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EMPLOYMENT-UNEMPLOYMENT

HEARINGS

BEFORE THE

JOINT ECONOMIC COMMITTEE

CONGRESS OF THE UNITED STATES

NINETY-FIFTH CONGRESS

SECOND SESSION

PART 12

MARCH 10, APRIL 7, MAY 5, AND JUNE 2, 1978

[Hearing day of February 3, 1978, of this series, may be found in part 1 of the hearings on "The 1978 Economic Report of the President"]

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FRIDAY, MARCH 10, 1978

EMPLOYMENT-UNEMPLOYMENT

FRIDAY, MARCH 10, 1978

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

The committee met, pursuant to notice, at 10:05 a.m., in room 5110, Dirksen Senate Office Building, Hon. Richard Bolling (chairman of the committee) presiding.

Present: Representatives Bolling and Brown of Ohio; and Senators Proxmire and Javits.

Also present: John R. Stark, executive director; Louis C. Krauthoff II, assistant director; Kent H. Hughes and Thomas F. Dernburg, professional staff members; Mark Borchelt, administrative assistant; and Charles H. Bradford, M. Catherine Miller, and Mark R. Policinski, minority professional staff members.

OPENING STATEMENT OF REPRESENTATIVE BOLLING, CHAIRMAN

Representative BOLLING. The committee will be in order.

Mr. Shiskin, we are pleased to have you with us this morning to discuss the most recent figures on unemployment and the rate of inflation, and I guess all of us are a little surprised. You have certainly brought us good news with regard to employment. Total employment rose in February by 350,000 and the unemployment rate continued to decline, in this case to 6.1 percent.

There was also improvement in several groups that have experienced higher than average rates of unemployment, for instance, the unemployment rate for black workers fell by almost a full percentage point, and there were also noticeable gains for adult women.

What is both puzzling and a problem is the sharp increase in unemployment for teenagers, from 16 percent in January to 17.4 percent in February.

I was surprised that with the bad weather and the coal strike and so on that the figures come out as they do, but we are all very gratified by it.

The steady employment gains of the last few months could be seriously affected by the lack of coal production since the United Mine Workers rejected the latest contract offer of the Bituminous Coal Association, coal supplies have continued to dwindle.

We may soon reach the point of massive layoffs and slower economic growth. Yesterday, BLS' press release on the coal situation reported that 25,000 factory workers were laid off for part or all of the week marking the end of February and the beginning of March. How much worse will the situation become?

In Monday's Washington Post, Otto Eckstein, head of Data Resources, Inc., was quoted as saying that if the strike continues, it could

result in as many as 700,000 layoffs in the next 2 weeks; 2 to 4 weeks after that, Eckstein thought the unemployment would be as high as 2 million. We would like to have the estimate from BLS on the unemployment of layoffs that are apt to result.

While the effects of the coal strike may be in the future, some bad news on the inflation front has already hit us. The latest figures of the Consumer Price Index show an increase of 0.8 percent, an annual rate of 10 percent. Much of the increase appears to be related to a sharp rise in food and beverage prices.

The wholesale price index figures, released yesterday, also do not bode well for the future. The finished goods index jumped 1.1 percent from January to February, an annual rate of 14 percent. The increases were sharpest for food-related products, but the rise in prices for crude and intermediate food materials were also well above the increases recorded for most of 1977.

We would welcome your views, Mr. Shiskin, on what the latest price and unemployment figures suggest about the future.

You may proceed as you wish.

STATEMENT OF HON. JULIUS SHISKIN, COMMISSIONER, BUREAU OF LABOR STATISTICS, DEPARTMENT OF LABOR, ACCOMPANIED BY JOHN F. EARLY, CHIEF, WHOLESALE PRICES DIVISION, OFFICE OF PRICES AND LIVING CONDITIONS; AND DEBORAH KLEIN, SENIOR EMPLOYMENT SPECIALIST, OFFICE OF CURRENT EMPLOYMENT ANALYSIS

Mr. SHISKIN. Thank you, Mr. Chairman and members of the committee.

First, let me say that my trusted assistants, Mr. Layng and Mr. Stein, have both fallen by the wayside this month, and I have with me to my left, John F. Early, who is the chief of our Wholesale Prices Division of the Office of Prices and Living Conditions, and Ms. Deborah Klein, who is one of Mr. Stein's assistants on employment statistics of the Office of Current Employment Analysis.

Representative BOLLING. We are glad to welcome them both.

Mr. SHISKIN. I might say if you will really want authoritative information on the status of female unemployment, this is your chance. Ms. Klein is one of the country's greatest experts in that.

Representative BOLLING. Thank you.

Mr. SHISKIN. As usual I have a brief oral statement to read, and then I will be glad to try to answer your questions.

I am glad to have this opportunity to offer the Joint Economic Committee a few brief comments to supplement our press release, "The Employment Situation: February 1978," issued this morning at 9 a.m.

In February, total employment rose by 122,000, unemployment declined by 136,000, and the civilian labor force declined by 14,000. While the labor force showed virtually no change over the month, the over-the-year increase has been substantial, more than 2.3 million. This calculation takes into account the effects of improvements in the household sampling and estimation procedures introduced last month.

Despite the severe weather and the coal strike, labor markets continued to improve through the survey week of February 12 through

the 18. The decline in unemployment, although small, was widespread and was shared by almost every major group—adult men, adult women, whites, blacks, full-time workers, the long-term unemployed, and job losers. Only the rate for teenagers rose. All 12 seasonal adjustment rates displayed in the attached table on employment rates declined. Over the year, the official rate has declined substantially—1.5 points—and with only one minor interruption.

Total employment rose only slightly, but nonagricultural employment rose substantially. In fact, the rise in employment reported in the establishment survey was one of the largest of recent record. About one-third of the rise took place in manufacturing, which exceeded 20 million employees for the first time since September 1974. The BLS diffusion indexes, showing the percentage of 172 industries with rising employment over various monthly spans, all continued at high levels. The index of aggregate hours rose sharply from last month, but remained below the November and December levels. The employment-population ratio remained at the alltime high reached last month.

It is to be noted that the February survey week preceded the employment and hours cutbacks in manufacturing due to the coal and other energy shortages. There are about 160,000 miners on strike, and approximately 20,000 workers in transportation and public utilities have been laid off since the strike began. In addition, our "quick response" weekly survey on employment effects of coal shortages in manufacturing and trade showed that, in the survey week of February 12–18, 9,500 manufacturing workers were laid off for part or all of the week in the 11 States most dependent on coal. In the week of February 26 through March 4, this number had reached 25,400, but at that time these layoffs remained a small proportion of the 7.8 million factory workers in these 11 States.

I would like to interrupt my oral statement to emphasize that this coal survey of ours covered last week. When I told some of the top officials in the administration what the survey results were, I had a little difficulty explaining to them that the numbers really referred to last week, and not to some earlier time. I think that is a remarkable performance on the part of the staff of BLS, and I want to take this opportunity, from my point of view, to commend them for it.

The producer price index for finished goods showed a sharp rise in the rate of increase between January and February. This acceleration in the increase was entirely attributable to a rise in food prices. However, it is to be noted that in the last few months the prices of commodities at the earlier stages of fabrication, both foods and nonfoods, have been rising more rapidly.

Among food-related materials there has been a considerable acceleration in price increases during the past few months for livestock and live poultry, partly because of the impact of bad weather on supplies. Grain prices, which had declined during much of 1977, turned up toward the end of the year and continued to advance.

On the other side, prices of green coffee and cocoa beans have generally been falling for several months. The more rapid rises in industrial materials prices than during previous months reflect higher prices for such products as construction-related materials, steel mill products, and nonferrous metals.

It may also be worth noting that energy price changes during the last several months have generally been rather moderate and have not contributed to these price accelerations.

My colleagues and I are now ready to try to answer your questions.

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

UNEMPLOYMENT RATES BY ALTERNATE SEASONAL ADJUSTMENT METHODS

Month and year	Unadjusted rate	Official adjusted rate	Alternative procedures								Other aggregations (multiplicative)		Direct adjustment of rate	Range (cols. 2–13)
			Official procedure used in 1976–77	Unemployed all multiplicative	Unemployed all additive	Year ahead	Concurrent		Stable		Total	Residual		
							First computed	Revised	1967–73	1967–77				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1976:														
January	8.8	7.9	7.8	7.8	8.0	7.8	7.8	7.9	8.1	7.9	7.9	8.1	7.9	0.3
February	8.7	7.7	7.6	7.6	7.8	7.6	7.6	7.7	7.7	7.7	7.6	7.7	7.7	.2
March	8.1	7.6	7.5	7.5	7.6	7.5	7.5	7.6	7.7	7.6	7.5	7.6	7.6	.2
April	7.4	7.6	7.6	7.6	7.6	7.4	7.4	7.6	7.6	7.6	7.6	7.6	7.6	.2
May	6.7	7.4	7.4	7.5	7.2	7.2	7.2	7.4	7.5	7.5	7.5	7.3	7.5	.3
June	8.0	7.5	7.5	7.5	7.5	7.5	7.6	7.5	7.5	7.5	7.4	7.5	7.4	.1
July	7.8	7.7	7.8	7.8	7.8	7.8	7.8	7.8	7.7	7.7	7.7	7.7	7.7	.1
August	7.6	7.8	7.8	7.8	7.8	7.9	7.9	7.8	7.7	7.8	7.8	7.8	7.9	.2
September	7.4	7.7	7.8	6.8	7.7	7.8	7.8	7.7	7.6	7.7	7.8	7.7	7.8	.2
October	7.2	7.7	7.8	7.9	7.8	7.9	7.9	7.7	7.7	7.7	7.8	7.7	7.8	.2
November	7.4	7.8	7.8	7.8	7.8	8.1	8.0	7.8	7.8	7.9	7.8	7.7	7.8	.4
December	7.4	7.8	7.8	7.8	7.8	7.9	7.8	7.8	7.9	7.9	7.8	7.8	7.8	.1
1977:														
January	8.3	7.4	7.3	7.3	7.4	7.3	7.4	7.4	7.5	7.4	7.4	7.6	7.5	.3
February	8.5	7.6	7.5	7.5	7.6	7.5	7.5	7.6	7.6	7.5	7.5	7.5	7.5	.1
March	7.9	7.4	7.4	7.4	7.4	7.3	7.3	7.4	7.5	7.4	7.4	7.3	7.4	.2
April	6.9	7.1	7.1	7.1	7.1	7.0	7.0	7.1	7.1	7.1	7.1	7.1	7.1	.1
May	6.4	7.1	7.1	7.1	6.9	6.9	7.0	7.1	7.1	7.1	7.1	7.0	7.2	.3
June	7.5	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.0	7.0	7.0	7.1	7.0	.1
July	7.0	6.9	7.0	7.0	7.0	6.9	6.9	6.9	6.8	6.9	7.0	6.9	7.0	.2
August	6.8	7.0	7.0	7.0	7.1	7.1	7.0	7.0	6.9	7.0	7.1	7.1	7.0	.2
September	6.6	6.8	6.9	6.9	6.9	6.9	6.9	6.8	6.7	6.8	6.9	6.9	6.9	.2
October	6.3	6.8	6.9	6.9	6.9	7.0	6.9	6.8	6.8	6.8	6.9	6.9	6.8	.2
November	6.4	6.7	6.7	6.7	6.8	6.9	6.8	6.8	6.8	6.8	6.8	6.7	6.7	.2
December	6.0	6.4	6.4	6.3	6.4	6.4	6.4	6.4	6.5	6.4	6.3	6.4	6.3	.2
1978:														
January	7.0	6.3	6.2	6.2	6.2	6.3	6.4	6.3	6.4	6.3	6.3	6.3	6.3	.2
February	6.9	6.1	6.1	6.1	6.0	6.1	6.1	6.1	6.2	6.1	6.1	5.9	6.1	.3

Note.—See "Column Notes" on p. 2174.

Source: U.S. Department of Labor, Bureau of Labor Statistics, March 1978.

COLUMN NOTES

(1) Unadjusted rate. Unemployment rate not seasonally adjusted.
(2) Official rate. This is the published seasonally adjusted rate. Each of 4 unemployed age-sex components—males and females, 16–19 and 20 yrs of age and over—is independently adjusted. The teenage unemployment and nonagricultural employment components are adjusted using the additive procedure of the X–11 method, while adults are adjusted using the X–11 multiplicative option. Adult male unemployment is adjusted multiplicatively using a prior trend adjustment procedure. The rate is calculated by aggregating the 4 and dividing them by 12 summed labor force components—these 4 plus 8 employment components, which are the 4 age-sex groups in agriculture and nonagricultural industries. This employment total is also used in the calculation of the labor force base in cols. 3–9. The current "implicit" factors for the total unemployment rate derived by dividing the original unemployment rate by the seasonally adjusted rate for the months of 1977, are: January, 112.2; February, 112.6; March, 106.7; April, 96.5; May, 90.1; June, 106.2; July, 101.2; August, 97.6; September, 96.6; October, 92.6; November, 95.3; December, 93.6.
(3) Official procedure used in 1976–77. Only teenage unemployment components are adjusted using the additive procedure of X–11; all other series are adjusted with the multiplicative option. The prior adjustment is not used for adult male unemployment.
(4) Unemployed all multiplicative. The 4 basic unemployed age-sex groups—males and females, 16–19 and 20 yrs and over—are adjusted by the X–11 multiplicative procedure. This procedure was used to adjust unemployment data in 1975 and previous years.
(6) Year-ahead factors. The official seasonal adjustment procedure for each of the components is and over—are adjusted by the X–11 additive procedure.
(6) Year-ahead factors. The official seasonal adjustment procedure for each of the components is followed through computation of the factor for the last years of data. A projected factor—the factor for the last year plus one-half of the difference from the previous year—is then computed for each of the components, and the rate is calculated. The rates shown are as first calculated and are not subject to revision.
(7) Concurrent adjustment through current month (first computed). The official procedure is followed with data reseasonally adjusted incorporating the experience through the current month, i.e., the rate for March 1976 is based on adjustment of data for the period, January 1967–March 1976. The rates are as first calculated and are not subject to revision.
(8) Concurrent adjustment through current month (revised). Follows the same procedures as used in computation of col. 7. Each month, however, revisions in the entire time series are made. This column provides an indication, as the year progresses, of the scope of the revisions and provides the best portrayal of movements in the series.
(9) Stable seasonals (January 1967–December 1973). The stable seasonal option in the X–11 program uses an unweighted average of all available seasonal-irregular ratios to compute final seasonal factors. In essence, it assumes that seasonal patterns are relatively constant from year to year. A cutoff of input data as of December 1973 was selected to avoid the impact of cyclical changes in the 1974–75 period.
(10) Stable seasonals (January 1967–December 1977). Follows the same procedures as used in col. 9, except that the unweighted average is based on seasonal-irregular ratios for the 1967–77 period.
(11) Total. Unemployment and labor force levels adjusted directly.
(12) Residual. Labor force and employment levels adjusted directly, unemployment as a residual and rate then calculated.
(13) Direct adjustment. Unemployment rate adjusted directly.
(14) Average of cols. 2–12.

Note: The X–11 method, developed by Julius Shiskin at the Bureau of the Census over the period 1955–65, was used in computing all the seasonally adjusted series described above.

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THE EMPLOYMENT SITUATION: FEBRUARY 1978

The overall employment situation continued to show improvement in February, as nonfarm payroll employment rose sharply and unemployment declined further, it was reported today by the Bureau of Labor Statistics of the U. S. Department of Labor. The Nation's overall unemployment rate was 6.1 percent, down from January's 6.3-percent rate and the higher rates which prevailed during 1977.

Nonfarm payroll employment--as measured by the monthly survey of establishments--rose by 350,000 over the month to 84.1 million. Payroll jobs have advanced by 3.1 million over the year. The survey, which relates to the week of February 12th through the 18th, reflected only a marginal impact of the coal strike.

Total employment--as measured by the monthly survey of households--edged up in February to 93.0 million. Employment was about 3.7 million above its year-earlier level (after allowing for the effect of changes in sampling and estimation procedures introduced into the household survey last month).

Unemployment

Unemployment continued to trend downward, totaling 6.1 million in February, seasonally adjusted. The overall rate of unemployment was 6.1 percent, a small improvement over the month and down by 1.7 percentage points since late 1976.

The reduction in the overall jobless rate was the result of diverse developments among the major worker groups. The jobless rate for adult women fell 0.4 percentage point to 5.7 percent, that for adult men edged down 0.2 point to 4.5 percent, while there was an increase in the teenage unemployment rate from 16.0 to 17.4 percent over the month.

The unemployment rate for black workers declined nearly a full percentage point to 11.8 percent, with most of this improvement occurring among adult men. The rate for white workers also declined, albeit slightly, as joblessness dropped for adult women. Over the year most of the decline in unemployment has taken place among whites, whose level of unemployment has fallen by 20 percent, while joblessness for black workers has been reduced by only 5 percent. (See table A-2.)

The average (mean) duration of unemployment fell by about one-half week in February to 12.5 weeks, reflecting a relatively large decline in the number of persons unemployed 6 months or more. Half of the unemployed have been looking for work for 7 weeks or less. (See table A-4.)

Total Employment and the Labor Force

Total employment, at 93.0 million in February, advanced slightly from the January level. Since February 1977, however, employment has increased by 3.7 million (this figure takes into account the effect of the improvements in the household survey sampling and estimation procedures introduced last month). The employment-to-population ratio--the proportion of the total noninstitutional population that is employed--was unchanged over the month at the all-time high of 58.1 percent. (See table A-1.)

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

Selected categories	Quarterly averages					Monthly data		
	1976	1977				1977	1978	
	IV	I	II	III	IV	Dec.	Jan.	Feb.
HOUSEHOLD DATA	Thousands of persons							
Civilian labor force	95,625	96,221	97,153	97,559	98,622	98,919	99,107	99,093
Total employment	88,182	89,059	90,264	90,823	92,069	92,609	92,881	93,003
Unemployment	7,443	7,161	6,889	6,736	6,554	6,310	6,226	6,090
Not in labor force	59,218	59,225	58,941	59,205	58,777	58,689	58,709	58,911
Discouraged workers	944	942	1,062	1,067	969	N.A.	N.A.	N.A.
	Percent of labor force							
Unemployment rates:								
All workers	7.8	7.4	7.1	6.9	6.6	6.4	6.3	6.1
Adult men	6.0	5.7	5.2	5.0	4.8	4.6	4.7	4.5
Adult women	7.5	7.1	7.0	7.0	6.8	6.6	6.1	5.7
Teenagers	19.1	18.6	18.1	17.6	16.7	15.6	16.0	17.4
White	7.1	6.7	6.3	6.1	5.8	5.5	5.5	5.3
Black and other	13.4	12.9	12.8	13.6	13.3	12.7	12.7	11.8
Full-time workers	7.4	6.9	6.6	6.5	6.2	5.9	5.8	5.7
ESTABLISHMENT DATA	Thousands of jobs							
Nonfarm payroll employment	80,111	80,925	81,871	82,548	83,192	83,429	83,725p	84,074p
Goods-producing industries	23,456	23,788	24,265	24,359	24,497	24,526	24,598p	24,753p
Service-producing industries	56,655	57,137	57,606	58,189	58,695	58,903	59,127p	59,321p
	Hours of work							
Average weekly hours:								
Total private nonfarm	36.2	36.1	36.2	36.0	36.2	36.2	35.6p	35.7p
Manufacturing	40.0	40.1	40.4	40.3	40.5	40.5	39.6p	39.9p
Manufacturing overtime	3.1	3.3	3.4	3.3	3.5	3.5	3.5p	3.8p

p=preliminary. N.A.=not available.

The civilian labor force was 99.1 million in February, unchanged from January but up more than 2.3 million over the year (also adjusted for the survey changes introduced last month). The civilian labor force participation rate--the proportion of the civilian noninstitutional population that is either working or seeking work--was 62.7 percent in February, close to the all-time high recorded over the prior 3 months.

Industry Payroll Employment

Nonfarm payroll employment advanced by 350,000 in February to 84.1 million, seasonally adjusted. Most of the major industry groups registered gains, as employment increased in 72 percent of the 172 industries that comprise the BLS diffusion index of private nonagricultural payroll employment.

A very large over-the-month employment pickup took place in manufacturing (120,000), bringing the industry total to its highest level since September 1974. Most of this gain was concentrated in the durable goods industries. In the service-producing sector, all major industry groups posted increases. Contract construction employment returned to the levels prevailing in November and December, following a weather-induced dip in January. Total nonfarm payroll employment in February was 3.1 million above the year-ago level.

As in December and January, employment totals were affected by the strike in coal mining, with approximately 160,000 miners leaving the industry's payrolls. In addition, it has been estimated from regular establishment survey reports that approximately 20,000 workers in transportation and public utilities have been laid off over this period as a direct result of the strike. In order to further assess the impact of coal shortages on employment, each week since mid-February, the Bureau of Labor Statistics has surveyed some 900 of the largest manufacturing and trade firms in 11 coal-dependent Midwestern and Mid-Atlantic States. The first BLS energy impact survey (for the week of February 12-18) identified only a small effect on employment in manufacturing (about 9,500 workers). The two subsequent surveys, covering the weeks of February 19-25 and February 26 - March 4, indicated slightly higher levels of energy-related layoffs (25,400 manufacturing workers), but still only a small fraction of total employment in the industry. (See BLS press release USDL 78-180, March 9, 1978.)

Hours

The February average workweek for production or nonsupervisory workers on private nonagricultural payrolls was 35.7 hours, seasonally adjusted, little different from the sharply reduced January level. Since December, the workweek has been depressed by both unusually bad weather and energy-related problems.

Several major industries made up for some of their sharp January decline in hours. For example, the factory workweek increased 0.3 hour, as overtime hours also rose by this magnitude. In addition, contract construction and transportation and public utilities showed gains of 0.8 and 0.4 hour, respectively. The other major industry groups showed no change or slight declines. (See table B-2.)

Because of the strong employment increase, the index of aggregate weekly hours of production or nonsupervisory workers on private nonagricultural payrolls increased 0.8 percent in February to 116.9 (1967=100). While below the levels of November and December, the index was 2.4 percent above the year-ago level. (See table B-5.)

Hourly and Weekly Earnings

Average hourly earnings of production or nonsupervisory workers on private nonagricultural payrolls remained about the same as in January, seasonally adjusted, but average weekly earnings increased by 0.5 percent. Compared to their year-ago levels, average hourly and weekly earnings were up 7.6 and 6.2 percent, respectively.

Before adjustment for seasonality, average hourly earnings were unchanged from their January level and 39 cents above a year earlier. Average weekly earnings rose $1.09 over the month to $193.99. Over the year, average weekly earnings rose by $11.26. (See table B-3.)

The Hourly Earnings Index

The Hourly Earnings Index--earnings adjusted for overtime in manufacturing, seasonality, and the effects of changes in the proportion of workers in high-wage and low-wage industries--was 207.8 (1967=100) in February, unchanged from January. The index was 7.6 percent above February a year ago. During the 12-month period ended in January, the Hourly Earnings Index in dollars of constant purchasing power rose 1.1 percent. (See table B-4.) Beginning with January 1978, the revised Consumer Price Index for Urban Wage Earners and Clerical Workers (revised CPI-W) is being used to compute the constant (1967) dollars figures.

Explanatory Note

This release presents and analyzes statistics from two major surveys. Data on labor force, total employment, and unemployment (A tables) are derived from the Current Population Survey—a sample survey of households which is conducted by the Bureau of the Census for the Bureau of Labor Statistics. Beginning in September 1975, the sample was enlarged by 9,000 households in order to provide greater reliability for smaller States and thus permit the publication of annual statistics for all 50 States and the District of Columbia. These supplementary households were added to the 47,000 national household sample in January 1978; thus the sample now consists of about 56,000 households selected to represent the U.S. civilian noninstitutional population 16 years and over.

Statistics on nonagricultural payroll employment, hours, and earnings (B tables) are collected by the Bureau of Labor Statistics, in cooperation with State agencies, from payroll records of a sample of approximately 165,000 establishments. Unless otherwise indicated, data for both statistical series relate to the week containing the 12th day of the specified month.

Comparability of household and payroll employment statistics

Employment data from the household and payroll surveys differ in several basic respects. The household survey provides information on the labor force activity of the entire civilian noninstitutional population, 16 years of age and over, without duplication. Each person is classified as either employed, unemployed, or not in the labor force. The household survey counts employed persons in both agriculture and nonagricultural industries and, in addition to wage and salary workers (including private household workers), counts the self-employed, unpaid family workers, and persons "with a job but not at work" and not paid for the period absent.

The payroll survey relates only to paid wage and salary employees (regardless of age) on the payrolls of nonagricultural establishments. Persons who worked at more than one job during the survey week or otherwise appear on more than one payroll are counted more than once in the establishment survey. Such persons are counted only once in the household survey and are classified in the job at which they worked the greatest number of hours.

Unemployment

To be classified in the household survey as unemployed an individual must: (1) Have been without a job during the survey week; (2) have made specific efforts to find employment sometime during the prior 4 weeks; and (3) be presently available for work. In addition, persons on layoff and those waiting to begin a new job (within 30 days), neither of whom must meet the jobseeking requirements, are also classified as unemployed. The unemployed total includes all persons who satisfactorily meet the above criteria, regardless of their eligibility for unemployment insurance benefits or any kind of public assistance. The unemployment rate represents the unemployed as a proportion of the civilian labor force (the employed and unemployed combined).

The Bureau regularly publishes a wide variety of labor market measures. See, for example, the demographic, occupational, and industry detail in tables A-2 and A-3 of this release and the comprehensive data package in Employment and Earnings each month. A special grouping of seven unemployment measures is set forth in table A-7. Identified by the symbols U-1 through U-7, these measures represent a range of possible definitions of unemployment and of the labor force—from the most restrictive (U-1) to the most comprehensive (U-7). The official rate of unemployment appears as U-5.

Seasonal adjustment

Nearly all economic phenomena are affected to some degree by seasonal variations. These are recurring, predictable events which are repeated more or less regularly each year—changes in weather, opening and closing of schools, major holidays, industry production schedules, etc. The cumulative effects of these events are often large. For example, on average over the year, they explain about 95 percent of the month-to-month variance in the unemployment figures. Since seasonal variations tend to be large relative to the underlying cyclical trends, it is necessary to use seasonally-adjusted data to interpret short-term economic developments. At the beginning of each year, seasonal adjustment factors for unemployment and other labor force series are calculated for use during the entire year, taking into account the prior year's experience, and revised seasonally-adjusted data are introduced in the release containing January data.

All seasonally-adjusted civilian labor force and unemployment rate statistics, as well as the major employment and unemployment estimates, are computed by aggregating independently adjusted series. The official unemployment rate for all civilian workers is derived by dividing the estimate for total unem-

ployment (the sum of four seasonally-adjusted age-sex components) by the civilian labor force (the sum of 12 seasonally-adjusted age-sex components).

For establishment data, the seasonally-adjusted series for all employees, production workers, average weekly hours, and average hourly earnings are adjusted by aggregating the seasonally-adjusted data from the respective component series. These data are also revised annually, often in conjunction with benchmark (comprehensive counts of employment) adjustments. (The most recent revision of seasonally-adjusted data was based on data through August 1977.)

Sampling variability

Both the household and establishment survey statistics are subject to sampling error, which should be taken into account in evaluating the levels of a series as well as changes over time. Because the household survey is based upon a probability sample, the results may differ from the figures that would be obtained if it were possible to take a complete census using the same questionnaires and procedures. The standard error is the measure of sampling variability, that is, of the variation that occurs by chance because a sample rather than the entire population is surveyed. The chances are about 68 out of 100 that an estimate from the survey differs from a figure that would be obtained through a complete census by less than the standard error. Tables A through H in the "Explanatory Notes" of Employment and Earnings provide approximations of the standard errors for unemployment and other labor force categories. To obtain a 90-percent level of confidence, the confidence interval generally used by BLS, the errors should be multiplied by 1.6. The following examples provide an indication of the magnitude of sampling error: For a monthly change in total employment, the standard error is on the order of plus or minus 182,000. Similarly, the standard error on a change in total unemployment is approximately 115,000. The standard error on a change in the national unemployment rate is 0.12 percentage point.

Although the relatively large size of the monthly establishment survey assures a high degree of accuracy, the estimates derived from it also may differ from the figures obtained if a complete census using the same schedules and procedures were possible. However, since the estimating procedures utilize the previous month's level as the base in computing the current month's level of employment (link-relative technique), sampling and response errors may accumulate over several months. To remove this accumulated error, the employment estimates are adjusted to new benchmarks (comprehensive counts of employment), usually on an annual basis. In addition to taking account of sampling and response errors, the benchmark revision adjusts the estimates for changes in the industrial classification of individual establishments. Employment estimates are currently projected from March 1974 levels, plus an interim benchmark adjustment based on December 1975 levels.

One measure of the reliability of the employment estimates for individual industries is the root-mean-square error (RMSE). The RMSE is the standard deviation adjusted for the bias in estimates. If the bias is small, the chances are about 68 out of 100 that an estimate from the sample would differ from its benchmark by less than the RMSE. For total nonagricultural employment, the RMSE is on the order of plus or minus 31,000. Measures of reliability (approximations of the RMSE) for establishment-survey data and actual amounts of revision due to benchmark adjustments are provided in tables J through O in the "Explanatory Notes" of Employment and Earnings.

HOUSEHOLD DATA

NOTE: Household survey data for periods prior to January 1978 shown in tables A-1 through A-7 are not strictly comparable with current data because of the introduction of an expansion in the sample and revisions in the estimation procedures. As a result, the overall civilian labor force and employment totals in January were raised by roughly a quarter of a million; unemployment levels and rates were essentially unchanged. An explanation of the procedural changes and an indication of the differences appear in "Revisions in the Current Population Survey in January 1978," *Employment and Earnings*, February 1978 Vol. 25 No. 2.

HOUSEHOLD DATA

Table A-1. Employment status of the noninstitutional population

[Numbers in thousands]

Employment status	Not seasonally adjusted			Seasonally adjusted					
	Feb. 1977	Jan. 1978	Feb. 1978	Feb. 1977	Oct. 1977	Nov. 1977	Dec. 1977	Jan. 1978	Feb. 1978
TOTAL									
Total noninstitutional population[1]	157,584	159,937	160,128	157,584	159,334	159,522	159,736	159,937	160,128
Armed Forces[1]	2,137	2,121	2,124	2,137	2,134	2,132	2,129	2,121	2,124
Civilian noninstitutional population[1]	155,447	157,816	158,004	155,447	157,201	157,389	157,608	157,816	158,004
Civilian labor force	95,340	97,950	97,924	96,320	98,071	98,877	98,919	99,107	99,093
Participation rate	61.3	62.1	62.0	62.0	62.4	62.8	62.8	62.8	62.7
Employed	87,231	91,053	91,185	89,047	91,383	92,214	92,609	92,881	93,003
Employment-population ratio[2]	55.4	56.9	56.9	56.5	57.4	57.8	58.0	58.1	58.1
Agriculture	2,709	2,868	2,771	3,164	3,243	3,357	3,323	3,354	3,242
Nonagricultural industries	84,522	88,185	88,413	85,883	88,140	88,857	89,286	89,527	89,761
Unemployed	8,109	6,897	6,739	7,273	6,688	6,663	6,310	6,226	6,090
Unemployment rate	7.0	6.9	6.9	7.6	6.8	6.7	6.4	6.3	6.1
Not in labor force	60,106	59,866	60,080	59,127	59,130	58,512	58,689	58,709	58,911
Men, 20 years and over									
Total noninstitutional population[1]	67,025	68,148	68,240	67,025	67,852	67,948	68,052	68,148	68,240
Civilian noninstitutional population[1]	65,342	66,467	66,556	65,342	66,161	66,257	66,364	66,467	66,556
Civilian labor force	51,940	52,741	52,713	52,209	52,739	52,971	53,122	53,153	53,142
Participation rate	79.5	79.3	79.2	79.9	79.7	79.9	80.0	80.0	79.8
Employed	48,192	49,822	49,805	49,136	50,118	50,459	50,688	50,673	50,759
Employment-population ratio[2]	71.9	73.1	73.0	73.3	73.9	74.3	74.5	74.4	74.4
Agriculture	2,081	2,171	2,105	2,257	2,326	2,330	2,346	2,394	2,283
Nonagricultural industries	46,111	47,651	47,700	46,879	47,792	48,129	48,342	48,279	48,476
Unemployed	3,748	2,919	2,907	3,073	2,621	2,512	2,434	2,480	2,383
Unemployment rate	7.2	5.5	5.5	5.9	5.0	4.7	4.6	4.7	4.5
Not in labor force	13,402	13,726	13,843	13,133	13,422	13,286	13,242	13,314	13,414
Women, 20 years and over									
Total noninstitutional population[1]	73,746	74,991	75,095	73,746	74,660	74,768	74,883	74,991	75,095
Civilian noninstitutional population[1]	73,554	74,892	74,996	73,654	74,561	74,669	74,783	74,892	74,996
Civilian labor force	35,159	36,624	36,733	35,044	35,984	36,451	36,418	36,595	36,654
Participation rate	47.7	48.9	49.0	47.6	48.3	48.8	48.7	48.9	48.9
Employed	32,434	34,184	34,470	32,532	33,537	33,923	34,009	34,348	34,569
Employment-population ratio[2]	44.0	45.6	45.9	44.1	44.9	45.4	45.4	45.8	46.0
Agriculture	379	421	437	524	525	589	543	517	604
Nonagricultural industries	32,056	33,763	34,033	32,008	33,012	33,334	33,466	33,831	33,965
Unemployed	2,725	2,440	2,262	2,512	2,447	2,528	2,409	2,247	2,085
Unemployment rate	7.7	6.7	6.2	7.2	6.8	6.9	6.6	6.1	5.7
Not in labor force	38,495	38,268	38,263	38,610	38,577	38,218	38,365	38,297	38,342
Both sexes, 16-19 years									
Total noninstitutional population[1]	16,813	16,798	16,794	16,813	16,822	16,806	16,802	16,798	16,794
Civilian noninstitutional population[1]	16,451	16,457	16,453	16,451	16,480	16,463	16,460	16,457	16,453
Civilian labor force	8,241	8,585	8,479	9,067	9,348	9,455	9,379	9,359	9,297
Participation rate	50.1	52.2	51.5	55.1	56.7	57.4	57.0	56.9	56.5
Employed	6,605	7,046	6,909	7,379	7,728	7,832	7,912	7,860	7,675
Employment-population ratio[2]	39.3	41.9	41.1	43.9	45.9	46.6	47.1	46.8	45.7
Agriculture	249	275	229	383	392	438	434	443	355
Nonagricultural industries	6,356	6,771	6,680	6,996	7,336	7,394	7,478	7,417	7,320
Unemployed	1,636	1,539	1,570	1,688	1,620	1,623	1,467	1,499	1,622
Unemployment rate	19.9	17.9	18.5	18.6	17.3	17.2	15.6	16.0	17.4
Not in labor force	8,210	7,872	7,974	7,384	7,132	7,008	7,081	7,098	7,156
WHITE									
Total noninstitutional population[1]	138,575	140,421	140,571	138,575	139,962	140,095	140,264	140,421	140,571
Civilian noninstitutional population[1]	136,810	138,687	138,834	136,810	138,218	138,351	138,523	138,687	138,834
Civilian labor force	84,368	86,405	86,344	85,167	86,812	87,292	87,193	87,425	87,360
Participation rate	61.7	62.3	62.2	62.3	62.8	63.1	62.9	63.0	62.9
Employed	77,793	81,061	81,061	79,405	81,614	82,181	82,391	82,650	82,697
Employment-population ratio[2]	56.1	57.7	57.7	57.3	58.3	58.7	58.7	58.9	58.8
Unemployed	6,574	5,344	5,284	5,762	5,198	5,111	4,802	4,775	4,663
Unemployment rate	7.8	6.2	6.1	6.8	6.0	5.9	5.5	5.5	5.3
Not in labor force	52,442	52,283	52,490	51,643	51,406	51,059	51,330	51,262	51,474
BLACK AND OTHER									
Total noninstitutional population[1]	19,009	19,516	19,558	19,009	19,372	19,427	19,473	19,516	19,558
Civilian noninstitutional population[1]	18,637	19,129	19,170	18,637	18,983	19,038	19,084	19,129	19,170
Civilian labor force	10,973	11,546	11,580	11,155	11,398	11,551	11,761	11,725	11,785
Participation rate	58.9	60.4	60.4	59.9	60.0	60.7	61.6	61.3	61.5
Employed	9,438	9,992	10,124	9,695	9,842	9,966	10,271	10,238	10,391
Employment-population ratio[2]	49.7	51.2	51.8	51.0	50.8	51.3	52.7	52.5	53.1
Unemployed	1,535	1,554	1,455	1,460	1,556	1,585	1,490	1,487	1,394
Unemployment rate	14.0	13.5	12.6	13.1	13.7	13.7	12.7	12.7	11.8
Not in labor force	7,664	7,583	7,591	7,482	7,585	7,487	7,323	7,404	7,385

[1] The population and Armed Forces figures are not adjusted for seasonal variations; therefore, identical numbers appear in the unadjusted and seasonally adjusted columns.

[2] Civilian employment as a percent of the total noninstitutional population (including Armed Forces).

Table A-2. Major unemployment indicators, seasonally adjusted

Selected categories	Number of unemployed persons (in thousands)		Unemployment rates					
	Feb. 1977	Feb. 1978	Feb. 1977	Oct. 1977	Nov. 1977	Dec. 1977	Jan. 1978	Feb. 1978
CHARACTERISTICS								
Total, 16 years and over	7,273	6,090	7.6	6.8	6.7	6.4	6.3	6.1
Men, 20 years and over	3,073	2,383	5.9	5.0	4.7	4.6	4.7	4.5
Women, 20 years and over	2,512	2,085	7.2	6.8	6.9	6.6	6.1	5.7
Both sexes, 16-19 years	1,688	1,622	18.6	17.3	17.2	15.6	16.0	17.4
White, total	5,762	4,663	6.8	6.0	5.9	5.5	5.5	5.3
Men, 20 years and over	2,456	1,842	5.3	4.4	4.1	4.0	4.0	3.9
Women, 20 years and over	1,954	1,594	6.4	6.1	6.1	5.9	5.5	5.0
Both sexes, 16-19 years	1,352	1,227	16.5	14.9	14.7	12.7	13.7	14.8
Black and other, total	1,460	1,394	13.1	13.7	13.7	12.7	12.7	11.8
Men, 20 years and over	564	489	9.9	11.3	10.0	9.1	9.8	8.6
Women, 20 years and over	580	512	12.2	11.4	12.6	11.5	10.8	10.1
Both sexes, 16-19 years	336	393	37.4	38.0	39.0	38.0	38.7	38.0
Married men, spouse present	1,626	1,157	4.1	3.6	3.3	3.2	2.9	2.9
Married women, spouse present	1,504	1,201	6.8	6.3	6.5	6.2	5.6	5.2
Women who head families	402	358	9.3	9.3	9.3	8.1	7.9	7.6
Full-time workers	5,697	4,791	6.9	6.4	6.2	5.9	5.8	5.7
Part-time workers	1,520	1,259	10.6	9.6	9.6	8.9	8.9	8.6
Unemployed 15 weeks and over[1]	2,168	1,568	2.3	1.9	1.8	1.8	1.7	1.6
Labor force time lost[2]	--	--	8.0	7.4	7.3	7.0	6.8	6.6
OCCUPATION[3]								
White-collar workers	2,137	1,691	4.6	4.1	4.2	4.0	3.6	3.5
Professional and technical	444	364	3.2	3.0	2.9	2.8	2.7	2.5
Managers and administrators, except farm	280	195	2.9	2.6	3.0	2.5	2.5	1.9
Sales workers	344	262	5.6	5.0	4.9	4.7	3.9	4.3
Clerical workers	1,069	870	6.4	5.7	5.7	5.5	5.0	5.0
Blue-collar workers	2,873	2,388	8.8	8.0	7.6	7.2	7.1	7.1
Craft and kindred workers	810	648	6.5	5.4	5.2	5.2	5.4	5.0
Operatives, except transport	1,123	952	9.8	9.8	9.3	8.5	7.9	8.1
Transport equipment operatives	283	192	7.6	6.1	5.3	5.6	5.4	5.0
Nonfarm laborers	657	596	12.9	11.8	11.9	10.6	11.0	11.5
Service workers	1,114	974	8.5	8.1	7.8	7.8	7.6	7.1
Farm workers	187	137	6.4	4.4	4.1	3.9	3.9	4.7
INDUSTRY[3]								
Nonagricultural private wage and salary workers[4]	5,297	4,376	7.6	6.9	6.7	6.3	6.2	6.1
Construction	687	544	15.2	12.1	11.2	10.8	11.7	11.5
Manufacturing	1,534	1,243	7.2	6.8	6.5	5.7	5.6	5.7
Durable goods	875	647	6.9	6.1	6.0	5.6	5.2	5.0
Nondurable goods	659	596	7.5	7.8	7.2	5.9	6.1	6.5
Transportation and public utilities	240	169	4.7	4.8	4.7	4.9	4.3	3.2
Wholesale and retail trade	1,559	1,302	8.7	7.9	7.4	7.3	7.1	7.1
Finance and service industries	1,251	1,086	6.2	5.7	6.0	5.5	5.3	5.1
Government workers	694	549	4.4	4.1	4.3	4.3	4.2	3.5
Agricultural wage and salary workers	198	151	13.3	10.3	9.3	9.6	9.0	10.1
VETERAN STATUS								
Male Vietnam-era veterans:[5]								
20 to 34 years	468	328	7.2	7.1	6.8	5.6	5.7	5.2
20 to 24 years	158	92	16.2	15.3	14.1	11.8	12.9	12.5
25 to 29 years	205	130	7.0	6.6	6.4	6.1	6.1	5.4
30 to 34 years	105	106	4.1	5.0	4.8	3.7	3.5	3.4
Male nonveterans:								
20 to 34 years	1,326	1,115	8.5	7.3	6.9	6.9	7.1	6.7
20 to 24 years	788	692	11.4	9.3	9.3	9.4	10.1	9.7
25 to 29 years	360	278	7.3	6.4	5.5	5.2	5.4	5.0
30 to 34 years	178	145	4.7	4.9	4.5	4.5	4.0	3.8

[1] Unemployment rate calculated as a percent of civilian labor force.

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

[3] Unemployment by occupation includes all experienced unemployed persons, whereas that by industry covers only unemployed wage and salary workers.

[4] Includes mining, not shown separately.

[5] Vietnam-era veterans are those who served between August 5, 1964, and May 7, 1975.

Table A-3. Selected employment indicators

(In thousands)

Selected categories	Not seasonally adjusted		Seasonally adjusted					
	Feb. 1977	Feb. 1978	Feb. 1977	Oct. 1977	Nov. 1977	Dec. 1977	Jan. 1978	Feb. 1978
CHARACTERISTICS								
Total employed, 16 years and over	87,231	91,185	89,047	91,383	92,214	92,609	92,881	93,003
Men	51,659	53,466	53,094	54,341	54,745	55,012	54,975	54,897
Women	35,573	37,719	35,953	37,042	37,469	37,597	37,906	38,106
Married men, spouse present	37,587	38,047	38,214	38,425	38,531	38,682	38,645	38,666
Married women, spouse present	20,673	21,651	20,750	21,119	21,278	21,416	21,638	21,738
OCCUPATION								
White-collar workers	44,443	46,475	44,528	46,083	46,251	46,316	46,547	46,555
Professional and technical	13,690	14,254	13,467	14,042	13,918	13,981	14,057	14,016
Managers and administrators, except farm	9,350	9,962	9,514	9,911	9,894	9,939	10,067	10,134
Sales workers	5,646	5,666	5,791	5,718	5,804	5,796	5,913	5,811
Clerical workers	15,757	16,594	15,756	16,412	16,635	16,600	16,510	16,594
Blue-collar workers	28,549	29,796	29,894	30,247	30,603	30,807	30,942	31,198
Craft and kindred workers	11,236	11,780	11,654	11,860	12,116	12,153	12,111	12,220
Operatives, except transport	10,030	10,405	10,348	10,320	10,423	10,424	10,755	10,738
Transport equipment operatives	3,355	3,548	3,446	3,457	3,525	3,555	3,432	3,643
Nonfarm laborers	3,929	4,064	4,446	4,610	4,539	4,675	4,644	4,597
Service workers	11,925	12,557	12,060	12,473	12,590	12,617	12,704	12,703
Farm workers	2,315	2,356	2,717	2,755	2,809	2,805	2,872	2,769
MAJOR INDUSTRY AND CLASS OF WORKER								
Agriculture:								
Wage and salary workers	1,073	1,114	1,296	1,387	1,405	1,405	1,387	1,345
Self-employed workers	1,417	1,460	1,540	1,577	1,590	1,605	1,604	1,587
Unpaid family workers	219	196	351	305	368	346	342	314
Nonagricultural industries:								
Wage and salary workers	78,345	81,851	79,506	81,727	82,281	82,692	82,915	83,078
Government	15,211	15,526	14,932	15,463	15,415	15,422	15,267	15,237
Private industries	63,134	66,325	64,574	66,264	66,866	67,270	67,648	67,841
Private households	1,288	1,328	1,341	1,358	1,403	1,436	1,421	1,383
Other industries	61,846	64,997	63,233	64,906	65,463	65,834	66,227	66,458
Self-employed workers	5,719	6,124	5,856	6,080	6,082	6,182	6,259	6,268
Unpaid family workers	459	440	509	460	467	442	439	488
PERSONS AT WORK [1]								
Nonagricultural industries	80,980	84,176	80,846	82,788	83,347	83,662	83,304	84,054
Full-time schedules	65,549	68,592	66,147	67,827	68,240	68,574	68,812	69,215
Part time for economic reasons	3,377	3,111	3,441	3,263	3,285	3,220	2,986	3,193
Usually work full time	1,484	1,248	1,342	1,237	1,255	1,247	1,043	1,128
Usually work part time	1,893	1,863	2,099	2,026	2,030	1,973	1,943	2,065
Part time for noneconomic reasons	12,054	12,473	11,258	11,698	11,822	11,868	11,506	11,646

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

Table A-4. Duration of unemployment

(Numbers in thousands)

Weeks of unemployment	Not seasonally adjusted		Seasonally adjusted					
	Feb. 1977	Feb. 1978	Feb. 1977	Oct. 1977	Nov. 1977	Dec. 1977	Jan. 1978	Feb. 1978
DURATION								
Less than 5 weeks	2,869	2,591	2,863	2,804	2,851	2,628	2,700	2,586
5 to 14 weeks	2,832	2,406	2,142	2,117	2,037	1,937	1,861	1,820
15 weeks and over	2,409	1,742	2,168	1,848	1,829	1,797	1,688	1,568
15 to 26 weeks	1,183	1,062	959	920	936	941	864	897
27 weeks and over	1,226	680	1,209	928	893	856	824	671
Average (mean) duration, in weeks	14.8	12.6	14.7	13.8	13.7	13.8	13.1	12.5
Median duration, in weeks	8.2	7.7	7.5	7.1	7.0	7.1	6.6	7.0
PERCENT DISTRIBUTION								
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 5 weeks	35.4	38.4	39.9	41.4	42.4	41.3	43.2	43.3
5 to 14 weeks	34.9	35.7	29.9	31.3	30.3	30.4	29.8	30.5
15 weeks and over	29.7	25.8	30.2	27.3	27.2	28.2	27.0	26.2
15 to 26 weeks	14.6	15.8	13.4	13.6	13.9	15.0	13.8	15.0
27 weeks and over	15.1	10.1	16.9	13.7	13.3	13.5	13.2	11.2

Table A-5. Reasons for unemployment

[Numbers in thousands]

Reasons	Not seasonally adjusted		Seasonally adjusted					
	Feb. 1977	Feb. 1978	Feb. 1977	Oct. 1977	Nov. 1977	Dec. 1977	Jan. 1978	Feb. 1978
NUMBER OF UNEMPLOYED								
Lost last job	4,371	3,241	3,425	3,035	2,969	2,748	2,698	2,540
On layoff	1,474	1,047	999	840	780	687	768	709
Other job losers	2,898	2,194	2,426	2,195	2,189	2,061	1,930	1,831
Left last job	868	885	881	876	881	877	856	898
Reentered labor force	2,030	1,848	1,972	1,906	1,891	1,886	1,821	1,796
Seeking first job	839	765	942	857	901	820	914	868
PERCENT DISTRIBUTION								
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Job losers	53.9	48.0	47.4	45.5	44.7	43.4	42.9	41.6
On layoff	18.2	15.5	13.8	12.6	11.7	10.9	12.2	11.6
Other job losers	35.7	32.5	33.6	32.9	33.0	32.6	30.7	30.0
Job leavers	10.7	13.1	12.2	13.1	13.3	13.9	13.6	14.7
Reentrants	25.0	28.8	27.3	28.6	28.5	29.8	29.0	29.4
New entrants	10.3	11.4	13.0	12.8	13.6	13.0	14.5	14.2
UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE								
Job losers	4.5	3.3	3.6	3.1	3.0	2.8	2.7	2.6
Job leavers	.9	.9	.9	.9	.9	.9	.9	.9
Reentrants	2.1	1.9	2.0	1.9	1.9	1.9	1.8	1.8
New entrants	.9	.8	1.0	.9	.9	.8	.9	.9

Table A-6. Unemployment by sex and age, seasonally adjusted

Sex and age	Number of unemployed persons (in thousands)		Unemployment rates					
	Feb. 1977	Feb. 1978	Feb. 1977	Oct. 1977	Nov. 1977	Dec. 1977	Jan. 1978	Feb. 1978
Total, 16 years and over	7,273	6,090	7.6	6.8	6.7	6.4	6.3	6.1
16 to 19 years	1,688	1,622	18.6	17.3	17.2	15.6	16.0	17.4
16 to 17 years	755	821	20.0	18.8	19.0	17.8	18.2	20.8
18 to 19 years	938	806	17.6	16.2	15.9	13.7	14.5	15.0
20 to 24 years	1,701	1,477	11.9	10.4	10.4	10.2	10.5	10.1
25 years and over	3,811	2,941	5.2	4.9	4.7	4.4	4.2	3.9
25 to 54 years	3,159	2,476	5.4	5.1	4.8	4.6	4.3	4.1
55 years and over	657	470	4.6	4.2	4.1	4.0	3.5	3.3
Men, 16 years and over	3,978	3,245	7.0	6.0	5.8	5.5	5.6	5.6
16 to 19 years	905	862	18.6	16.7	16.4	15.3	14.9	17.2
16 to 17 years	395	457	19.6	18.6	18.2	16.7	17.2	21.1
18 to 19 years	516	410	18.0	15.1	15.0	13.9	13.4	14.3
20 to 24 years	945	816	12.0	9.9	9.8	9.8	10.5	10.3
25 years and over	2,058	1,539	4.6	4.3	3.8	3.6	3.5	3.4
25 to 54 years	1,665	1,238	4.7	4.3	3.9	3.6	3.6	3.4
55 years and over	398	285	4.5	4.1	3.7	3.7	3.2	3.2
Women, 16 years and over	3,295	2,845	8.4	8.0	8.1	7.6	7.3	6.9
16 to 19 years	783	760	18.6	18.0	18.1	16.1	17.4	17.7
16 to 17 years	360	364	20.6	19.1	20.1	19.2	19.5	20.4
18 to 19 years	422	396	17.1	17.4	16.8	13.5	15.8	15.7
20 to 24 years	756	661	11.7	11.0	11.1	10.8	10.5	9.8
25 years and over	1,753	1,422	6.1	5.8	6.0	5.7	5.2	4.7
25 to 54 years	1,494	1,238	6.4	6.2	6.3	6.0	5.5	5.1
55 years and over	259	185	4.8	4.5	4.8	4.4	3.8	3.3

Table A-7. Range of unemployment measures based on varying definitions of unemployment and the labor force, seasonally adjusted

[Percent]

Measures	Quarterly averages					Monthly data		
	1976	1977				1977	1978	
	IV	I	II	III	IV	Dec.	Jan.	Feb.
U-1—Persons unemployed 15 weeks or longer as a percent of the civilian labor force	2.5	2.2	1.9	1.9	1.9	1.8	1.7	1.6
U-2—Job losers as a percent of the civilian labor force	3.8	3.4	3.1	3.2	3.0	2.8	2.7	2.6
U-3—Unemployed persons 25 years and over as a percent of the civilian labor force 25 years and over	5.5	5.2	5.0	4.9	4.7	4.4	4.2	3.9
U-4—Unemployed full-time jobseekers as a percent of the full-time labor force	7.4	6.9	6.6	6.5	6.2	5.9	5.8	5.7
U-5—Total unemployed as a percent of the civilian labor force (official measure)	7.8	7.4	7.1	6.9	6.6	6.4	6.3	6.1
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	9.6	9.0	8.7	8.6	8.2	7.9	7.7	7.6
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	10.6	10.0	9.7	9.7	9.2	N.A.	N.A.	N.A.

N.A. = not available.

Table A-8. Employment status of the noninstitutional population for ten large States

[Numbers in thousands]

State and employment status	Not seasonally adjusted			Seasonally adjusted					
	Feb. 1977	Jan. 1978	Feb. 1978	Feb. 1977	Oct. 1977	Nov. 1977	Dec. 1977	Jan. 1978	Feb. 1978
California									
Civilian noninstitutional population[1]	15,772	16,099	16,124	15,772	16,034	16,062	16,090	16,099	16,124
Civilian labor force	9,957	10,280	10,386	9,992	10,227	10,355	10,317	10,288	10,422
Employed	9,052	9,467	9,533	9,147	9,420	9,529	9,602	9,584	9,628
Unemployed	905	813	854	845	807	826	715	704	794
Unemployment rate	9.1	7.9	8.2	8.5	7.9	8.0	6.9	6.8	7.6
Florida									
Civilian noninstitutional population[1]	6,305	6,465	6,481	6,305	6,416	6,435	6,453	6,465	6,481
Civilian labor force	3,438	3,630	3,639	(2)	(2)	(2)	(2)	(2)	(2)
Employed	3,095	3,358	3,416	(2)	(2)	(2)	(2)	(2)	(2)
Unemployed	343	272	223	(2)	(2)	(2)	(2)	(2)	(2)
Unemployment rate	10.0	7.5	6.1	(2)	(2)	(2)	(2)	(2)	(2)
Illinois									
Civilian noninstitutional population[1]	8,115	8,189	8,195	8,115	8,180	8,187	8,194	8,189	8,195
Civilian labor force	5,093	5,254	5,235	5,124	5,269	5,305	5,276	5,299	5,262
Employed	4,757	4,858	4,861	4,819	4,942	4,936	4,945	4,943	4,923
Unemployed	336	396	374	305	327	369	331	356	339
Unemployment rate	6.6	7.5	7.1	6.0	6.2	7.0	6.3	6.7	6.4
Massachusetts									
Civilian noninstitutional population[1]	4,278	4,315	4,319	4,278	4,308	4,313	4,317	4,315	4,319
Civilian labor force	2,731	2,819	2,794	(2)	(2)	(2)	(2)	(2)	(2)
Employed	2,466	2,607	2,594	2,513	2,587	2,591	2,613	2,649	2,641
Unemployed	265	212	200	(2)	(2)	(2)	(2)	(2)	(2)
Unemployment rate	9.7	7.5	7.1	(2)	(2)	(2)	(2)	(2)	(2)
Michigan									
Civilian noninstitutional population[1]	6,518	6,590	6,596	6,518	6,575	6,582	6,590	6,590	6,596
Civilian labor force	4,093	4,164	4,161	(2)	(2)	(2)	(2)	(2)	(2)
Employed	3,693	3,825	3,862	(2)	(2)	(2)	(2)	(2)	(2)
Unemployed	400	339	299	344	341	356	319	330	242
Unemployment rate	9.8	8.2	7.2	(2)	(2)	(2)	(2)	(2)	(2)
New Jersey									
Civilian noninstitutional population[1]	5,392	5,439	5,444	5,392	5,429	5,435	5,440	5,439	5,444
Civilian labor force	3,317	3,360	3,326	3,348	3,411	3,441	3,487	3,406	3,356
Employed	2,935	3,097	3,049	2,995	3,083	3,141	3,226	3,175	3,109
Unemployed	382	263	277	353	328	300	261	231	247
Unemployment rate	11.5	7.8	8.3	10.5	9.6	8.7	7.5	6.8	7.4
New York									
Civilian noninstitutional population[1]	13,292	13,317	13,318	13,292	13,315	13,321	13,326	13,317	13,318
Civilian labor force	7,681	7,789	7,743	7,755	7,794	7,863	7,906	7,906	7,826
Employed	6,870	7,107	7,055	7,007	7,108	7,160	7,246	7,278	7,192
Unemployed	811	682	688	748	686	703	660	628	634
Unemployment rate	10.6	8.8	8.9	9.6	8.8	8.9	8.3	7.9	8.1
Ohio									
Civilian noninstitutional population[1]	7,747	7,812	7,816	7,747	7,801	7,807	7,814	7,812	7,816
Civilian labor force	4,683	4,746	4,733	4,745	4,880	4,921	4,842	4,787	4,795
Employed	4,242	4,455	4,437	4,347	4,582	4,598	4,580	4,526	4,541
Unemployed	441	291	296	398	298	323	262	261	254
Unemployment rate	9.4	6.1	6.3	8.4	6.1	6.6	5.4	5.5	5.3
Pennsylvania									
Civilian noninstitutional population[1]	8,788	8,842	8,846	8,788	8,834	8,840	8,847	8,842	8,846
Civilian labor force	5,034	5,120	5,138	5,078	5,180	5,182	5,207	5,166	5,188
Employed	4,548	4,714	4,746	4,659	4,785	4,790	4,800	4,802	4,862
Unemployed	486	406	393	419	395	392	407	364	326
Unemployment rate	9.7	7.9	7.6	8.3	7.6	7.6	7.8	7.0	6.3
Texas									
Civilian noninstitutional population[1]	8,908	9,108	9,125	8,908	9,064	9,083	9,101	9,108	9,125
Civilian labor force	5,693	5,905	5,843	5,769	5,846	5,872	5,932	5,984	5,919
Employed	5,329	5,580	5,525	5,417	5,525	5,570	5,625	5,692	5,612
Unemployed	364	325	318	352	321	302	307	292	307
Unemployment rate	6.4	5.5	5.4	6.1	5.5	5.1	5.2	4.9	5.2

[1] The population figures are not adjusted for seasonal variations; therefore, identical numbers appear in the unadjusted and the seasonally adjusted columns.

[2] These are the official Bureau of Labor Statistics' estimates used in the administration of Federal fund allocation programs.

[3] Seasonally-adjusted data are not presented for this series, because the variations that are due to seasonal influences cannot be separated with sufficient precision from those which stem from the trend-cycle and irregular components of the original time series.

NOTE: A comprehensive reappraisal of the seasonal adjustment of the employment and unemployment series for all 10 States is now underway. Revisions in certain series will be introduced in the near future.

ESTABLISHMENT DATA

Table B-1. Employees on nonagricultural payrolls, by industry

(In thousands)

Industry	Not seasonally adjusted				Seasonally adjusted					
	FEB. 1977	DEC. 1977	JAN. 1978 p	FEB. 1978 p	FEB. 1977	OCT. 1977	NOV. 1977	DEC. 1977	JAN. 1978 p	FEB. 1978 p
TOTAL	79,734	84,181	82,557	82,874	80,870	82,502	83,245	83,429	83,725	84,074
GOODS-PRODUCING	23,063	24,472	23,975	24,010	23,763	24,436	24,528	24,526	24,556	24,753
MINING	807	707	700	695	824	859	843	711	710	713
CONTRACT CONSTRUCTION	3,251	3,884	3,526	3,505	3,661	3,511	3,950	3,947	3,913	3,947
MANUFACTURING	19,005	19,881	19,749	19,806	19,278	19,666	19,715	19,868	19,575	20,093
Production workers	13,600	14,321	14,200	14,235	13,852	14,132	14,184	14,306	14,407	14,496
DURABLE GOODS	11,108	11,772	11,730	11,761	11,261	11,604	11,625	11,748	11,631	11,925
Production workers	7,899	8,462	8,418	8,435	8,039	8,313	8,337	8,438	8,509	8,584
Ordnance and accessories	155.8	155.8	157.0	156.2	156	150	152	155	156	156
Lumber and wood products	606.0	654.2	645.5	647.3	627	653	662	666	670	670
Furniture and fixtures	493.7	531.2	528.8	532.3	498	517	523	530	531	537
Stone, clay, and glass products	597.6	664.3	649.7	651.5	622	657	667	671	675	678
Primary metal industries	1,170.6	1,201.6	1,204.7	1,205.5	1,180	1,208	1,206	1,204	1,210	1,216
Fabricated metal products	1,397.7	1,496.3	1,486.9	1,491.3	1,420	1,473	1,475	1,492	1,496	1,516
Machinery, except electrical	2,140.6	2,272.9	2,272.7	2,264.3	2,134	2,243	2,237	2,257	2,264	2,287
Electrical equipment	1,878.9	2,001.0	1,999.7	2,005.7	1,890	1,961	1,974	1,987	2,002	2,018
Transportation equipment	1,735.8	1,844.4	1,841.9	1,826.9	1,786	1,801	1,782	1,830	1,861	1,880
Instruments and related products	521.1	537.7	536.3	535.9	523	530	532	536	538	538
Miscellaneous manufacturing	409.7	412.7	406.6	413.9	425	411	413	420	425	429
NONDURABLE GOODS	7,897	8,105	8,019	8,045	8,017	8,062	8,090	8,120	8,144	8,168
Production workers	5,701	5,859	5,782	5,800	5,813	5,819	5,847	5,868	5,898	5,912
Food and kindred products	1,652.5	1,696.5	1,663.0	1,654.6	1,727	1,696	1,703	1,714	1,723	1,729
Tobacco manufacturers	71.4	73.2	69.2	66.6	73	67	66	65	65	68
Textile mill products	962.8	991.6	986.6	989.7	967	987	993	990	991	994
Apparel and other textile products	1,277.8	1,284.3	1,263.7	1,278.2	1,282	1,285	1,291	1,291	1,291	1,282
Paper and allied products	680.3	707.1	700.1	702.5	687	702	706	705	705	710
Printing and publishing	1,094.2	1,132.1	1,125.6	1,129.0	1,096	1,117	1,120	1,123	1,128	1,131
Chemicals and allied products	1,041.0	1,060.4	1,058.7	1,066.0	1,045	1,058	1,055	1,064	1,067	1,075
Petroleum and coal products	198.9	211.0	208.9	209.0	205	211	212	212	214	214
Rubber and plastics products, nec	655.8	690.7	686.6	690.2	666	673	681	689	691	701
Leather and leather products	262.4	262.5	256.5	258.8	265	266	265	263	261	262
SERVICE-PRODUCING	56,671	59,709	58,582	58,864	57,107	58,466	58,717	58,903	59,127	59,321
TRANSPORTATION AND PUBLIC UTILITIES	4,494	4,657	4,596	4,604	4,553	4,610	4,634	4,652	4,642	4,665
WHOLESALE AND RETAIL TRADE	17,653	19,269	18,565	18,428	18,039	18,414	18,512	18,610	18,776	18,831
WHOLESALE TRADE	4,291	4,482	4,454	4,460	4,334	4,415	4,438	4,460	4,481	4,505
RETAIL TRADE	13,362	14,787	14,111	13,968	13,705	13,999	14,074	14,150	14,297	14,326
FINANCE, INSURANCE, AND REAL ESTATE	4,391	4,597	4,582	4,602	4,431	4,572	4,561	4,611	4,624	4,644
SERVICES	14,887	15,585	15,388	15,545	15,068	15,533	15,608	15,663	15,670	15,738
GOVERNMENT	15,246	15,601	15,451	15,681	15,016	15,337	15,366	15,367	15,413	15,443
FEDERAL	2,705	2,724	2,711	2,715	2,721	2,730	2,727	2,718	2,736	2,735
STATE AND LOCAL	12,541	12,877	12,740	12,962	12,295	12,607	12,635	12,645	12,677	12,708

p-preliminary.

ESTABLISHMENT DATA

Table B-2. Average weekly hours of production or nonsupervisory workers,[1] on private nonagricultural payrolls, by industry

Industry	Not seasonally adjusted				Seasonally adjusted					
	FEB. 1977	DEC. 1977	JAN. 1978 p	FEB. 1978 p	FEB. 1977	OCT. 1977	NOV. 1977	DEC. 1977	JAN. 1978 p	FEB. 1978 p
TOTAL PRIVATE	35.9	36.3	35.2	35.4	36.2	36.2	36.2	36.2	35.6	35.7
MINING	43.3	43.8	42.3	42.7	43.5	44.6	44.6	43.7	43.0	42.5
CONTRACT CONSTRUCTION	36.6	36.4	33.0	34.3	37.5	36.8	36.5	36.8	34.4	35.2
MANUFACTURING	39.9	41.1	39.1	39.6	40.3	40.4	40.5	40.5	39.6	39.9
Overtime hours	3.0	3.7	3.2	3.5	3.3	3.5	3.5	3.5	3.5	3.6
DURABLE GOODS	40.4	41.5	39.7	40.2	40.8	41.2	41.1	41.2	40.1	40.5
Overtime hours	3.1	4.0	3.4	3.7	3.4	3.8	3.7	3.7	3.7	4.0
Ordnance and accessories	40.6	41.8	40.0	38.8	40.8	40.8	40.2	41.1	40.2	39.0
Lumber and wood products	40.2	40.3	38.1	39.1	40.4	40.1	40.3	40.2	39.4	39.3
Furniture and fixtures	37.5	40.3	37.2	38.8	38.2	39.5	39.4	39.5	37.7	39.6
Stone, clay, and glass products	40.7	41.7	39.4	39.9	41.4	41.1	41.6	41.6	40.4	40.5
Primary metal industries	40.4	41.7	40.6	40.9	40.7	41.3	41.3	41.4	40.7	41.2
Fabricated metal products	40.4	42.2	39.7	40.2	40.8	41.1	41.1	41.5	40.1	40.6
Machinery, except electrical	41.3	43.0	41.0	41.6	41.4	42.0	41.9	41.9	41.0	41.7
Electrical equipment	40.3	41.0	39.2	39.3	40.5	40.3	40.2	40.3	39.5	39.5
Transportation equipment	41.0	43.6	40.2	40.1	41.6	42.7	42.5	42.2	41.1	40.7
Instruments and related products	40.6	41.2	39.5	40.4	40.9	40.6	40.4	40.4	39.7	40.7
Miscellaneous manufacturing	39.3	39.3	37.6	38.0	39.5	39.1	39.0	38.9	38.1	38.2
NONDURABLE GOODS	39.1	39.9	38.3	38.7	39.5	39.4	39.5	39.5	38.7	39.1
Overtime hours	2.9	3.2	2.9	3.1	3.2	3.1	3.2	3.1	3.1	3.4
Food and kindred products	39.7	40.1	39.0	39.0	40.3	39.5	39.8	39.7	39.2	39.6
Tobacco manufacturers	38.5	39.1	37.1	35.9	39.1	38.2	38.8	38.3	37.5	36.5
Textile mill products	40.2	40.9	39.2	39.5	40.5	40.5	40.7	40.6	40.0	40.2
Apparel and other textile products	35.3	35.9	33.2	35.1	35.6	35.6	35.7	35.8	33.6	35.4
Paper and allied products	42.1	43.5	42.1	41.8	42.7	42.8	42.7	42.9	42.2	42.4
Printing and publishing	37.5	38.5	37.0	37.2	37.8	37.6	37.6	37.9	37.5	37.5
Chemicals and allied products	41.5	42.1	41.3	41.5	41.7	41.6	41.7	41.7	41.5	41.7
Petroleum and coal products	41.8	43.9	43.0	42.9	42.4	43.2	43.3	43.9	43.7	43.6
Rubber and plastics products, nec	41.3	41.2	39.6	39.5	41.3	40.9	40.9	40.7	39.8	39.5
Leather and leather products	36.5	37.6	36.0	36.3	36.8	37.7	37.8	37.2	36.6	36.6
TRANSPORTATION AND PUBLIC UTILITIES	40.2	40.3	39.5	39.9	40.5	39.7	40.3	40.2	39.8	40.2
WHOLESALE AND RETAIL TRADE	33.0	33.5	32.3	32.4	33.4	33.5	33.2	33.3	32.8	32.8
WHOLESALE TRADE	38.8	39.2	38.4	38.4	39.1	39.1	38.9	38.8	38.6	38.7
RETAIL TRADE	31.3	32.0	30.5	30.6	31.8	31.9	31.6	31.7	31.1	31.1
FINANCE, INSURANCE, AND REAL ESTATE	36.7	36.6	36.7	36.5	36.6	36.7	36.7	36.6	36.6	36.4
SERVICES	33.4	33.3	33.2	33.1	33.5	33.5	33.3	33.4	33.4	33.2

[1] Data relate to production workers in mining and manufacturing; to construction workers in contract construction; and to nonsupervisory workers in transportation and public utilities; wholesale and retail trade; finance, insurance, and real estate; and services. These groups account for approximately four-fifths of the total employment on private nonagricultural payrolls.
p=preliminary.

ESTABLISHMENT DATA

Table B-3. Average hourly and weekly earnings of production or nonsupervisory workers[1] on private nonagricultural payrolls, by industry

Industry	Average hourly earnings				Average weekly earnings			
	FEB. 1977	DEC. 1977	JAN. 1978 P	FEB. 1978 P	FEB. 1977	DEC. 1977	JAN. 1978 P	FEB. 1978 P
TOTAL PRIVATE	$5.09	$5.42	$5.48	$5.48	$182.73	$196.75	$152.50	$153.55
Seasonally adjusted	5.10	5.42	5.48	5.49	184.62	196.20	155.05	155.55
MINING	6.76	6.68	6.84	6.85	292.31	292.56	289.33	292.50
CONTRACT CONSTRUCTION	7.88	8.27	8.33	8.27	288.41	301.03	274.85	283.66
MANUFACTURING	5.43	5.88	5.92	5.92	216.66	241.67	231.47	234.43
DURABLE GOODS	5.75	6.29	6.30	6.30	233.92	263.55	250.11	253.26
Ordnance and accessories	6.06	6.61	6.63	6.69	246.04	276.30	265.20	255.57
Lumber and wood products	4.91	5.23	5.35	5.32	157.38	210.77	203.84	206.01
Furniture and fixtures	4.16	4.47	4.50	4.50	156.00	180.14	167.40	174.60
Stone, clay, and glass products	5.54	5.96	5.99	5.97	225.48	248.53	236.01	236.20
Primary metal industries	7.06	7.81	7.90	7.54	285.22	325.68	320.74	324.75
Fabricated metal products	5.62	6.07	6.04	6.02	227.05	256.15	229.35	242.00
Machinery, except electrical	6.02	6.48	6.46	6.52	248.63	278.64	264.86	271.23
Electrical equipment	5.17	5.61	5.62	5.63	208.35	230.01	220.30	221.26
Transportation equipment	6.87	7.56	7.48	7.48	281.67	329.62	300.70	256.95
Instruments and related products	5.10	5.41	5.45	5.46	207.06	222.65	215.28	220.56
Miscellaneous manufacturing	4.25	4.51	4.56	4.55	167.03	177.24	171.46	172.90
NONDURABLE GOODS	4.93	5.27	5.34	5.33	192.76	210.27	204.52	206.27
Food and kindred products	5.22	5.56	5.60	5.63	207.23	223.76	216.40	215.57
Tobacco manufacturers	5.37	5.70	5.58	6.05	206.75	222.87	221.86	217.20
Textile mill products	3.84	4.12	4.16	4.14	154.37	168.51	163.07	165.15
Apparel and other textile products	3.55	3.75	3.84	3.82	125.32	134.63	127.49	134.06
Paper and allied products	5.65	6.20	6.22	6.24	234.55	265.76	261.86	260.83
Printing and publishing	5.93	6.28	6.33	6.32	222.38	241.78	234.21	235.10
Chemicals and allied products	6.18	6.67	6.71	6.73	256.47	280.81	277.12	276.30
Petroleum and coal products	7.63	7.86	8.26	8.48	318.53	345.05	355.18	362.75
Rubber and plastics products, nec	5.03	5.26	5.30	5.29	207.74	216.71	209.88	208.56
Leather and leather products	3.60	3.71	3.80	3.83	131.40	136.50	136.80	136.03
TRANSPORTATION AND PUBLIC UTILITIES	6.74	7.24	7.29	7.29	270.95	291.77	287.96	290.87
WHOLESALE AND RETAIL TRADE	4.20	4.39	4.53	4.54	138.60	147.01	146.32	147.10
WHOLESALE TRADE	5.40	5.77	5.84	5.80	205.52	226.18	224.26	222.32
RETAIL TRADE	3.76	3.92	4.06	4.07	117.69	125.44	123.83	124.54
FINANCE, INSURANCE, AND REAL ESTATE	4.52	4.75	4.83	4.81	165.88	173.85	177.26	175.57
SERVICES	4.61	4.91	4.99	4.99	153.97	163.90	165.67	165.17

[1] See footnote 1, table B-2.
P=preliminary.

ESTABLISHMENT DATA

Table B-4. Hourly earnings index for production or nonsupervisory workers[1] on private nonagricultural payrolls, by industry division, seasonally adjusted

(1967=100)

Industry	FEB. 1977	SEPT. 1977	OCT. 1977	NOV. 1977	DEC. 1977	JAN. P 1978	FEB. P 1978	Percent change from: FEB. 1977–FEB. 1978	Percent change from: JAN. 1978–FEB. 1978
TOTAL PRIVATE NONFARM:									
Current dollars	193.2	201.2	203.3	204.1	205.2	207.8	207.8	7.6	(4)
Current (1967) dollars	109.0	109.5	110.2	110.2	110.3	110.9	N.A.	(2)	(3)
MINING	209.9	218.8	221.7	221.7	219.1	221.7	222.3	5.9	.3
CONTRACT CONSTRUCTION	191.4	196.2	197.8	198.5	198.9	200.5	201.1	5.1	.3
MANUFACTURING	193.4	202.7	204.2	205.4	206.3	208.0	208.9	8.0	.4
TRANSPORTATION AND PUBLIC UTILITIES	206.2	215.0	217.8	219.1	221.9	222.8	222.4	7.9	-.2
WHOLESALE AND RETAIL TRADE	187.4	194.4	196.2	197.1	198.0	202.4	202.4	8.0	(4)
FINANCE, INSURANCE, AND REAL ESTATE	175.5	181.8	185.2	185.3	185.8	188.7	186.3	6.2	-1.2
SERVICES	197.3	205.8	208.6	208.8	209.8	213.8	213.0	8.0	-.4

[1] See footnote 1, table B-2.
[2] PERCENT CHANGE WAS 1.1 FROM JANUARY 1977 TO JANUARY 1978, THE LATEST MONTH AVAILABLE.
[3] PERCENT CHANGE WAS .5 FROM DECEMBER 1977 TO JANUARY 1978, THE LATEST MONTH AVAILABLE.
[4] LESS THAN 0.05 PERCENT.
N.A. = not available.
P=preliminary.

NOTE: All series are in current dollars except where indicated. The index excludes effects of two types of changes that are unrelated to underlying wage-rate developments: Fluctuations in overtime premiums in manufacturing (the only sector for which overtime data are available) and the effects of changes in the proportion of workers in high-wage and low-wage industries.

Table B-5. Indexes of aggregate weekly hours of production or nonsupervisory workers,[1] on private nonagricultural payrolls, by industry, seasonally adjusted

(1967=100)

Industry division and group	1977											1978	
	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	JAN. P	FEB. P
TOTAL PRIVATE	114.2	115.0	115.4	115.9	115.8	115.8	115.6	115.9	116.8	117.2	117.5	116.0	116.5
GOODS-PRODUCING	98.6	100.1	100.8	101.4	101.8	101.4	100.6	100.5	101.7	102.3	102.1	99.4	101.1
MINING	134.3	140.6	141.6	140.6	142.3	139.9	134.7	142.5	143.9	144.8	113.3	110.8	111.6
CONTRACT CONSTRUCTION	105.6	108.7	111.7	112.4	111.8	112.8	110.8	110.4	112.3	114.0	113.5	104.0	107.2
MANUFACTURING	96.1	97.2	97.5	98.1	98.7	98.0	97.6	97.8	98.4	98.8	99.7	98.1	99.6
DURABLE GOODS	95.2	96.8	96.9	97.8	98.7	98.3	98.1	98.4	99.3	99.5	100.8	99.2	100.8
Ordnance and accessories	39.3	39.2	40.1	40.7	41.0	40.5	39.3	39.1	38.2	38.2	40.2	40.4	35.2
Lumber and wood products	103.0	103.6	103.5	104.1	104.0	105.3	104.0	106.0	106.8	109.5	109.8	108.2	107.7
Furniture and fixtures	103.2	103.3	106.1	107.1	107.9	108.4	107.2	108.3	110.6	111.7	113.8	109.1	113.9
Stone, clay, and glass products	97.4	101.7	103.9	104.2	105.4	104.9	104.1	103.3	103.2	104.7	107.0	104.5	105.0
Primary metal industries	85.9	88.6	89.7	90.7	90.9	89.0	88.2	89.0	89.7	89.5	89.7	88.6	90.2
Fabricated metal products	100.3	101.7	101.3	102.8	104.2	103.7	103.3	103.1	105.0	105.7	107.7	104.7	107.5
Machinery, except electrical	97.9	98.7	98.8	100.2	101.6	103.2	103.5	103.6	105.5	104.9	106.0	104.1	107.1
Electrical equipment and supplies	95.6	96.1	96.3	97.2	97.9	98.3	98.3	97.8	98.8	99.4	100.4	99.2	100.4
Transportation equipment	92.9	96.4	94.7	95.3	96.5	94.8	95.4	94.5	96.2	94.5	96.7	96.3	96.4
Instruments and related products	112.7	111.6	111.7	112.3	113.2	111.7	111.3	112.4	113.2	113.4	114.4	112.6	115.6
Miscellaneous manufacturing industry	96.5	95.5	95.0	94.7	94.6	91.4	91.3	90.3	91.1	91.5	93.9	93.1	93.5
NONDURABLE GOODS	97.3	97.7	98.5	98.5	98.7	97.7	96.9	96.5	97.1	97.8	98.1	96.6	97.9
Food and kindred products	97.5	97.8	98.5	97.3	97.3	95.9	94.5	94.1	92.8	94.2	94.6	94.6	95.7
Tobacco manufacturers	82.4	75.1	80.5	76.2	80.2	77.2	71.7	73.2	72.4	72.2	74.0	72.4	65.2
Textile mill products	98.1	99.4	99.6	100.2	99.7	99.9	98.9	99.4	100.2	101.4	100.8	99.6	100.3
Apparel and other textile products	87.9	88.1	87.7	88.6	89.8	87.6	87.8	87.2	87.8	88.6	85.0	84.3	87.3
Paper and allied products	98.2	98.6	100.8	100.4	101.1	100.3	99.4	99.7	100.2	99.6	100.8	99.3	100.8
Printing and publishing	94.6	94.5	95.2	95.1	95.3	95.6	95.1	95.7	95.7	95.9	95.9	95.3	95.7
Chemicals and allied products	101.6	102.2	102.9	103.3	103.8	103.7	103.4	103.0	102.6	103.0	103.5	103.7	104.9
Petroleum and coal products	114.4	118.4	119.6	119.3	121.6	119.9	120.4	120.6	122.8	124.8	125.7	127.8	128.4
Rubber and plastics products, nec	131.8	132.9	134.8	135.3	133.9	132.5	129.7	129.3	130.5	132.5	133.8	131.1	132.3
Leather and leather products	72.1	71.8	73.4	73.3	72.9	69.5	71.8	72.7	73.8	73.7	71.9	70.7	70.4
SERVICE-PRODUCING	125.0	125.3	125.5	125.9	125.6	125.8	126.1	126.4	127.2	127.5	128.2	127.5	127.8
TRANSPORTATION AND PUBLIC UTILITIES	104.4	104.1	103.8	104.6	104.1	103.1	103.5	103.9	102.9	105.1	105.6	103.8	105.3
WHOLESALE AND RETAIL TRADE	120.3	120.7	121.0	121.4	121.2	121.6	121.4	121.8	122.7	122.4	123.2	122.5	122.9
WHOLESALE TRADE	117.1	116.9	117.3	117.3	117.3	117.5	117.5	117.6	118.7	118.8	118.9	118.9	120.0
RETAIL TRADE	121.6	122.1	122.4	123.0	122.7	123.1	123.1	123.3	124.2	123.7	124.8	123.8	124.0
FINANCE, INSURANCE, AND REAL ESTATE	130.2	131.0	131.0	131.6	131.7	132.3	132.7	133.2	134.2	134.9	134.9	135.4	135.3
SERVICES	139.3	139.8	140.1	140.3	139.6	140.1	140.6	140.9	142.7	142.6	143.4	143.0	142.6

[1] See footnote 1, table B-2.

P=preliminary.

ESTABLISHMENT DATA

Table B-6. Indexes of diffusion: Percent of industries in which employment[1] increased

Year and month	Over 1-month span	Over 3-month span	Over 6-month span	Over 12 month span
1975				
January	15.1	12.8	12.8	16.6
February	15.7	12.8	11.9	17.4
March	25.6	18.6	17.7	17.7
April	39.0	32.3	28.2	20.6
May	51.2	43.9	41.6	27.0
June	40.7	52.3	56.7	40.7
July	58.1	57.0	67.2	50.6
August	73.0	76.2	70.1	63.1
September	80.8	81.7	75.3	72.4
October	66.9	74.1	82.3	77.3
November	62.2	72.4	83.4	80.2
December	74.1	74.7	81.7	82.6
1976				
January	78.5	82.0	83.1	86.0
February	77.9	84.3	81.7	84.6
March	74.1	85.2	79.9	81.1
April	79.4	77.9	79.4	74.4
May	66.6	71.5	70.9	79.7
June	54.1	61.0	68.6	79.1
July	57.3	52.9	57.0	74.1
August	47.1	62.5	57.3	74.7
September	69.8	56.7	63.7	78.5
October	42.4	62.8	69.8	76.5
November	69.5	58.7	73.5	75.0
December	73.0	79.9	78.5	74.7
1977				
January	75.0	79.7	89.0	75.9
February	73.5	86.0	86.6	75.6
March	82.3	85.8	83.1	78.2
April	77.6	84.0	80.5	78.2
May	68.6	73.3	71.5	79.1
June	63.7	70.1	68.0	77.6
July	65.7	56.1	68.3	77.5p
August	50.0	62.5	68.3	78.4p
September	61.3	57.0	72.1	
October	59.9	73.3	74.9p	
November	75.9	76.2	80.4p	
December	73.8	79.2p		
1978				
January	67.5p	78.9p		
February	72.2p			
March				
April				
May				
June				
July				
August				
September				
October				
November				
December				

[1] Number of employees, seasonally adjusted, on payrolls of 172 private nonagricultural industries.
p = preliminary.

Representative BOLLING. Senator Proxmire.

Senator PROXMIRE. Thank you, Mr. Chairman.

Needless to say, Mr. Shiskin, I am really surprised and, of course, elated, but also I couldn't have been more wrong. I was sure that there would be a dropoff in employment and an increase in unemployment, because every bit of information we had suggested that was happening last month. Let me run over some of it.

The index of leading indicators took its steepest drop in 3 years. Of course, the leading indicators indicated what was going to happen in the future. Retail sales fell 3.1 percent, auto sales fell 18 percent, housing starts were down 29 percent, a phenomenal drop. Industrial production went down 0.7 of 1 percent and, of course, we have, as you also pointed out to us, the sharpest rise in wholesale prices in 3 years.

All of that is bad news. Much of it should be reflected in a higher level of unemployment, and yet you come in and are able to point out that we had another excellent month, and how do you explain it?

Mr. SHISKIN. Well, to begin with, I have consistently said here that we are experiencing a very good expansion, and I think we are.

Representative BOLLING. Would you please repeat that.

Mr. SHISKIN. We are experiencing very strong economic expansion, and I think we are. It is not the best expansion we have ever had, but it is certainly not the worst. It is a good, solid, vigorous expansion.

I think most of the difficulties you alluded to are weather-related. Last month, in January, we had very bad weather, and the weather in February wasn't very good either.

Senator PROXMIRE. Explain to us the effect that weather could have had on unemployment. Would that mean that people who were unable to work would, of course, be regarded as employed, even though they weren't able to get to work for a day or maybe a week? Is that correct?

Mr. SHISKIN. Yes.

Senator PROXMIRE. So that the weather would not have had an effect on unemployment statistics, although it could have had an effect on production and the ability to shop and so forth.

Mr. SHISKIN. I think it did, and that is why retail sales went down. It is hard to start a lot of houses and other kinds of construction during severely bad weather.

I have commented here numerous times that the seasonal adjustment corrects for the average weather, but not for abnormal weather, be it bad or good, and we have had abnormal weather this winter.

Senator PROXMIRE. This would suggest, then, that there might be a snapback as there was last year in the coming months?

Mr. SHISKIN. That is exactly what I think——

Senator PROXMIRE. And housing starts may pick up and so forth?

Mr. SHISKIN. I think so. If you run down the leading indicators, such as hours of work and housing starts, a lot om them were affected by the bad weather in January. So it is not surprising that they went down.

I think this is a remarkable performance on the part of the economy. Only 2 or 3 months ago, some of our best forecasters said they couldn't believe the unemployment figures—that there was something wrong with them. I didn't think there was anything wrong with them, and I don't think there is anything wrong with them today. I think they are very good.

Senator PROXMIRE. Isn't it a fact that this is another month that unemployment dropped, it went down to 6.3 percent in January and 6.1 percent in February. One of the most heartening elements here is that the February statistics tend to confirm the very sharp drop which we enjoyed in January, suggesting that this is not just a blip or an unusual development. It seems a little more solid than it did. Isn't that correct?

Mr. SHISKIN. I was personally convinced that our seasonal adjustment was correct in December, but there were many, many outside people who were very critical of it, and I don't hear them coming out and saying they were wrong, but that is what they were. [Laughter.]

And, you know, my policy generally has been to let events speak for themselves.

May I just go on for a minute, Senator Proxmire?

Senator PROXMIRE. Yes.

Mr. SHISKIN. In connection with the coal strike, I emphasized very strongly in my statement and in our press release that these data refer to 1 week of the month, and it was the week of February——

Senator PROXMIRE. As you pointed out, it is a very recent week, just this last week.

Mr. SHISKIN. The unemployment figures and the employment figures refer to the survey week, which was 3 weeks ago. Now, normally 3 weeks isn't long ago, but it is now.

Senator PROXMIRE. In your March 10 press release you say, "Last week (Feb. 26–Mar. 4) this number had reached 25,400"—the number of unemployed because of the coal strike.

Mr. SHISKIN. The number of people laid off, yes.

Senator PROXMIRE. That does seem to conflict with the complaints we have gotten from Congressmen and Senators from Ohio and Indiana who indicate that in their States the unemployment is, in their judgment, already quite high. That seems like a very low figure compared to what they have been telling us.

Mr. SHISKIN. First of all, let me call to your attention that the number in my statement is only part of the total. This in manufacturing and trade.

Senator PROXMIRE. What is—the 25,400 energy-related layoffs were in manufacturing and trade?

Mr. SHISKIN. Right. In addition, based on a more comprehensive survey, we know there are about 20,000 people who were laid off in transportation and public utilities.

Senator PROXMIRE. That would be 25,400 plus an additional 20,000 that were temporarily laid off.

Mr. SHISKIN. Yes. The 25,000 also applies to 11 States, not to the whole United States.

Senator PROXMIRE. Is there any way we can project this, and any way we can make an estimate as to what the overall increase in unemployment is caused by the coal strike during that week? Can you make a rough estimate?

Mr. SHISKIN. There is a group in the administration in which we have a representative, which is doing just that. The spokesmen have been Charlie Schultze and Jim Schlesinger. They are making forecasts on the basis of an econometric model, and we are very closely in touch with them.

I talk to some of them almost every day. They are making forecasts, and they think if the coal strike continues, the impact will be very much greater than it has been in the last 2 weeks.

Senator PROXMIRE. What would they show in unemployment in the last weeks?

Mr. SHISKIN. Unemployment isn't a good word in this context. We count those people as employed in this context. It is the layoffs you want to talk about. By our definition, a person who has a job and is not at work because of bad weather is employed.

The only contribution I can make today to the discussion of layoffs is to say that we also ask for the number expected to be laid off in the week ahead, and that number is about 38,000 for this week.

Senator PROXMIRE. So that would be this present week?

Mr. SHISKIN. Yes.

Senator PROXMIRE. 38,000. Can you give us any notion of how steeply this layoff rate is likely to climb over the next month?

Mr. SHISKIN. I can't.

Senator PROXMIRE. We are quite certain that even if they settled it today, it would be a month or so before they get back into production.

Mr. SHISKIN. I am no expert in this field, but some people are saying that the coal is being handled more efficiently. Some people are saying that many of the utilities are switching to oil, and some people say a lot of coal is getting in. But I am no expert on this, and I think you ought to address these questions to people who are concentrating on the longer term effects of the coal strike.

May I be a little self-serving and tell you a little bit about the survey, which I am very proud of, so that you will know what it is?

We start on Friday morning with the sample of between 900 and 1,000 of the largest establishments in these 11 States, and we telephone them. We have a questionnaire, and we have 100 people spread throughout the country to ask the questions and record the answers. By the end of the day they have most of the reports, but some plants can't tell us because the week isn't quite over. We get to them on Monday.

On Monday night we have all the material in, and we process it on Tuesday. By the middle of the day on Wednesday we have the figure. I give that figure to Charlie Schultze and Secretary Marshall on Wednesday, and everybody else gets it on Thursday. So we are right on top of this, and we are following it, but we are not making long-term forecasts.

Senator PROXMIRE. Let me go back once again.

You said 25,400 temporary layoffs, and that is confined primarily to manufacturing and trade.

Mr. SHISKIN. Yes.

Senator PROXMIRE. In addition, there is another 20,000 in transportation——

Mr. SHISKIN. Yes; in transportation and public utilities. We get that from the monthly payroll survey.

Senator PROXMIRE. Then you say the 25,400 figure would be 38,000 in the current week.

Mr. SHISKIN. According to the estimates of the people who reported.

Senator PROXMIRE. How big would it be if you included transportation?

Mr. SHISKIN. I don't know. We get the estimates of anticipated layoffs from people who give us the actual layoff figures.

Senator PROXMIRE. How comprehensive is the manufacturing trade and transportation? What is left out that isn't included here?

Mr. SHISKIN. Utilities and the other 39 States.

Senator PROXMIRE. I am sorry. I misunderstood. This 25,400 figure is only for the 11 States?

Mr. SHISKIN. Eleven heavily coal-dependent States.

Senator PROXMIRE. You would expect the principal reflection of the coal strike would be there in those 11 States?

Mr. SHISKIN. Yes.

Senator PROXMIRE. A State like California, which uses very little coal, you wouldn't expect it to——

Mr. SHISKIN. In the short run the effects in other industries are excluded. We expect in the long run that the effects will be spilling over into other industries, but apparently we haven't had much of that yet as of these dates, and Mr. Schlesinger and Mr. Schultze are saying that by the end of this month and certainly by the end of April, if the strike continues, we will have very large numbers of people laid off.

Senator PROXMIRE. Of course they have a case to prove. If they are going to go to court and get an injunction, they are going to have to be able to come in and say more than that the coal strike increased unemployment by a fraction of 1 percent. They have to make the strongest case they can.

Mr. SHISKIN. I am being very neutral on this, because we don't like to make forecasts, and I have not studied their figures at all. I know one of the best people in BLS is on that committee, and I have great confidence in him.

Representative BOLLING. In your statement, Mr. Shiskin, you say the rise in employment supporting the establishment survey was one of the largest in recent record, the rise in employment. and yet at another point you say total employment rose by 122,000. We have had many, many months that greatly exceeded that. That is about a third or a fourth of what we had in some months.

Last year there was an increase of 4 million jobs, which is 300,000 a month. How do you square that difference, that total employment rose 122.000, but you say the establishment survey indicated a very large rise?

Mr. SHISKIN. Well, first of all, total employment includes agriculture, and we had a drop in agricultural employment this month. The rise in nonagricultural employment, measured by the household survey, is about 200,000. So, Mr. Chairman. if I may say so, often when you are cross-examining me, you want to know why employment, as measured in the other survey—the household survey—that goes up faster, and I say if you just wait and take a longer period and not dwell on the month-to-month changes, they come out pretty even. Here is a month when the payroll survey is moving up faster than the household survey, which is what I would expect.

You know, I think the performance of this economy, the real economy, is really remarkable. We have a good expansion underway and, as I keep saying, some people don't want to face it. There is a very strong economic expansion underway.

Senator PROXMIRE. We have this very sharp contrast this morning. We have, on the one hand, the great news on unemployment, despite all we have heard about how the outlook is not too good, and we have very bad news on inflation.

We have unemployment which is down, we have inflation which is up. the worst increase in 3 years, and we have the Humphrey-Hawkins bill we are considering, and we are putting a goal, at specific numerical goal for unemployment, and we have nothing but rhetoric on inflation.

It seems to me that that is a rather sharp and strange contrast with what the situation really is.

Mr. SHISKIN. I share your views on that, and I would only like to put one caveat on the price figures.

I think the price figures are a cause for concern. They require very careful scrutiny each month. What troubles me most of all about the price figures is the apparent buildup that was clearly revealed by our new presentation of the wholesale price figures, and I might say that when we first started the new presentation, we had a lot of criticism from the press over the telephone. They would call me or John Early here, and be very critical. They couldn't understand it.

But that is changing. They are all beginning to see how you can understand the flow of price increases over different stages of processing. What troubles me is that even if you look at nonfoods, you will see that there has been quite a buildup of price increases for crude materials, and now the increases are beginning to spill over into intermediate materials.

May I just make one other point, sir?

Senator PROXMIRE. Yes.

Mr. SHISKIN. However, in the last year or two we have had small cycles in these series—4- or 5-month cycles. You have a spurt, and then it goes down. Just take a look at that table for 1977, Senator Proxmire.

Senator PROXMIRE. The thing that strikes me about that table is the fact that you had the big increase of 1.1 percent in finished goods, which I guess now is the figure to zero in on, because there is less double counting; but then you look over at what it includes. Consumer foods rose 2.9 percent, a tremendous increase, by far the biggest increase in the past year or so; but excluding foods, an increase that is far more moderate, 0.4 of 1 percent, or about the average increase over the past few months.

Mr. SHISKIN. The point I am trying to make is that this presentation has great advantages over the earlier one.

Look, for example, at the nonfood materials column in that table. You will see in the last 4 or 5 months there have been very big increases.

Now, go to intermediate materials but excluding foods. In the last 2 months there were bigger increases than there were before. That is what I find very troublesome about the data in this table.

Senator PROXMIRE. So what you are saying is that this is a process that included goods and intermediate goods will enter into finished goods in coming months.

Mr. SHISKIN. Sure. I want to make a caveat, and that is that we have had these small cycles in the past years, and we seem to have had one at the beginning of 1977. Look, for example. at the figure 5.8 percent for crude nonfood materials at the beginning of 1977 in the last column of table A in the Produce Price Index press release. For a few months, intermediate materials—excluding foods—went up 0.8 and 0.7, but then we had a succession of declines, and nothing much took place in finished goods.

So it is not a foregone conclusion that we are going to have a big burst of price increases in finished goods, but it is a troublesome situation, and it requires very careful scrutiny.

Senator PROXMIRE. So your analysis, to try to sum up a little bit, would be that the unemployment outlook seems to be improving——

Mr. SHISKIN. That is not my statement, sir.

Senator PROXMIRE. And you recognize the weather and the coal strike as aberrations that obviously aren't going to be with us forever, and the inflation situation is getting worse——

Mr. SHISKIN. May be getting worse.

Senator PROXMIRE. The indications, to the extent we have them, are that the inflation situation may be getting worse.

Mr. SHISKIN. Since you were summarizing my statement, I would like to amend it in one simple way. You said, I think, that the unemployment situation seems to be getting better. I would say the unemployment situation is getting better.

Senator PROXMIRE. It has been getting better. The evidence we have now is that it is getting better. All right.

Thank you, Mr. Chairman.

Representative BOLLING. I am going to ask one question before I call on Senator Javits.

We are in the process of doing our report in the latter stages, finishing our report, on the President's Economic Report. We are also, in the House, debating Humphrey-Hawkins, so I would like to ask a very pointed question.

Forecasts that our staff and others have produced suggest that the economic expansion is definitely losing its momentum. Rather than the 4.9 percent rate of output growth in 1977, we expect about 4.5 percent in 1978, around 4 percent in 1978.

We concluded, therefore, that stimulative policies are still called for. On the other hand, if we knew only about recent happenings, the February rise in wholesale prices of 12.6 percent annual rate, the decline in unemployment to 6.1 percent, and the continuing pressure on the dollar, one would think that the economy was overheating and in need of restraint.

I don't happen to think that 6.1 percent unemployment is adequate as a goal. Industrial capacities remain below peak, and a recent survey shows we cannot expect capital spending to be very strong in 1978.

Nevertheless, I would like your view on this subject, specifically taking both the shortrun news and the longer range picture into account, does the situation call for changes in proposed fiscal policies, or in the trend of monetary policy?

Mr. SHISKIN. Sir, as you know, I avoid making policy judgments, because I think that would weaken the credibility and prestige of the Commissioner of Labor Statistics. I think we should stick to the statistics and let others make policy judgments.

But I am willing to say that I don't think this expansion is coming to an end soon. We have been buffeted about by exceptionally bad weather for a few months and by a very broad-based coal strike. The economy has done very well in spite of that.

So, the figures you cited on GNP aren't as good perhaps as they were last year, but they are not bad figures. If we have increases in GNP running at 4.5 percent, that is pretty good. That is more than

our long-term rate of growth. So I don't see an end to the expansion, and I think there is a tendency on the part of some people to dwell on the bad news.

I happened to listen to Mr. Schultze's statement on "Meet the Press" the other day. A reporter started off by citing a whole series of damaging figures, as I think you did, Senator Proxmire, and Mr. Schultze matched him one by one, giving him good figures. You have to take a balanced view of this.

Mr. Schultze said that the real economy is doing well. I think it is too, and I think we have to face up to that.

Second——

Senator PROXMIRE. You have to face up to it. [Laughter.]

Mr. SHISKIN. Some people don't like to face up to it. There is a carryover feeling, from the recession, that the economy just can't do well; but it is doing well, and it has done well in the last few years.

Now, inflation and the unemployment problem pose a very vexatious problem.

There are some people who think we are already at full employment—that the situation has changed in terms of the demographics and other factors, and we have gone through that at earlier hearings, so that the full employment rate is far above 4.0 percent. I will cite some of my friends at Brookings, who think the full employment rate of unemployment is now at 5.5 percent. If that is true—and I don't know whether it is or not—we are getting very close to full employment.

I am not really prepared to discuss this at length this morning, but I hope to do so next month. I have been studying the Bureau of Labor Statistics figures on compensation per hour, productivity, and unit labor costs in the last couple of months, and my guess is that those figures are more closely related to the inflation problem—though not exclusively—than are the unemployment figures.

Those figures show that productivity is lagging very significantly—productivity is very sluggish—and yet hourly compensation has been rising quite vigorously.

As a result, since unit labor costs are the ratio between hourly compensation and productivity, our unit labor costs are rising.

One of my favorite human beings is Wesley Clair Mitchell of the national bureau. I started my life studying under him, and in those days, at least, he thought that the major economic process that was controlling the business cycle was the relationship between unit labor costs and prices. That point of view is still frequently expressed. As a matter of fact, I thought the Kennedy Council of Economic Advisers did a brilliant job in setting up their guidelines. If you recall those guidelines, the first was that hourly compensation should not exceed productivity changes. In other words, unit labor costs have to remain steady.

The second guideline was that the rises in prices should not exceed the rises in unit labor costs. I don't know whether Walter Heller, or whoever developed the guidelines, was aware of it, but that was exactly what Wesley Mitchell had said.

When I think of the inflation problem, I keep looking at compensation and productivity. I think they are worth scrutiny, and, with your

indulgence next month, I hope to include a paragraph or two in my statement which spells that out a little bit. We worked it up yesterday, but I felt a little reluctant to go into any details today, because we need a little time to think about those figures.

Representative BOLLING. Thank you for a very informative response.

Senator Javits.

Senator JAVITS. Thank you.

Mr. Shiskin, I happen to thoroughly agree with you about productivity. This is the grave danger to our country. The erosion of productivity is the erosion of the basic strengths of our country, and I would like to ask you about this.

Do the figures in any way help us to determine whether productivity inadequacy, which is what it is, is attributable to manpower and its use, and the morale of workers, in addition to the obsolescence of the American industrial plants? In other words, to what extent are we being now harmed by the fact that Germany and Japan, to be very specific, are way ahead of us in terms of modernization of plants and equipment, rather than the erosion of the morale of the American worker?

Mr. SHISKIN. Well, I am not really ready to make any response. I would like a little more time, as I said this morning, before I answer those questions. Let me give you a few offhand comments.

One is that the great rise in labor force is inevitably bringing less experienced workers and part-time workers in. This could have an effect on productivity. We need more and better plants and equipment. I think there is another element, and Dennison brought that out in his most recent article appearing in the Survey of Current Business, which was written up in the Washington Post. The way we measure GNP doesn't take into account a lot of investment in improving safety and the environment. So a lot of our economic growth is now going into improving those two areas.

That may be a good trade off. It may be worth it, but it doesn't show up in GNP. So, I think there is a downward bias in the productivity figures in that sense.

Senator JAVITS. I think those are very sound observations.

May I ask you whether your figures show where the United States in terms of productivity among the leading 10 industrialized countries of the world?

Mr. SHISKIN. Sir, I don't have those figures, but we may be able to to get them for next month's hearing.[1]

Senator JAVITS. I would like you to, because my figures show the United States is, as they say in baseball, in the cellar. We are not performing, and this is the great problem we have.

Also, I assume that the problem of acquiring broader markets is a very serious problem for the United States, which, again, would not be shown by particular figures of the imbalances in international trade.

Mr. SHISKIN. I agree.

Senator JAVITS. The other question that I would like to ask you is about youth unemployment. I have just come from a hearing which is seeking to zero in on that issue, and you pointed out the extraordinary phenomenon that the youth unemployment figure is going up while

[1] See Mr. Shiskin's letter to Senator Javits, dated Mar. 29, 1978, p. 2201.

the average unemployment figure is going down. As a matter of fact, we even speak of "full employment" as a possibility now within sight, were it not for this youth unemployment.

Now, can you tell us to what extent the heavy youth unemployment is attributable to new entrants in the labor force, and the extent to which it is attributable to those who are in the labor force but cannot find a job?

Mr. SHISKIN. I am sorry we don't have that information, but we will supply that for the record.

Senator JAVITS. Don't you think that would be a very important breakdown?

Mr. SHISKIN. Yes; I should have thought of it.

[The following information was subsequently supplied for the record:]

In February of 1978, as in February 1977, about 25 percent of the teenagers seeking jobs had lost their last job. About one-third of those were on layoff. Nine percent of the unemployed had left their previous job. Entrants to the labor force accounted for the remaining 66 percent of the teenage jobseekers. Most of these entrants—about 7 of every 10—have had some full- or part-time work experience.

In terms of duration of unemployment, nearly half of the unemployed teenagers had been seeking work for less than 5 weeks. while about one-fifth had been looking for work for 15 weeks or more and 7 percent had been seeking jobs for a half year or more, on average, teenagers had been out of work for a shorter period of time than adults. The median duration of unemployment was 5.3 weeks for teenagers and 8.3 weeks for adults.

(These data are not adjusted for seasonality.)

Senator JAVITS. The situation we are considering in the Human Resources Committee is based on a cyclical unemployment, which differs in the treatment of a structural unemployment. Can you tell us what part of the aggregate of the youth unemployment is structural and what part is cyclical?

Mr. SHISKIN. That is a tough question. We have tried to deal with this problem before, and have found it hard to isolate cyclical, structural, and frictional unemployment.

Senator JAVITS. The last thing I would like to ask you is this: Just as you spoke about the fact that the GNP doesn't reflect the environment and safety, is it not a fact that the GNP doesn't reflect in any way the quality of production either?

Mr. SHISKIN. Correct.

Senator JAVITS. Or the selectivity of production. It could be in hairpins or it could be in highly sophisticated machinery.

Mr. SHISKIN. If you look at the GNP accounts, you can make a judgment on the last point, because there is a detailed breakdown of the GNP total.

Senator JAVITS. Finally, do we have any figures on the extent to which American exports contribute to employment and GNP?

Mr. SHISKIN. I don't have those, sir.

Senator JAVITS. Those are essential elements in your statistics because we have a big wave of protectionism in the United States on the ground that workers are losing jobs resulting from the impact of imports. Isn't it a fact that we ought to have compensating data: To wit, what do exports mean to the United States, and how many workers are employed in the export industry under various aspects?

Mr. SHISKIN. Well, yes; I agree with you, but that work has been assigned by the Secretary of Labor to the International Labor Affairs

Bureau, and I will be in touch with them and see if we can't provide you with a statement which I will send you directly, if that is agreeable.

Senator JAVITS. That is very fine. I appreciate that.

Also, one question on productivity that I would like to ask you—and you may not be able to answer now—however, since it is believed that the productivity of American agriculture is superior, can we get any differentiation for the aggregate productivity figures between agricultural and nonagricultural producers of GNP?

Mr. SHISKIN. I think we can for the United States. In other words, you will have figures for the nonagriculture economy and for the total economy. I don't have them here today, but we will supply them.

Senator JAVITS. I think they are critically important. The general belief is that we are doing very well in the agricultural sector, but we are lagging in the nonagricultural sector.

Thank you.

Mr. Chairman, I ask unanimous consent that these various items of information may be incorporated.

Representative BOLLING. Without objection, so ordered.

[The following information was subsequently supplied for the record:]

U.S. DEPARTMENT OF LABOR,
BUREAU OF LABOR STATISTICS,
Washington, D.C., March 29, 1978.

Hon. JACOB K. JAVITS,
U.S. Senate. Washington, D.C.

DEAR SENATOR JAVITS: In the hearings of the Joint Economic Committee on Friday, March 10, you requested information on the comparative productivity between the United States and the 10 leading industrialized countries. Unfortunately, we do not have any measures of aggregate productivity levels among the various countries, but we do have measures of trends. We currently develop and publish indexes of output per hour of all persons in manufacturing for the United States and the industrialized countries in Europe (excluding the Eastern bloc) and for Japan. The enclosed table 1 shows the latest indexes and the growth rates for the various countries.

You also requested information on separate productivity figures for the agriculture and nonagriculture sectors in the United States. Table 2 and the accompanying chart show the latest data we have for these sectors through 1977.

I hope this information will be helpful to you.

Sincerely yours,

JULIUS SHISKIN, *Commissioner.*

Enclosures.

TABLE 1.—OUTPUT PER HOUR IN MANUFACTURING, 10 COUNTRIES, 1960–76

[Indexes: 1967=100]

Year	United States	Canada	Japan	Denmark	France	Germany	Italy	Sweden	Switzerland	United Kingdom
1960	78.8	75.1	52.6	66.6	68.7	66.4	65.1	63.1	80.4	76.8
1961	80.7	79.2	59.3	70.4	71.9	70.0	67.4	66.1	80.5	77.4
1962	84.5	83.3	61.9	74.0	75.2	74.4	74.1	71.0	79.9	79.3
1963	90.4	86.5	67.1	76.4	79.7	78.4	76.6	75.1	82.2	83.6
1964	95.2	90.2	75.9	82.6	83.7	84.5	81.5	81.9	85.8	89.7
1965	98.2	93.6	79.1	86.7	88.5	90.4	91.6	88.5	90.5	92.4
1966	99.7	96.9	87.1	91.1	94.7	94.0	96.0	92.1	95.2	95.7
1967	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968	103.6	106.7	112.6	109.8	111.4	107.6	108.4	110.1	105.2	107.1
1969	104.9	113.0	130.0	120.3	115.4	113.8	112.2	118.3	116.1	108.4
1970	104.5	114.7	146.5	129.3	121.2	116.6	117.8	124.5	125.5	109.1
1971	110.3	122.8	151.7	138.8	127.8	122.5	123.5	129.0	131.3	114.5
1972	116.0	128.1	163.9	150.7	137.0	130.3	132.9	137.9	137.9	121.1
1973	119.4	133.4	184.3	159.8	144.1	138.9	147.8	147.4	147.7	128.2
1974	112.8	135.6	187.5	166.9	149.8	147.6	155.9	152.1	150.7	127.9
1975	116.3	133.6	181.7	177.3	148.9	153.3	150.2	152.8	144.8	124.3
1976	124.3	137.5	205.2	196.3	166.1	165.8	161.5	153.2	156.8	129.3
Average annual rates of changes:										
1960–76	2.6	4.1	9.4	7.2	5.8	5.8	6.1	6.3	5.0	3.7
1966–76	2.1	3.8	8.5	7.6	5.5	5.6	5.6	5.4	5.3	3.1
1970–76	2.1	2.8	5.5	6.8	4.9	6.0	5.5	3.9	3.5	2.6

Note: The data relate to all employed persons (wage and salary earners, the self-employed, and nnpaid family workers) in the United States and Canada, wage earners in Switzerland, and all employees (wage and salary earners) in the other countries. Percent changes ccmputed from the least squares trend of the logarithms of index numbers.

Prepared by: U.S. Department of Labor, Bureau of Labor Statistics, Office of Productivity and Technology, March 1978.

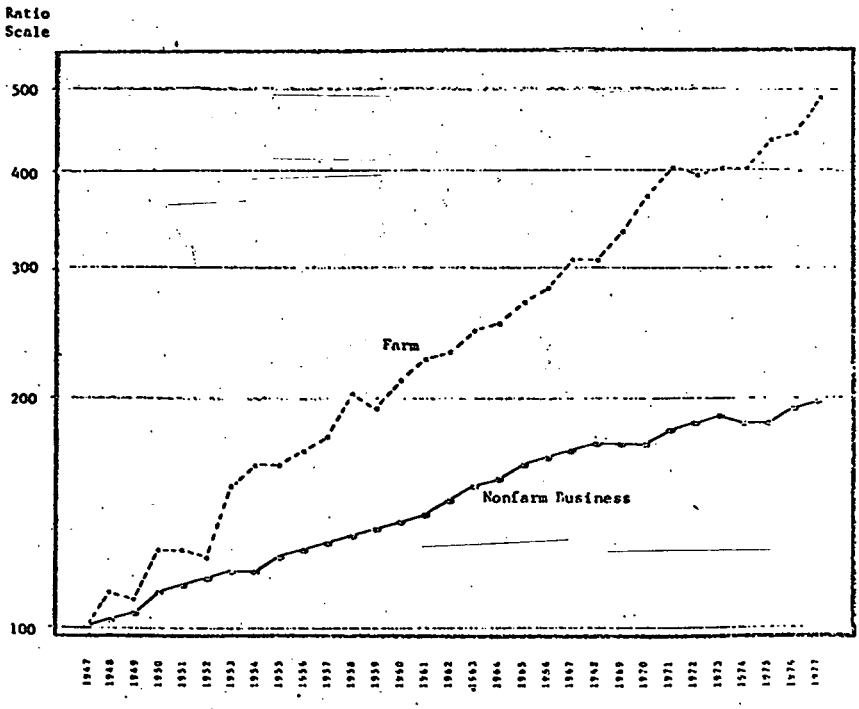
TABLE 2.—OUTPUT PER HOUR IN THE NONFARM BUSINESS AND FARM SECTORS
[Index 1947=100]

Year	Farm output per hour [1]	Nonfarm business output per hour [1]
1947	100.00	100.00
1948	111.21	102.78
1949	109.68	105.16
1950	125.51	111.61
1951	125.97	113.66
1952	123.51	115.96
1953	153.91	117.86
1954	162.33	119.84
1955	164.90	124.72
1956	170.60	125.49
1957	179.89	128.25
1958	201.69	130.79
1959	193.94	135.58
1960	211.31	136.90
1961	225.20	140.76
1962	231.49	146.94
1963	247.09	152.12
1964	253.91	157.77
1965	269.58	163.00
1966	280.51	167.14
1967	303.77	170.40
1968	307.84	175.91
1969	330.64	175.61
1970	370.35	175.94
1971	406.45	181.11
1972	391.98	186.63
1973	405.97	189.74
1974	405.55	184.27
1975	440.61	187.19
1976	450.69	194.83
1977	498.88	199.00

[1] Includes the labor input of self-employed persons, unpaid family workers, and employees.

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

Output per Hour in the Non Farm Business and Farm Sectors
Index 1947 = 100



SOURCE: Bureau of Labor Statistics, U.S. Department of Labor.

March 1978

INTERNATIONAL COMPARISONS OF PRODUCTIVITY AND LABOR COSTS IN THE STEEL INDUSTRY; UNITED STATES, JAPAN, FRANCE, GERMANY, UNITED KINGDOM; 1964 AND 1972–76

(Prepared by the U.S. Department of Labor, Bureau of Labor Statistics, Office of Productivity and Technology, March 1978)

INTRODUCTION

The Bureau of Labor Statistics has been comparing trends and levels of productivity, as measured by output per hour worked, hourly labor costs, and unit labor costs in the steel industry of the United States, Japan, France, Germany, and the United Kingdom since the late 1960's. The accompanying tables show the comparisons for 1964, the first year for which such comparisons have been made, and for 1972 to 1976. The level comparisons for the four foreign countries are presented in ranges, showing minimum and maximum estimates for each country relative to the United States. These comparisons are subject to certain technical as well as data limitations, discussed in the technical note following the tables, but the Bureau feels reasonably confident that the relative levels of productivity and labor costs for the foreign countries fall within the given ranges.

The productivity and unit labor cost comparisons are affected not only by the relative efficiency of the average steel plant in each country, but by differences in the utilization of steel capacity. Therefore, in interpreting the data for any specific year, the level of steel activity should be taken into account.

IRON AND STEEL INDUSTRY: OUTPUT PER HOUR, HOURLY LABOR COST, UNIT LABOR COST, ALL EMPLOYEES, 5 COUNTRIES, 1964 AND 1972–76

[Relative levels (United States=100)]

Year	Output per hour		Hourly labor cost [1]		Unit labor cost [1]	
	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
United States:						
Each year	100	100	100	100	100	100
Japan:						
1964	46	53	16	16	30	35
1972	85	101	33	34	32	39
1973	94	111	42	43	37	46
1974	35	113	44	46	39	48
1975	103	123	44	46	36	44
1976	106	126	44	45	35	42
France:						
1964	48	52	34	35	66	72
1972	63	70	43	48	63	76
1973	59	66	59	59	90	100
1974	61	68	60	60	88	98
1975	60	67	70	70	105	117
1976	61	69	68	68	99	110
Germany:						
1964	53	60	35	35	58	67
1972	77	85	57	57	68	75
1973	76	84	75	75	89	98
1974	30	83	77	77	88	97
1975	32	91	76	76	84	92
1976	31	90	72	72	80	88
United Kingdom:						
1964	43	51	29	30	57	61
1972	51	54	33	34	51	66
1973	47	50	34	35	69	74
1974	43	45	33	34	74	30
1975	43	46	36	37	79	86
1976	46	49	31	32	64	69

[1] Data in national currency converted to U.S. dollars at the annual average exchange rate for the listed year.

IRON AND STEEL INDUSTRY: OUTPUT PER HOUR, HOURLY LABOR COST, UNIT LABOR COST, ALL EMPLOYEES, 5 COUNTRIES, 1964 AND 1972–76

[Indexes (1964=100)]

Year	Output per hour	Hourly labor cost	Unit labor cost		Output	Total hours	Total labor cost	Exchange rate
			National currency	U.S. dollars				
United States:								
1964	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1972	118.8	161.1	135.6	135.6	105.6	88.9	143.2	100.0
1973	134.0	173.4	129.4	129.4	128.5	95.9	166.3	100.0
1974	135.9	202.1	148.7	148.7	129.1	95.0	192.0	100.0
1975	117.6	238.3	202.7	202.7	94.4	80.3	191.4	100.0
1976	125.0	258.2	206.6	206.6	103.1	82.5	212.9	100.0
Japan:								
1964	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1972	222.4	277.1	124.6	148.9	254.4	114.4	317.1	119.4
1973	275.0	341.2	124.0	165.7	312.5	113.6	387.7	133.6
1974	282.6	454.8	160.9	199.8	311.1	110.1	500.6	124.1
1975	265.9	548.9	206.4	251.9	270.7	101.8	558.8	122.0
1976	291.4	582.6	200.0	244.2	296.7	101.8	593.2	122.1
France:								
1964	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1972	159.2	231.6	145.5	141.4	130.0	81.7	189.1	97.2
1973	169.0	272.3	161.1	177.9	137.7	81.5	221.8	110.5
1974	175.4	346.2	197.4	201.2	149.3	85.1	294.6	102.0
1975	149.8	427.4	285.4	326.7	118.4	79.1	337.9	114.5
1976	163.1	496.9	304.7	312.8	128.7	78.9	392.1	102.6
Germany:								
1964	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1972	170.2	210.7	123.8	154.3	143.2	84.1	177.2	124.7
1973	189.8	245.0	129.1	193.8	163.7	86.3	211.4	150.1
1974	202.1	287.9	142.5	219.3	172.4	85.3	245.6	153.9
1975	180.1	316.4	175.7	284.4	134.6	74.7	236.5	161.9
1976	189.2	332.7	175.8	277.7	141.5	74.8	248.8	158.0
United Kingdom:								
1964	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1972	126.4	206.8	163.6	146.5	94.4	74.7	154.5	89.6
1973	131.1	233.0	177.7	156.0	102.8	78.4	182.7	87.8
1974	120.9	280.3	231.9	194.4	92.6	76.7	214.9	83.8
1975	105.1	373.5	355.5	282.9	78.4	74.6	278.6	79.6
1976	119.5	430.4	360.1	232.7	86.6	72.5	311.8	64.6

[1] Value of foreign currency relative to the United States dollar.

IRON AND STEEL INDUSTRY: OUTPUT PER HOUR, HOURLY LABOR COST, UNIT LABOR COST, ALL EMPLOYEES, 5 COUNTRIES, 1964 AND 1972

[Absolute levels]

Year	United States	Japan		France		Germany		United Kingdom	
		Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
Output in short tons per 1,000 hours:									
1964	76.25	35.34	40.54	30.39	39.60	40.20	45.94	36.59	30.77
1972	90.57	77.23	91.01	57.17	63.78	69.75	76.88	46.16	49.10
Total hours per short ton: [1]									
1964	13.12	24.67	28.30	25.26	27.48	21.77	24.87	25.79	27.33
1972	11.04	10.33	12.94	15.68	17.49	13.01	14.34	20.37	21.66
Hourly labor cost in U.S. dollars: [2]									
1964	4.63	0.74	0.75	1.57	1.60	1.63	1.63	1.33	1.37
1972	7.45	2.43	2.50	3.57	3.57	4.23	4.28	2.47	2.54
Unit labor cost in U.S. dollars [2] per short ton: [1]									
1964	60.69	18.37	21.09	40.02	43.61	35.50	40.57	34.54	37.23
1972	82.30	26.45	32.32	55.96	62.42	55.73	61.43	50.55	54.64
Output [1] in 1,000's of short tons:									
1964	86,252.4	33,010.8	36,381.3	16,563.0	18,023.6	29,603.6	33,829.8	20,408.9	21,483.5
1972	91,061.3	83,994.3	92,557.8	21,248.9	23,704.3	43,204.4	47,621.8	19,232.0	20,328.3
Hours worked in 1,000's:									
1964	1,131,224	872,469	960,895	455,187	455,187	736,330	736,330	548,462	563,510
1972	1,005,475	975,880	1,123,831	371,681	371,681	619,394	619,394	409,756	420,998

Employment:									
1964	562, 127	360, 161	405, 152	206, 800	206, 890	372, 354	372, 354	259, 007	259, 007
1972	511, 536	451, 713	521, 021	195, 460	195, 469	335, 551	335, 551	213, 050	213, 059
Average annual hours worked:									
1964	2012. 4	2369. 8	2371. 7	2200. 1	2200. 1	1977. 5	1977. 5	2117. 6	2175. 7
1972	1965. 6	2156. 0	2157. 0	1901. 5	1901. 5	1845. 9	1845. 9	1923. 2	1976. 0
Total labor cost in 1000's of U.S. dollars: [2]									
1964	5, 234, 687	649, 732	716, 441	716, 426	727, 161	1, 200, 938	1, 200, 938	730, 674	771, 663
1972	7, 403, 978	2, 361, 791	2, 314, 011	1, 326, 400	1, 326, 400	2, 653, 886	2, 653, 886	1, 011, 109	1, 067, 830

[1] Weighted output (see technical note), deflated so that U.S. weighted output in the weight base year, 1967, equals unweighted output.

[2] Exchange Rates: 1964—U.S. $1 equals 362 yen, 4.902 francs, 3.975 deutsche marks, and 0.358.2 pounds. 1972—U.S. $1 equals 303 yen, 5.044 francs, 3.188 deutsche marks, and 0.3999 pounds.

TECHNICAL NOTE

With the exception of a few products—wire products are excluded for Japan, wheels and axles for Germany, and wire and wire products for the United Kingdom—the Bureau's 1964 and 1972 estimates of comparative productivity and labor costs in the iron and steel industry are based on the U.S. definition of the industry, which covers blast furnaces, steel works, and rolling and finishing mills (SIC 331). In addition, each country's output has been measured using a common set of weights, and the labor input data have been carefully matched with the output figures. The estimates for 1973 to 1976 were obtained by applying trend indexes to the 1972 benchmarks. Except for the United States, these trend indexes are based on different output weights and data sources than the 1964 and 1972 figures.

While the Bureau has attempted to adjust the 1964 and 1972 figures for comparability of coverage among countries, some differences remain. Where the data for a foreign country are known to differ significantly in product coverage, e.g., by the exclusion of wire and wire products from the data for the United Kingdom, comparability has been maintained between the output and labor input figures and the effect on inter-country comparisons of steel productivity and labor costs is believed to be small. There are other possible differences among the countries in the extent of vertical integration for which no adjustments have been made, such as differences in the proportions of own-produced versus purchased coke, but such differences also appear to have only a small effect upon the comparisons.

For the 1964 and 1972 benchmark years, each country's output has been adjusted for differences in product mix among countries and over time by weighting the component products according to 1967 U.S. labor requirements (hours of labor required per ton of each product).[1] Ideally, for balanced international comparisons, both U.S. and second-country weights should be used. However, weights are not available for any other country. The weights used are cumulative, that is, for each end product, they reflect all stages of production within the industry from coke through the end products. They were derived from incremental weights compiled for the use of the Bureau through arrangements made by the American Iron and Steel Institute. Incremental weights reflect only the hours of labor required at each stage of processing. For example, the incremental weight for wire rods reflects only the labor required to make wire rods from semi-finished steel, whereas the cumulative weight for wire rods includes the labor requirements embodied in the production of the coke, pig iron, crude steel, and semi-finished steel used to make the wire rods. Cumulative weights have been used for the country-to-country comparisons because of possible country differences in tonnage yields from one stage of production to another. Incremental weights would not reflect inter-country differences in yields or changes in tonnage yields over time. The use of cumulative weights has a disadvantage, however, in that it assumes that all stages of production (or equivalent production) take place in the same year that the final product is produced and therefore no account is taken of year-to-year changes in inventories.

While the 1964 and 1972 output figures for each country have been adjusted for intercountry differences in product mix, no adjustments have been made for possible differences among countries in the quality of steel produced. Reportedly, the Japanese steel industry, and, to a lesser extent, European producers, ship some seconds which would be recycled as scrap in the United States and ship higher proportions of less finely finished products, for example, untrimmed steel plate, than the U.S. steel industry. To the extent that this is true, the output figures for the foreign countries would be somewhat overstated relative to the United States.

The comparative productivity and labor cost results for the foreign countries have been presented in ranges rather than as single best estimates because of gaps in the available data.[2] For the European countries, the principal data gaps

[1] In the original comparisons for 1964, the component products were weighted according to 1961 U.S. labor requirements. The change from 1961 to 1967 weights has very little effect on the relative levels of productivity and labor costs.

[2] In the tables, minimum and maximum estimates are shown only for the level comparisons. The trend indexes for the four foreign countries, 1964=100, are based on the midpoint of minimum and maximum estimates for each year.

relate to the absence of some product detail. For example, the European data on pipe and tubing are reported in two categories, welded and seamless, whereas the U.S. data system covers seven categories of pipe and tubing, some with sharply different labor requirement weights. In such cases, two output distributions have been estimated, one emphasizing low-weight product categories and the other emphasizing high-weight product categories. For Japan, the principal data gap relates to labor input. There is substantial employment of contract labor in Japanese steelmaking activities, and the use of contract labor is said to vary from period to period. The Bureau has not been able to obtain adequate data on how many contract workers are employed or the number of hours or rates of pay for these workers. Therefore, it has been necessary to make minimum and maximum estimates based largely on financial data reported by Japanese steel companies.

In making minimum and maximum estimates for the ratios of output per hour and unit labor cost, it has been assumed that (1) the numerator (e.g., output) and denominator (e.g., hours) of the ratio (output per hour) are each normally distributed, and (2) the values of numerator and denominator bounded by their minimum and maximum estimates have a specific level of confidence. The ratio may be approximated as a range by using the minimum and maximum values established for the numerator and denominator, which are independently estimated. Applying a formula devised by Geary,[3] it is possible to calculate the minimum and maximum boundaries of the ratio (e.g., output per hour) so that the range will have the same level of confidence as the specific level of confidence of numerator and denominator. Originally, minimum and maximum values of output per hour and unit labor cost were estimated by combining minimum and maximum values of the component series. This led to ranges of estimates that were wider than warranted. The above method was not followed for calculating hourly labor cost ratios since, in those cases where a range of estimates is shown, the component hours and labor cost series are not independently estimated.

The estimates for 1964 are a modification of the Bureau's originally published figures. The Bureau's 1964 estimates comparing the United States and the three European countries were initially published in an International Comparison of Unit Labor Cost in the Iron and Steel Industry, 1964: United States, France, Germany, United Kingdom (BLS Bulletin 1580, 1968). The 1964 estimates for Japan were published later. The current estimates for 1964 differ from the earlier estimates because they are based on 1967 labor requirement weights; the earlier estimates were based on 1961 labor requirement weights. In addition, there have been some minor modifications of the basic output data for all of the countries and of the hours and labor cost data for some countries. The output revisions reflect primarily adjustments of data to match the product categories in the 1967 weighting system, which differ somewhat from the previous categories. The most significant hours and labor cost revisions relate to Japan and reflect a modification in the method of estimating total employment, hours, and labor costs of contract workers.

The estimates for 1972 are revisions of figures previously issued by the Bureau. The Bureau's estimates for 1972 had been based on trend indexes similar to those now used for the years since 1972. All of the trend indexes, and therefore the level comparisons, also differ from the earlier estimates because of the introduction of the new 1972 estimates. The 1972 estimates for Japan also differ from previous estimates derived from trend indexes because of a modification in the method of estimating contract workers for Japan.[4]

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[3] Geary, R. C. "The Frequency Distribution of the Quotient of Two Normal Variates," Journal of the Royal Statistical Society, 93 (1930), pp. 442–446.

[4] Preliminary results for 1964 and for 1972–75 based on the 1967 labor requirement weights and the other changes described in this note were first released as part of a paper entitled: "Comparative Growth in Manufacturing Productivity and Labor Costs in Selected Industrialized Countries," that was presented at the Workshop on Recent Progress in Productivity Measurement and Prospects, held in Copenhagen, Denmark, in October 1976. The paper was subsequently published in 1977 as BLS Bulletin 1958.

Japan.—Employment in the Japanese steel industry consists of regular employees of the steel firms plus a large number of workers employed by independent firms under contract with the steel firms. The Bureau's previously published 1964 estimates of productivity and labor costs in the Japanese steel industry included minimum and maximum estimates of the number of contract workers. The previously published trend indexes were based on regular workers only; it was assumed that the ratio of contract workers to regular workers to regular workers remained within the 1964 range of estimates. However, the available evidence indicates a substantial increase in this ratio since 1964. The current 1972 figures for Japan and the trend indexes for 1973–1976 include new estimates of the number of contract workers.

As with the previous 1964 estimates, data for contract workers are estimated primarily on the basis of financial statements of the steel companies. However, for recent years, some supporting information is also available from statistics on employment collected by the Japan steel industry labor union confederation (Tekkororen Steel Workers Federation) for purposes of computing accident rates. Total contract worker labor costs are estimated directly from the financial data; hours worked are estimated by dividing total labor costs by estimated hourly labor costs.

While the Bureau's current estimates for contract workers are still based primarily on steel company financial statements, there have been some changes in the estimating method. Principally, whereas it had been assumed that average hourly labor costs of contract workers and regular workers were the same, the current figures reflect an estimate that average hourly labor costs of contract workers are 75 percent of regular production worker labor costs. In addition, the Bureau's previous estimates of total costs for contract workers in 1964 have been reduced. The financial data on which the estimates are based include costs other than for contract workers. On the maximum side, it had been assumed that all such costs were for contract workers.

The overall effect of these and some other less significant changes is to reduce the Bureau's 1964 estimates of total labor costs in the Japanese iron and steel industry. The Bureau's 1964 estimates of total hours worked are changed much less, however, primarily because of the assumption that contract workers are paid less on an hourly basis than regular workers.

Representative BOLLING. Congressman Brown.

Representative BROWN of Ohio. Thank you, Mr. Chairman.

Mr. Shiskin, is the Phillips curve still in operation?

The persistent drop in unemployment is accompanied by sharp increases in wholesale prices. Is that a natural reaction, or do you think they are unrelated?

Mr. SHISKIN. I don't think they are unrelated, but economists in recent years have had great difficulty in pinpointing a relationship.

Now, as I said a few minutes ago, while this approach has contributed something useful to the dialog, I think a more useful approach would be to study the relationship between unit labor costs and prices.

Representative BROWN of Ohio. I am sorry, would you repeat that.

Mr. SHISKIN. To study the relationship between unit labor costs and prices. That is something I learned from Wesley Mitchell many years ago and stored in my mind. In recent years, the movement has been to try to relate unemployment and prices, and some scholars have been trying to relate the employment-population ratio and prices. I think that is worth trying, as I think there is some relationship, but I also think it is useful to look at the relationship between unit labor costs and prices.

Representative BROWN of Ohio. Do you have that statistic available for us?

Mr. SHISKIN. Yes; we have those statistics, and I will supply them for the record.

Representative BROWN of Ohio. Would you be kind enough to do that?

Mr. SHISKIN. Surely.

[The following information was subsequently supplied for the record:]

U.S. DEPARTMENT OF LABOR,
BUREAU OF LABOR STATISTICS,
Washington, D.C., March 22, 1978.

Hon. CLARENCE J. BROWN,
House of Representatives,
Washington, D.C.

DEAR CONGRESSMAN BROWN: In the hearings of the Joint Economic Committee on Friday, March 10, I promised to provide you information on movement of prices and unit labor costs. The enclosed table and chart show the latest data that we have for the private business sector.

I hope this information will be helpful to you.

Sincerely yours,

JULIUS SHISKIN, *Commissioner.*

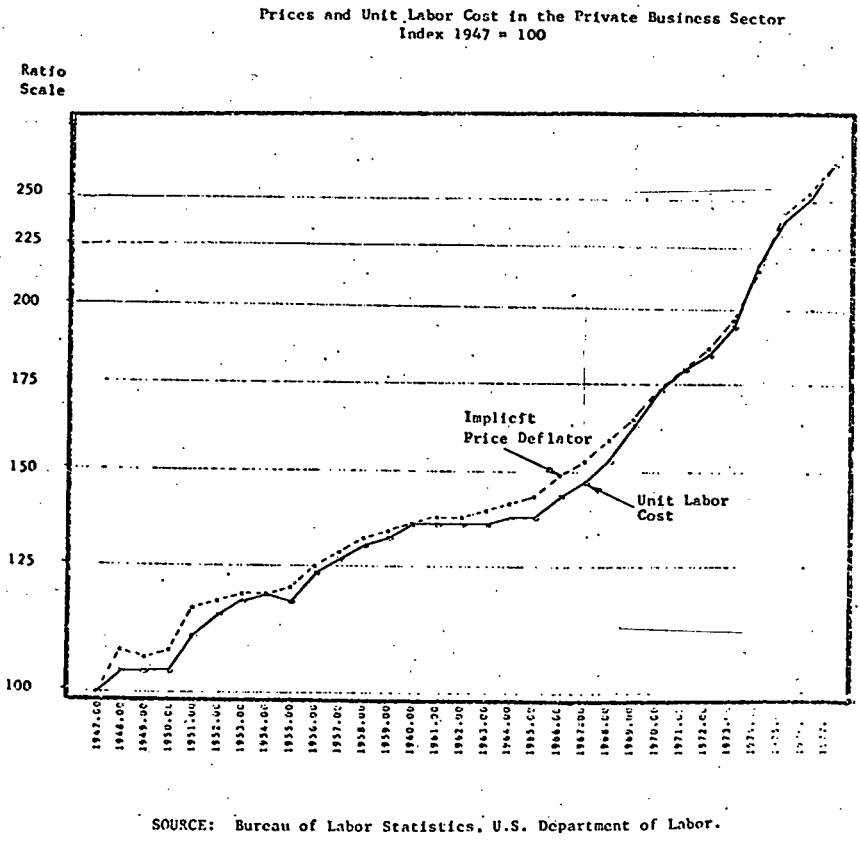
Enclosures.

PRICES AND UNIT LABOR COST IN THE PRIVATE BUSINESS SECTOR

[Index 1947=100]

Year	Implicit price deflator	Unit labor cost
1947	100.00	100.00
1948	108.41	104.48
1949	107.17	104.57
1950	108.75	103.68
1951	116.66	110.62
1952	118.88	114.87
1953	119.54	118.15
1954	120.65	119.98
1955	122.46	118.20
1956	126.17	124.37
1957	130.22	128.93
1958	132.64	131.42
1959	135.25	132.76
1960	137.14	136.15
1961	137.90	137.14
1962	139.11	137.22
1963	140.34	137.12
1964	142.26	138.85
1965	144.59	139.08
1966	149.20	144.26
1967	153.50	148.98
1968	159.52	155.11
1969	167.00	165.34
1970	174.85	175.91
1971	182.54	181.61
1972	189.09	186.50
1973	200.03	197.99
1974	219.68	222.75
1975	242.49	239.97
1976	254.24	251.25
1977	267.32	266.82

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



SOURCE: Bureau of Labor Statistics, U.S. Department of Labor.

Senator PROXMIRE. Would the Congressman yield just for 1 minute for a point?

Representative BROWN of Ohio. Surely.

Senator PROXMIRE. I think it may help this dialog a little if we point out that what the Phillips curve presupposes is that the trade off occurs because, as unemployment drops, labor becomes more scarce, wage rates tend to go up more rapidly, and therefore wage costs climb, and productivity remains the same.

Representative BROWN of Ohio. I intend to get into that point if he can give the figures as to why the unit costs of labor are going up. It is peculiar that the unit costs of labor are going up when there is still a large pool of unemployed people. I would think it would tend to drop the unit costs of labor, because you would think it would be cheaper for an employer to hire another worker than to go to more overtime, or whatever the impact is that causes the unit costs of labor to go up.

Mr. SHISKIN. Representative Brown, I have found some recent material on this in my folders.

May I say once again, parenthetically, that unit labor cost is the ratio between compensation per hour and productivity.

Productivity grew 2.5 percent, in the last year, and was down from the 4.2 percent gained in 1976.

Hourly compensation also fell off, but only slightly.

Consequently, unit labor costs accelerated from 4.7 to 6.2 percent last year.

Representative BROWN of Ohio. Say that again, please.

Mr. SHISKIN. 4.7 to 6.2 percent in the last year. The speedup in unit labor costs last year resulted primarily from the decline in productivity growth. In the fourth quarter of last year, productivity growth fell off very sharply from an annual rate of over 5 percent in the third quarter to one-half of 1 percent. Although hourly compensation grew somewhat more slowly in this quarter, unit labor costs accelerated markedly from a rate of 2.9 to 6.4 percent because of the substantial slackening in productivity.

So what it seems is that in the last year, and this last year is consistent with a much longer pattern of over a decade or longer, productivity growth has been declining, but hourly compensation has been increasing and, because of that, unit labor costs have been going up very rapidly.

Representative BROWN of Ohio. I am a business manager, and I can understand in small business where one might have, at the time of the turn, the cycle, the tendency to want to hold on to employees, hoping that the cycle would pick back up again, but, you know, that is the time that you have a guy clean his machine, or paint the work area, and not necessarily produce, which is the reason for unit labor costs going up.

Now, is there any prospect, and do you think something like that may be happening in our economy now?

Mr. SHISKIN. Yes; and in fact I think I have said that before. I think we have to watch unit labor costs carefully, because what has happened in the past many times is that rapidly rising unit labor costs have put a lot of pressure on businessmen to raise prices, and because there is so much competition, especially in the latest stages of an expansion, it is hard for them to raise prices, so there is a profit squeeze.

Representative BROWN of Ohio. You referred to our mutual friends at Brookings. I think you perhaps meant Arthur Okun.

Mr. SHISKIN. No; I had George Perry in mind.

Representative BROWN of Ohio. I think Arthur Okun has commented to the same effect, that full employment may be in the range 5.5 percent, congressional legislation notwithstanding, and I would like to ask you if you share that view, or do you think it is somewhat higher, somewhat lower? Where would you place it?

Mr. SHISKIN. I think it is a reasonable point of view. Now, we have made a very detailed comparison of the mix in the labor force today with that of 10 and 20 years ago, and there have been some very major changes that could explain the differences between the usual estimate of the full employment follow rate of unemployment and the ones that Mr. Okun and Mr. Perry are giving today.

For example, you have the fact that there are today many families with two workers, and that gives them a little elbow room. When one of the two workers becomes unemployed, he or she doesn't have to immediately find another job. He or she can look around more and find a more suitable job.

Representative BROWN of Ohio. You also have a lot of support services that weren't here back in 1946; food stamps and other things.

Mr. SHISKIN. Yes; I was going to refer to these programs. There are programs, like the food stamp program, which also provide more elbow room for people to take more time to look for another job.

Then you have the big change in the demographic mix—groups that have typically had high unemployment, like teenagers, now represent a greater share of the labor force.

There are also many people who argue, and I think George Perry is one of them, though I am not sure, that the minimum wage has affected the full-employment/unemployment level.

So there are many reasons you can spell out as to why the present full-employment rate of unemployment is higher than it was 20 years ago.

Representative BROWN of Ohio. Mr. Shiskin, one of these may very well be the participation rate of the people in the work force which has recently been at alltime highs. I notice in February, the total civilian labor force dropped, although very modestly, but the question is: Do you see the possibility that the unemployment rate drop may relate to the decline in the civilian labor force——

Mr. SHISKIN. Sure.

Representative BROWN of Ohio [continuing]. And can we look for a slowdown in the growth of the labor force now after sharp increases of the past 2 years?

I think that is about 3 million people entering the work force each year for the last 2 years.

Mr. SHISKIN. Our figures, cited earlier, were 2.3 million last year. and I think we are going to have some slackening in the growth of the labor force. But I don't think a decline in growth is imminent, because I don't think the tendency of more women to enter the labor force is over. I think that trend is not yet at an end. and that it will probably, at least for quite a while, offset the decline in the number of teenagers in the market.

Representative BROWN of Ohio. I guess what we come to from this exchange of views is that, if the participation rate in the work force is going to continue to increase, which means that the work force will continue to grow more rapidly, and what we have learned to consider as normal over the last few years, and if the rate of productivity continues to decline and the unit cost of labor goes up, it may be somewhat more difficult then for those people who are joining the work force to find employment over the next few months.

Is that a fair comment? It seems to reflect the view that the chairman expressed.

Mr. SHISKIN. I think we have a very vital and vigorous economy, and the economy has shown an amazing capacity for creating new jobs, and I don't think that is over.

Representative BROWN of Ohio. Mr. Shiskin, I don't want to be the victim of reverse psychology, but, when you come in with strong optimistic statement, I always get just a bit nervous, because I feel that maybe it is not quite as good as it looks like, and I want to be optimistic—I think all of us do. We are very anxious to have the economy develop and grow, particularly if we are going to have an increased participation in the work force, because we are going to have to find all those jobs.

So I hope your optimism is well founded.

Mr. SHISKIN. May I summarize my views, because I don't think I am overly optimistic. What I have been saying for many, many months is that we are experiencing a vigorous economic expansion.

The economy turned around early in 1975, and the expansion was clear to me even at that time. I remember one dialog I had with Senator Kennedy at that time, and he was very surprised to hear me saying the economy was turning around, and vigorously. We had an inventory adjustment in 1974 and 1975, a big one, a massive one, and we made a very speedy recovery. But we had gone down so far, that it took a long time to recover.

However, this is not the best economic expansion we have ever had. There have been others that have been stronger. However, it is not the worst, either.

Representative BROWN of Ohio. It has lasted a long time as recoveries go.

Mr. SHISKIN. Under the Kennedy-Johnson administration, we had a recovery that lasted over 100 months. This one is 35 months. By that standard, this one has a long way to go.

Representative BROWN of Ohio. There was a little help by the war in Vietnam.

Mr. SHISKIN. Even without that, it was long. We have had expansions of 35 months and 45 months since the end of World War II. We had one that lasted 25 months. So this expansion isn't out of line.

Now, I think there are some imbalances building up on the cost side. The unit labor costs are rising sharply, interest rates are rising sharply. However, I don't think that the rises in these kinds of costs—which usually affect profits and investment—are at the stage now where they are going to bring about a recession.

I don't see an early end to this expansion, but let me say again that I don't think it is the greatest expansion we ever have had, either.

So, if that is optimistic——

Representative BROWN of Ohio. But you are nervous, as I am, about the rising wholesale prices?

Mr. SHISKIN. I am. I think you need eternal vigilance. You have to be extremely careful every month. It is a very complicated, difficult judgment to make every time. A lot of people are wrong, and this time I may be one of them.

Representative BROWN of Ohio. I hope not.

Thank you, Mr. Chairman.

Representative BOLLING. Senator Proxmire.

Senator PROXMIRE. I just have a couple more questions, Mr. Chairman.

Mr. Shiskin, as I understand it, you try not to forecast, and I think you do a good job of avoiding that, so I think to imply that you are forecasting that we are going to have a particular development in the economy is not what you are trying to do, and what you try very hard to avoid, although we push you to make forecasts at times.

I think one of the most significant developments we may be on the verge of is that unemployment is at 6.1 percent, and if it goes down to 5.9 in March, it is my understanding that that ends the countercyclical jobs program nationally.

That might or might not be wise, and Congress might decide to make the national unemployment figure somewhat lower.

Do you have figures as to the regional unemployment? That is, are there some sections of the country where unemployment continues to be much higher?

If you have those figures, could you make them available for the record? Could you give us just a general picture of some of the areas that have higher unemployment and how high that is?

Mr. SHISKIN. Yes; we put out a release every month that shows the unemployment rate for a great many local areas, and actually we have available unemployment rates for 6,000 different areas. We have started to publish in this very release a table showing the unemployment rate for 10 States.

I thought Senator Javits was going to ask me about a real problem we ran into with respect to New Jersey, and I am glad he didn't, because I don't know the answer to that question. We have a problem with the New Jersey unemployment figures.

We can provide you with those figures, but in general, our figures show that the unemployment rates in the central cities are running higher than unemployment rates elsewhere, and that the unemployment rates in the South are lower than in the Northeast.

[The following unemployment rate figures were subsequently supplied for the record:]

Unemployment rates by region, 1977 annual averages

Northeast	8.4
North Central	6.0
South	6.4
West	7.8

Unemployment rates by area, 1977 annual averages

Central cities	8.7
Suburbs	6.3
Nonmetropolitan areas	6.6

Senator PROXMIRE. Do you have any figures on what happens to unemployment if the countercyclical jobs programs are ended, as they would be with the trigger at 6 percent?

Say we go down to 5.9 or 5.8 percent in March. That ends the countercyclical jobs program. What effect would that have on unemployment by itself?

As I understand it, we now have a situation which goes contrary to what we had during the Depression, in which those who are employed by the Government are considered at work and employed, and therefore, if we end the countercyclical program, a few hundred thousand, or several hundred thousand jobs would be ended, and that would increase unemployment again.

Do you know what those figures are?

Mr. SHISKIN. I don't have them.

Let me just emphasize that I don't expect the unemployment rate to go down every month, sir. I just expect it to continue to go down over the next 6 months or so.

Senator PROXMIRE. I am not trying to forecast and ask you to forecast, but I say, if it does go down. It doesn't have to change very much to end that program, to release that trigger.

Mr. SHISKIN. I don't expect to be giving you such a happy report next month, because I think the coal strike will spill over more, affecting more industries.

Senator PROXMIRE. I was pretty sure this month it would go up.

Mr. SHISKIN. Well, it may have, you know. We only cover the middle week of the month.

Senator PROXMIRE. At any rate, this may happen in April or May, and whenever it does, if it does, the countercyclical jobs program ends. So can you give us data on the unemployment in various areas, and also the overall effect this would have on unemployment?

Mr. SHISKIN. Yes, sir.

[The following information was subsequently supplied for the record:]

As I understand the provisions of the CETA program, there will be about 725,000 job slots funded through fiscal year 1979, regardless of the overall national unemployment rate.

There are other counter cyclical programs administered by the Treasury Department's Office of Revenue Sharing and the Commerce Department's Economic Development Administration, which could be affected by a reduction in the National unemployment rate, but in each case job slots are not specified as with CETA. The staff of the committee may wish to contact these agencies directly to determine the extent of any impact from reduced unemployment on their programs.

Senator PROXMIRE. In your household data you show that total employment rose by about 120,000 in January. Yet, in the same month the unemployment of persons not in the labor force rose even more, by 200,000. Is this greater drop in those seeking work the reason for the good news on the unemployment rates?

Mr. SHISKIN. Do you want to try that, Ms. Klein?

Ms. KLEIN. It is very hard to tell on a 1-month-basis whether an increase of those not in the labor force really means anything relative to unemployment. We have been having extremely strong labor force growth in almost every month, so, for a specific month not to show another great increase doesn't show——

Senator PROXMIRE. I understand that, but what I am trying to do is understand better the meaning of the drop to 6.1 percent. If it means that during this past month there were fewer people seeking work, it would have less significance.

Ms. KLEIN. Do you mean fewer new people seeking work?

Senator PROXMIRE. That is right.

Ms. KLEIN. What we showed was nothing to speak of. We had a drop in the number of people unemployed because they had lost their last job, but we didn't have any significant movement in the number of people unemployed because they were entrants to the labor force.

Senator PROXMIRE. Could the weather have had an effect on that? After all, people are less likely to go to look for work, particularly if the weather is very bad, where it is extremely cold, as in Milwaukee.

Ms. KLEIN. That is plausible. We have no evidence one way or the other.

Mr. SHISKIN. That cuts both ways, I would guess, since retail stores and service establishments would be less likely to hire people in very bad weather.

Senator PROXMIRE. The chairman asked an extremely good question. I though, and you gave one of the best answers I have heard in a long time, on inflation and the cause of inflation being the result of rising unit labor costs primarily, rather than some of these other elements.

In this particular case, however, where we have had the wholesale price index go up sharply, as it has, and food is the principal ingredient, isn't this less likely to be labor-cost related? Isn't food more likely to be related to the agricultural sector where labor cost is not an important element?

Mr. SHISKIN. Yes, but let me go back again and say that, while I think you can discount to some considerable extent the rise in the prices of total finished goods for the very reason you gave—mostly food prices go up for a time and then go down—it is the buildup that is troublesome, sir, and again let me come back to that.

There has been a buildup of the price increases for nonfood materials, and now it appears to be spilling over into intermediate goods. That is what we have to watch.

Let me say again that we have had very short cycles in that pattern—4 or 5 months—but every time you start on the up side of one of these cycles, you wonder if it isn't going to be a long cycle, and you worry.

Senator PROXMIRE. Thank you, Mr. Chairman.

Representative BOLLING. Representative Brown.

Representative BROWN of Ohio. Thank you, Mr. Chairman.

It is always a pleasure to have Mr. Shiskin here, and he is forthright and candid and always is careful to separate his opinions from the precision of the facts that he has before him. I do worry about the precision of the facts, as I told him before, and I would ask one final question about where the work is or how the work is progressing on modifying the collection of unemployment statistics.

Mr. SHISKIN. It is just not moving at all. We at BLS made a substantial improvement in the sample last month. We added 9,000 households, and I think that gives us a better sample, but I think what you allude to is the President's commission. Is that correct?

Representative BROWN of Ohio. Yes.

Mr. SHISKIN. Well, it is not moving at all. The President appointed a chairman in July, and then recently, maybe in November or December, he submitted names of other members of the Commission, but they have not yet been confirmed by the Senate. So at this moment there is no commission. When there is, the Commission is allowed 18 months to make a report, and then the Secretary of Labor has 6 months to round up all the comments from the different agencies and submit his recommendations to the Congress and the President. So that is moving very very slowly, sir.

Representative BROWN of Ohio. You still think we ought to get better statistics in this area and the price area than we now have?

Mr. SHISKIN. We have a very vigorous program underway to improve statistics. As you know, from reading the newspapers, we have just completed a massive revision of the Consumer Price Index. And, we have this program underway of making what I think are major improvements in the Wholesale Price Index.

On the unemployment statistics, I think it is a very good thing for the country and for us to have a review by outside experts.

I expect them to recommend some changes, and I think some changes are needed. But I don't want to prejudge what the commission will do; I am willing to wait. All I am saying in response to your comment is that their report is not imminent. In fact, there is no commission yet, to the best of my knowledge.

Representative BROWN of Ohio. I didn't think this colloquy would last so long. It is not my prerogative to suggest what this committee ought to do, and I am a little bit put off by your use of the words "outside experts." But is there anything this committee can do, if you leave out the word "experts" and also if I haven't overstepped my prerogative as a minority member of the committee, to help you in getting these better statistics?

Mr. SHISKIN. Well, it may be unusual for a government employee to say this, but I really don't think so. I would like to see a good, impartial, objective commission established and for them to review our work. We will treat such a commission's recommendations with great sympathy.

As far as the money is concerned, I have no problems with the funds allocated to us. I really believe that in the employment field we are getting as much money as we could spend effectively.

In fact, I am being pushed by the House Appropriations Committee to take more money—I think they are pushing me—than I can effectively spend. I would not say that about the funds for price indexes. We are more concerned about funds for the price statistics. We have no problem getting funds for employment statistics, but I am worried about our price statistics.

What has happened in the last few years typically is that the House has cut down our price funds, and the Senate has put most of them back. So, if you can do anything with Mr. Flood's committee on price statistics, I would appreciate that. It would be useful.

Representative BROWN of Ohio. It would be ungracious for me to say that we have been considering legislation on the floor of the House which seems more concerned about unemployment than the inflation.

Mr. SHISKIN. We don't have any trouble getting money for unemployment statistics, but we do for price statistics.

Representative BOLLING. The House yesterday, it seemed to me, was rather messy with the experts and the statistics by making the decision which it made which, if it became law, would change some of this without any reference to experts.

Mr. SHISKIN. The definition of unemployment, sir?

Representative BOLLING. No, not the definition of unemployment, but the elements of some of the categories that would be included. It was not an amendment that I supported, so I don't know the details.

Mr. SHISKIN. Was it passed?

Representative BOLLING. It was.

Mr. SHISKIN. We had better look into that.

Representative BOLLING. Curiously enough, it came from another side than mine. [Laughter.]

Representative BROWN of Ohio. In the process, I don't think that is curious at all.

Representative BOLLING. Are you through?

Representative BROWN of Ohio. Yes, sir. [Laughter.]

Representative BOLLING. Thank you very much.

I have a few, and then we will be finished.

Four million new jobs were created in 1977, which is a large number. However, the unemployment rate for black teenagers increased from 35.2 percent in December 1976, to 36.1 percent in December of 1977.

Now, we thought we were doing something about that in the program. I thought that we had a substantial amount of our youth employment and other public service job programs going in that area.

Is there any explanation beyond the obvious for these incredible statistics, with a strong recovery, with a very large—not incredible—but a very large increase in jobs, and with almost 1 percent worsening of the situation among black teenagers?

Mr. SHISKIN. I am just going to say what you said but in other words.

We seem to have what we called at these meetings, these discussions, a two-tier economy. I have used the expression in discussing the fact that there has been a great economic expansion for whites, but not for blacks. The blacks just are not participating in this recovery to the extent the whites are. And that is a problem. I have discussed internally in the Department, and I believe that the Department is trying to adjust the programs to be targeted more directly toward improving the black unemployment situation, particularly that for teenagers.

Representative BOLLING. Could it be, Mr. Shiskin, that one or two or three things that are happening, again on the black teenage group—and there has been talk about people getting lost. In the last census they may have missed 5 million people, and 10 years before it was guessed to be 3 million.

There has been some talk about an economy that is not part of what we normally think of as the economy, it is not necessarily an illegal economy, although it could be on the edge of it, and then there is just a change in attitude on the part of people if they have some hope that they might get a job, where before they had none.

Could any or all of these factors be an element?

Mr. SHISKIN. Yes. In fact, I was reading an article last night entitled "The Subterranean Economy" in a journal, and I think the author estimated that the lost GNP is in the neighborhood of $200 million. Could that be?

Representative BOLLING. It was very large.

Mr. SHISKIN. There are a lot of cash transactions in those businesses, some legal and some illegal, and they are not included in the reports and the GNP, and there is probably something to it. Whether that kind of figure is correct or not, I don't know. There is a problem there. There is a lot we don't know.

I have had many reporters question me about illegal activities, but we don't know. We don't ask people if their activities are legal or illegal. We know there is some illegal activity, but we don't know how much.

Representative BOLLING. By that definition, it is almost impossible to find out, if it is an illegal economy or quasi-illegal economy.

Mr. SHISKIN. There may be ways to do it, but our survey is a voluntary survey. I can't imagine anybody volunteering this type of information.

Representative BOLLING. During 1977, the internal value of the dollar fell by about 5 percent relative to the currencies of our trading partners. This may mean increased exports in 2 to 2½ years. The depreciating dollar also raises imports and therefore, presumably, the consumer prices. Can you quantify such an impact?

Mr. SHISKIN. I can't, sir.

Representative BOLLING. Have you any thought of it?

Mr. SHISKIN. It is a worry, it is one of the areas of concern, but I have no quantitative feeling on it.

Representative BOLLING. Do we have any comparable situation in the past?

Mr. SHISKIN. I don't know. This is not something the Bureau of Labor Statistics——

Representative BOLLING. It wouldn't be your field, but I am getting desperate to get a lead on it.

Now, this is not a facetious question, but it is certainly not a question about government statistics.

In my congressional district I get a lot of flak about the stock market proving that there is something wrong with the economy.

Now, I know you don't make comments on policy questions, but this is a long way out, and I have been looking at a variety of, I guess they are indexes, guides, to what is happening in the market, and I am beginning to wonder if they, by accident, of course, aren't very misleading.

It seems to me that some of the leading indicators just flat mislead us in terms of what is happening in the stock market, and that they may very well be presenting a totally inaccurate picture of what is happening in the economy and in the companies that are on the various stock exchanges.

Is that an unreal approach?

Mr. SHISKIN. Well, I don't think the leading indicators, when measured over a period of months, are presenting a misleading picture of what is likely to happen.

Representative BOLLING. I don't mean our leading indicators. I am talking about the indexes popularly used by the public, including the Dow.

Mr. SHISKIN. The movement of stock prices has historically been a good leading indicator, but sometimes stock prices lead a life of their own. They react to special circumstances, and this may be one of them. They certainly have been foreshadowing bad news for a long time, at least for the last year and 2 months. This may be the stock market living a life of its own, or maybe they are telling us something.

Let me just go back to my own experience, or at least my reading experience. In my study of the leading indicators, I went back to the Harvard Economic Society literature, as many people have. That is where the leading indicators originated. There were Professor Persons and Frickey, and they started the ABC curves, which were nothing more than the leading indicators.

They didn't have computers, and they didn't have many people helping them, and they kept whittling down the number of series, and they wound up with one leading indicator—stock prices—and that was in 1928; when 1929 came, the stock market rose after the rest of the economy had started down. It was a very misleading indicator. It was leading a life of its own. We may be having something like that again.

I think our answer to that, and I have done a lot of work in that field, is that you cannot rely on one or two leading indicators, but you need a group of them, and I think we have a pretty good group. I am chairman of that committee, and I have resisted the efforts, I might say, to include some money supply series in there. One is

really M–7, or something closer than that, and the other is M–1, and M–1 is just not responding at all, not showing a typical cyclical performance.

But as a group, I think it is a pretty good group, and I don't think they are going to mislead us. I am comfortable with them. You shouldn't get carried away by 1 month's figures, though.

But stock prices are a puzzle. Maybe they are really telling us something.

Representative BOLLING. Well, at least we are probably going to find out.

Thank you very much.

Mr. SHISKIN. Thank you very much.

Representative BOLLING. It is great to have you and your associates with us.

Mr. SHISKIN. It is great to be here.

Representative BOLLING. The committee stands adjourned.

[Whereupon, at 11:30 a.m., the committee adjourned, subject to the call of the Chair.]

EMPLOYMENT-UNEMPLOYMENT

FRIDAY, APRIL 7, 1978

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

The committee met, pursuant to notice, at 10:40 a.m., in room 1114, Dirksen Senate Office Building, Hon. Richard Bolling (chairman of the committee) presiding.

Present: Representatives Bolling, Brown of Michigan, and Rousselot; and Senators Bentsen, Proxmire, McGovern, and Javits.

Also present: John R. Stark, executive director; Louis C. Krauthoff II, assistant director; Richard F. Kaufman, general counsel; Kent H. Hughes and Thomas F. Dernburg, professional staff members; Mark Borchelt, administrative assistant; and Charles H. Bradford and M. Catherine Miller, minority professional staff members.

OPENING STATEMENT OF REPRESENTATIVE BOLLING, CHAIRMAN

Representative BOLLING. Good morning, ladies and gentlemen, the hearing will be in order.

We welcome Commissioner Julius Shiskin, of the Bureau of Labor Statistics, as our first witness.

Mr. Shiskin, you bring us surprisingly good news today.

Despite the cold weather and the coal strike, the unemployment rate has only crept up by one-tenth of 1 percent to 6.2 percent.

Whether measured by the household or establishment surveys employment has shown a healthy increase. Average hours worked are up, average hourly earnings are up while at the same time there has been a fall in the average duration of employment.

The quarterly figure for discouraged workers dropped by 300,000 from the 1.1 million recorded in the fourth quarter of 1977.

Most demographic groups had virtually unchanged rates of unemployment. The major exceptions were black women, with an increase of 1.3 percentage points and black teenagers whose unemployment rate increased from 38 to 39 percent. The two-tier nature of the recovery is still with us.

Ms. Slater has brought us less heartening yet hardly unexepected news that the level of GNP remained essentially flat in the first quarter of 1978.

Reflecting the cold weather, residential and business construction were both down. The other indexes also point to a lackluster first quarter, no growth in real income, a decline in consumer spending and a probable drop in Federal expenditures.

The generally strong performance of the American economy has been marred by the specter of rising prices. For all of 1977, consumer prices rose by 6.8 percent—a full 2 percentage points greater than the increase in 1976.

During 1978, there has been nothing but bad news on the inflation front.

In February, consumer prices rose by six-tenths of 1 percent, an annual rate of 7.4 percent. The finished goods portion of the producer price index has been rising by a similar amount since October.

The one exception, February, was very much on the high side with finished goods rising at an annual rate of 14 percent. The steady increase in the finished goods index suggests further pressure on consumer prices in the coming months.

The staggering trade deficit in 1977 has shown no signs of abating. The $2.3 billion deficit in January was followed by a $4.5 billion deficit in February.

If February's performance were repeated during the course of the year, the total deficit for 1978 would be in excess of $50 billion.

Not only will the deficit act as a continuing drain on overall domestic demand, but it promises to put even greater pressure on the value of the dollar.

All of these problems will be heavily influenced by the overall performance of the economy in 1978. Figures on the first quarter of 1978 will cast some light on what economic performance will be for the rest of the year.

We do know that cold weather and the coal strike could combine to sharply reduce economic activity in the first quarter without necessarily presaging a poor performance for the remaining three quarters.

Thus far, loss of energy due to the coal strike does not appear to have caused a great deal of economic disruption.

The sixth and final BLS survey on the impact of the coal shortages revealed that layoffs during the week of March 19 to March 25, 1978, were down to 18,100, a considerable reduction from the 23,400 coal-shortage-related layoffs during the previous week.

We are very pleased to have you with us this morning to discuss the employment and unemployment data as well as the latest changes in consumer and wholesale prices.

We also want to extend a warm welcome to Ms. Courtenay Slater, Chief Economist of the Commerce Department. Ms. Slater will give us a preliminary view of just how good or bad the first quarter has been.

Unless my colleagues wish to make a comment, I will call on Mr. Shiskin first.

STATEMENT OF HON. JULIUS SHISKIN, COMMISSIONER, BUREAU OF LABOR STATISTICS, DEPARTMENT OF LABOR, ACCOMPANIED BY W. JOHN LAYNG, ASSISTANT COMMISSIONER, OFFICE OF PRICES AND LIVING CONDITIONS

Mr. SHISKIN. Thank you, Mr. Chairman.

With me, to my left, is Mr. W. John Layng, Assistant Commissioner, Office of Prices and Living Conditions.

I do have a brief statement, and it is a page or two longer than previously.

You will recall last month I said that I would talk about unit labor costs a little bit, and I now have a brief statement on unit labor costs.

Mr. Chairman and members of the committee, I am glad to have this opportunity to offer the Joint Economic Committee a few brief comments to supplement our press release, the Employment Situation: March 1978, issued this morning at 9 a.m. and our Producer Price Indexes release, issued yesterday.

THE EMPLOYMENT SITUATION

In March, total employment rose by 263,000, unemployment rose by 58,000 and the civilian labor force rose by 321,000.

The unemployment rate rose slightly between February and March, with about half of the categories posted in our basic release table on unemployment rising slightly and about half declining slightly. Most of the alternative seasonal adjustment methods also produced a slight rise in the rate of unemployment between February and March. The rise in the unemployment rate for black adult women may be noteworthy. The number of discouraged workers fell to the lowest level in almost 2 years.

Despite any effects of the coal strike, employment continued to move upward, with a rise in total employment of 263,000; 195,000 of this total rise was contributed by nonagricultural industries. The employment-population ratio edged up to another new high.

The nonagricultural employment series, based on payroll reporting, showed great improvement over February. To begin with, the rise of almost 450,000 in nonfarm employment is one of the highest monthly increases on record. Over the last 3 months, total nonfarm employment, as measured in the establishment payroll survey, rose by more than 1 million. Weekly hours of production workers rose sharply, both for total private employment and manufacturing, and are now back to December levels. The large rise in hours was widespread, probably marking the end of the especially bad weather during the winter.

As a result of this increase and the large employment gain, the index of aggregate weekly hours showed one of the highest monthly increases on record and is now at a new peak. Here again, the rise was widespread with all major industries reporting increased aggregate hours.

The BLS diffusion index, showing the percentage of 172 industries with rising employment, was also at a high level in March—almost 75 percent.

Thus, the data show that unemployment rose slightly, while employment and aggregate hours increased substantially. These findings are supported by the numerous different measures which are produced in the two employment surveys. By this point, I mean that we don't rely on the aggregate changes alone, but we look at several indexes, the employment-population ratios, and other similar measures to see if they support the findings for the aggregate, and they all do.

PRICES

Since my last appearance before this committee a month ago, we have had two additional price reports—the Consumer Price Index for February and the Producer Price Index for March.

Both showed some deceleration in price increases compared to the previous month. The deceleration in the consumer price index was small and took place mostly in two areas—housing and clothing. The Producer Price Indexes, released yesterday, show that inflation is still running at a high rate. However, while the buildup of large price increases in both finished and crude food products continued in March, the pace was much slower.

The rise in intermediate nonfood was also moderated. Crude nonfood materials, however, continued to increase for the sixth consecutive month.

This pattern suggests that it is still too early to tell whether the buildup we have been seeing at the early stages of fabrication will turn out to be one of the small cycles of 5 or 6 months that we have been experiencing since 1975, or something more serious.

PRICES, LABOR COSTS, AND PRODUCTIVITY

We have a chart here, ladies and gentlemen, which you may wish to follow as I read this section.

In order to understand some of the factors associated with price movements, it is useful to examine the changes in productivity, compensation, and unit labor costs.

In general, there is a close interrelationship between prices and unit labor costs. To the extent that hourly compensation increases are not offset by productivity gains, unit labor costs rise.

The productivity measure referred to here describes the relationship between changes in output in real terms and the changes in labor time involved in its production. Although the measure relates output to labor input, it does not indicate only the specific contribution of labor to production. Rather, it reflects the joint effect of a number of interrelated influences, such as changes in technology, capital investment per worker, utilization of capacity, layout and flow of materials, and the skill level of management, as well as the skill level and efforts of the work force.

In the first two decades after World War II, productivity growth in the private business economy was greater than in the last 10 years, and its contribution to restraining price rises was also greater.

During that period, labor productivity grew slightly over 3 percent per year; hourly compensation rose about 5 percent per year. This held the annual growth in unit labor costs to 1.9 percent, the same as the change in prices.

In the last decade, productivity increased at only half its earlier rate, about 1.5 percent per year. Hourly compensation rose about 7.5 percent, and unit labor costs increased about 6 percent.

During the past year, productivity grew 2.6 percent, down from the 4.2 percent gain in 1976. The growth in hourly compensation also fell off, but only slightly. Consequently, unit labor costs accelerated from 4.7 percent to 6.1 percent. The speedup in unit labor costs last year resulted primarily from the decline in productivity growth.

In the fourth quarter of last year, productivity growth fell off very sharply from an annual rate of over 5 percent in the third quarter to a 1.7 percent annual rate. Although hourly compensation grew somewhat more slowly in this quarter, unit labor costs accelerated markedly from a rate of 2.9 percent to 5.3 percent because of the substantial slackening in productivity growth.

As yet, we do not have any first quarter figures, but it does appear that we may have a decline in productivity because of the severity of the winter and the dislocations that may have arisen from the coal strike. As a result, most likely unit labor costs will continue to increase in the first quarter.

In summary, employment advanced substantially in March while unemployment rose slightly and the rate of inflation over the month decelerated slightly. Sluggish productivity growth would appear to be an important factor in explaining increases in unit labor costs, which usually move in tandem with the consumer price index.

My colleague and I are now ready to try to answer your questions.

[The table and chart attached to Mr. Shiskin's statement, together with the press release referred to, follow:]

UNEMPLOYMENT RATES BY ALTERNATE SEASONAL ADJUSTMENT METHODS

Month and year	Unadjusted rate	Official adjusted rate	Alternative procedures								Other aggregations (multiplicative)		Direct adjustment of rate	Range (cols. 2–13)
			Official procedure used in 1976–77	Unemployed all multiplicative	Unemployed all additive	Year ahead	Concurrent		Stable		Total	Residual		
							First computed	Revised	1967–73	1967–77				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1976:														
January	8.8	7.9	7.8	7.8	8.0	7.8	7.8	7.9	8.1	7.9	7.9	8.1	7.9	0.3
February	8.7	7.7	7.6	7.6	7.8	7.6	7.6	7.7	7.7	7.7	7.6	7.7	7.7	.2
March	8.1	7.6	7.5	7.5	7.6	7.5	7.5	7.6	7.7	7.6	7.5	7.6	7.6	.2
April	7.4	7.6	7.6	7.6	7.6	7.4	7.4	7.6	7.6	7.6	7.6	7.6	7.6	.2
May	6.7	7.4	7.4	7.5	7.2	7.2	7.2	7.4	7.5	7.5	7.5	7.3	7.5	.3
June	8.0	7.5	7.5	7.5	7.5	7.5	7.6	7.5	7.5	7.5	7.4	7.5	7.4	.1
July	7.8	7.7	7.8	7.8	7.8	7.8	7.8	7.7	7.7	7.7	7.7	7.7	7.7	.1
August	7.6	7.8	7.8	7.8	7.8	7.9	7.9	7.8	7.7	7.8	7.8	7.8	7.9	.2
September	7.4	7.7	7.8	7.8	7.7	7.8	7.8	7.7	7.6	7.7	7.8	7.7	7.8	.2
October	7.2	7.7	7.8	7.9	7.8	7.9	7.9	7.7	7.7	7.7	7.8	7.7	7.8	.2
November	7.4	7.8	7.8	7.8	7.8	8.1	8.0	7.9	7.8	7.9	7.8	7.7	7.8	.4
December	7.4	7.8	7.8	7.8	7.8	7.9	7.8	7.8	7.9	7.9	7.8	7.8	7.8	.1
1977:														
January	8.3	7.4	7.3	7.3	7.4	7.3	7.4	7.5	7.5	7.4	7.4	7.6	7.5	.3
February	8.5	7.6	7.5	7.5	7.6	7.5	7.5	7.6	7.6	7.5	7.5	7.5	7.5	.1
March	7.9	7.4	7.4	7.4	7.4	7.3	7.3	7.4	7.5	7.4	7.4	7.3	7.4	.2
April	6.9	7.1	7.1	7.1	7.1	7.0	7.0	7.1	7.1	7.1	7.1	7.1	7.1	.1
May	6.4	7.1	7.1	7.1	6.9	6.9	7.0	7.1	7.1	7.1	7.1	7.0	7.2	.3
June	7.5	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.0	7.0	7.0	7.1	7.0	.1
July	7.0	6.9	7.0	7.0	7.0	6.9	6.9	6.9	6.8	6.9	7.0	6.9	7.0	.2
August	6.8	7.0	7.0	7.0	7.1	7.1	7.0	7.0	6.9	7.0	7.1	7.1	7.0	.2
September	6.6	6.8	6.9	6.9	6.9	6.9	6.9	6.8	6.7	6.8	6.9	6.9	6.9	.2
October	6.3	6.8	6.9	6.9	6.9	7.0	6.9	6.8	6.8	6.8	6.9	6.9	6.8	.2
November	6.4	6.7	6.7	6.7	6.8	6.9	6.8	6.8	6.8	6.8	6.8	6.7	6.7	.2
December	6.0	6.4	6.4	6.3	6.4	6.4	6.4	6.3	6.5	6.4	6.3	6.4	6.3	.2
1978:														
January	7.0	6.3	6.2	6.2	6.2	6.3	6.4	6.4	6.4	6.3	6.3	6.3	6.3	.2
February	6.9	6.1	6.1	6.1	6.0	6.1	6.1	6.1	6.2	6.1	6.1	5.9	6.1	.3
March	6.6	6.2	6.1	6.2	6.1	6.2	6.2	6.2	6.3	6.2	6.1	6.0	6.1	.3

Source: U.S. Department of Labor, Bureau of Labor Statistics, April 1978.

COLUMN NOTES

(1) Unadjusted rate. Unemployment rate not seasonally adjusted.

(2) Official rate. This is the published seasonally adjusted rate. Each of 4 unemployed age-sex components—males and females, 16–19 and 20 yrs of age and over—is independently adjusted. The teenage unemployment and nonagricultural employment components are adjusted using the additive prccedure of the X–11 method, while adults are adjusted using the X–11 multiplicative option. Adult male unemployment is adjusted multiplicatively using a prior trend adjustment procedure. The rato is calculated by aggregating the 4 and dividing them by 12 summed labor force components—these 4 plus 8 employment components, which are the 4 age-sex groups in agriculture and nonagricultural industries. This employment total is also used in the calculation of the labor force base in cols. 3–9. The current "implicit" factors for the total unemployment rate derived by dividing the original unemployment rate by the seasonally adjusted rate for the months of 1977, are: January, 112.2; February, 112.6; March, 106.7; April, 96.5; May, 90.1; June, 106.2; July, 101.2; August, 97.6; September, 96.6; October, 92.6; November, 95.3; December, 93.6.

(3) Official procedure used in 1976–77. Only teenage unemployment components are adjusted using the additive procedure of X–11; all other series are adjusted with the multiplicative option. The prior adjustment is not used for adult male unemployment.

(4) Unemployed all multiplicative. The 4 basic unemployed age-sex groups—males and females, 16–19 and 20 yrs and over—are adjusted by the X–11 multiplicative procedure. This procedure was used to adjust unemployment data in 1975 and previous years.

(5) Additive rate. The 4 basic unemployed age-sex groups—males and females, 16–19 and 20 yrs and over—are adjusted by the X–11 additive procedure.

(6) Year-ahead factors. The official seasonal adjustment procedure for each of the components is followed through computation of the factor for the last years of data. A projected factor—the factor for the last year plus one-half of the difference from the previous year—is then computed for each of the components, and the rate is calculated. The rates shown are as first calculated and are not subject to revision.

(7) Concurrent adjustment through current month (first computed). The official procedure is followed with data reseasonally adjusted incorporating the experience through the current month, i.e., the rate for March 1976 is based on adjustment of data for the period, January 1967–March 1976. The rates are as first calculated and are not subject to revision.

(8) Concurrent adjustment through current month (revised). Follows the same procedures as used in computation of col. 7. Each month, however, revisions in the entire time series are made. This column provides an indication, as the year progresses, of the scope of the revisions and provides the best portrayal of movements in the series.

(9) Stable seasonals (January 1967–December 1973). The stable seasonal option in the X–11 program uses an unweighted average of all available seasonal-irregular ratios to compute final seasonal factors. In essence, it assumes that seasonal patterns are relatively constant from year to year. A cutoff of input data as of December 1973 was selected to avoid the impact of cyclical changes in the 1974–75 period.

(10) Stable seasonals (January 1967–December 1977). Follows the same procedures as used in col. 9, except that the unweighted average is based on seasonal-irregular ratios for the 1967–77 period.

(11) Total. Unemployment and labor force levels adjusted directly.

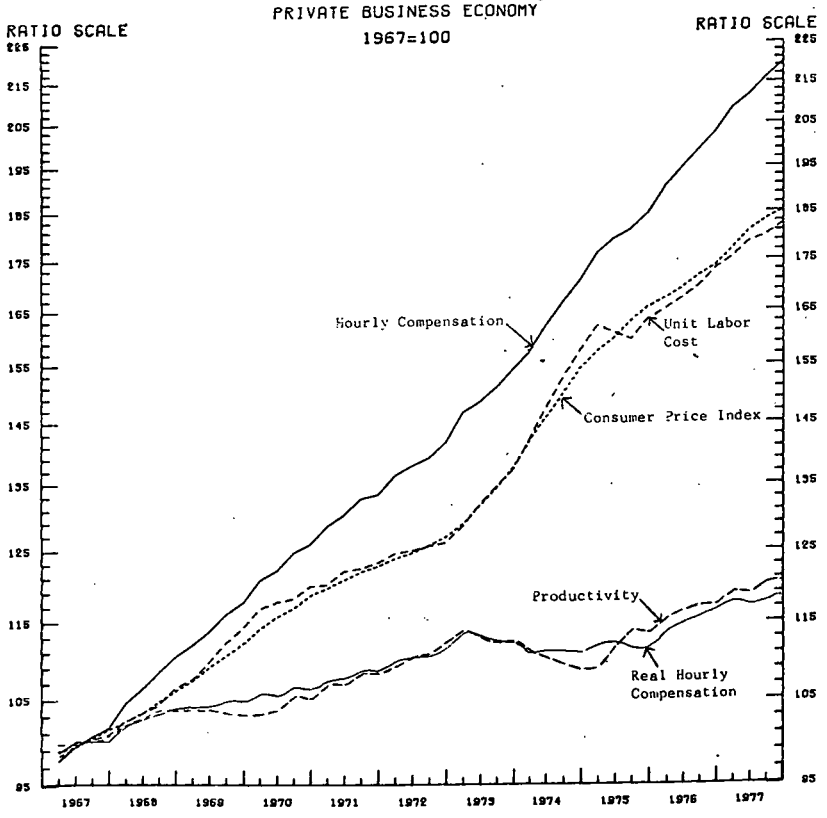
(12) Residual. Labor force and employment levels adjusted directly, unemployment as a residual and rate then calculated.

(13) Direct adjustment. Unemployment rate adjusted directly.

(14) Average of cols. 2–12.

Note: The X–11 method, developed by Julius Shiskin at the Bureau of the Census over the period 1955–65, was used in computing all the seasonally adjusted series described above.

COMPENSATION, COSTS AND PRICES IN THE
PRIVATE BUSINESS ECONOMY
1967=100



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THE EMPLOYMENT SITUATION: MARCH 1978

Employment rose in March and unemployment was little changed, the Bureau of Labor Statistics of the U. S. Department of Labor reported today. The Nation's overall unemployment rate was 6.2 percent, compared with 6.1 percent in February and 6.3 percent in January. The rate has fallen more than a full percentage point in the past 12 months.

Total employment--as measured by the monthly survey of households--advanced by 260,000 to 93.3 million. Over the past year, employment has increased by 3.5 million (after allowing for the effect of changes in sampling and estimating procedures introduced in January).

Nonfarm payroll employment--as measured by the monthly survey of establishments--posted a sharp gain of 445,000 in March. At 84.5 million, payroll jobs were 3.1 million above their year-earlier level.

Unemployment

The number of persons unemployed in March was about the same as in February, 6.1 million, seasonally adjusted. The unemployment rate was 6.2 percent, also little changed from the previous month.

Jobless rates for adult men (4.5 percent), adult women (5.8 percent), and teenagers (17.3 percent) were all virtually unchanged from February. The only major demographic group to show any significant change over the month was black adult women, whose unemployment rate increased to 11.4 percent from 10.1 percent.

Over the past year, joblessness has been reduced by more than 1 million, and the rate has dropped by 1.2 percentage points. Virtually all worker groups have shared in this improvement. For example, substantial reductions in unemployment were registered among adult men and women, full-time workers and white- and blue-collar workers. However, unemployment among blacks was little different from a year earlier. (See table A-2.)

The median duration of unemployment declined from 7.0 to 6.2 weeks in March, reflecting a drop in the number of persons unemployed 15 weeks or longer. The mean duration of unemployment, however, was little changed from February at 12.3 weeks. (See table A-4.)

Total Employment and the Labor Force

The civilian labor force grew by about 320,000 in March to 99.4 million, and employment was up by 260,000 to 93.3 million (seasonally adjusted). In both the labor force and employment, adult women outgained adult men two to one. Over the year, the labor force rose by 2.4 million and employment increased 3.5 million (taking into account the effect of the improvements in the household survey sampling and estimation procedures introduced in January). (See table A-1.)

The March employment-population ratio was up slightly to an all-time high of 58.2 percent. The ratio was 1.5 points higher than a year earlier. The over-the-year increase was particularly strong among adult women, as their proportion employed increased from 44.3 to 46.2 percent.

The civilian labor force participation rate was 62.8 percent, remaining about the same as in the previous 4 months and 0.7 percentage point above the year-ago level.

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

Selected categories	Quarterly averages					Monthly data		
	1977				1978	1978		
	I	II	III	IV	I	Jan.	Feb.	Mar.
HOUSEHOLD DATA	Thousands of persons							
Civilian labor force	96,221	97,153	97,559	98,622	99,205	99,107	99,093	99,414
Total employment	89,059	90,264	90,823	92,069	93,050	92,881	93,003	93,266
Unemployment	7,161	6,889	6,736	6,554	6,155	6,226	6,090	6,148
Not in labor force	59,225	58,941	59,205	58,777	58,799	58,709	58,911	58,776
Discouraged workers	942	1,062	1,067	969	903	N.A.	N.A.	N.A.
	Percent of labor force							
Unemployment rates:								
All workers	7.4	7.1	6.9	6.6	6.2	6.3	6.1	6.2
Adult men	5.7	5.2	5.0	4.8	4.6	4.7	4.5	4.5
Adult women	7.1	7.0	7.0	6.8	5.9	6.1	5.7	5.8
Teenagers	18.6	18.1	17.6	16.7	16.9	16.0	17.4	17.3
White	6.7	6.3	6.1	5.8	5.4	5.5	5.3	5.3
Black and other	12.9	12.8	13.6	13.3	12.3	12.7	11.8	12.4
Full-time workers	6.9	6.6	6.5	6.2	5.7	5.8	5.7	5.6
ESTABLISHMENT DATA	Thousands of jobs							
Nonfarm payroll employment	80,925	81,871	82,548	83,192	84,091p	83,719	84,055p	84,498p
Goods-producing industries	23,788	24,265	24,359	24,497	24,739p	24,593	24,729p	24,896p
Service-producing industries	57,137	57,606	58,189	58,695	59,351p	59,126	59,326p	59,602p
	Hours of work							
Average weekly hours:								
Total private nonfarm	36.1	36.2	36.0	36.2	35.8p	35.6	35.8p	36.1p
Manufacturing	40.1	40.4	40.3	40.5	40.0p	39.6	40.0p	40.5p
Manufacturing overtime	3.3	3.4	3.3	3.5	3.7p	3.5	3.8p	3.7p

p-preliminary. N.A.-not available.

Discouraged Workers

Discouraged workers are persons who report that they want work but are not looking for jobs because they believe they cannot find any. Because they do not meet the labor market test—that is, they are not engaged in active job search—they are classified as not in the labor force rather than as unemployed. These data are published on a quarterly basis.

Consistent with a decline in unemployment during the first quarter, the number of discouraged workers also fell. The first quarter average was 900,000, down from the third and fourth quarter 1977 levels of 1.1 million and 970,000, respectively. All of the decrease in discouragement occurred among women, as men showed a slight increase. About 70 percent of the discouraged total cited job market factors as their reason for not seeking work. (See table A-8.)

Industry Payroll Employment

The number of employees on nonagricultural payrolls rose by 445,000 in March to 84.5 million, seasonally adjusted. Every major industry division registered gains, as employment increased in 74 percent of the 172 industries that comprise the BLS diffusion index of private nonagricultural payroll employment. Total nonfarm payroll employment has risen by 1.1 million since December and was 3.1 million above the year-earlier level. (See table B-1.)

The pervasiveness of the March payroll employment advance was reflected in over-the-month gains of 60,000 or more in contract construction, manufacturing, trade, services, and government. The bulk of the overall gain occurred in the service-producing sector (275,000), as has typically been the case in recent years. Growth in this sector over the past 12 months has totaled nearly 2.3 million.

In the goods-producing sector, both contract construction and manufacturing posted over-the-month increases of 75,000 jobs. The factory job total has risen by 725,000 since last March, with three-fifths of the increase occurring in the last 4 months. Two-thirds of the manufacturing increase over the month occurred in the durable goods sector.

Hours

The average workweek for production or nonsupervisory workers on private nonagricultural payrolls rose 0.3 hour to 36.1 hours in March, seasonally adjusted. This represented a return to the levels that prevailed at the end of last year before the recent weather-related reductions. As was true for employment, the rise in working hours was spread throughout the major industry divisions.

The factory workweek rose by one-half hour in March, also returning to levels prevailing in late 1977. Mining and contract construction showed workweek gains of 1.0 and 0.6 hour, respectively, with the other major industry groups posting increases of lesser magnitude. (See table B-2.)

As a result of the advance in both employment and hours, the index of aggregate weekly hours of production or nonsupervisory workers on private nonagricultural payrolls increased by 1.5 percent in March to a record 118.8 (1967=100). The factory index rose to 101.5 in March, its highest level since mid-1974. (See table B-5.)

Hourly and Weekly Earnings

Average hourly earnings of production or nonsupervisory workers on nonagricultural payrolls increased in March by 0.4 percent on a seasonally-adjusted basis. This advance, combined with the increase in hours, resulted in a 1.2-percent over-the-month rise in average weekly earnings. Since last March, average hourly and weekly earnings have advanced by 8.2 and 7.6 percent, respectively.

Before adjustment for seasonality, average hourly earnings were $5.53, up 2 cents from February and 42 cents above a year earlier. Average weekly earnings rose $2.36 over the month to $197.97 and have risen $14.01 since March a year ago. (See table B-3.)

The Hourly Earnings Index

The Hourly Earnings Index--earnings adjusted for overtime in manufacturing, seasonality, and the effects of changes in the proportion of workers in high-wage and low-wage industries--was 209.9 (1967=100) in March, 0.6 percent higher than in February. The index was 8.1 percent above March a year ago. During the 12-month period ended in February, the Hourly Earnings Index in dollars of constant purchasing power rose 1.4 percent. (See table B-4.)

Explanatory Note

This release presents and analyzes statistics from two major surveys. Data on labor force, total employment, and unemployment (A tables) are derived from the Current Population Survey—a sample survey of households which is conducted by the Bureau of the Census for the Bureau of Labor Statistics. Beginning in September 1975, the sample was enlarged by 9,000 households in order to provide greater reliability for smaller States and thus permit the publication of annual statistics for all 50 States and the District of Columbia. These supplementary households were added to the 47,000 national household sample in January 1978; thus the sample now consists of about 56,000 households selected to represent the U.S. civilian noninstitutional population 16 years and over.

Statistics on nonagricultural payroll employment, hours, and earnings (B tables) are collected by the Bureau of Labor Statistics, in cooperation with State agencies, from payroll records of a sample of approximately 165,000 establishments. Unless otherwise indicated, data for both statistical series relate to the week containing the 12th day of the specified month.

Comparability of household and payroll employment statistics

Employment data from the household and payroll surveys differ in several basic respects. The household survey provides information on the labor force activity of the entire civilian noninstitutional population, 16 years of age and over, without duplication. Each person is classified as either employed, unemployed, or not in the labor force. The household survey counts employed persons in both agriculture and nonagricultural industries and, in addition to wage and salary workers (including private household workers), counts the self-employed, unpaid family workers, and persons "with a job but not at work" and not paid for the period absent.

The payroll survey relates only to paid wage and salary employees (regardless of age) on the payrolls of nonagricultural establishments. Persons who worked at more than one job during the survey week or otherwise appear on more than one payroll are counted more than once in the establishment survey. Such persons are counted only once in the household survey and are classified in the job at which they worked the greatest number of hours.

Unemployment

To be classified in the household survey as unemployed an individual must: (1) Have been without a job during the survey week; (2) have made specific efforts to find employment sometime during the prior 4 weeks; and (3) be presently available for work. In addition, persons on layoff and those waiting to begin a new job (within 30 days), neither of whom must meet the jobseeking requirements, are also classified as unemployed. The unemployed total includes all persons who satisfactorily meet the above criteria, regardless of their eligibility for unemployment insurance benefits or any kind of public assistance. The unemployment rate represents the unemployed as a proportion of the civilian labor force (the employed and unemployed combined).

The Bureau regularly publishes a wide variety of labor market measures. See, for example, the demographic, occupational, and industry detail in tables A-2 and A-3 of this release and the comprehensive data package in Employment and Earnings each month. A special grouping of seven unemployment measures is set forth in table A-7. Identified by the symbols U-1 through U-7, these measures represent a range of possible definitions of unemployment and of the labor force—from the most restrictive (U-1) to the most comprehensive (U-7). The official rate of unemployment appears as U-5.

Seasonal adjustment

Nearly all economic phenomena are affected to some degree by seasonal variations. These are recurring, predictable events which are repeated more or less regularly each year—changes in weather, opening and closing of schools, major holidays, industry production schedules, etc. The cumulative effects of these events are often large. For example, on average over the year, they explain about 95 percent of the month-to-month variance in the unemployment figures. Since seasonal variations tend to be large relative to the underlying cyclical trends, it is necessary to use seasonally-adjusted data to interpret short-term economic developments. At the beginning of each year, seasonal adjustment factors for unemployment and other labor force series are calculated for use during the entire year, taking into account the prior year's experience, and revised seasonally-adjusted data are introduced in the release containing January data.

All seasonally-adjusted civilian labor force and unemployment rate statistics, as well as the major employment and unemployment estimates, are computed by aggregating independently adjusted series. The official unemployment rate for all civilian workers is derived by dividing the estimate for total unem-

ployment (the sum of four seasonally-adjusted age-sex components) by the civilian labor force (the sum of 12 seasonally-adjusted age-sex components).

For establishment data, the seasonally-adjusted series for all employees, production workers, average weekly hours, and average hourly earnings are adjusted by aggregating the seasonally-adjusted data from the respective component series. These data are also revised annually, often in conjunction with benchmark (comprehensive counts of employment) adjustments. (The most recent revision of seasonally-adjusted data was based on data through August 1977.)

Sampling variability

Both the household and establishment survey statistics are subject to sampling error, which should be taken into account in evaluating the levels of a series as well as changes over time. Because the household survey is based upon a probability sample, the results may differ from the figures that would be obtained if it were possible to take a complete census using the same questionnaires and procedures. The standard error is the measure of sampling variability, that is, of the variation that occurs by chance because a sample rather than the entire population is surveyed. The chances are about 68 out of 100 that an estimate from the survey differs from a figure that would be obtained through a complete census by less than the standard error. Tables A through H in the "Explanatory Notes" of Employment and Earnings provide approximations of the standard errors for unemployment and other labor force categories. To obtain a 90-percent level of confidence, the confidence interval generally used by BLS, the errors should be multiplied by 1.6. The following examples provide an indication of the magnitude of sampling error: For a monthly change in total employment, the standard error is on the order of plus or minus 182,000. Similarly, the standard error on a change in total unemployment is approximately 115,000. The standard error on a change in the national unemployment rate is 0.12 percentage point.

Although the relatively large size of the monthly establishment survey assures a high degree of accuracy, the estimates derived from it also may differ from the figures obtained if a complete census using the same schedules and procedures were possible. However, since the estimating procedures utilize the previous month's level as the base in computing the current month's level of employment (link-relative technique), sampling and response errors may accumulate over several months. To remove this accumulated error, the employment estimates are adjusted to new benchmarks (comprehensive counts of employment), usually on an annual basis. In addition to taking account of sampling and response errors, the benchmark revision adjusts the estimates for changes in the industrial classification of individual establishments. Employment estimates are currently projected from March 1974 levels, plus an interim benchmark adjustment based on December 1975 levels.

One measure of the reliability of the employment estimates for individual industries is the root-mean-square error (RMSE). The RMSE is the standard deviation adjusted for the bias in estimates. If the bias is small, the chances are about 68 out of 100 that an estimate from the sample would differ from its benchmark by less than the RMSE. For total nonagricultural employment, the RMSE is on the order of plus or minus 81,000. Measures of reliability (approximations of the RMSE) for establishment-survey data and actual amounts of revision due to benchmark adjustments are provided in tables J through O in the "Explanatory Notes" of Employment and Earnings.

NOTE: Household survey data for periods prior to January 1978 shown in tables A-1 through A-7 are not strictly comparable with current data because of the introduction of an expansion in the sample and revisions in the estimation procedures. As a result, the overall civilian labor force and employment totals in January were raised by roughly a quarter of a million; unemployment levels and rates were essentially unchanged. An explanation of the procedural changes and an indication of the differences appear in "Revisions in the Current Population Survey in January 1978," *Employment and Earnings*, February 1978 Vol. 25 No. 2.

HOUSEHOLD DATA

Table A-1. Employment status of the noninstitutional population

[Numbers in thousands]

Employment status	Not seasonally adjusted			Seasonally adjusted					
	Mar. 1977	Feb. 1978	Mar. 1978	Mar. 1977	Nov. 1977	Dec. 1977	Jan. 1978	Feb. 1978	Mar. 1978
TOTAL									
Total noninstitutional population[1]	157,782	160,128	160,313	157,782	159,522	159,736	159,937	160,128	160,313
Armed Forces[1]	2,138	2,124	2,122	2,138	2,132	2,129	2,121	2,124	2,122
Civilian noninstitutional population[1]	155,643	158,004	158,190	155,643	157,389	157,608	157,816	158,004	158,190
Civilian labor force	95,771	97,924	98,443	96,623	98,877	98,919	99,107	99,093	99,414
Participation rate	61.5	62.0	62.2	62.1	62.8	62.8	62.8	62.7	62.8
Employed	88,215	91,185	91,964	89,478	92,214	92,609	92,881	93,003	93,266
Employment-population ratio[2]	55.9	56.9	57.4	56.7	57.8	58.0	58.1	58.1	58.2
Agriculture	2,804	2,771	2,913	3,179	3,357	3,323	3,354	3,242	3,310
Nonagricultural industries	85,411	88,413	89,051	86,299	88,857	89,286	89,527	89,761	89,956
Unemployed	7,556	6,739	6,479	7,145	6,663	6,310	6,226	6,090	6,148
Unemployment rate	7.9	6.9	6.6	7.4	6.7	6.4	6.3	6.1	6.2
Not in labor force	59,872	60,080	59,747	59,020	58,512	58,689	58,709	58,911	58,776
Men, 20 years and over									
Total noninstitutional population[1]	67,114	68,240	68,327	67,114	67,948	68,052	68,148	68,240	68,327
Civilian noninstitutional population[1]	65,423	66,556	66,645	65,423	66,257	66,364	66,467	66,556	66,645
Civilian labor force	51,925	52,713	52,870	52,195	52,971	53,122	53,153	53,142	53,242
Participation rate	79.4	79.2	79.3	79.8	79.9	80.0	80.0	79.8	79.9
Employed	48,599	49,805	50,106	49,297	50,459	50,688	50,673	50,759	50,833
Employment-population ratio[2]	72.4	73.0	73.3	73.5	74.3	74.5	74.4	74.4	74.4
Agriculture	2,106	2,105	2,145	2,247	2,330	2,346	2,394	2,283	2,289
Nonagricultural industries	46,494	47,700	47,961	47,050	48,129	48,342	48,279	48,476	48,544
Unemployed	3,325	2,907	2,765	2,898	2,512	2,436	2,480	2,383	2,409
Unemployment rate	6.4	5.5	5.2	5.6	4.7	4.6	4.7	4.5	4.5
Not in labor force	13,498	13,843	13,774	13,228	13,286	13,242	13,314	13,414	13,403
Women, 20 years and over									
Total noninstitutional population[1]	73,852	75,095	75,196	73,852	74,768	74,883	74,991	75,095	75,196
Civilian noninstitutional population[1]	73,757	74,996	75,093	73,757	74,669	74,783	74,892	74,996	75,093
Civilian labor force	35,433	36,733	36,982	35,278	36,451	36,418	36,595	36,654	36,849
Participation rate	48.0	49.0	49.2	47.8	48.8	48.7	48.9	48.9	49.1
Employed	32,850	34,470	34,817	32,742	33,923	34,009	34,348	34,569	34,722
Employment-population ratio[2]	44.5	45.9	46.3	44.3	45.4	45.4	45.8	46.0	46.2
Agriculture	402	437	486	522	589	543	517	604	628
Nonagricultural industries	32,448	34,033	34,333	32,220	33,334	33,466	33,831	33,965	34,094
Unemployed	2,583	2,262	2,165	2,536	2,528	2,409	2,247	2,085	2,127
Unemployment rate	7.3	6.2	5.9	7.2	6.9	6.6	6.1	5.7	5.8
Not in labor force	38,323	38,263	38,111	38,479	38,218	38,365	38,297	38,342	38,244
Both sexes, 16-19 years									
Total noninstitutional population[1]	16,816	16,794	16,790	16,816	16,806	16,802	16,798	16,796	16,790
Civilian noninstitutional population[1]	16,464	16,453	16,452	16,464	16,463	16,460	16,457	16,453	16,452
Civilian labor force	8,414	8,479	8,591	9,150	9,455	9,379	9,359	9,297	9,323
Participation rate	51.1	51.5	52.2	55.6	57.4	57.0	56.9	56.5	56.7
Employed	6,766	6,909	7,041	7,439	7,832	7,912	7,860	7,675	7,711
Employment-population ratio[2]	40.2	41.1	41.9	44.2	46.6	47.1	46.8	45.7	45.9
Agriculture	297	229	284	420	438	434	443	355	393
Nonagricultural industries	6,469	6,680	6,758	7,029	7,394	7,478	7,417	7,320	7,318
Unemployed	1,648	1,570	1,549	1,711	1,623	1,467	1,499	1,622	1,612
Unemployment rate	19.6	18.5	18.0	18.7	17.2	15.6	16.0	17.4	17.3
Not in labor force	8,050	7,974	7,862	7,314	7,008	7,081	7,098	7,156	7,129
WHITE									
Total noninstitutional population[1]	138,732	140,571	140,714	138,732	140,095	140,264	140,421	140,571	140,714
Civilian noninstitutional population[1]	136,972	138,834	138,997	136,972	138,351	138,523	138,687	138,834	138,997
Civilian labor force	84,792	86,344	86,736	85,481	87,292	87,193	87,425	87,360	87,532
Participation rate	61.9	62.2	62.4	62.4	63.1	62.9	63.0	62.9	63.0
Employed	78,685	81,061	81,737	79,809	82,181	82,391	82,650	82,697	82,880
Employment-population ratio[2]	56.7	57.7	58.1	57.5	58.7	58.7	58.9	58.8	58.9
Unemployed	6,107	5,284	4,999	5,672	5,111	4,802	4,775	4,663	4,652
Unemployment rate	7.2	6.1	5.8	6.6	5.9	5.5	5.5	5.3	5.3
Not in labor force	52,180	52,490	52,261	51,491	51,059	51,330	51,262	51,474	51,465
BLACK AND OTHER									
Total noninstitutional population[1]	19,050	19,558	19,599	19,050	19,427	19,473	19,516	19,558	19,599
Civilian noninstitutional population[1]	18,672	19,170	19,194	18,672	19,038	19,084	19,129	19,170	19,194
Civilian labor force	10,979	11,580	11,707	11,133	11,551	11,761	11,725	11,785	11,871
Participation rate	58.8	60.4	61.0	59.6	60.7	61.6	61.3	61.5	61.8
Employed	9,530	10,124	10,227	9,702	9,966	10,271	10,238	10,391	10,402
Employment-population ratio[2]	50.0	51.8	52.2	50.9	51.3	52.7	52.5	53.1	53.1
Unemployed	1,449	1,455	1,480	1,431	1,585	1,490	1,487	1,394	1,469
Unemployment rate	13.2	12.6	12.6	12.9	13.7	12.7	12.7	11.8	12.4
Not in labor force	7,692	7,591	7,486	7,539	7,487	7,323	7,404	7,385	7,323

[1] The population and Armed Forces figures are not adjusted for seasonal variations; therefore, identical numbers appear in the unadjusted and seasonally adjusted columns.

[2] Civilian employment as a percent of the total noninstitutional population (including Armed Forces).

Table A-2. Major unemployment indicators, seasonally adjusted

Selected categories	Number of unemployed persons (in thousands)		Unemployment rates					
	Mar. 1977	Mar. 1978	Mar. 1977	Nov. 1977	Dec. 1977	Jan. 1978	Feb. 1978	Mar. 1978
CHARACTERISTICS								
Total, 16 years and over	7,145	6,148	7.4	6.7	6.4	6.3	6.1	6.2
Men, 20 years and over	2,898	2,409	5.6	4.7	4.6	4.7	4.5	4.5
Women, 20 years and over	2,536	2,127	7.2	6.9	6.6	6.1	5.7	5.8
Both sexes, 16-19 years	1,711	1,612	18.7	17.2	15.6	16.0	17.4	17.3
White, total	5,672	4,652	6.6	5.9	5.5	5.5	5.3	5.3
Men, 20 years and over	2,321	1,885	5.0	4.1	4.0	4.0	3.9	4.0
Women, 20 years and over	1,982	1,552	6.5	6.1	5.9	5.5	5.0	4.9
Both sexes, 16-19 years	1,369	1,215	16.6	14.7	12.7	13.7	14.8	14.6
Black and other, total	1,431	1,469	12.9	13.7	12.7	12.7	11.8	12.4
Men, 20 years and over	527	483	9.6	10.0	9.1	9.8	8.6	8.5
Women, 20 years and over	559	585	11.8	12.6	11.5	10.8	10.1	11.4
Both sexes, 16-19 years	345	401	38.9	39.0	38.0	38.7	38.0	39.0
Married men, spouse present	1,524	1,203	3.8	3.3	3.2	2.9	2.9	3.0
Married women, spouse present	1,517	1,168	6.8	6.5	6.2	5.6	5.2	5.1
Women who head families	412	408	9.6	9.3	8.1	7.9	7.6	8.6
Full-time workers	5,550	4,719	6.8	6.2	5.9	5.8	5.7	5.6
Part-time workers	1,574	1,422	10.9	9.6	8.9	8.9	8.6	9.6
Unemployed 15 weeks and over[1]	2,008	1,463	2.1	1.8	1.8	1.7	1.6	1.5
Labor force time lost[2]	--	--	7.8	7.3	7.0	6.8	6.6	6.6
OCCUPATION[3]								
White-collar workers	2,186	1,673	4.7	4.2	4.0	3.6	3.5	3.4
Professional and technical	447	382	3.2	2.9	2.8	2.7	2.5	2.6
Managers and administrators, except farm	333	240	3.4	3.0	2.5	2.5	1.9	2.3
Sales workers	329	272	5.5	4.9	4.7	3.9	4.3	4.3
Clerical workers	1,077	779	6.3	5.7	5.5	5.0	5.0	4.5
Blue-collar workers	2,774	2,388	8.5	7.6	7.2	7.1	7.1	7.1
Craft and kindred workers	761	648	6.1	5.2	5.2	5.4	5.0	5.1
Operatives, except transport	1,099	932	9.5	9.3	8.5	7.9	8.1	8.0
Transport equipment operatives	266	194	7.1	5.3	5.6	5.4	5.0	5.2
Nonfarm laborers	648	614	13.2	11.9	10.6	11.0	11.5	11.9
Service workers	1,076	1,046	8.1	7.8	7.8	7.6	7.1	7.7
Farm workers	143	137	5.0	4.1	3.9	3.9	4.7	4.7
INDUSTRY[3]								
Nonagricultural private wage and salary workers[4]	5,181	4,372	7.4	6.7	6.3	6.2	6.1	6.0
Construction	648	537	14.2	11.2	10.8	11.7	11.5	11.3
Manufacturing	1,466	1,177	6.7	6.5	5.7	5.6	5.7	5.4
Durable goods	813	624	6.3	6.0	5.6	5.2	5.0	4.8
Nondurable goods	653	553	7.4	7.2	5.9	6.1	6.5	6.2
Transportation and public utilities	251	194	5.1	4.7	4.9	4.3	3.2	3.7
Wholesale and retail trade	1,499	1,345	8.3	7.4	7.3	7.1	7.1	7.3
Finance and service industries	1,283	1,080	6.4	6.0	5.5	5.3	5.1	5.1
Government workers	632	580	4.1	4.3	4.3	4.2	3.5	3.7
Agricultural wage and salary workers	187	154	12.6	9.3	9.6	9.0	10.1	10.0
VETERAN STATUS								
Male Vietnam-era veterans:[5]								
20 to 34 years	461	317	7.1	6.8	5.6	5.7	5.2	5.0
20 to 24 years	165	96	17.4	14.1	11.8	12.9	12.5	13.2
25 to 29 years	198	110	6.8	6.4	6.1	6.1	5.4	4.6
30 to 34 years	98	111	3.7	4.8	3.7	3.5	3.4	3.5
Male nonveterans:								
20 to 34 years	1,238	1,136	7.9	6.9	6.9	7.1	6.7	6.9
20 to 24 years	717	680	10.4	9.3	9.4	10.1	9.7	9.5
25 to 29 years	355	322	7.1	5.5	5.2	5.4	5.0	5.8
30 to 34 years	166	134	4.4	4.5	4.5	4.0	3.8	3.5

[1] Unemployment rate calculated as a percent of civilian labor force.

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

[3] Unemployment by occupation includes all experienced unemployed persons, whereas that by industry covers only unemployed wage and salary workers.

[4] Includes mining, not shown separately.

[5] Vietnam-era veterans are those who served between August 5, 1964, and May 7, 1975.

Table A-3. Selected employment indicators

[In thousands]

Selected categories	Not seasonally adjusted		Seasonally adjusted					
	Mar. 1977	Mar. 1978	Mar. 1977	Nov. 1977	Dec. 1977	Jan. 1978	Feb. 1978	Mar. 1978
CHARACTERISTICS								
Total employed, 16 years and over	88,215	91,964	89,478	92,214	92,609	92,881	93,003	93,266
Men	52,180	53,866	53,301	54,745	55,012	54,975	54,897	55,013
Women	36,035	38,098	36,177	37,469	37,597	37,906	38,106	38,253
Married men, spouse present	37,873	38,003	38,317	38,531	38,682	38,645	38,666	38,465
Married women, spouse present	20,942	21,674	20,933	21,278	21,416	21,638	21,738	21,674
OCCUPATION								
White-collar workers	44,621	46,915	44,533	46,251	46,316	46,547	46,555	46,835
Professional and technical	13,721	14,327	13,465	13,918	13,981	14,057	14,016	14,060
Managers and administrators, except farm	9,476	10,118	9,521	9,894	9,939	10,067	10,134	10,169
Sales workers	5,544	5,865	5,656	5,804	5,796	5,913	5,811	5,985
Clerical workers	15,880	16,604	15,891	16,635	16,600	16,510	16,594	16,621
Blue-collar workers	28,911	29,988	29,919	30,603	30,807	30,942	31,198	31,039
Craft and kindred workers	11,393	11,780	11,767	12,116	12,153	12,111	12,220	12,169
Operatives, except transport	10,193	10,529	10,425	10,423	10,424	10,755	10,738	10,766
Transport equipment operatives	3,410	3,481	3,471	3,525	3,555	3,432	3,643	3,541
Nonfarm laborers	3,915	4,198	4,256	4,539	4,675	4,644	4,597	4,563
Service workers	12,288	12,605	12,251	12,590	12,617	12,704	12,703	12,572
Farm workers	2,395	2,456	2,709	2,809	2,805	2,872	2,769	2,788
MAJOR INDUSTRY AND CLASS OF WORKER								
Agriculture:								
Wage and salary workers	1,123	1,206	1,294	1,405	1,405	1,387	1,345	1,389
Self-employed workers	1,442	1,434	1,536	1,590	1,605	1,604	1,587	1,527
Unpaid family workers	240	273	343	368	346	342	314	389
Nonagricultural industries:								
Wage and salary workers	79,004	82,179	79,907	82,281	82,692	82,915	83,078	83,124
Government	15,251	15,472	14,939	15,415	15,422	15,267	15,237	15,154
Private industries	63,753	66,708	64,968	66,866	67,270	67,648	67,841	67,970
Private households	1,287	1,253	1,329	1,403	1,436	1,421	1,383	1,293
Other industries	62,466	65,455	63,639	65,463	65,834	66,227	66,458	66,677
Self-employed workers	5,812	6,305	5,923	6,082	6,182	6,259	6,268	6,427
Unpaid family workers	594	566	525	467	442	439	488	500
PERSONS AT WORK [1]								
Nonagricultural industries	81,986	85,175	81,161	83,347	83,662	83,304	84,054	84,285
Full-time schedules	66,392	69,348	66,491	68,240	68,574	68,812	69,215	69,417
Part time for economic reasons	3,219	3,116	3,271	3,285	3,220	2,986	3,193	3,164
Usually work full time	1,256	1,254	1,228	1,255	1,247	1,043	1,128	1,226
Usually work part time	1,963	1,862	2,043	2,030	1,973	1,943	2,065	1,938
Part time for noneconomic reasons	12,375	12,711	11,399	11,822	11,868	11,506	11,646	11,704

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

Table A-4. Duration of unemployment

[Numbers in thousands]

Weeks of unemployment	Not seasonally adjusted		Seasonally adjusted					
	Mar. 1977	Mar. 1978	Mar. 1977	Nov. 1977	Dec. 1977	Jan. 1978	Feb. 1978	Mar. 1978
DURATION								
Less than 5 weeks	2,665	2,552	2,944	2,851	2,628	2,700	2,586	2,820
5 to 14 weeks	2,444	2,143	2,140	2,037	1,937	1,861	1,820	1,877
15 weeks and over	2,448	1,784	2,008	1,829	1,797	1,688	1,568	1,463
15 to 26 weeks	1,178	1,014	859	936	941	864	897	766
27 weeks and over	1,270	771	1,149	893	856	824	671	697
Average (mean) duration, in weeks	15.7	13.4	14.4	13.7	13.8	13.1	12.5	12.3
Median duration, in weeks	9.2	7.9	7.2	7.0	7.1	6.6	7.0	6.2
PERCENT DISTRIBUTION								
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 5 weeks	35.3	39.4	41.5	42.4	41.3	43.2	43.3	45.8
5 to 14 weeks	32.3	33.1	30.2	30.3	30.4	29.8	30.5	30.5
15 weeks and over	32.4	27.5	28.3	27.2	28.2	27.0	26.2	23.8
15 to 26 weeks	15.6	15.6	12.1	13.9	15.0	13.8	15.0	12.4
27 weeks and over	16.8	11.9	16.2	13.3	13.5	13.2	11.2	11.3

Table A-5. Reasons for unemployment

[Numbers in thousands]

Reasons	Not seasonally adjusted		Seasonally adjusted					
	Mar. 1977	Mar. 1978	Mar. 1977	Nov. 1977	Dec. 1977	Jan. 1978	Feb. 1978	Mar. 1978
NUMBER OF UNEMPLOYED								
Lost last job	3,850	2,989	3,212	2,969	2,748	2,698	2,560	2,693
On layoff	1,174	864	896	780	687	768	709	660
Other job losers	2,676	2,125	2,316	2,189	2,061	1,930	1,831	1,833
Left last job	904	851	916	881	877	856	898	862
Reentered labor force	1,918	1,833	2,000	1,891	1,886	1,821	1,796	1,911
Seeking first job	883	807	999	901	820	914	868	923
PERCENT DISTRIBUTION								
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Job losers	50.9	46.1	45.1	44.7	43.4	42.9	41.6	40.3
On layoff	15.5	13.3	12.6	11.7	10.9	12.2	11.6	10.7
Other job losers	35.4	32.8	32.5	33.0	32.6	30.7	30.0	29.6
Job leavers	12.0	13.1	12.9	13.3	13.9	13.6	14.7	13.9
Reentrants	25.4	28.3	28.1	28.5	29.8	29.0	29.4	30.9
New entrants	11.7	12.5	14.0	13.6	13.0	14.5	14.2	14.9
UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE								
Job losers	4.0	3.1	3.3	3.0	2.8	2.7	2.6	2.5
Job leavers	.9	.9	.9	.9	.9	.9	.9	.9
Reentrants	2.0	1.9	2.1	1.9	1.9	1.8	1.8	1.9
New entrants	.9	.8	1.0	.9	.8	.9	.9	.9

Table A-6. Unemployment by sex and age, seasonally adjusted

Sex and age	Number of unemployed persons (in thousands)		Unemployment rates					
	Mar. 1977	Mar. 1978	Mar. 1977	Nov. 1977	Dec. 1977	Jan. 1978	Feb. 1978	Mar. 1978
Total, 16 years and over	7,145	6,148	7.4	6.7	6.4	6.3	6.1	6.2
16 to 19 years	1,711	1,612	18.7	17.2	15.6	16.0	17.4	17.3
16 to 17 years	833	799	21.9	19.0	17.8	18.2	20.8	20.4
18 to 19 years	881	817	16.5	15.9	13.7	14.5	15.0	15.2
20 to 24 years	1,632	1,513	11.4	10.4	10.2	10.5	10.1	10.3
25 years and over	3,748	2,987	5.1	4.7	4.4	4.2	3.9	4.0
25 to 54 years	3,167	2,561	5.4	4.8	4.6	4.3	4.1	4.2
55 years and over	601	449	4.2	4.1	4.0	3.5	3.3	3.1
Men, 16 years and over	3,812	3,271	6.7	5.8	5.5	5.6	5.6	5.6
16 to 19 years	914	862	18.6	16.4	15.3	14.9	17.2	17.1
16 to 17 years	465	463	22.3	18.2	16.7	17.2	21.1	21.0
18 to 19 years	457	408	16.1	15.0	13.9	13.4	14.3	14.3
20 to 24 years	881	812	11.2	9.8	9.8	10.5	10.3	10.1
25 years and over	1,967	1,562	4.4	3.8	3.6	3.5	3.4	3.5
25 to 54 years	1,604	1,283	4.5	3.9	3.6	3.6	3.4	3.5
55 years and over	368	284	4.2	3.7	3.7	3.2	3.2	3.2
Women, 16 years and over	3,333	2,877	8.4	8.1	7.6	7.3	6.9	7.0
16 to 19 years	797	750	18.8	18.1	16.1	17.4	17.7	17.5
16 to 17 years	368	336	21.5	20.1	19.2	19.5	20.4	19.6
18 to 19 years	424	409	17.0	16.8	13.5	15.8	15.7	16.1
20 to 24 years	751	701	11.6	11.1	10.8	10.5	9.8	10.4
25 years and over	1,781	1,425	6.2	6.0	5.7	5.2	4.7	4.7
25 to 54 years	1,563	1,278	6.7	6.3	6.0	5.5	5.1	5.2
55 years and over	233	165	4.4	4.8	4.4	3.8	3.3	3.0

Table A-7. Range of unemployment measures based on varying definitions of unemployment and the labor force, seasonally adjusted

[Percent]

Measures	Quarterly averages					Monthly data		
	1977				1978	1978		
	I	II	III	IV	I	Jan.	Feb.	Mar.
U-1—Persons unemployed 15 weeks or longer as a percent of the civilian labor force	2.2	1.9	1.9	1.9	1.6	1.6	1.6	1.5
U-2—Job losers as a percent of the civilian labor force	3.4	3.1	3.2	3.0	2.6	2.7	2.6	2.5
U-3—Unemployed persons 25 years and over as a percent of the civilian labor force 25 years and over	5.2	5.0	4.9	4.7	4.0	4.2	3.9	4.0
U-4—Unemployed full-time jobseekers as a percent of the full-time labor force	6.9	6.6	6.5	6.2	5.7	5.8	5.7	5.6
U-5—Total unemployed as a percent of the civilian labor force (official measure)	7.4	7.1	6.9	6.6	6.2	6.3	6.1	6.2
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	9.0	8.7	8.6	8.2	7.6	7.7	7.6	7.6
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	10.0	9.7	9.7	9.2	8.5	N.A.	N.A.	N.A.

N.A. = not available.

Table A-8. Persons not in the labor force by selected characteristics, quarterly averages

[In thousands]

Characteristics	Not seasonally adjusted		Seasonally adjusted					
			1976	1977				1978
	I 1977	I 1978	IV	I	II	III	IV	I
Total not in labor force	60,174	59,898	59,218	59,225	58,941	59,205	58,777	58,799
Do not want a job now	54,437	54,301	53,828	53,825	53,263	53,213	53,207	53,789
Want a job now	5,727	5,596	5,464	5,539	5,739	5,936	5,581	5,448
Discouraged workers	972	920	994	942	1,062	1,067	969	903
Job-market factors[1]	677	634	726	657	739	747	630	621
Personal factors[2]	295	285	268	285	323	320	339	282
Men	287	341	341	297	310	360	306	352
Women	685	579	653	645	753	707	662	550
White	725	681	750	676	732	735	726	640
Black and other	247	239	254	283	298	329	248	274

[1] Job market factors include "could not find job" and "thinks no job available."

[2] Personal factors include "employers think too young or old," "lacks education or training," and "other personal handicap."

Table A-9. Employment status of the noninstitutional population in the ten largest States

[Numbers in thousands]

State and employment status	Not seasonally adjusted*			Seasonally adjusted					
	Mar. 1977	Feb. 1978	Mar. 1978	Mar. 1977	Nov. 1977	Dec. 1977	Jan. 1978	Feb. 1978	Mar. 1978
California									
Civilian noninstitutional population[1]	15,807	16,124	16,148	15,807	16,062	16,090	16,099	16,124	16,148
Civilian labor force	9,957	10,386	10,524	10,001	10,355	10,317	10,288	10,422	10,568
Employed	9,090	9,533	9,681	9,154	9,529	9,602	9,584	9,628	9,785
Unemployed	868	854	843	847	826	715	704	794	823
Unemployment rate	8.7	8.2	8.0	8.5	8.0	6.9	6.8	7.6	7.8
Florida									
Civilian noninstitutional population[1]	6,316	6,481	6,498	6,316	6,435	6,453	6,465	6,481	6,498
Civilian labor force	3,438	3,639	3,608	(2)	(2)	(2)	(2)	(2)	(2)
Employed	3,133	3,416	3,381	(2)	(2)	(2)	(2)	(2)	(2)
Unemployed	305	223	227	(2)	(2)	(2)	(2)	(2)	(2)
Unemployment rate	8.9	6.1	6.3	(2)	(2)	(2)	(2)	(2)	(2)
Illinois									
Civilian noninstitutional population[1]	8,124	8,195	8,200	8,124	8,187	8,194	8,189	8,195	8,200
Civilian labor force	5,150	5,235	5,230	5,166	5,305	5,276	5,299	5,262	5,243
Employed	4,831	4,861	4,880	4,864	4,936	4,945	4,943	4,923	4,912
Unemployed	319	374	350	302	369	331	356	339	331
Unemployment rate	6.2	7.1	6.7	5.8	7.0	6.3	6.7	6.4	6.3
Massachusetts									
Civilian noninstitutional population[1]	4,281	4,319	4,323	4,281	4,313	4,317	4,315	4,319	4,323
Civilian labor force	2,696	2,794	2,799	(2)	(2)	(2)	(2)	(2)	(2)
Employed	2,462	2,594	2,627	2,492	2,591	2,613	2,649	2,681	2,657
Unemployed	234	200	172	(2)	(2)	(2)	(2)	(2)	(2)
Unemployment rate	8.7	7.1	6.2	(2)	(2)	(2)	(2)	(2)	(2)
Michigan									
Civilian noninstitutional population[1]	6,525	6,596	6,602	6,525	6,582	6,590	6,590	6,596	6,602
Civilian labor force	4,099	4,161	4,125	(2)	(2)	(2)	(2)	(2)	(2)
Employed	3,700	3,862	3,829	(2)	(2)	(2)	(2)	(2)	(2)
Unemployed	398	299	296	331	356	319	330	242	229
Unemployment rate	9.7	7.2	7.2	(2)	(2)	(2)	(2)	(2)	(2)
New Jersey									
Civilian noninstitutional population[1]	5,396	5,444	5,448	5,396	5,435	5,440	5,439	5,444	5,448
Civilian labor force	3,310	3,326	3,267	3,318	3,441	3,487	3,406	3,356	3,274
Employed	2,969	3,049	3,037	2,999	3,141	3,226	3,175	3,109	3,067
Unemployed	342	277	230	319	300	261	231	247	207
Unemployment rate	10.3	8.3	7.1	9.6	8.7	7.5	6.8	7.4	6.3
New York									
Civilian noninstitutional population[1]	13,293	13,318	13,321	13,293	13,321	13,326	13,317	13,318	13,321
Civilian labor force	7,731	7,743	7,773	7,732	7,863	7,906	7,906	7,826	7,784
Employed	6,952	7,055	7,132	7,001	7,160	7,246	7,278	7,192	7,182
Unemployed	779	688	641	731	703	660	628	634	602
Unemployment rate	10.1	8.9	8.3	9.5	8.9	8.3	7.9	8.1	7.7
Ohio									
Civilian noninstitutional population[1]	7,754	7,816	7,820	7,754	7,807	7,814	7,812	7,816	7,820
Civilian labor force	4,731	4,733	4,744	4,774	4,921	4,842	4,787	4,795	4,787
Employed	4,342	4,437	4,453	4,427	4,598	4,580	4,526	4,541	4,538
Unemployed	389	296	291	347	323	262	261	254	249
Unemployment rate	8.2	6.3	6.1	7.3	6.6	5.4	5.5	5.3	5.2
Pennsylvania									
Civilian noninstitutional population[1]	8,793	8,846	8,850	8,793	8,840	8,847	8,842	8,846	8,850
Civilian labor force	5,138	5,138	5,232	5,172	5,182	5,207	5,166	5,188	5,269
Employed	4,684	4,746	4,818	4,763	4,790	4,800	4,802	4,862	4,899
Unemployed	454	393	414	409	392	407	364	326	370
Unemployment rate	8.8	7.6	7.9	7.9	7.6	7.8	7.0	6.3	7.0
Texas									
Civilian noninstitutional population[1]	8,928	9,125	9,143	8,928	9,083	9,101	9,108	9,125	9,143
Civilian labor force	5,692	5,843	5,950	5,732	5,872	5,932	5,984	5,919	5,990
Employed	5,393	5,525	5,670	5,424	5,570	5,625	5,692	5,612	5,702
Unemployed	300	318	280	308	302	307	292	307	288
Unemployment rate	5.3	5.4	4.7	5.4	5.1	5.2	4.9	5.2	4.8

[1] The population figures are not adjusted for seasonal variations; therefore, identical numbers appear in the unadjusted and the seasonally adjusted columns.

* These are the official Bureau of Labor Statistics' estimates used in the administration of Federal fund allocation programs.

[2] Seasonally-adjusted data are not presented for this series, because the variations that are due to seasonal influences cannot be separated with sufficient precision from those which stem from the trend-cycle and irregular components of the original time series.

NOTE: A comprehensive reappraisal of the seasonal adjustment of the employment and unemployment series for all 10 States is now underway. Revisions in certain series will be introduced in the near future.

Table B-1. Employees on nonagricultural payrolls, by industry

[In thousands]

Industry	Not seasonally adjusted				Seasonally adjusted					
	MAR. 1977	JAN. 1978	FEB. 1978 p	MAR. 1978 p	MAR. 1977	NOV. 1977	DEC. 1977	JAN. 1978	FEB. 1978 p	MAR. 1978 p
TOTAL	80,547	82,554	82,858	83,680	81,331	83,245	83,429	83,719	84,055	84,498
GOODS-PRODUCING	23,461	23,972	23,987	24,315	24,017	24,528	24,526	24,593	24,729	24,896
MINING	827	695	697	715	841	863	711	705	711	727
CONTRACT CONSTRUCTION	3,451	3,528	3,505	3,693	3,759	3,950	3,947	3,916	3,947	4,023
MANUFACTURING	19,183	19,749	19,785	19,907	19,417	19,715	19,868	19,972	20,071	20,146
Production workers	13,763	14,197	14,226	14,324	13,975	14,184	14,306	14,403	14,487	14,539
DURABLE GOODS	11,246	11,739	11,746	11,831	11,373	11,625	11,748	11,828	11,910	11,962
Production workers	8,025	8,420	8,427	8,497	8,137	8,337	8,438	8,512	8,575	8,612
Ordnance and accessories	155.4	156.6	156.4	157.5	156	152	155	156	157	158
Lumber and wood products	614.0	642.1	642.6	650.3	633	662	666	667	665	670
Furniture and fixtures	498.4	529.5	531.7	539.6	503	521	530	532	537	540
Stone, clay, and glass products	625.9	649.9	650.3	661.5	643	667	671	675	677	680
Primary metal industries	1,190.8	1,207.6	1,206.9	1,204.1	1,200	1,206	1,204	1,212	1,217	1,214
Fabricated metal products	1,415.9	1,487.4	1,489.7	1,495.1	1,432	1,479	1,492	1,499	1,514	1,512
Machinery, except electrical	2,148.1	2,273.8	2,288.6	2,299.9	2,142	2,237	2,257	2,265	2,282	2,293
Electrical equipment	1,886.6	1,996.5	2,004.6	2,018.0	1,906	1,974	1,987	1,998	2,017	2,038
Transportation equipment	1,775.6	1,843.2	1,824.5	1,850.6	1,808	1,782	1,830	1,862	1,877	1,885
Instruments and related products	521.8	537.5	539.1	540.4	526	532	536	539	541	544
Miscellaneous manufacturing	413.5	404.5	411.4	417.8	424	413	420	423	426	428
NONDURABLE GOODS	7,937	8,020	8,039	8,076	8,044	8,090	8,120	8,144	8,161	8,184
Production workers	5,738	5,777	5,799	5,827	5,838	5,847	5,868	5,891	5,912	5,927
Food and kindred products	1,661.4	1,664.0	1,652.5	1,662.2	1,732	1,703	1,714	1,728	1,727	1,733
Tobacco manufacturers	63.9	69.3	67.1	64.9	69	66	69	69	69	70
Textile mill products	969.8	987.0	988.4	989.7	974	993	990	991	992	994
Apparel and other textile products	1,286.9	1,262.0	1,278.1	1,291.5	1,284	1,291	1,291	1,289	1,282	1,289
Paper and allied products	682.9	702.5	703.2	704.6	689	700	705	707	710	713
Printing and publishing	1,096.6	1,122.8	1,126.7	1,128.7	1,099	1,120	1,123	1,125	1,129	1,131
Chemicals and allied products	1,047.3	1,057.8	1,062.1	1,069.1	1,052	1,059	1,064	1,066	1,071	1,073
Petroleum and coal products	202.0	209.0	210.1	211.6	207	212	212	214	217	217
Rubber and plastics products, nec	661.4	688.6	690.2	690.7	672	681	689	693	701	702
Leather and leather products	264.8	257.2	260.5	261.1	266	265	263	262	263	262
SERVICE-PRODUCING	57,086	58,582	58,871	59,365	57,314	58,717	58,903	59,126	59,326	59,602
TRANSPORTATION AND PUBLIC UTILITIES	4,522	4,582	4,596	4,639	4,563	4,634	4,652	4,628	4,657	4,681
WHOLESALE AND RETAIL TRADE	17,799	18,532	18,361	18,518	18,118	18,912	18,610	18,744	18,762	18,849
WHOLESALE TRADE	4,310	4,455	4,463	4,493	4,354	4,438	4,460	4,482	4,508	4,538
RETAIL TRADE	13,489	14,077	13,898	14,025	13,764	14,074	14,150	14,262	14,254	14,311
FINANCE, INSURANCE, AND REAL ESTATE	4,422	4,588	4,607	4,636	4,453	4,597	4,611	4,630	4,649	4,669
SERVICES	15,028	15,411	15,603	15,752	15,149	15,608	15,663	15,693	15,793	15,879
GOVERNMENT	15,315	15,469	15,704	15,820	15,031	15,366	15,367	15,431	15,465	15,524
FEDERAL	2,714	2,711	2,720	2,724	2,725	2,727	2,718	2,736	2,736	2,735
STATE AND LOCAL	12,601	12,758	12,984	13,096	12,306	12,639	12,649	12,695	12,729	12,789

p=preliminary.

ESTABLISHMENT DATA

Table B-2. Average weekly hours of production or nonsupervisory workers,[1] on private nonagricultural payrolls, by industry

Industry	Not seasonally adjusted				Seasonally adjusted					
	MAR. 1977	JAN. 1978	FEB. 1978 P	MAR. 1978 P	MAR. 1977	NOV. 1977	DEC. 1977	JAN. 1978	FEB. 1978 P	MAR. 1978 P
TOTAL PRIVATE	36.0	35.2	35.5	35.8	36.2	36.2	36.2	35.6	35.8	36.1
MINING	43.7	42.5	43.1	43.8	44.2	44.6	43.7	43.2	43.3	44.3
CONTRACT CONSTRUCTION	36.8	33.1	34.8	35.9	37.2	36.5	36.8	34.6	35.7	36.3
MANUFACTURING	40.2	39.1	39.6	40.3	40.4	40.5	40.5	39.6	40.0	40.5
Overtime hours	3.2	3.2	3.4	3.5	3.3	3.5	3.5	3.5	3.8	3.7
DURABLE GOODS	40.8	39.7	40.2	41.0	41.0	41.1	41.2	40.2	40.6	41.1
Overtime hours	3.3	3.4	3.7	3.7	3.5	3.7	3.7	3.7	4.0	3.9
Ordnance and accessories	40.8	40.0	39.7	39.8	40.7	40.2	41.1	40.2	39.9	39.7
Lumber and wood products	39.8	38.1	39.1	39.5	40.2	40.3	40.2	39.4	39.3	39.9
Furniture and fixtures	38.1	37.2	39.0	39.3	38.6	39.4	39.5	37.7	39.8	39.8
Stone, clay, and glass products	41.2	39.3	40.2	41.0	41.4	41.8	41.6	40.3	40.9	41.2
Primary metal industries	41.0	40.9	41.3	41.3	41.1	41.3	41.4	41.0	41.6	41.4
Fabricated metal products	40.8	39.9	40.3	41.0	41.0	41.1	41.5	40.3	40.7	41.2
Machinery, except electrical	41.5	40.9	41.6	42.2	41.5	41.9	41.9	40.9	41.7	42.2
Electrical equipment	40.2	39.2	39.5	40.2	40.3	40.2	40.3	39.5	39.7	40.3
Transportation equipment	42.4	40.2	40.0	41.7	42.6	42.5	42.2	41.1	40.6	41.9
Instruments and related products	40.3	39.6	40.0	41.2	40.4	40.4	40.4	39.8	40.3	41.3
Miscellaneous manufacturing	39.3	37.5	38.0	38.8	39.2	39.0	38.9	38.0	38.2	38.7
NONDURABLE GOODS	39.3	38.2	38.7	39.4	39.5	39.5	39.5	38.7	39.1	39.7
Overtime hours	2.9	2.9	3.1	3.1	3.1	3.2	3.1	3.1	3.4	3.3
Food and kindred products	39.6	38.9	39.1	39.6	40.2	39.8	39.7	39.1	39.7	40.2
Tobacco manufacturers	37.7	37.1	38.1	39.1	38.2	38.8	38.3	37.5	38.7	39.6
Textile mill products	40.5	39.2	40.0	40.2	40.7	40.7	40.6	40.0	40.3	40.4
Apparel and other textile products	35.5	33.2	34.9	35.8	35.6	35.7	35.8	33.9	35.2	35.9
Paper and allied products	42.4	42.1	41.9	42.9	42.8	42.7	42.9	42.2	42.5	43.3
Printing and publishing	37.6	36.9	37.2	37.9	37.7	37.9	37.9	37.4	37.5	38.0
Chemicals and allied products	41.7	41.4	41.5	42.0	41.8	41.7	41.7	41.6	41.7	42.1
Petroleum and coal products	42.6	42.9	42.9	43.7	42.9	43.3	43.9	43.6	43.6	44.1
Rubber and plastics products, nec	41.2	39.6	39.6	40.3	41.2	40.9	40.7	39.8	39.6	40.3
Leather and leather products	36.3	36.0	36.3	37.2	36.5	37.8	37.2	36.6	36.6	37.4
TRANSPORTATION AND PUBLIC UTILITIES	39.9	39.5	40.0	40.0	40.3	40.3	40.2	39.8	40.3	40.4
WHOLESALE AND RETAIL TRADE	33.1	32.3	32.4	32.7	33.4	33.2	33.3	32.8	32.9	33.1
WHOLESALE TRADE	38.7	38.4	38.6	38.7	38.9	38.9	38.8	38.6	38.9	38.9
RETAIL TRADE	31.4	30.5	30.6	31.0	31.8	31.6	31.7	31.1	31.1	31.4
FINANCE, INSURANCE, AND REAL ESTATE	36.6	36.6	36.5	36.6	36.7	36.7	36.6	36.5	36.4	36.7
SERVICES	33.3	33.3	33.1	33.2	33.5	33.3	33.4	33.5	33.2	33.4

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

P preliminary.

ESTABLISHMENT DATA

Table B-3. Average hourly and weekly earnings of production or nonsupervisory workers[1] on private nonagricultural payrolls, by industry

Industry	Average hourly earnings				Average weekly earnings			
	MAR. 1977	JAN. 1978	FEB. 1978 p	MAR. 1978 p	MAR. 1977	JAN. 1978	FEB. 1978 p	MAR. 1978 p
TOTAL PRIVATE	$5.11	$5.49	$5.51	$5.53	$183.96	$193.25	$195.61	$197.97
Seasonally adjusted	5.13	5.49	5.52	5.54	185.71	195.44	197.62	199.99
MINING	6.78	6.83	6.84	6.85	296.29	290.28	294.80	300.03
CONTRACT CONSTRUCTION	7.67	8.36	8.30	8.32	289.62	276.72	288.84	298.69
MANUFACTURING	5.48	5.93	5.94	5.96	220.30	231.86	235.22	240.19
DURABLE GOODS	5.84	6.31	6.33	6.36	238.27	250.51	254.47	260.76
Ordnance and accessories	6.12	6.63	6.69	6.67	249.70	265.20	265.59	265.47
Lumber and wood products	4.89	5.36	5.33	5.33	194.62	204.22	208.40	210.54
Furniture and fixtures	4.19	4.51	4.52	4.54	159.64	167.77	176.28	178.42
Stone, clay, and glass products	5.57	5.99	6.00	6.00	229.48	235.61	241.20	246.00
Primary metal industries	7.13	7.91	8.01	8.03	292.33	323.52	330.81	331.64
Fabricated metal products	5.69	6.04	6.04	6.11	232.15	241.00	243.41	250.51
Machinery, except electrical	6.04	6.49	6.55	6.53	250.66	265.44	272.48	275.57
Electrical equipment	5.18	5.63	5.64	5.64	208.24	220.70	222.78	226.73
Transportation equipment	7.00	7.48	7.49	7.60	296.80	300.70	299.60	316.92
Instruments and related products	5.10	5.44	5.50	5.49	205.53	215.42	220.00	226.19
Miscellaneous manufacturing	4.27	4.57	4.56	4.57	167.81	171.38	173.28	177.32
NONDURABLE GOODS	4.95	5.35	5.35	5.36	194.54	204.37	207.05	211.18
Food and kindred products	5.22	5.60	5.64	5.65	206.71	217.84	220.52	223.74
Tobacco manufacturers	5.36	5.96	5.99	6.21	202.07	221.12	228.22	242.81
Textile mill products	3.85	4.17	4.16	4.16	155.93	163.46	166.40	167.23
Apparel and other textile products	3.57	3.84	3.83	3.87	126.74	127.49	133.67	138.55
Paper and allied products	5.72	6.22	6.27	6.28	242.53	261.86	262.71	269.41
Printing and publishing	5.97	6.33	6.36	6.37	224.47	233.58	235.85	241.42
Chemicals and allied products	6.21	6.74	6.77	6.76	258.96	279.04	281.96	283.92
Petroleum and coal products	7.68	8.26	8.42	8.39	327.17	354.35	361.22	366.64
Rubber and plastics products, nec	5.03	5.31	5.30	5.30	207.24	210.28	209.88	213.59
Leather and leather products	3.61	3.83	3.86	3.87	131.04	137.88	140.12	143.96
TRANSPORTATION AND PUBLIC UTILITIES	6.71	7.29	7.31	7.28	267.73	287.96	292.40	291.20
WHOLESALE AND RETAIL TRADE	4.20	4.54	4.55	4.55	139.02	146.64	147.42	148.79
WHOLESALE TRADE	5.41	5.83	5.82	5.85	209.37	223.87	224.65	226.40
RETAIL TRADE	3.76	4.06	4.07	4.08	118.06	123.83	124.54	126.48
FINANCE, INSURANCE, AND REAL ESTATE	4.51	4.83	4.83	4.84	165.07	176.78	176.30	177.14
SERVICES	4.62	5.00	5.02	5.02	153.85	166.50	166.16	166.66

[1] See footnote 1, table B-2.
p=preliminary.

Table B-4. Hourly earnings index for production or nonsupervisory workers[1] on private nonagricultural payrolls, by industry division, seasonally adjusted

(1967=100)

Industry	MAR. 1977	OCT. 1977	NOV. 1977	DEC. 1977	JAN. 1978	FEB. P 1978	MAR. P 1978	Percent change from: MAR. 1977-MAR. 1978	Percent change from: FEB. 1978-MAR. 1978
TOTAL PRIVATE NONFARM:									
Current dollars	194.2	203.3	204.1	205.2	208.1	208.6	209.9	8.1	0.6
Current (1967) dollars	108.8	110.2	110.2	110.3	111.0	110.5	N.A.	(2)	(3)
MINING	210.6	221.7	221.7	219.1	221.4	223.1	225.4	7.0	1.0
CONTRACT CONSTRUCTION	191.8	197.8	198.5	198.9	201.1	201.7	202.8	5.7	.6
MANUFACTURING	194.3	204.2	205.4	206.3	208.3	209.6	210.7	8.4	.5
TRANSPORTATION AND PUBLIC UTILITIES	206.9	217.8	219.1	221.5	223.3	223.3	224.1	8.3	.4
WHOLESALE AND RETAIL TRADE	188.7	196.2	197.1	198.8	202.4	202.7	204.3	8.3	.8
FINANCE, INSURANCE, AND REAL ESTATE	176.1	185.2	185.3	185.8	188.5	187.1	188.8	7.2	.9
SERVICES	198.7	208.6	208.8	209.8	214.4	214.2	215.8	8.6	.8

[1] See footnote 1, table B-2.
[2] PERCENT CHANGE WAS 1.4 FROM FEBRUARY 1977 TO FEBRUARY 1978, THE LATEST MONTH AVAILABLE.
[3] PERCENT CHANGE WAS -.4 FROM JANUARY 1978 TO FEBRUARY 1978, THE LATEST MONTH AVAILABLE.

N.A. = not available.
p=preliminary.

NOTE: All series are in current dollars except where indicated. The index excludes effects of two types of changes that are unrelated to underlying wage-rate developments: Fluctuations in overtime premiums in manufacturing (the only sector for which overtime data are available) and the effects of changes in the proportion of workers in high-wage and low-wage industries.

Table B-5. Indexes of aggregate weekly hours of production or nonsupervisory workers,[1] on private nonagricultural payrolls, by industry, seasonally adjusted

(1967=100)

Industry division and group	1977 MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	1978 JAN.	FEB. p	MAR. p
TOTAL PRIVATE	115.0	115.4	115.9	115.8	115.8	115.6	115.9	116.8	117.2	117.5	116.1	117.0	118.8
GOODS-PRODUCING	100.1	100.8	101.4	101.8	101.4	100.6	100.9	101.7	102.3	102.1	99.5	101.4	103.6
MINING	140.6	141.6	140.6	142.3	139.9	134.7	142.5	143.9	144.8	113.3	110.7	111.8	117.7
CONTRACT CONSTRUCTION	108.7	111.7	112.4	111.8	112.8	110.8	110.4	112.3	114.0	113.5	104.7	108.8	113.3
MANUFACTURING	97.2	97.5	98.1	98.7	98.0	97.6	97.8	98.4	98.8	99.7	98.2	99.6	101.2
DURABLE GOODS	96.8	96.9	97.8	98.7	98.3	98.1	98.4	99.3	99.5	100.8	99.3	101.0	102.8
Ordnance and accessories	39.2	40.1	40.7	41.0	40.5	39.3	39.1	38.2	38.2	40.2	39.8	40.1	39.9
Lumber and wood products	103.6	103.5	104.1	104.0	105.3	104.0	106.0	106.8	109.5	109.8	107.6	106.8	109.2
Furniture and fixtures	105.3	106.1	107.1	107.9	108.4	107.2	108.3	110.6	111.7	113.8	109.3	110.5	117.5
Stone, clay, and glass products	101.7	103.9	104.2	105.4	104.9	104.1	103.3	103.2	106.7	107.0	104.3	105.4	107.2
Primary metal industries	88.6	89.7	90.7	90.9	89.4	88.2	89.0	89.7	89.5	89.7	89.5	91.4	90.6
Fabricated metal products	101.7	101.3	102.8	104.2	103.7	103.3	103.1	105.0	105.7	107.7	105.3	107.6	108.6
Machinery, except electrical	98.7	98.8	100.2	101.6	103.2	103.5	103.6	105.5	104.9	106.0	104.0	107.1	109.0
Electrical equipment and supplies	96.1	96.3	97.2	97.9	98.3	98.3	97.8	98.8	99.4	100.4	98.9	100.7	103.5
Transportation equipment	96.4	94.7	95.3	96.5	94.8	95.4	96.5	96.2	94.5	96.7	96.5	95.9	99.5
Instruments and related products	111.6	111.7	112.3	113.2	111.7	111.3	112.4	113.2	113.4	114.4	113.4	114.8	117.7
Miscellaneous manufacturing industry	95.5	95.0	94.7	94.6	91.4	91.3	90.3	91.1	91.5	93.9	92.3	93.3	94.9
NONDURABLE GOODS	97.7	98.5	98.5	98.7	97.7	96.9	96.9	97.1	97.8	98.1	96.5	98.0	99.5
Food and kindred products	97.8	98.5	97.3	97.3	95.9	94.5	94.1	92.8	94.2	94.6	94.6	96.1	97.5
Tobacco manufacturers	75.1	80.5	78.2	80.2	77.2	71.7	73.2	72.4	72.2	74.0	72.4	74.0	77.9
Textile mill products	99.4	99.6	100.2	99.7	99.9	98.9	99.4	100.2	101.4	100.8	99.3	100.4	100.8
Apparel and other textile products	88.1	87.7	88.6	89.8	87.6	87.8	87.2	87.8	88.6	89.0	84.2	87.1	89.2
Paper and allied products	98.6	100.8	100.4	101.1	100.3	99.4	99.7	100.2	99.6	100.8	99.3	100.8	102.9
Printing and publishing	94.5	95.2	95.1	95.3	95.6	95.1	95.7	95.7	95.9	95.9	94.6	95.3	96.6
Chemicals and allied products	102.2	102.9	103.3	103.8	103.7	103.4	103.0	102.6	103.0	103.5	103.8	104.5	105.7
Petroleum and coal products	118.4	119.6	119.3	121.6	119.9	120.4	120.8	122.8	124.8	125.7	126.6	128.6	129.8
Rubber and plastics products, nec	132.9	134.8	135.3	133.9	132.5	129.7	129.3	130.5	132.5	133.8	131.3	132.6	135.7
Leather and leather products	71.8	73.4	73.3	72.9	69.9	71.8	72.7	73.8	73.7	71.9	70.7	70.7	72.3
SERVICE-PRODUCING	125.3	125.5	125.9	125.6	125.8	126.1	126.4	127.2	127.5	128.2	127.6	127.8	129.3
TRANSPORTATION AND PUBLIC UTILITIES	104.1	103.8	104.6	104.1	103.1	103.5	103.9	102.9	105.1	105.6	103.5	105.2	106.0
WHOLESALE AND RETAIL TRADE	120.7	121.0	121.4	121.2	121.6	121.6	121.8	122.7	122.4	123.2	122.3	122.5	123.9
WHOLESALE TRADE	116.9	117.3	117.3	117.3	117.5	117.5	117.8	118.7	118.8	118.9	118.9	120.5	121.3
RETAIL TRADE	122.1	122.4	123.0	122.7	123.1	123.1	123.3	124.2	123.7	124.8	123.5	123.2	124.9
FINANCE, INSURANCE, AND REAL ESTATE	131.0	131.0	131.6	131.7	132.3	132.7	133.2	134.2	134.9	134.9	135.4	135.5	137.0
SERVICES	139.8	140.1	140.3	139.6	140.1	140.6	140.9	142.7	142.6	143.4	143.8	143.3	145.0

[1] See footnote 1, table B-2.

p=preliminary.

Table B-6. Indexes of diffusion: Percent of industries in which employment[1] increased

Year and month	Over 1-month span	Over 3-month span	Over 6-month span	Over 12-month span
1975				
January	15.1	12.8	12.8	16.6
February	15.7	12.8	11.9	17.4
March	25.6	18.6	17.7	17.7
April	39.0	32.3	28.2	20.6
May	51.2	43.9	41.6	27.0
June	40.7	52.3	56.7	40.7
July	58 1	57.0	67.2	50.6
August	73.0	76.2	70.1	63.1
September	80.8	81.7	75.3	72.4
October	66.9	74.1	82.3	77.3
November	62.2	72.4	83.4	80.2
December	74.1	74.7	81.7	82.6
1976				
January	78.5	82.0	83.1	86.0
February	77.9	84.3	81.7	84.6
March	74.1	85.2	79.9	81.1
April	79.4	77.9	79.4	74.4
May	66.6	71.5	70.9	79.7
June	54.1	61.0	68.6	79.1
July	57.3	52.9	57.0	74.1
August	47.1	62.5	57.3	74.7
September	69.8	56.7	63.7	78.5
October	42.4	62.8	69.8	76.5
November	69.5	58.7	73.5	75.0
December	73.0	79.9	78.5	74.7
1977				
January	75.0	79.7	89.0	75.9
February	73.5	86.0	86.6	75.6
March	82.3	85.8	83.1	78.2
April	77.6	84.0	80.5	78.2
May	68.6	73.3	71.5	79.1
June	63.7	70.1	68.0	77.6
July	65.7	56.1	68.3	78.8
August	50.0	62.5	68.3	79.4p
September	61.3	57.0	72.1	76.5p
October	59.9	73.3	75.0	
November	75.9	76.2	80.8p	
December	73.8	77.9	82.8p	
1978				
January	66.9	80.8p		
February	70.3p	77.0p		
March	73.8p			
April				
May				
June				
July				
August				
September				
October				
November				
December				

[1] Number of employees, seasonally adjusted, on payrolls of 172 private nonagricultural industries.
p = preliminary.

Representative BOLLING. Thank you, Mr. Shiskin.
Ms. Slater, please proceed as you wish.

STATEMENT OF COURTENAY M. SLATER, CHIEF ECONOMIST, DEPARTMENT OF COMMERCE

Ms. SLATER. Thank you, Mr. Chairman, I am very pleased to be here. I don't bring you good news. In fact, I don't bring you any news at all. I bring you only my own personal guesses as to what may have happened in the first quarter, and I do want to underscore that our first official estimates of GNP will not be available for another 2 weeks and at this point we are guessing as to what may have happened.

Our guesses are based on only partial data for the quarter.

First quarter gross national product expressed in constant dollars probably was little changed from the fourth quarter 1977 level.

This interruption of growth was due in considerable part to the bad weather and the prolonged coal strike. It is not possible to measure precisely the impact of these special factors.

My preliminary judgment, however, is that, even without these special factors, first quarter growth would have fallen somewhat short of the 4- to 5-percent annual rate which we would like to have seen.

Quarterly variations around a growth trend always are to be expected. First quarter performance obviously is disappointing, but our expectation continues to be for strong growth of GNP during the remainder of the year.

At the same time, however, it must be recognized that extremely rapid growth in the remaining quarters of 1978 would be necessary in order for earlier growth forecasts for the year as a whole to be fully met.

Let me briefly review the available data on the major sectors of the economy.

Consumption expenditures for goods were weak in January and February following the abnormally strong fourth quarter.

Retail sales in both of these months were below the fourth quarter level even in current dollars.

Despite a comeback in March, unit sales of automobiles for the first quarter were below the fourth quarter average. Thus, while real consumer purchases of goods fell in the first quarter, this was partly offset by fairly strong growth in purchases of services.

Business fixed investment expenditures in the first quarter were held down by the lower business automobile purchases and by reduced construction activity due to the bad weather.

Only very limited data are available on business inventories, but the drawing down of coal inventories during the strike will partly offset the expected fairly strong accumulation of other inventory items.

Residential construction activity declined in the first quarter, again, largely the result of bad weather. Housing starts averaged 1.5 to 1.6 million units at an annual rate in January and February. This is, of course, down a great deal from the 2 million annual rate in the last half of last year.

The foreign trade deficit was quite large in January and February. Even with considerable improvement in March, net exports are unlikely to contribute to GNP growth in the first quarter.

Real Federal Government purchases probably declined in the first quarter, reflecting the recently recognized budget shortfall in this fiscal year.

Real disposable income probably was essentially unchanged in the first quarter. While large tax refunds stemming from last year's personal tax reduction were a positive factor, this was more than offset by higher social security tax payments, shorter weekly hours worked and higher consumer prices.

On balance, it appears that real disposable income did not grow significantly in the first quarter. This lack of real income growth, relatively high levels of consumer debt, and the bad weather in combination serve to explain the weakness in first quarter consumer spending.

Consumer prices, as Commissioner Shiskin mentioned, rose by 0.6 percent in February following the 0.8 percent rise in January.

Both changes are significantly above the average monthly change of the second half of last year.

Food price increases were the major cause of this acceleration. These higher food prices imply a somewhat higher overall consumer price increase this year than previously forecast, but the underlying inflationary pressures in the nonfood sector do not appear much different than earlier expected.

The continued declines in the unemployment rate in January and February, despite the lack of significant output growth, came as a pleasant surprise.

I might add we would not be too surprised if they did not continue in March.

Labor force growth in these 2 months, however, was well below recent secular trends and even below the rate of growth of the population, a situation which cannot be expected to continue.

It would be my expectation that labor force growth for the year as a whole will be quite strong, although not quite at the extraordinary pace of last year.

In these circumstances, further reduction in the unemployment rate will require the resumption of strong output growth.

I will be pleased to answer any questions you may have.

Representative BOLLING. Thank you.

Senator Proxmire.

Senator PROXMIRE. Ms. Slater and Mr. Shiskin, I think this is a good example of what Chairman Bolling has done in bringing both of you before us.

I think it is a great contribution to better economic understanding. It seems to us just superficially that you disagree.

Mr. Shiskin gives us a very good, strong picture of how the situation is improving. Not only are the number of jobs up and up sharply, and consistently they are up in the household survey data, also.

The number of hours are up, which is unusual. The diffusion index is up. The number of job losers is down. It was 50 percent last month and it is now down to 40 percent. All of those figures sound good.

On the other hand, Ms. Slater gives us some contrary views. She points out that the GNP is flat, or was flat, and seems to be fairly flat at least. flattening out, I should say, and real income, you say, is down.

You question whether the comeback in retail sales even in March has been very great.

Let me ask first: Mr. Shiskin, how do you reconcile what appears to be a situation where employment almost alone seems to be strongly moving ahead, while the other indicators are that the economy is not doing so well?

Mr. SHISKIN. Well, first of all, the economy is doing well. As I have said again and again here, the cursent expansion is continuing at a healthy pace. It is not the best expansion we have ever had, but it is by no means the worst.

Senator PROXMIRE. Aren't you looking at it from an employment and unemployment context almost entirely?

Mr. SHISKIN. No, sir.

Representative BOLLING. Certainly we are not getting the real expansion in GNP.

Mr. SHISKIN. May I come to that?

Senator PROXMIRE. I am sorry.

Mr. SHISKIN. Ms. Slater has dwelt on the first 2 months from which she has data for estimating GNP. They were very poor months because the weather, for the most part, was essenitally bad.

As I have said many times, the seasonal adjustments adjust for average weather, but not for exceptional weather. So, the especially bad weather affected GNP.

While the coal strike may not have delivered the devastating blow to the economy that many people thought it would deliver, nevertheless, it was a damper on the economy while it was underway.

Senator PROXMIRE. Your figure was 25,000 to 45,000 jobs out of 90 million jobs.

Mr. SHISKIN. One of the first things we will see next month when we report the March figures on payroll employment tax is that they will include 160,000 miners who are not included this month. Also. the 25,000 factory workers, were laid off, have been or will be called back. And, another 20,000 layoffs in public utilities and transportation will be included.

So, you are going to have approximately 200,000 additional workers to begin with next month that will get us off to a good start. I can't tell you what else will occur, but that will happen.

So, this leaves one puzzle, to me—why did employment continue to rise during the first quarter when the prospects seemed to dim?

Well, I can only guess, and my guess is that most of the employers maintained their confidence in an expanding economy and were preparing for the prospect that came partly in March and will come even more strongly, in my judgment, in April and May.

So, my view is that Ms. Slater and I are not as far apart as you indicated, but she may disagree with me.

Senator PROXMIRE. Before I ask Ms. Slater to comment, let me cover one more point with you, Mr. Shiskin.

Toward the end of her statement, Ms. Slater said, "Labor force growth in these 2 months, however, was well below recent secular trends and even below the rate of growth of the population, * * *."

Do you consider that to be all explained because of the weather?

Mr. SHISKIN. It may be an element, but labor force changes, as you know, come very erratically.

I can still remember that a year ago Congressman Brown pointed out that we had a 700,000 increase in employment in 1 month—a big rise in the labor force—and, if that continued, we would wipe out all the unemployment.

The labor force is an erratic series, you know. I must say that I was quite surprised by the figure this month, and it may be larger.

I think that we will see larger increases in the next few months than we did in the last few months.

Senator PROXMIRE. Ms. Slater.

Ms. SLATER. I don't think Mr. Shiskin and I are really in much disagreement.

He was, of course, discussing primarily March figures where I was talking about the first quarter as a whole.

January and February clearly were bad months, and if the quarter had consisted only of January and February, we would have had a drop in GNP in the first quarter, but we can see from this morning's strong employment figures that there seems to have been a considerable catchup in March, and when you take January, February, and March and average them together, you get what we think is an average which shows not very much real growth in the first quarter, but within that average we have a picture of coming back quite strongly.

Senator PROXMIRE. I wonder about that. In your statement you said, "Despite a comeback in March, unit sales of automobiles for the first quarter were below the fourth quarter average."

So, you seem to feel that the comeback was partial?

Ms. SLATER. I would have very limited data for March. We do have data on automobile sales, and unit sales of automobiles in the first quarter were below the fourth quarter.

The fourth quarter was quite high. We will not have March data on total retail sales until next week, but in making these early estimates about first quarter retail sales, we have assumed some considerable comeback in March.

Now, maybe the comeback will be a little higher. If so, our estimate for GNP may be a little too gloomy.

I think we are looking at a picture which doesn't show much real growth.

Now, we do expect growth to continue in the remainder of the year fairly strongly. We are describing this as an interruption, but we think the growth will continue.

The only point I would like to make is that when you have a first quarter in which you didn't get very much growth, it is very hard to catch up with that completely, so this in an arithmetic sense may have the effect of reducing the growth rate for the year as a whole a little bit from what we had earlier forecast.

Senator PROXMIRE. How much can you reconcile from increasing inventories, if anything?

Obviously, you have this contrast, more people working and producing more, but retail sales are not coming up to expectations.

I would think inventories would increase very sharply. Have they?

Ms. SLATER. That is a reasonable assumption. We don't have much data on retail inventory except for January. However, we did have a coal strike going on, so inventories were drawn down.

We think other inventories went up strongly, but you have to subtract the coal. It may not be strong enough to give us much growth.

Senator PROXMIRE. Mr. Layng, I would like to ask you a question about the price situation.

I think all of us are tremendously and deeply concerned because of inflation. Many people feel that it is the No. 1 economic problem we face.

We did have a little better figure yesterday than we had before, but the underlying figures seemed to be bad.

An official in the administration is quoted as saying that inflation seems to be hopelessly stuck at 6 to 7 percent.

What is your feeling about that? Do you think that is a realistic expression, or not?

Mr. LAYNG. In my view, it would be a realistic expression of what we have seen so far and what is on the immediate horizon in the sense of knowing that we have an increase in steel prices which has not been reflected in the Producer Price Index figures released yesterday.

Senator PROXMIRE. Also, we have an increase in coal miner wages, which are likely to set a pattern and have not been reflected fully; is that right?

Mr. LAYNG. The effect is not fully felt yet. The other reason is that there are increases in many areas. The frequency of change that appears to be quoted in the press, in the trade press, seems to be increasing.

I was looking through just a listing of newspaper reports, for example, in chemicals, steel mill products, and fabricated products, a fairly broad range of them.

So, on the immediate horizon, that seem to be an accurate statement.

Senator PROXMIRE. My time is up.

Representative BOLLING. Senator Javits.

Senator JAVITS. Thank you.

Mr. Shiskin, you are fairly optimistic, whereas Ms. Slater says GNP growth is just about flat. You have studied trends for years in other recoveries from recessions. Although we have had to face a serious recession, do you believe that at this stage of the recovery we are adequately moving? Or is the recovery lagging or staggering, compared with other similar cycles which you have experienced?

Where do we stand?

Mr. SHISKIN. Let me first state that we have just completed the 36th month of this current expansion. That is pretty good.

The first quarter is not one we all hoped it would be. We think it is reduced by several factors. I think I see some obstacles to further expansion building up. For example, costs are building up, and I devoted the latter part of my statement to unit labor costs.

Rising unit labor costs are always a threat. I am beginning to switch a considerable part of my attention to unit labor costs.

You know, our old friend, Wesley Mitchell, had a favorite theory at one time, that in the later stages of the business cycle unit labor costs rise very rapidly. For a while, prices could keep up with unit labor costs; but, when they could no longer, we went through a profit squeeze, a reduction in investment, and a recession. That was one of Wesley Mitchell's favorite theories.

Now, you are asking me what the prospects are for a continuation of this expansion at a pretty good clip.

Well, we didn't have it at a very good clip in the first quarter, but there were special factors involved. I think we will have a rebound in

the second quarter. It may not be all we need, but I think it will be pretty good.

I am optimistic that one day I wil be sitting here telling you that we have just completed the 39th month of the expansion.

Senator JAVITS. Ms. Slater, in your opinion, is an unemployment rate of 6.1 percent, a continued inflation rate at an annual rate of roughly 7 percent, and a massive, catastrophic deficit in our trade balance in this year a sign of a lively recovery from the recession?

Ms. SLATER. It obviously is evidence that we face some rather important problems. I agree with Commissioner Shiskin that the recovery is continuing and that we should have a strong second quarter.

I also would like to say that if we want the recovery to continue over a sustained period, as I assume we all do, you have to do certain policy things as you go along to achieve a result, and it is important that we do what we can to contain the rate of inflation.

As you know, the President intends to address himself to that with a major statement in a few days.

It also is important that we take the budget action, some tax action, that is necessary to keep the recovery going, and we have before the Congress a proposal for an important tax reduction in the final quarter of this year, and all the statements I have made about expecting continued growth during the remainder of the year assume that that tax cut or something similar to it is enacted.

Senator JAVITS. Mr. Shiskin and Ms. Slater, isn't it a fact that the great structural defect, which has been uncovered by this recovery, is the diminution in the productivity of U.S. business?

For years, I have tried to draw this country's attention to this important point. It is exactly as you say, recovery from the recession may be aborted by the excess in labor costs over productivity increases.

Mr. Shiskin.

Mr. SHISKIN. Well, there certainly are unfavorable developments during this recovery. Every time Ms. Slater reports on the trade balance, I am glad I am not in the Department of Commerce these days.

Senator JAVITS. However, you are in the United States, just like the rest of us.

Mr. SHISKIN. But I am glad I don't have to report on the trade balance. Let me say, though, that there is something we have to report, something I think we have lost sight of in the past few months; there are two tiers of unemployment—a high tier for blacks and a lower tier for whites.

I don't think this situation is going to go away, although Mr. Marshall is addressing himself to the problem, and I think we will alleviate it somewhat.

I also think, as you do, that we have a very serious problem with U.S. productivity. I don't see the effort being made today, as I have seen it made during my career over these many years, to stimulate productivity.

I think that ought to be done. Our productivity is terrible.

Senator JAVITS. We should learn from our mistakes. Haven't we uncovered the basic problems—the problem in productivity and the failure to absorb youth in employment and the excess of imports over exports—without any lively prosperity in the country?

Mr. SHISKIN. Yes.

Senator JAVITS. As for the second and very important part of my question, isn't it alarming to realize that these basic problems form the base from which we will start when there is another cycle?

You yourself said that 3 years is a long time for an economy to continue expanding. Have we done anything to prevent another cyclical recession? Or will the structural problems I outlined determine that the next recession will be deeper than the last one? It has to be deeper because it will start from a much higher base.

Mr. SHISKIN. I am not sure that it would be starting from a higher base. We have special problems in unemployment; special problems we are addressing ourselves to, and to which the Government is addressing itself.

You know, sometimes the way we and the others express our figures tends to be misleading. For example, we show that somewhere in the neighborhood of 38 or 40 percent of the black teenagers are unemployed. That is a very deplorable situation. However, this represents only 400,000 black teenagers. If we can create a few more jobs, through such programs as CETA, we can put most of them to work. Then their unemployment rate would fall dramatically. I think that ought to be done. We also have other problems with the higher tier of unemployment.

While we may not be making much progress, we are very well aware of the gap between imports and exports, and I am doing my best at least, and you are, in trying to make the country aware of the problems of productivity.

Senator JAVITS. My concern is that we haven't done anything fundamental to deal with the root problems. Furthermore, I believe that we are heading for a worse recession than we have had before because we would be starting from a higher base.

Mr. SHISKIN. I want to comment on that.

Senator Javits, you referred to my experience in business cycle analysis, and I want to call your attention to the fact that from 1948 to 1974 we had a period of very small cyclical fluctuation, much smaller than between 1921 and 1948, which was a real accomplishment.

Things went awry in 1974 and 1975, but I would guess that the cycles of the future will be more like those of the middle 1950's and perhaps even like the long cycle in the 1960's.

The expansion, which began in 1961, lasted over 100 months—an extraordinary record. I would not infer that the next recession is going to be like the last one. I think it will more likely be like the ones before it, if we have one at all.

Senator JAVITS. Mr. Shiskin, may I say for myself that I believe we have to "pull up our socks." I don't think that all of what you look at optimistically is going to happen unless we take drastic measures to make changes, and I believe the next recession will be much worse and not much better.

This is why I am so alarmed: whether it is the international money situation or the international unemployment situation or our so-called stagflation—all of these are depressing and bad.

Ms. Slater, would you like to comment?

Ms. SLATER. I would be glad to.

I can only agree with you that our slow productivity gains are a serious part of our economic problem. We need to address ourselves to them.

In order to make sure there is no misunderstanding, I would like to disassociate myself from any notion that our lack of productivity gain is going to abort the recovery, or that we are headed for the next recession.

I think we are looking at a picture of continued economic growth this year and next as far as we can foresee.

We are not looking at a recession in the immediate future or anything approaching it, and I do want to be quite clear about that, because I don't want our other disappointing first quarter numbers to be misinterpreted as signaling a recession.

Senator JAVITS. Ms. Slater, may I sum up your views by saying that you don't see grave danger but that you do believe there are major moves we have to make respecting these structural problems?

Ms. SLATER. Yes, sir, you may. We are trying to do some things. We have proposed business tax reductions before the Congress that we think would encourage investment and be helpful to productivity.

We have major new efforts underway in the Commerce Department to assist businessmen in exporting and being competitive abroad, particularly small businessmen.

We think that will be helpful. There is a great deal more than we can do and hope to be able to do.

Senator JAVITS. Personally, I am sorry to disagree with both of you. The way of the world is, in my opinion, that if you are not deeply worried, you don't do much. I think massive changes are necessary, or this country is headed for a very rough time.

Thank you.

Representative BOLLING. Congressman Brown.

Representative BROWN of Michigan. Thank you, Mr. Chairman.

Ms. Slater, a paragraph in your statement kind of boggles my mind.

You said, "The continued declines in the unemployment rate in January and February, despite the lack of significant output growth, came as a pleasant surprise."

Skipping down to your next to last paragraph in your statement, you said that "further reduction in the unemployment rate will require the resumption of strong output growth."

Now, if you read that in the context of what Mr. Shiskin has said about the worsening of the productivity situation, with an increase in unit costs, he pointed out how during the fourth quarter it had worsened substantially, and then he said that "as a result, most unit labor costs will continue to increase in the first quarter."

Now, insofar as labor's contribution is concerned—ignoring materials and capital, et cetera—the equation, as it seems to me, is hours worked plus productivity equals output plus inflation, and when hours worked is up and productivity is down, we end up with output being reduced and inflation being increased.

So, what do we have before us this morning?

Mr. Shiskin first has said that we can expect even poorer productivity. You have pointed out the low percentage of the labor force to the population in this quarter, and this forecasts, I suggest, that there will be an increase in the labor force in order to get back [illegible]

and such an increase will require a disproportionate increase in employment if unemployment is not to increase substantially.

Always, the radio of labor force to population—labor force determines the unemployment rate as much as other factors.

Finally, if that unemployment, nevertheless, occurs, and productivity remains low—and I see no reason to believe it won't, it seems to me the unit cost in the inflation picture will be compounded.

Now, what is wrong with all those premises?

Ms. SLATER. I don't know that there is necessarily anything wrong with them. It is certainly inescapably true that in order for unemployment to go down, employment has to grow faster than the labor force.

That is an arithematic relationship that we can't get away from.

We have a special situation in the first quarter with respect to productivity and the bad productivity figures we will probably have in the first quarter will not tell you much about the longer term situation.

We had a situation in which output was down. Production was interrupted because of bad weather, and because the power supply was cut as a result of the coal strike.

Because you had people counted as being employed, because they were still on the payroll and still showing up for work, but you didn't have them producing as much as they normally would, so that would show up as no productivity gain, but that is a temporary result of the bad weather and the coal strike. It is also true, as Senator Javits has been stressing, that over a longer period our productivity growth is lower than the historic norm, and that is a problem.

What I was trying to bring out in my statement about the unemployment rate is that it will be quite difficult during the remainder of the year to continue to achieve the reductions we saw in January and February in the unemployment rate.

I did not have the March data available when I prepared this statement. I did not see it until this morning, and I still have not had a chance to study it carefully, but at first glance the March data would tend to bear out that thesis.

We had the resumption of the labor force growth in March, we had strong employment gains in March, and had a strong performance in March, but the unemployment rate did not go down, because the labor force grew as much as employment.

Representative BROWN of Michigan. What you have said would seem to be the case, but then how do you explain this statement in Mr. Shiskin's statement: "Weekly hours of production workers rose sharply, both for total private employment and manufacturing, and are now back to December levels. The large rise in hours was widespread, probably marking the end of especially bad weather during the winter. As a result of this increase and the large employment gain, the index of aggregate weekly hours showed one of the highest monthly increases on record and is now at a peak."

Ms. SLATER. That statement is very correct, and sort of explains itself. Hours worked were down in January and February. It went up strongly in March because people were catching up for low rates of output in January and February.

If you take the 3 months, January, February, and March, and average them together, the index of aggregate hours worked is, I believe, just barely above the fourth quarter average.

That indicates that hours worked for the quarter as a whole had little change from one quarter to the next.

I would attribute that largely to bad weather and the coal strike, not to any underlying factor.

Representative BROWN of Michigan. I really have a difficult time finding something to be so pleased about when you find you have the greatest number of hours worked, et cetera, but output has remained constant because it can only mean one thing to me with the equation I cited for you, and that is that unit costs are going up tremendously and inflation is going to be a real problem.

Mr. Shiskin, maybe you would like to comment.

Mr. SHISKIN. I think that, while output may remain constant for the first quarter, it is not going to be constant in March.

You know how I dislike making predictions, but I haven't the slightest doubt that the Federal Reserve index of production will rise sharply in March, and insofar as that can be perceived in Ms. Slater's figures, there will be a corresponding rise there.

So, I think as she said a few moments ago, I have been stressing the bounceback in March, and she has been talking about the whole quarter, they are quite different references.

I would like to add one comment to the discussion of productivity, and I want Senator Javits to hear this. I think that productivity is less likely to affect the recovery, the real recovery, and more likely to affect prices. As I have pointed out again and again and as we learned in college, hourly compensation divided by productivity equals unit labor costs. Now, if productivity goes down and hourly compensation stays the same, unit labor costs are going to go up.

The other thing we know is that, generally, unit labor costs and the CPI move together. Therefore, I think that low productivity figures will work their way into the system in terms of rising prices rather than slow real growth, and with rising prices, there will be an effect on real growth.

I said last time, and if I may, I would like to say it again, that I thought the two guidelines that President Kennedy's Council on Economic Advisers had would sum up the whole situation on prices. Hourly compensation should rise no faster than productivity; that is, unit labor costs should be stable. The second guideline was that prices should rise no faster than unit labor costs.

Now, these principles were very good, but, unfortunately, we weren't able to follow them.

Senator JAVITS. If I may, just by way of information, at our request this committee is starting a close study of the obsolescence of the U.S. industrial plant.

That, of course, bears very directly on what you are saying.

Thank you.

Representative BROWN of Michigan. Mr. Shiskin, what you said was what I was coming to, and that is that we just can't look at the employment-unemployment situation if we are concerned about our total economic welfare.

We have got to look at this problem of unit costs, and everything that I see here this morning indicates to me that although there may be some recovery and great output, with the inherent factors that

exist, we are going to pay a price for it, which we are not going to like.

My time has expired.

Thank you, Mr. Chairman.

Representative BOLLING. Congressman Rousselot.

Representative ROUSSELOT. Thank you, Mr. Chairman.

The Chairman of the Federal Reserve Board, Mr. Miller, recently has commented that he considers inflation to be the major problem, and he also commented on a deficit that we continue to run.

Do you both want to comment on that?

Ms. SLATER. I think anyone who is looking at the economic situation would regard inflation as a major problem, and also the foreign trade deficit.

As I noted a moment ago, the President plans to make a statement on anti-inflation initiatives next week, and I think I really ought to defer comment on that until we hear what he has to say, except to say that there is no question that it is a serious problem at the moment that we are trying to do something about, and we think there are things that can be done.

Similarly, with the foreign trade deficit; the February figure, I think, was unusually large.

We don't expect that kind of monthly deficit to continue, but we do expect to have a large trade deficit for the foreseeable future, and that certainly is a question we have got to address ourselves to, in efforts to get stronger growth abroad, and reduction in our oil imports, and so forth.

Representative ROUSSELOT. Right now we are in the process of marking up a budget resolution to be a target for Federal revenues and expenditures.

One of the comments that Chairman Miller of the Federal Reserve Board made was that these constant deficits do make an impact on inflation.

Do you want to comment on that?

Ms. SLATER. The level of——

Representative ROUSSELOT. Would you advise us to increase our deficit substantially?

Ms. SLATER. I would advise you to take what the President recommended in January in the way of a tax reduction.

I would point out that what we do about the budget reflects the real growth and the level of employment and also affects price levels, and without the kind of general overall budget strategy that the President has recommended, including the tax refund late this year. I would be very afraid that we were in an economy where the real growth rate would slow down and lead to rising unemployment, and I hope the Budget Committee would keep that thought in mind as they make their decisions.

Representative ROUSSELOT. Mr. Shiskin, do you personally feel the so-called full employment rate, which we have talked about so much here in the Congress, is realistic today?

We always mention 4 percent or 3 percent as a livable rate of unemployment.

We all realize it should be zero, but is that really realistic any more?

Mr. SHISKIN. As you know, there is a great difference of opinion on this subject. There is a widespread debate going on among economists. Some of the more liberal institutions and economists at Brookings are arguing that the full employment rate of unemployment is 5½ percent——

Representative ROUSSELOT. What is your view?

Mr. SHISKIN. Let me just finish the sentence.

Others are still arguing that we can have a noninflationary rate at 4 percent.

I think my own views are in the minority as far as the Labor Department and Congress are concerned, and I can assure you I am not speaking for Secretary Marshall at the moment, but my personal views are closer to the Brookings Institution's views.

Representative ROUSSELOT. Five and a half percent?

Mr. SHISKIN. Closer to that than 4 percent, yes.

Representative ROUSSELOT. Ms. Slater.

Ms. SLATER. I have trouble settling on a single number and locking yourself into it for long periods of time.

Representative ROUSSELOT. But here in Congress we spend a lot of time talking about how perfect it is.

In the Humphrey-Hawkins bill that passed the House, there is an unemployment figure.

Ms. SLATER. I hesitate to suggest that you spend less time talking about it, because it is your decision, but we have had changes in the structure of the economy in the last 20 years.

Obviously, more women and young people have entered the labor force, and that may affect the unemployment rate, but what I would like to point out is that we will have more changes in the next 10 to 20 years.

Representative ROUSSELOT. You are an economist in a key spot.

What is your judgment of what it should be?

Ms. SLATER. My judgment is that the exact rate of unemployment which represents full employment or a satisfactory situation changes over time, and you can't establish a target for all time.

My judgment right now is that unemployment is too high and the labor markets are too slack, and there is room to bring it down, and we should proceed to do that.

Representative ROUSSELOT. If you think it should be a moving target, what should it be?

Ms. SLATER. You have got to look at the structure of the economy and the shift in the labor force.

We have had more teenagers coming into the labor force. That is coming down because the teenage population is coming down.

We will have an older labor force and a more experienced labor force. So, if those who said 5½ percent is the best we can do now are right—and I don't necessarily endorse that they are—we ought to be improving that over time.

Whatever we can achieve right now, we ought to be in a more favorable situation 10 years from now because we will have a more experienced, more productive work force, a higher proportion of the work force that is full time.

The women who entered the work force will have gained experience and will have gone into career type jobs with hopefully higher

wages, although that seems a difficult thing to achieve, and I think over the next 10 years these factors will be working in our favor, and it will be more nearly possible to bring the unemployment rate down to the 4 percent range than it would be right now.

Representative ROUSSELOT. Is it your judgment that it should be a flexible rate?

Would you say 4.6 or 4.5 percent?

Ms. SLATER. Certainly below 6 percent.

Representative ROUSSELOT. Below 6 percent.

Ms. SLATER. I think it is when you get into the 4- to 5-percent range that you have to proceed cautiously, and when we can succeed in getting the unemployment rate down to 5 percent, we have to proceed very cautiously from that point on as to what the impact may be on the prices, and the tightness of the labor market and wage structure.

I don't think we know enough about it to make that judgment right now.

Representative BROWN of Michigan. In this same area, I would like to ask both of you: What do you estimate to be the so-called frictional or temporary noncyclical unemployment, that unemployment that exists even if you had full employment?

Ms. SLATER. Well, the Joint Economic Committee had a study of that done by the Bureau of Labor Statistics, and I don't remember offhand the exact number they came up with.

Was it 3 percent?

Representative BROWN of Michigan. I thought maybe you would have your own views.

Ms. SLATER. But in addition to the temporary, noncyclical factors, you have structural problems within the country of people who are living in regions where there are no job opportunities, or people who are poorly educated, and so forth, which until we can do something about the structural problems you have to add on there.

Representative BROWN of Michigan. But, Ms. Slater, don't we have to have a pretty good handle on what is our frictional or temporary noncyclical employment if we are going to suggest what unemployment rate is acceptable?

Ms. SLATER. I would like to have a better handle on it than I feel I do at this moment, and I can recommend it to you as a suitable subject for further——

Representative BROWN of Michigan. If noncyclical unemployment was 5 percent in our economy, and if we advocated and took steps to reduce all unemployment 4½ percent or 4 percent, that would be pretty bad; wouldn't it?

Ms. SLATER. Yes; but I don't think it is 5 percent, so that is a fairly hypothetical illustration.

Representative BROWN of Michigan. But when we talk about these figures, we have to have good estimates.

Thank you.

Ms. SLATER. I think we have sufficient knowledge about it to know the unemployment figure we have today is too high, and there is still slack in the labor market, and I think we have to know precisely how much we can ultimately achieve.

Representative BOLLING. Senator McGovern.

Senator McGOVERN. Ms. Slater, in your statement you make the observation that even if one were to rule out the coal strike and bad weather to remove those as factors, that in your judgment the growth rate in the first quarter would still have been unsatisfactory.

What, then, are the reasons for that growth rate independent of the impact of the coal strike and the bad weather?

Ms. SLATER. Let me first underline that that is strictly a personal judgment.

Senator McGOVERN. I understand, but it is really your personal judgment that I am interested in.

Ms. SLATER. I think one important factor is that we had unusually strong growth of disposable income and personal consumption in the fourth quarter, and it was hard to grow in the short run on top of that even if we hadn't had the bad weather and the coal strike.

So, that section of the economy which accounts for about two-thirds of the GNP was destined for a slowing in the growth rate in the first quarter.

Another problem has obviously been our trade balance where the January-February monthly trade deficit has come in quite large, and the export sector will not be contributing to growth in the first quarter.

Another factor has been business fixed investment, where the surveys in the Commerce Department do not indicate quite as strong real growth this year as we had earlier put in our forecast.

They do indicate real growth and important real growth, but it is not quite as high as we had thought.

I can't really say how much of the slowing in the investment rate in the first quarter is due to bad weather and so forth, and how much is due to other factors.

Senator McGOVERN. It is your judgment that even without those factors it would have been unsatisfactory in terms of what you would have liked to have seen take place?

Ms. SLATER. Yes.

I think it would not have been up to the range we hoped to achieve.

Senator McGOVERN. You state further, Ms. Slater, "That extremely rapid growth in the remaining quarters of 1978 would be necessary in order for earlier growth forecasts for the year as a whole to be fully met."

Do you really see an extremely rapid growth rate that you describe as taking place given the kind of stimulus package the administration is proposing?

Suppose we were to accept the $25 billion tax cut. Is that going to bring about extremely rapid growth rates so that you can meet the targets by the end of the year that you are forecasting?

Ms. SLATER. No, sir. As a purely arithmetic thing, I think it is going to be fairly hard to meet our forecasts for the year.

To get the yearly average, you take the four quarters, and average them, and then one of those quarters is a very low growth number, down to zero, you would have to do an awful lot of catching up in the numbers for the remaining three quarters to have the average growth rate for the year as high as we had earlier forecast, and I don't really quite see that as likely to happen.

I do think we will have good, strong growth rates in the remainder of the year. I think the remaining three quarters will be in the range

we had earlier forecast, but the average for the year will be drawn down because of what we might call the shortfall in the first quarter.

Senator McGovern. Without going into the merits of the relative approaches, but just looking at it purely from the standpoint of the creation of jobs, what in your judgment would be the most practical way to stimulate more employment? To do it through the tax cut method that the President has proposed, or to try to figure out ways that we could wisely invest a similar amount of money in such things as transportation and housing and the development of renewable resources, job-creating enterprises in the cities, programs in concert with private industry.

Which would, in your judgment, be the better way to create additional jobs?

Ms. Slater. We are, I think, doing quite a bit to create jobs directly right now through the public service employment and public works program.

The public service employment program, as far as we can see, is proving successful in meeting the goals for the number of people we are going to hire.

It would seem to me quite difficult to expect to do much more very quickly. On the spending side in terms of other types of spending, there are two points I would make. One is that they take some time to get underway and, two, I would think spending decisions primarily should be made in terms of the output that you are trying to achieve.

That is, if you want to see improvements in the national transportation system. I would judge the merits—I would base it on the merits of whether those improvements were needed.

I wouldn't go out and build a transportation system to create jobs. Those decisions are priority decisions that I would rather leave to you, if you don't mind.

I do think the tax cut is very important in terms of keeping employment growing and the private economy moving, and the tax side of the budget offers us more flexibility to move quickly to support the economy, I think, than the spending side.

Senator McGovern. One of the other trade offs that some people had talked about was the repeal of the social security tax increase of last year and recover those revenues by reducing the proposed income tax cut by that amount.

Would that be a feasible alternative?

Ms. Slater. Well, as you know, Senator, the administration's position is that we would prefer the kind of tax cut which we recommended, and we think it might be difficult for the Congress to fully consider what ought to be done about social security taxes and take action this year in time to meet the needs of the economy.

You asked me whether it is a feasible alternative. Obviously, if the Congress can agree on the type of legislation they desire, it is certainly feasible as a technical measure.

Senator McGovern. Mr. Shiskin, I had one question that I am not sure is in your field or not, but we are getting ready to vote on a farm bill that has a feature in it to induce major cuts in farm production.

Conceivably, it could go to 50-percent reduction in the production of grains and cotton in this country if the maximum signs up under the alternative to that bill.

They are promised wheat at $5 a bushel if they cut production in half.

Have you had a chance to look at that at all, or have any of your people examined what the impact of that would be on the economy?

Mr. SHISKIN. I certainly haven't, and it isn't normally one of our jobs.

We try to measure as exactly as we can figures on prices, wages, and unemployment.

That is about as far as we go, so I can't comment on that.

Senator MCGOVERN. Thank you, Mr. Chairman.

Representative BOLLING. Senator Bentsen.

Senator BENTSEN. Ms. Slater, you commented on the trade balance. I would like to explore that more.

Last month the deficit in our trade balance worsened. If you took the last month deficit and extrapolated it, we could have a trade deficit this year as high as $50 billion.

I would like to have your estimate on what you think the trade deficit will be for this year.

Ms. SLATER. Mr. Shiskin commented earlier that he was glad he didn't work at the Commerce Department, and have to announce the trade figures every month.

I have often thought it would be a good time to take the day off when they were coming out.

Senator BENTSEN. Here you are. [Laughter.]

Ms. SLATER. We certainly do not expect anything like the size of the February trade deficit to continue on the average in future months, and I would urge you not to take that figure and multiply it by 12 and get your estimate for the year that way, because it would be a very large overestimate of what we expect the deficit to be.

Senator BENTSEN. What do you expect it to be?

Ms. SLATER. We are expecting, as far as we can tell, a trade deficit about the same size as last year. That was forecast in the CEA annual report, and that still seems to be as good a forecast as we can make.

Some private forecasters have begun to forecast slightly smaller trade deficits, improvement toward the end of the year.

We hope they are right.

Senator BENTSEN. Why do you think it will improve substantially over what it was?

Ms. SLATER. If you are comparing last year to this year, we don't think it will improve much.

I think the February number had some special factors in it. One of them was an unusually high level of steel imports because the new reference price system was about to go into effect, and there seemed to be fairly clear indications that people were rushing to get steel imports in, and the evidence on steel orders leads us to believe that steel imports will be dropping from that February level quite a bit.

We probably had some extra petroleum imports because of the coal strike in February.

Senator BENTSEN. Let's talk about petroleum imports.

A lot of European and Japanese leaders have been saying that we don't have an energy policy and haven't passed an energy bill and that that is a major reason for the falling of the dollar. But as a matter of fact, if we passed the total energy bill as proposed by the ad-

ministration, would you see any dramatic curtailment of imports of oil not only this year but next year?

Ms. SLATER. We would expect to see some—well, not curtailment, but slowing of the growth of oil imports.

Senator BENTSEN. You are using the term "slowing of the growth of oil imports" rather than a curtailment or reduction; isn't that correct?

Ms. SLATER. Yes.

I think from the point of view of foreign observers of this country, passage of energy legislation and settling on an energy policy would be a strong psychological signal that we could get our act together in this country, and it would have benefits going beyond that.

Senator BENTSEN. In the short run, it is psychological more than anything else.

Ms. SLATER. Yes, but that can be very important.

Senator BENTSEN. I understand that oil imports are exceeding 50 percent of what we utilize. You don't see a meaningful reduction in the amount we import over the next 3 years regardless of whether we pass the energy bill or not?

Ms. SLATER. I don't see a reduction in absolute terms, but a reduction in what we otherwise would have to import, and that is important, too.

Senator BENTSEN. I agree with that. I agree that it is important to pass energy legislation. But insofar as any dramatic turnaround in the use of energy it won't come to pass in the next year or two, with or without legislation.

I think what is overlooked is that we are converting because economics are forcing it on much of our industry.

Ms. SLATER. Yes, we are converting, and if you look at the relationship in the growth of the use of energy and the growth in GNP and particularly in the growth of petroleum, you see a much different period in the last few years than you saw historically.

We are making progress on conservation.

Senator BENTSEN. That is not reported in the press, though.

It is not as dramatic, but conversions are taking place, and the price of energy is forcing the conversion and the conversion methods.

Mr. Shiskin, we have indexed so many things today that a body of economists say indexing is working to our detriment by generating an immediate reaction to inflationary pressures, because we have indexed social security and a lot of wages.

Yet, there is another, smaller group, that says that that really helps with the problem of inflation because it keeps some workers from asking for wage increases that might go far beyond just compensating for inflation.

In which group do you fall, and why?

Mr. SHISKIN. Well, I think the cost-of-living adjustments, particularly for executives and high Government officials, are a disincentive to control inflation, because there is nothing like having a personal problem—a household budget problem.

The household budget problems can cause you to control the rate of price increases. So, I think that an automatic adjustment is a disincentive and that it shouldn't be done.

I think that is particularly true of Congressmen. I think that Congressmen and the high Government officials should have a tough issue to face on whether to adjust their own salaries for inflation every year and that they should not have it done in an automatic way.

Senator BENTSEN. Can any one of you give us an estimate of what will happen to the price of food if the current farm bill is passed, and signed by the President?

Ms. SLATER. No, sir, except I believe the newspaper today describes a study by the Congressional Budget Office on that question.

That could be one source of an estimate. I am not sure I remember the number. I believe it was on the order of adding three-tenths of 1 percent to the consumer price index.

Senator BENTSEN. Three-tenths to the price of food?

Ms. SLATER. No; to the total CPI. More than to food.

Senator BENTSEN. How does that relate to food, do you know?

Ms. SLATER. No; I don't.

I only saw the newspaper this morning. I have not seen the study.

Senator BENTSEN. Explain something to a farmer, would you: When I sell a grapefruit it sells for 29 cents in the market, and I get 2 cents for it.

If I got a 50-percent increase in price, I would get 3 cents.

Why does this increase end up much more by the time it ends up in the retail market?

Ms. SLATER. I am not sure I can try to explain that to you.

You know quite a bit more about that than I do, probably.

Senator BENTSEN. I would like your version of it.

Ms. SLATER. The prices which we are concerned about include prices of feed grain and wheat and red meat.

If it were only the price of grapefruit; we would not have to worry about it, I don't think it would be an important national issue, except to the people who grow grapefruit.

When prices of the feed grains go up, it affects the supply and the price of beef, as well as other prices, and can have strong impacts on retail price levels which cannot be explained as added on in the marketing chain.

I am told that the particular problem we have now that has caused us to raise our food price estimates for the year has to do with pork supply, that there is a smaller supply of pork coming on the market than the Agriculture Department had previously thought and that has rather a large impact on pork prices.

Senator BENTSEN. The reasons I often question the numbers given to me by the executive branch or any one else is that I have been educated by previous experience.

I have found on the Finance Committee that one time in particular when I was favoring a particular tax cut, I was assured by Treasury that it was going to cost $1.5 billion.

The next year it was their idea, and they proposed it and it was going to make money for the Treasury. [Laughter.] Thank you very much.

Representative BOLLING. That is the virtue of authorship.

Senator MCGOVERN. Would you yield?

Ms. Slater, one thing that is puzzling to me, and one thing that puzzles food producers, I am talking about the wheat farmers, grain farmers and others, is not only the question that Senator Bentsen raised, but why is it that when farm prices dip sharply, let us say, when the price of wheat goes from $5 a bushel down to $2.24, why doesn't the price of bread come down.

I can't recall the price of bread dropping a penny for 30 years. It just keeps going up and up and up, and yet we are told every time we want to adjust the price levels on basic farm commodities that that is going to escalate the price of food.

It sure doesn't deescalate it when the price levels go down.

It really does baffle people in the farm sector of the country. I don't know whether economists have explanations for it or not.

Ms. SLATER. Some economists do. I am not really the one to be discussing this question. I am not an expert in the area, but you do see evidence of retail prices moving in response to farm prices.

You don't see bread prices going down. Meat prices have moved, and they move in part because the price of grain is moving, and I think that is one of the more obvious and quicker transfers from the farm to the retail level.

Mr. Layng may want to contribute some information.

Mr. LAYNG. I think in terms of overall movement, they do follow one another fairly closely in terms of rates of change.

When you see a substantial increase in the rate of price change for retail food prices, you can see a substantial increase at the farm level, and when we see a decrease in the rate of increase at the retail level, you will see a decrease in the rate of increase at the farm level.

The amplitudes of swings are oftentimes less at the retail level than at the farm level because you build up the product as it goes from the farm to the consumer, and it gets more things built into it, as Ms. Slater said.

In a loaf of bread, there is very little cost as regards the wheat in it.

There is a very close relationship between movements in farm prices and movements in retail prices, at least from the data we have, and we could provide that to the committee.

Representative BOLLING. In relation to some questions I am going to ask Mr. Shiskin, I would like unanimous consent to place in the record two articles: One by Alexander R. Hammer, which is entitled "Institutional Buying Helps Stocks To Outperform the Dow Average." And the second by Robert Metz entitled "Secondary Stocks Give Better Picture." Also, a letter of response from Mr. Shiskin, to my earlier letter, regarding divergence in certain market indexes, which have been featured by a decline in some of the more well-known ones and rises in others.

[The two articles, together with Mr. Shiskin's letter of reply to Representative Bolling's earlier letter, follow:]

[From the New York Times, Apr. 7, 1978]

INSTITUTIONAL BUYING HELPS STOCKS TO OUTPERFORM THE DOW AVERAGE

(By Alexander R. Hammer)

Stepped-up institutional buying and a better-than-expected wholesale price report enabled the stock market to advance moderately yesterday in continued heavy volume.

The Dow Jones industrial average, which moved in a narrow range throughout the session, closed with a token gain of 0.87 point to 763.95.

However, the general market did better, with advances on the New York Stock Exchange outnumbering declines by almost an 8-to-5 ratio.

Analysts noted that cash-laden institutions in recent sessions have been increasing their stock purchases. Their longstanding cautious approach to the

market has resulted in a large buildup of cash reserves. In the last three sessions, increased institutional buying has helped the Dow rise 12.91 points.

The market also received some encouragement yesterday after the Labor Department reported that wholesale prices of finished goods in March rose six-tenths of 1 percent, compared with February's 1.1 percent jump. The March increase was smaller than many Wall Streeters had anticipated.

Helping to dampen yesterday's advance was the performance of the dollar in foreign-exchange trading abroad. The dollar eased somewhat against European currencies and hit a new postwar low in Japan. It later rallied in Tokyo but still finished lower on the day.

Another depressant was a gloomy assessment of the inflation outlook by the Council on Wage and Price Stability, which said that the underlying inflation rate seemed "hopelessly stuck" in the 6 to 7 percent range.

AMEX SETS ANOTHER RECORD

Ignatious Teichberg, vice president for investments at Gruntal & Company, said that the sizable cash positions of institutions still on the sidelines, an expected improvement in the dollar on foreign exchanges and the eventual passage of positive energy legislation "should enable the market to continue its recent advance."

The American Stock Exchange yesterday again outperformed the Big Board. Its market-value index for the third time this week rose to a record high. It closed yesterday at 130.85, up 1 point.

Resorts International continued to advance on the Amex, its Class B share soaring 8¼ to 64 before the exchange halted trading due to an order imbalance. In the previous three sessions, the issue climbed 16¾. On Tuesday, the company said that it had applied for a temporary permit to operate a casino in Atlantic City and that it had already spent about $50 million to refurbish a hotel and casino there.

Reflecting the better tone of the market, nine of the 15 most actively traded issues rose while six fell. Kennecott Copper led the active list and advanced ¾ to 27⅝ on turnover of 460,000 shares.

On Wednesday, Curtiss-Wright, which is trying to get control of Kennecott, said that if it were successful it would recommend buying 50 percent of Kennecott's shares from stockholders for $40 a share. Curtiss-Wright is also considering a $20-a-share dividend as an alternative. Curtiss-Wright yesterday rose 57 to 21⅛.

OPTIONS EXCHANGE TRADING

On the Chicago Board Options Exchange, Kennecott's April 30 call option headed the active list as it gained ⅛ to 7⁄16. The gain in this option, which gives its holder the right to buy Kennecott at a price of 30 until the current series expires after the trading date of Friday, April 21, reflected the price rise in the underlying shares selling on the Big Board.

Several glamour and merger candidate issues posted sizable advances. General American Oil gained 2⅛ to 32⅝; Medtronics, 2 to 22½; Cooper Laboratories, 2 to 26; Miccrowave Associates, 2¼ to ⅜ ¾ ¼, and Teledyne, 1⅛ to 76.

Farah Manufacturing moved ahead ⅜ to 4. The slacks and jeans producer said it had signed a new $15 million short-term lending agreement with the General Electric Credit Corporation.

Fuqua Industries, which is in the leisure-oriented fields, fell ¼ to 10. The company disclosed in its annual report that share earnings were expected to be lower in the first half of this year although higher in the last half of the year and in succeeding years.

General Dynamics lost ¾ to 45⅜ after it announced plans to acquire the American Telecommunication Corporation for $21.75 a share in cash or preferred stock, the latter's issue, which is traded in the over-the-counter market, dropped 1¼ to 19⅜ bid.

Turnover on the Big Board expanded to 27.36 million shares from 27.26 million shares the day before.

Consolidated trading in all issues listed on the New York Stock Exchange amounted to 30.51 million shares compared with 30.63 million shares on Wednesday.

On the Amex, gainers yesterday outscored losers by 356 to 239. Sundance Oil, which climbed 4⅝ points in the two previous sessions, eased to 33⅛.

The most actively-traded option on the Amex was Digital Equipment's April 4 call, which eased 316 to ⅝. The decline was caused by weakness in the underlying stock, which fell ¼ to 39¾ on the Big Board.

Options volume on the Amex rose to 46,449 contracts from 41,141 on Wednesday.

In the over-the-counter market, the NASDAQ industrial index added 0.53 to 113.06, while the composite index rose 0.52 to 107.47.

On the Chicago Board Options Exchange, 143,723 contracts changed hands up from 118,535 Wednesday.

[From the New York Times, Apr. 5, 1978]

SECONDARY STOCKS GIVE BETTER PICTURE

(By Robert Metz)

The casual reader of the financial pages who measures the stock market on the basis of gains or losses in the Dow Jones Industrials and the Standard & Poor's 500 stocks may conclude that the market is depressed. He will be only half-right.

If he is looking at the Amex index and other secondary stock indexes, the market is doing much better. Last week the American Stock Exchange Index hit a peak of 128.94 and there may be no end in sight, according to some optimistic observers of the market scene.

Anthony Gaubis, a market technician in Sparta, N.J., notes that the Amex index was not begun until September 1973. Amex stocks reached a high back in 1968. Mr. Gaubis, who notes that the Value Line index also measures secondary stocks, says that the index would have to rise 15 to 20 percent to cancel half the decline from 1968 highs.

Meanwhile, New York Stock Exchange listed issues—particularly those that figure most prominently in the leading averages—have not done well. Since January, the 30 Dow Jones industrials are down 7.5 percent and even the more broadly based S. & P. index of 500 leading stocks is off 3.7 percent.

Mr. Gaubis notes that 15 to 20 of the stocks in the S. & P. have an inordinate impact in that S. & P. weighs its index according to the number of shares outstanding. Thus, I.B.M., with 148 million shares and a recent price of 235, tips the index on substantial moves far more than other stocks in the index.

And it is just that kind of stock that has suffered most in the market. After criticism by Congress over inordinate holdings of such stocks, major trust departments and other institutional holders began selling off I.B.M., Eastman Kodak and other bellwethers that they had bought aggressively just a few years earlier at 30 and 40 times earnings.

Eastman Kodak, for example, sold at 153 in January 1973 and earned just $4.05 a share in that year. A stock that sells at, say, 33 times earnings returns just 3 percent on an investor's money.

By contrast there are dozens of stocks available at 5 times earnings. Purchased at that level, shares return 20 percent. This is not the same as yielding 3 percent or 20 percent in that yield is figured on dividends actually paid. Nevertheless, the contrast is startling and does offer comparison unflattering to high-multiple stocks.

Steven Lewins, director of research for The Value Line Investment Survey, calls the present market, which favors smaller companies, a "buy American" phenomenon. He notes that 30 percent of corporate profits come from abroad and that those foreign profits are concentrated in the biggest companies in the United States.

Sluggish growth abroad and currency devaluations have hurt companies with heavy foreign interests and they are in disfavor as a result. Mr. Lewins concludes that investors have turned instead to smaller companies that concentrate their activities within these shares.

There is some irony in the present "two-tier" market. In 1973, the two-tier market of glamour stocks and some smokestack companies led the Dow Jones Industrial average to a high on Jan. 11 of 1051.7. (It is now about 750.) Meanwhile, the vast majority of stocks were making new lows in early 1973.

The speculative and secondary stocks declined to extraordinary low levels and in the depths of the 1974 bear market more than 100 of these stocks—basically shares listed on the American Stock Exchange—were selling at multiples of less than 3.

There was little action in these stocks in any case. On many occasions, observers with both Big Board and Amex tickers noticed that the Big Board tape raced

ahead while the Amex tape moved haltingly if at all. One man who concentrates his attention on out-of-favor stocks believes that true investors are quietly buying up such values and are ready to wait for the market generally to recognize that they are right.

This is not the same as saying that the stock market generally is healthy nor that the secondary stocks will continue to advance and not experience setbacks. It should be noted that there are serious consequences, nonetheless, when the leading averages turn downward and when the most important companies do poorly in the market.

Such shares still represent core holdings in many portfolios and their falling prices discourage holders on two levels. For one thing, confidence in business generally is low and this discourages investment—investment that can help move the economy forward. Further, shares have less value as collateral and this too restrains investment.

U.S. DEPARTMENT OF LABOR,
BUREAU OF LABOR STATISTICS,
Washington, D.C., March 30, 1978.

HON. RICHARD BOLLING,
Chairman, Joint Economic Committee,
Washington, D.C.

DEAR DICK: Thank you for calling to my attention the article, "Up Tier, Down Tier," by John Schulz from the February 28, 1978, issue of Barron's. It does, indeed, appear, from the various indexes Schulz presents, that the stock market has two tiers, with the more familiar indexes, such as Dow Jones and Standard & Poor's, declining over the last two years while other indexes, such as the Value Line and American Stock Exchange Index, are rising.

In my capacity as Chairman of the Business Conditions Digest Advisory Committee, I have asked the Bureau of Economic Analysis staff at Commerce to draw up a few charts and we are also making special investigations. If Schulz's argument is correct, as I now believe it is, that would call for substituting a different, broader index for the one in BCD. That, in turn, could affect the movements of the overall leading indicator index.

I will be in touch with you again about this subject after the BCD staff has completed some of the work under way.

Sincerely yours.

JULIUS SHISKIN, *Commissioner.*

Representative BOLLING. Mr. Shiskin, I can understand the divergence in certain market indexes causing you some concern, and I applaud your decision to investigate the matter insofar as it relates to the overall balance of the signals we get from the leading indicators.

Have you had any further thoughts about this in the past week that you wish to share with us?

Mr. SHISKIN. First of all, I want to thank you for putting me onto this, because one of the things that I regretted about leaving the Department of Commerce and being in charge of BCD was that I had no legitimate excuse to study the stock market on company time.

Now I am back to it, and I must say I found out a lot of interesting things. Our study has just gotten underway.

For one thing, it looks to me as though the processes are correct. It seems to me the Dow Jones, Standard & Poor's, and the New York Stock Exchange indexes are no longer correct measures of the overall performance of stock prices.

As has been explained to me, in the article you sent me, and by people I used to work with on stock prices when I was in the Commerce Department, apparently high-quality stocks like American Home, IBM, and Merck no longer have a good market.

The institutions own a large part of the stock, and the institutions apparently have decided to reduce their holdings of some of these

high-quality stocks. But, there is no one to buy them, even though they appear to be very good buys on the basis of the criteria we used to use.

So, the Standard & Poor's index and the other two that I mentioned—the Dow Jones and the New York Stock Exchange—keep going down, because they are based on the high-quality stocks, while a great many other stocks are going up.

I have learned also about two new indexes that I had no familiarity with at all. One is the Value Line Index, which includes 1,780 stocks, or something like that. The other is the Wilshire Index, which includes 5,000 stocks. We haven't been able to put all that material together, but we hope to.

Now, why our interest in this? Because it is one of the key leading indicators in the overall index of indicators, and the performance of the index of leading indicators in recent months has been very dubious. A lot of people have called that to the attention of the BLS, Commerce, and many others.

Let me give you another explanation as to why people are puzzled. If you take the leading indicator index and compare it to the standing of the previous peak level, I guess in 1973, they are about even. We have not risen above that previous level, whereas in the case of employment, in real GNP, we are way above.

So, we're interested in finding out why this good leading indicator isn't foreshadowing the increases in employment and real GNP.

I was able to accomplish one other thing since we communicated last, and this is by no means all we hope to do.

I hoped to change the index indicators to conform more to what I think it should be than what is actually being published today by the Department of Commerce.

When this new list was made up, I was still chairman of the committee or a member of the committee.

I have been associated with this index since it came out in 1961. I was opposed to the inclusion of two of the series—the two money supply series—because I didn't think policy variables ought to be put into the forecasting series: They ought to be functions of the free market, or whatever.

In a document that the Commerce Department is still circulating, I had a section on policy indications, and I think that is where the money supply series belongs.

It is clear to me that the stock market index that is being used today is not representative of stock prices any more. I think it ought to be replaced, and we haven't been able to replace it.

I was able to take it out for 2 months, and the results are kind of staggering. For example, as I said a few moments ago, the leading indicator indexes today are about at the same level as in 1973, the previous peak level. This is the official series published by the Department of Commerce.

Now, if you take what I am calling an experimental leading indicator, you find that it is 12 percent above the previous peak—12 percent. That is a lot.

If you look at the median expansion, you discover that both the published and the experimental data I have, in terms of the historical business cycles, were at this stage 113 or 114 above their previous peak levels.

So, this experimental index I am producing is much closer to historical experience, and to the experience of the series like employment, GNP, industrial production, and so on, than the published one.

I think our committee has a job to do in reconsidering the content of that index, and I think we all owe you a debt for calling this to our attention.

Representative BOLLING. Thank you.

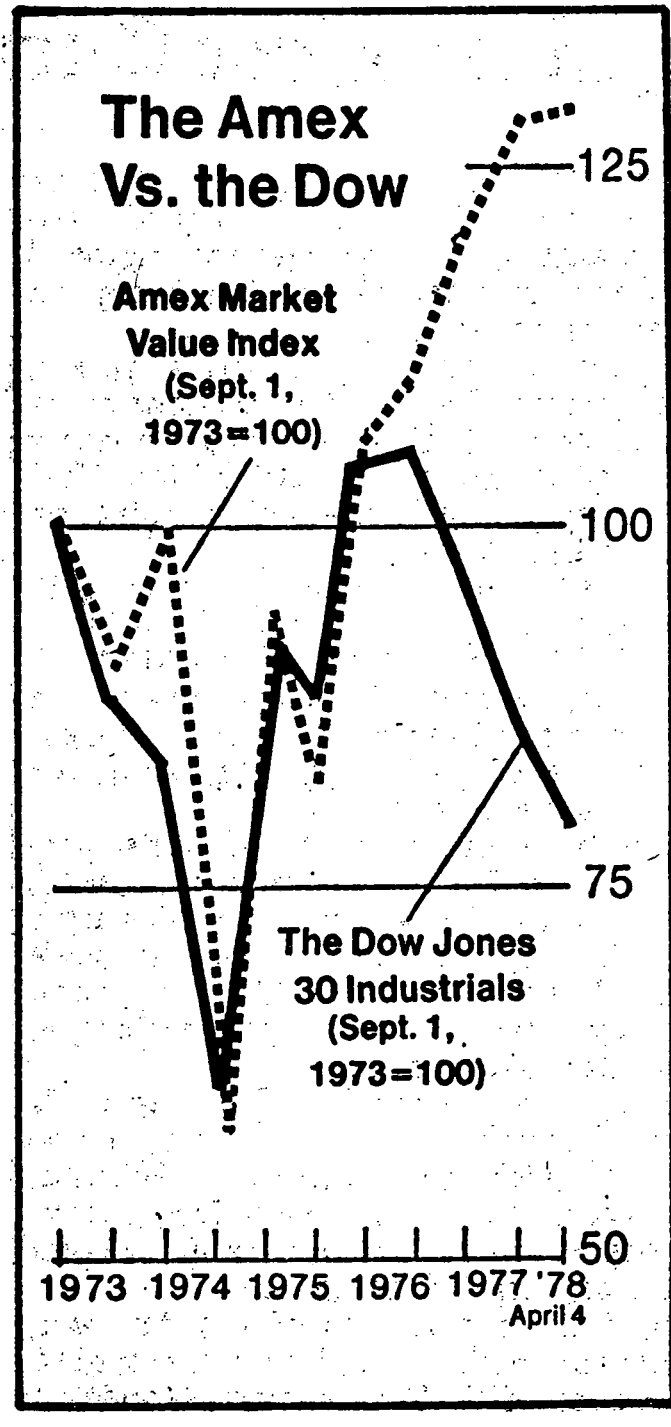
I would like to make it clear that the debt is owed to the staff, who brought it to my attention. I believe in making it clear that the staff did the work on this one.

I would like to place the chart from Mr. Metz' article in the record, which appeared in the New York Times of April 5. They constructed it for Mr. Metz' marketplace problem. The article itself will be inserted at another place in the record, comparing the index and the Dow.

They used an index number starting September 1, 1973. The two stay very much together until 1976, when at another level of about 1.7 they go in opposite directions.

As of April 4, we find the Amex around 108, and the Dow around 78.

[The chart referred to follows:]


The Amex
Vs. the Dow
125
Amex Market
Value Index
(Sept. 1,
1973=100)
100
75
The Dow Jones
30 Industrials
(Sept. 1,
1973=100)
50
1973 1974 1975 1976 1977 '78
April 4

Representative BOLLING. This abrupt divergent pattern has never, so far as I know, occurred before. Stephen Lewins, director of research for Value Line Investment, did a survey called the Present Marketplace, which favors smaller companies "buy American" phenomenon.

He notes that 30 percent of the corporate profits come from abroad, and that those foreign profits are concentrated in the biggest companies in the United States, which have been hurt by sluggish growth abroad and currency changes, and I don't know whether I even want to ask you whether you have a reaction at this point, but at some point—in effect, if you are interested, I would like you to look at that and see what you think about it.

Mr. SHISKIN. I would be glad to do that.

I would also like to make a general point, if I may, that every statistical series has to be reexamined for relevance and accuracy all the time. You just can't assume they are right.

We have had many debates in this room, or discussions, about the seasonal adjustment of the unemployment series. And, under considerable prodding by this committee, we have made two important changes in our method of seasonal adjustments.

I think we just have to review the series. Otherwise the data would become obsolete.

I think the same thing is true of the leading index, and this is one example of it. I haven't been very active in that committee, because I had my hands full, and I guess Ms. Slater has had her hands full to. Nevertheless I think that today it is likely that the leading indicator index is not a good index and has to be done over.

Representative BOLLING. In relation to that, I attended the first meeting of the Levitan commission yesterday, and there was conversation about the last time that that kind of thing had been done, and I am thoroughly aware that you must, in-house, do not a daily but a very regular review of the validity of your series, but it would seem to me—and I think I have the right people in front of me—it seems to me that at some point we ought to achieve what I think I remember I had in mind and others had in mind years ago when I was chairman of the Subcommittee on Economic Statistics: that the function which has now passed from OMB to Commerce, with some coordination, a statistical series, ought to include not only coordination, but it ought to include some systematic method, which I am not prepared to suggest, for the kind of constant review.

I think it is virtually a matter of constant review, in-house, probably, and then regularly from outside on the others.

Obviously, in a fashion that is not, you know, an adversary proceeding. Clearly, the Levitan approach will not be. I think we have to do better, because it is getting infinitely more difficult to deal with the problems.

I gather the Council of Economic Advisers has the same problem that we do, and I am not for a moment forgetting that we probably have the best statistics in the world in this country.

Mr. SHISKIN. There has been much review, for example, of the famous GNP report that has come out recently, which reviews the GNP accounts and what needs to be done to beef them up.

Also we had a report not long ago by Dick Ruggles, representing the National Bureau on Wholesale Prices, and we are following his recommendations almost to the letter. I guess we were a party to them. We worked very closely with him.

Then there is a commission underway, and I have also proposed as part of my confirmation hearing session that we set up such a commission, on wage statistics.

Somehow this is never enough. Something always gets through the cracks, like this leading indicator index which I think has to be updated.

Representative BOLLING. I am certainly not being critical, because I have spent a lot of time for a Member in this area, and I happen to think that it is the most important area that we have in policymaking, because it gives us the tools with which we can rationally make policy if we are willing, and it prevents the kind of thing that sometimes goes on, today in particular, when we spend all our time politically arguing over the facts and very little of our time really arguing about policy.

The soundness of the series makes it much more difficult to argue on facts, and I am just taking the opportunity to say what I have said many times before, that I think it is important that we recognize on the Hill and the administration recognize that the amount of money we put into this is a pittance compared to the value of the result in policymaking.

Mr. SHISKIN. I agree completely with that, but I would like to add that sometimes money just isn't enough.

For example, I have a problem with Congressman Rousselot and others, because they are dissatisfied with the local area unemployment statistics. So are we, but the question is, How do you make them better?

You run into very difficult obstacles. For example, the budget cycle is a long cycle. It takes a long time to get an appropriation from my desk to the Secretary's desk, through OMB, and then to you. Presently, we are debating our 1980 budget.

The next obstacle is that there are other constraints. For example, right now the Census Bureau has a very serious problem in gearing up for the 1980 census. They have done wonderful work for us. We think they are great. We would like to give them more business all the time, but they are about up to their ears. They can't take on any more business, and we have to find some way of helping them break that bottleneck. So, there are certain things that are really beyond the realm of possibility.

For example, one of your colleagues has been pushing me to get better data for his county, better unemployment data as regards the unemployment rate. His county happens to have a labor force of 100,000 people. That is a good, round number to work with. We figured out that it would cost us $750 million a year to provide quarterly data for all counties with a labor force of 100,000 or more.

But, I don't think if you handed me $750 million today and said, "I am going to give you this every year on April 8," that I could spend that money favorably. The computers aren't big enough, and there are a lot of other constraints. For example, every time we submit a form to be cleared, we face the fact that the President has a paperwork burden target. He wants to reduce paperwork, and we are on his side.

So, I just want to make it clear that those of us like Ms. Slater and I need better data and the administration needs better data, but money doesn't solve all of our problems.

We need time, and there are other elements involved.

Representative BOLLING. I am glad you made the point, because undoubtedly I oversimplified, and I think it is terribly important, just the same, to keep on looking at this, and that is about all I am trying to do, keep on looking at it and encourage people to recognize that, as I said yesterday, the meeting of this Levitan commission.

I sat, I think, right here and listened to a proposal from the administration for a sharpening of the trigger mechanism on the expenditure of funds that we later established, was sharper than the statistical error built into that series.

I wasn't critical of the administration at the moment. I could understand how that could happen, but I think that is a good illustration of the need for us to keep at it, and I think if anybody has been at fault over time, over a long period of time, and we do have the best statistics there are, I think in the world and if anybody has been at fault, it has been the Congress.

It hasn't been the administration.

Mr. SHISKIN. In my experience, it is useless to fault anyone.

There have been some years in the past when I have been very mad at my Appropriations Committee chairman—mostly, I might say, when I was in the Department of Commerce. [Laughter.] Other times, I have been mad at the OMB people, and sometimes I have been mad at my own boss.

Everyone takes a turn. There are conflicting issues, and you can't resolve all of the issues at one time.

Representative BOLLING. Right.

We have made it complicated enough, I think, and I agree with everything you have said.

Would any member care to comment? If not, we thank you both very much for your views. It has been a very enlightening hearing.

The committee stands adjourned.

[Whereupon, at 11:53 a.m., the committee adjourned, subject to the call of the Chair.]

EMPLOYMENT-UNEMPLOYMENT

FRIDAY, MAY 5, 1978

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

The committee met, pursuant to notice, at 10:10 a.m., in room 5110, Dirksen Senate Office Building, Hon. Lloyd Bentsen (vice chairman of the committee) presiding.

Present: Senators Bentsen and Proxmire.

Also present: Jack Albertine, William R. Buechner, Lloyd C. Atkinson, Thomas F. Dernburg, Deborah Norelli Matz, and Katie McArthur, professional staff members; Mark Borchelt, administrative assistant; and Charles H. Bradford and Mark R. Policinski, minority professional staff members.

Senator BENTSEN. Good morning, the hearing will come to order.

We have some good news and some bad news this morning. The bad news is inflation. The Consumer Price Index went up at an annual rate of 9.3 percent in the first quarter. And the producer prices index rose by an annual rate of 16.8 percent in April. I think we are sure that we will have to raise our estimates on inflation for the year.

We have already talked about raising it from 6 to 6.75 percent. I don't see how we can possibly get by with less than 7 percent inflation this year.

I also understand we have some good news about unemployment and that the 6-percent objective on unemployment has already been reached for this year.

Assistant Commissioner Stein will elaborate on that a little later. But suffice it to say that with all the dreary economic news, the reduction in unemployment really is welcome.

Productivity fell at a rate of 3.6 percent in the first quarter, the largest quarterly drop in 4 years. Also in the first quarter unit labor costs in private business rose at an alarming rate of 18.3 percent. We have not seen anything to compare with that in 25 years.

The problem we are faced with is that the average American is not going to show restraint with the kinds of inflation figures that we are seeing unless they can see that we have some answers and that we have the fortitude in the Congress to try to cut back on some of the expenditures that we are seeing in the budget.

I would like now to defer to my colleague, Senator Proxmire.

Senator PROXMIRE. I have no comment, Mr. Vice Chairman.

Senator BENTSEN. I have an opening statement which, without objection, will be placed in the record at this point.

[The opening statement of Senator Bentsen follows:]

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OPENING STATEMENT OF SENATOR BENTSEN, VICE CHAIRMAN

I am very sorry that Commissioner Shiskin is not feeling well and that he is not able to be with us this morning. I am sure that you all share my hope that he recovers swiftly and that he will be able to be with us again next month.

Meanwhile, I am pleased to welcome his very capable deputy, Mr. Robert Stein, Assistant Commissioner of Labor Statistics, to help us to interpret the most recent labor force, price, and productivity data.

The employment news you bring this morning is very encouraging. According to the household survey, employment in April rose 535,000 and unemployment declined 165,000, with the result that the unemployment rate fell to 6 percent, its lowest level in 3½ years. The proportion of the working age population that is employed has now risen to a record high of 58.4 percent. While most of the reduction in unemployment was among adult men, unemployment rates also fell for teenagers and for blacks. The unemploment rate for black teenagers dropped sharply from 39 percent to 35.3 percent. Last, but not least, I am pleased to note that the unemployment rate in Texas fell from 4.8 percent to 4.4 percent.

While the employment data for April are very favorable, other data that have been released in the last couple of weeks are very disheartening, and I will wish to discuss these developments with you. Consumer prices rose at an annual rate of 9.3 percent in the first quarter and by 6.5 percent since March of 1977. The wholesale price data released yesterday indicate that the acceleration of inflation has continued in April. Prices of all finished goods rose at an annual rate of 16.8 percent as compared with a rate of 9.6 percent in the first quarter. The principal source of this was a rise in the price of consumer finished goods at a rate of 20.1 percent with foods leading the way at a rate of 25.3 percent. Inflation is clearly accelerating and is doing so at an alarming rate.

In the first quarter we also had a drop in output in private business establishments of 1.8 percent. Yet, surprisingly, total hours worked increased 1.9 percent. In combination these developments caused productivity to drop 3.6 percent—the largest quarterly drop in 4 years. At the same time, hourly compensation rose 14 percent, so that unit labor costs in private business increased at an annual rate of 18.3 percent. There has been nothing to compare with this in the last 25 years.

I hope, Mr. Stein, that you will comment on these developments. How is it possible for an economy with declining output to enjoy rising employment and rising hours per worker? Is this a quirk in the data, or is there something fundamentally strange going on in the employment practices of business establishments? What about the rise in unit labor costs? What portion of the rise in the first quarter was due to social security tax increases, to higher employer contributions for unemployment insurance, and to the increase in the minimum wage rate? Finally, and uppermost in everyone's mind, what has happened to the underlying rate of inflation? Even allowing for first quarter abnormalities unit labor costs in March were 8.4 percent above March of last year, and this suggests an inflation rate well above the 7 percent that we were previously led to expect and also well above the administration's admission that 6¾ percent now seems more likely for 1978. Certainly the rise in consumer prices at an annual rate of 9.3 percent in the first quarter is hardly within a 6 to 6¾ percent range, and the finished goods picture for April indicate that the acceleration is continuing. Even if the inflation rate slows substantially during the remainder of the year, it is now virtually impossible for the rise in prices to be held below 7 percent for the year as a whole.

Last, the composite index of leading indicators declined in March suggesting that the March production rebound was more a reflection of inevitable improvement over the very poor performance of January and February that a portent of stronger economic activity to come. It very much looks as if stagflation is getting worse.

Please proceed with your statement, Mr. Stein. We shall return to my questions after you finish.

Senator BENTSEN. Mr. Stein, please proceed.

STATEMENT OF HON. ROBERT L. STEIN, ASSISTANT COMMISSIONER, OFFICE OF CURRENT EMPLOYMENT ANALYSIS, BUREAU OF LABOR STATISTICS, DEPARTMENT OF LABOR, ACCOMPANIED BY W. JOHN LAYNG, ASSISTANT COMMISSIONER, OFFICE OF PRICES AND LIVING CONDITIONS; JEROME A. MARK, ASSISTANT COMMISSIONER, OFFICE OF PRODUCTIVITY AND TECHNOLOGY; AND DEBORAH KLEIN, SENIOR EMPLOYMENT SPECIALIST, OFFICE OF CURRENT EMPLOYMENT ANALYSIS

Mr. STEIN. Before I begin with my statement, I would like to introduce my colleagues. On my left is Mr. W. John Layng, Assistant Commissioner of the Office of Prices and Living Conditions; on my right is Mr. Jerome A. Mark, our Assistant Commissioner, Office of Productivity and Technology; and on his right is Deborah Klein, who is our senior employment specialist.

Mr. Vice Chairman and members of the committee, I am glad to have this opportunity to offer the Joint Economic Committee a few brief comments to supplement our press release, "The Employment Situation: April 1978," issued this morning at 9 a.m. and our "Producer Price Indexes—April 1978" release, issued yesterday.

THE EMPLOYMENT SITUATION

Employment continued its vigorous expansion in April, while unemployment declined over the month. The Nation's unemployment rate was down to 6 percent, the lowest level in 3½ years.

Between March and April, total employment rose by 535,000, unemployment fell by 165,000, and the civilian labor force rose by 370,000. The unemployment rate in April was slightly below its March and first quarter levels of 6.2 percent. As indicated in the attached unemployment rate table, most of the alternative seasonal adjustment methods also produced a slight decline in the rate between March and April, and almost all showed the April rate to be at 6 percent. Men 20 years and over accounted for nearly all of the improvement in unemployment over the month. The number of women and teenage jobseekers changed only slightly.

Jobless rates among black workers have not come down as much as for white workers during the current expansion. The April rate for black workers was lower than in most recent months, but continued to be more than twice the rate for white workers. Other groups with persistently high rates of unemployment, despite the substantial job growth of recent months, were teenagers and women who head families. Over a third of all black teenagers in the labor force were unemployed in April.

Both total and nonagricultural employment—as measured by the household survey—moved up sharply in April. The employment-population ratio reached a new high of 58.4 percent, as men, women, and teenagers all shared in the employment growth.

The number of employees on nonfarm payrolls—as measured by the establishment survey—rose by 620,000 continuing its rapid growth

of recent months. Even after allowance for the return to work of about 160,000 coal miners previously on strike, the job expansion was unusually large. Gains were widespread throughout nonfarm industries, with the most substantial increase in contract construction. The BLS diffusion index, showing the percentage of 172 industries with rising employment, continued at a high level in April—69 percent. Over the past year, payroll jobs have increased by 3½ million, with nearly two-thirds of that growth occurring in the past 6 months.

The average weekly hours of production workers on nonfarm payrolls rose slightly, and were equal to the levels recorded in the latter months of 1977. As in the case of employment, construction workers showed the largest gain in hours of work. The small rise in the workweek, together with the strong employment gain, moved the index of aggregate weekly hours to a new high.

The labor force expanded sharply in both March and April following a 3-month plateau. Comparing the first 4 months of 1978 with the same months of 1977, the labor force has grown by an average of 2.65 million from 1 year ago—after allowance for the effects of improvements in survey procedures introduced in January 1978. This was a comparatively large increase, reflecting a continuing uptrend in the participation of women and teenagers, and at least a pause in the long-term downtrend among adult men.

PRICES

"The Producer Price Index for Finished Goods," which was released yesterday, increased 1.3 percent in April on a seasonably adjusted basis. The increase was considerably more than the increase recorded in March and was due primarily to continued increases in foods and a sharp rise in prices of consumer durables, especially jewelry. The sharp increase in jewelry prices accounted for about 30 percent of the increase in the finished goods price index.

The rise in prices of food items at the finished stage of processing continued in April. The increase of 1.9 percent was the seventh consecutive monthly increase. Prices for poultry and pork turned up in April after declining in March. Prices of fruits and vegetables, beef and veal, dairy products and other processed foods also increased in April. Roasted coffee prices fell, but by less than in recent months. Price increases for finished goods other than foods accelerated markedly in April to 1 percent from five-tenths of 1 percent in March.

Almost all of the acceleration was due to a sharp increase in jewelry prices. Prices also increased for passenger cars, floor coverings, household furniture, household appliances, footwear, tires and tubes, and gasoline and home heating oil.

Prices of commodities at the intermediate or semi-finished stage of processing advanced five-tenths of 1 percent in April on a seasonally adjusted basis. The increase was less than in March, primarily because of a decline in prices of manufactured animal feed. Prices of crude materials increased 2½ percent in April, somewhat more than in March as prices for crude food stuffs and feel stuffs accelerated.

My colleagues and I are now ready to try to answer your questions.

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

UNEMPLOYMENT RATES BY ALTERNATE SEASONAL ADJUSTMENT METHODS

Month and year	Unadjusted rate	Official adjusted rate	Alternative procedures								Other aggregations (multiplicative)		Direct adjustment of rate	Range (cols. 2–13)
			Official procedure used in 1976–77	Unemployed all multiplicative	Unemployed all additive	Concurrent			Stable		Total	Residual		
						Year ahead	First computed	Revised	1967–73	1967–77				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1976:														
January	8.8	7.9	7.8	7.8	8.0	7.8	7.8	7.9	8.1	7.9	7.9	8.1	7.9	0.3
February	8.7	7.7	7.6	7.6	7.8	7.6	7.6	7.7	7.7	7.7	7.6	7.7	7.7	.2
March	8.1	7.6	7.5	7.5	7.6	7.5	7.5	7.6	7.7	7.6	7.5	7.6	7.6	.2
April	7.4	7.6	7.6	7.6	7.6	7.4	7.4	7.6	7.6	7.6	7.6	7.6	7.6	.2
May	6.7	7.4	7.4	7.5	7.2	7.2	7.2	7.4	7.5	7.5	7.5	7.3	7.5	.3
June	8.0	7.5	7.5	7.5	7.5	7.5	7.6	7.5	7.5	7.5	7.4	7.5	7.4	.1
July	7.8	7.7	7.8	7.8	7.8	7.8	7.8	7.7	7.77	7.7	7.7	7.7	7.7	.1
August	7.6	7.8	7.8	7.8	7.8	7.9	7.9	7.8	7.7	7.8	7.8	7.8	7.9	.2
September	7.4	7.7	7.8	7.8	7.7	7.8	7.8	7.7	7.6	7.7	7.8	7.7	7.8	.2
October	7.2	7.7	7.8	7.8	7.8	7.9	7.9	7.7	7.7	7.7	7.8	7.7	7.8	.2
November	7.4	7.8	7.8	7.9	7.8	8.1	8.0	7.8	7.8	7.9	7.8	7.7	7.8	.4
December	7.4	7.8	7.8	7.8	7.8	7.9	7.8	7.8	7.9	7.9	7.8	7.8	7.8	.1
1977:														
January	8.3	7.4	7.3	7.3	7.4	7.3	7.4	7.5	7.5	7.4	7.4	7.6	7.5	.3
February	8.5	7.6	7.5	7.5	7.6	7.5	7.5	7.5	7.6	7.5	7.5	7.5	7.5	.1
March	7.9	7.4	7.4	7.4	7.4	7.3	7.3	7.4	7.5	7.4	7.4	7.3	7.4	.2
April	6.9	7.1	7.1	7.1	7.1	7.0	7.0	7.1	7.1	7.1	7.1	7.1	7.1	.1
May	6.4	7.1	7.1	7.1	6.9	6.9	7.0	7.1	7.1	7.1	7.1	7.0	7.2	.3
June	7.5	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.0	7.0	7.0	7.1	7.0	.1
July	7.0	6.9	7.0	7.0	7.0	6.9	6.9	6.9	6.8	6.9	7.0	6.9	7.0	.2
August	6.8	7.0	7.0	7.0	7.1	7.1	7.0	7.0	6.9	7.0	7.1	7.1	7.0	.2
September	6.6	6.8	6.9	6.9	6.9	6.9	6.9	6.8	6.7	6.8	6.9	6.9	6.9	.2
October	6.3	6.8	6.9	6.9	6.9	7.0	6.9	6.8	6.8	6.8	6.9	6.9	6.8	.2
November	6.4	6.7	6.7	6.7	6.8	6.9	6.8	6.8	6.8	6.8	6.8	6.7	6.7	.2
December	6.0	6.4	6.4	6.3	6.4	6.4	6.4	6.3	6.5	6.4	6.3	6.4	6.3	.2
January	7.0	6.3	6.2	6.2	6.2	6.3	6.4	6.4	6.4	6.3	6.3	6.3	6.3	.2
February	6.9	6.1	6.1	6.1	6.0	6.1	6.1	6.1	6.2	6.1	6.1	5.9	6.1	.3
March	6.6	6.2	6.1	6.2	6.1	6.2	6.2	6.2	6.3	6.2	6.1	6.0	6.1	.3
April	5.8	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	5.9	6.0	5.9	.1

Note.—See "Column Notes" on p. 2282.

Source: U.S. Department of Labor, Bureau of Labor Statistics, April 1978.

COLUMN NOTES

(1) Unadjusted rate. Unemployment rate not seasonally adjusted.

(2) Official rate. This is the published seasonally adjusted rate. Each of 4 unemployed age-sex components—males and females, 16–19 and 20 yrs of age and over—is independently adjusted. The teenage unemployment and nonagricultural employment components are adjusted using the additive procedure of the X–11 method, while adults are adjusted using the X–11 multiplicative option. Adult male unemployment is adjusted multiplicatively using a prior trend adjustment procedure. The rate is calculated by aggregating the 4 and dividing them by 12 summed labor force components—these 4 plus 8 employment components, which are the 4 age-sex groups in agriculture and nonagricultural industries. This employment total is also used in the calculation of the labor force base in cols. 3–9. The current "implicit" factors for the total unemployment rate derived by dividing the original unemployment rate by the seasonally adjusted rate for the months of 1977, are: January, 112.2; February, 112.6; March, 106.7; April, 96.5; May, 90.1; June, 106.2; July, 101.2; August, 97.6; September, 96.6; October, 92.6; November, 95.3; December, 93.6.

(3) Official procedure used in 1976–77. Only teenage unemployment components are adjusted using the additive procedure of X–11; all other series are adjusted with the multiplicative option. The prior adjustment is not used for adult male unemployment.

(4) Unemployed all multiplicative. The 4 basic unemployed age-sex groups—males and females, 16–19 and 20 yrs and over—are adjusted by the X–11 multiplicative procedure. This procedure was used to adjust unemployment data in 1975 and previous years.

(5) Additive rate. The 4 basic unemployed age-sex groups—males and females, 16–19 and 20 yrs and over—are adjusted by the X–11 additive procedure.

(6) Year-ahead factors. The official seasonal adjustment procedure for each of the components is followed through computation of the factor for the last years of data. A projected factor—the factor for the last year plus one-half of the difference from the previous year—is then computed for each of the components, and the rate is calculated. The rates shown are as first calculated and are not subjec to revision.

(7) Concurrent adjustment through current month (first computed). The official procedure is followed with data reseasonally adjusted incorporating the experience through the current month, i.e., the rate for March 1976 is based on adjustment of data for the period, January 1967–March 1976. The rates are as first calculated and are not subject to revision.

(8) Concurrent adjustment through current month (revised). Follows the same procedures as used in computation of col. 7. Each month, however, revisions in the entire time series are made. This column provides an indication, as the year progresses, of the scope of the revisions and provides the best portrayal of movements in the series.

(9) Stable seasonals (January 1967–December 1973). The stable seasonal option in the X–11 program uses an unweighted average of all available seasonal-irregular ratios to compute final seasonal factors. In essence, it assumes that seasonal patterns are relatively constant from year to year. A cutoff of input data as of December 1973 was selected to avoid the impact of cyclical changes in the 1974–75 period.

(10) Stable seasonals (January 1967–December 1977). Follows the same procedures as used in col. 9, except that the unweighted average is based on seasonal-irregular ratios for the 1967–77 period.

(11) Total. Unemployment and labor force levels adjusted directly.

(12) Residual. Labor force and employment levels adjusted directly, unemployment as a residual and rate then calculated.

(13) Direct adjustment. Unemployment rate adjusted directly.

(14) Average of cols. 2–12.

Note: The X–11 method, developed by Julius Shiskin at the Bureau of the Census over the period 1955–65, was used in computing all the seasonally adjusted series described above.

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THE EMPLOYMENT SITUATION: APRIL 1978

Employment rose sharply in April and unemployment declined, the Bureau of Labor Statistics of the U. S. Department of Labor reported today. The Nation's unemployment rate was down to 6.0 percent, the lowest level in 3-1/2 years.

Total employment--as measured by the monthly survey of households--advanced by more than half a million to 93.8 million. As a result of this strong increase, the proportion of the working age population that is employed rose to a record high of 58.4 percent.

Nonfarm payroll employment--as measured by the monthly survey of establishments--posted a gain of 620,000; about 160,000 of this increase represented the return to work of striking coal miners.

Unemployment

The April unemployment rate, 6.0 percent, and the number of unemployed persons, 6.0 million, were down slightly from the levels of the previous month. The unemployment rate was more than a percentage point below its year-ago level and nearly 2 points lower than a year and a half ago.

The over-the-month reduction in unemployment occurred exclusively among adult men, as women and teenagers showed little movement. Joblessness among persons seeking full-time jobs continued the decline evident since late last summer, and the number of people unemployed because of layoff dropped for the third consecutive month. Unemployment lessened considerably for craft and kindred workers and nonfarm laborers. This development was consistent with an improvement among workers in the construction industry, whose jobless rate fell to a 4-year low.

The unemployment rate for male Vietnam-era veterans declined slightly over the month, continuing a recent strong downtrend. In April 1977, the veterans' unemployment rate was about the same as that for nonveterans. However, it dropped by more than 3 percentage points over the past year to 4.5 percent--while the nonveterans' rate declined by only 1 point. Significant improvements were experienced by Vietnam veterans in all age groups. (See table A-2.)

The median duration of unemployment decreased from 6.2 to 5.8 weeks in April, due to an increased proportion of persons unemployed less than 5 weeks and a slight reduction in those unemployed 15 weeks or more. However, the mean duration of unemployment was unchanged from March at 12.3 weeks. (See table A-4.)

Total Employment and the Labor Force

The growth in the number of employed persons was particularly strong, increasing by 535,000 in April to 93.8 million. Blue-collar workers paced the over-the-month employment gains. Employment of adult men and women, and teenagers all rose over the month.

In line with recent trends, adult women led the increase in the labor force, which rose 370,000 over the month. The April total was thus only 220,000 below the 100-million milestone. In the past year, the labor force has grown by 2.8 million (after taking into account the effect of changes in sampling and estimating procedures in January). All major demographic groups have shown labor force gains, as well as gains in their labor force participation rates. Blacks and women have experienced the greatest rates of labor force growth over this period. (See table A-1.)

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

Selected categories	Quarterly averages					Monthly data		
	1977				1978	1978		
	I	II	III	IV	I	Feb.	Mar.	Apr.
HOUSEHOLD DATA	Thousands of persons							
Civilian labor force	96,221	97,153	97,559	98,622	99,205	99,093	99,414	99,784
Total employment	89,059	90,264	90,823	92,069	93,050	93,003	93,266	93,801
Unemployment	7,161	6,889	6,736	6,554	6,155	6,090	6,148	5,983
Not in labor force	59,225	58,941	59,205	58,777	58,799	58,911	58,776	58,602
Discouraged workers	942	1,062	1,067	969	903	N.A.	N.A.	N.A.
	Percent of labor force							
Unemployment rates:								
All workers	7.4	7.1	6.9	6.6	6.2	6.1	6.2	6.0
Adult men	5.7	5.2	5.0	4.8	4.6	4.5	4.5	4.2
Adult women	7.1	7.0	7.0	6.8	5.9	5.7	5.8	5.8
Teenagers	18.6	18.1	17.6	16.7	16.9	17.4	17.3	16.9
White	6.7	6.3	6.1	5.8	5.4	5.3	5.3	5.2
Black and other	12.9	12.8	13.6	13.3	12.3	11.8	12.4	11.8
Full-time workers	6.9	6.6	6.5	6.2	5.7	5.7	5.6	5.4
ESTABLISHMENT DATA	Thousands of jobs							
Nonfarm payroll employment	80,925	81,871	82,548	83,192	84,101p	84,046	84,537p	85,156p
Goods-producing industries	23,788	24,265	24,359	24,497	24,753p	24,733	24,933p	25,334p
Service-producing industries	57,137	57,606	58,189	58,695	59,348p	59,313	59,604p	59,822p
	Hours of work							
Average weekly hours:								
Total private nonfarm	36.1	36.2	36.0	36.2	35.8p	35.8	36.1p	36.2p
Manufacturing	40.1	40.4	40.3	40.5	40.0p	39.9	40.5p	40.5p
Manufacturing overtime	3.3	3.4	3.3	3.5	3.6p	3.8	3.6p	3.6p

p=preliminary. N.A.=not available.

Industry Payroll Employment

Nonagricultural payroll employment rose by 620,000 in April to 85.2 million, seasonally adjusted. A quarter of this increase, however, reflected the return to work of striking coal miners. Job gains were registered in more than two-thirds of the 172 industries that comprise the BLS diffusion index of private nonagricultural payrolls, with all of the major industry divisions posting increases over the month. Total nonfarm payroll employment has risen 3.5 million since April 1977; more than one-fourth of the rise (excluding the effect of the strike) took place during the past 2 months. (See table B-1.)

Primarily as a result of the strike settlement, employment in mining was up by nearly 170,000 in April to the highest level (just under 900,000) in a quarter of a century. The remainder of the March-April payroll job gain was about evenly distributed between the goods- and service-producing sectors. In the goods industries, there was an unusually sharp increase of 175,000 in contract construction. This was the second straight substantial monthly gain in the industry, pushing the employment level to an all-time high of 4.2 million. Manufacturing employment increased by 60,000 over the month, most of it in the durable goods industries.

In the service-producing sector, the bulk of the March-April job increase occurred in services (70,000) and trade (60,000). Employment in government rose by about 40,000, entirely at the State and local level.

Hours

The average workweek for production or nonsupervisory workers on private nonagricultural payrolls was 36.2 hours, seasonally adjusted, slightly above the March level. The workweek had rebounded in March, following weather-related depressed levels in January and February.

Both the factory workweek and overtime were unchanged in April at 40.5 and 3.6 hours, respectively. Consistent with the strong employment upturn in the industry, hours of work in construction were up half an hour to 37.2 hours in April. The mining workweek, on the other hand, fell 0.6 hour, following a substantial rise in the previous month prior to settlement of the strike. (See table B-2.)

As a result of the sharp job advance, the index of aggregate weekly hours of production or nonsupervisory workers on private nonagricultural payrolls increased by 1.2 percent in April to 120.3 (1967=100), a new record. The factory index was up slightly over the month to its highest level in almost 4 years. (See table B-5.)

Hourly and Weekly Earnings

Average hourly earnings of production or nonsupervisory workers on private nonagricultural payrolls increased in April by 1.1 percent on a seasonally-adjusted basis, accounting for nearly all of the 1.4 percent advance in average weekly earnings. Since last April, both average hourly and weekly earnings have risen by 8.7 percent.

Before adjustment for seasonality, average hourly earnings were $5.60, up 6 cents from March and 45 cents from a year earlier. Average weekly earnings increased by $2.71 over the month to $201.60 and have risen $16.20 since April a year ago. (See table B-3.)

The Hourly Earnings Index

The Hourly Earnings Index--earnings adjusted for overtime in manufacturing, seasonality, and the effects of changes in the proportion of workers in high-wage and low-wage industries--was 211.9 (1967=100) in April, 0.8 percent higher than in March. The index was 8.3 percent above April a year ago. During the 12-month period ended in March, the Hourly Earnings Index in dollars of constant purchasing power rose 1.6 percent. (See table B-4.)

Explanatory Note

This release presents and analyzes statistics from two major surveys. Data on labor force, total employment, and unemployment (A tables) are derived from the Current Population Survey—a sample survey of households which is conducted by the Bureau of the Census for the Bureau of Labor Statistics. Beginning in September 1975, the sample was enlarged by 9,000 households in order to provide greater reliability for smaller States and thus permit the publication of annual statistics for all 50 States and the District of Columbia. These supplementary households were added to the 47,000 national household sample in January 1978; thus the sample now consists of about 56,000 households selected to represent the U.S. civilian noninstitutional population 16 years and over.

Statistics on nonagricultural payroll employment, hours, and earnings (B tables) are collected by the Bureau of Labor Statistics, in cooperation with State agencies, from payroll records of a sample of approximately 165,000 establishments. Unless otherwise indicated, data for both statistical series relate to the week containing the 12th day of the specified month.

Comparability of household and payroll employment statistics

Employment data from the household and payroll surveys differ in several basic respects. The household survey provides information on the labor force activity of the entire civilian noninstitutional population, 16 years of age and over, without duplication. Each person is classified as either employed, unemployed, or not in the labor force. The household survey counts employed persons in both agriculture and nonagricultural industries and, in addition to wage and salary workers (including private household workers), counts the self-employed, unpaid family workers, and persons "with a job but not at work" and not paid for the period absent.

The payroll survey relates only to paid wage and salary employees (regardless of age) on the payrolls of nonagricultural establishments. Persons who worked at more than one job during the survey week or otherwise appear on more than one payroll are counted more than once in the establishment survey. Such persons are counted only once in the household survey and are classified in the job at which they worked the greatest number of hours.

Unemployment

To be classified in the household survey as unemployed an individual must: (1) Have been without a job during the survey week; (2) have made specific efforts to find employment sometime during the prior 4 weeks; and (3) be presently available for work. In addition, persons on layoff and those waiting to begin a new job (within 30 days), neither of whom must meet the jobseeking requirements, are also classified as unemployed. The unemployed total includes all persons who satisfactorily meet the above criteria, regardless of their eligibility for unemployment insurance benefits or any kind of public assistance. The unemployment rate represents the unemployed as a proportion of the civilian labor force (the employed and unemployed combined).

The Bureau regularly publishes a wide variety of labor market measures. See, for example, the demographic, occupational, and industry detail in tables A-2 and A-3 of this release and the comprehensive data package in Employment and Earnings each month. A special grouping of seven unemployment measures is set forth in table A-7. Identified by the symbols U-1 through U-7, these measures represent a range of possible definitions of unemployment and of the labor force—from the most restrictive (U-1) to the most comprehensive (U-7). The official rate of unemployment appears as U-5.

Seasonal adjustment

Nearly all economic phenomena are affected to some degree by seasonal variations. These are recurring, predictable events which are repeated more or less regularly each year—changes in weather, opening and closing of schools, major holidays, industry production schedules, etc. The cumulative effects of these events are often large. For example, on average over the year, they explain about 95 percent of the month-to-month variance in the unemployment figures. Since seasonal variations tend to be large relative to the underlying cyclical trends, it is necessary to use seasonally-adjusted data to interpret short-term economic developments. At the beginning of each year, seasonal adjustment factors for unemployment and other labor force series are calculated for use during the entire year, taking into account the prior year's experience, and revised seasonally-adjusted data are introduced in the release containing January data.

All seasonally-adjusted civilian labor force and unemployment rate statistics, as well as the major employment and unemployment estimates, are computed by aggregating independently adjusted series. The official unemployment rate for all civilian workers is derived by dividing the estimate for total unem-

ployment (the sum of four seasonally-adjusted age-sex components) by the civilian labor force (the sum of 12 seasonally-adjusted age-sex components).

For establishment data, the seasonally-adjusted series for all employees, production workers, average weekly hours, and average hourly earnings are adjusted by aggregating the seasonally-adjusted data from the respective component series. These data are also revised annually, often in conjunction with benchmark (comprehensive counts of employment) adjustments. (The most recent revision of seasonally-adjusted data was based on data through August 1977.)

Sampling variability

Both the household and establishment survey statistics are subject to sampling error, which should be taken into account in evaluating the levels of a series as well as changes over time. Because the household survey is based upon a probability sample, the results may differ from the figures that would be obtained if it were possible to take a complete census using the same questionnaires and procedures. The standard error is the measure of sampling variability, that is, of the variation that occurs by chance because a sample rather than the entire population is surveyed. The chances are about 68 out of 100 that an estimate from the survey differs from a figure that would be obtained through a complete census by less than the standard error. Tables A through H in the "Explanatory Notes" of Employment and Earnings provide approximations of the standard errors for unemployment and other labor force categories. To obtain a 90-percent level of confidence, the confidence interval generally used by BLS, the errors should be multiplied by 1.6. The following examples provide an indication of the magnitude of sampling error: For a monthly change in total employment, the standard error is on the order of plus or minus 182,000. Similarly, the standard error on a change in total unemployment is approximately 115,000. The standard error on a change in the national unemployment rate is 0.12 percentage point.

Although the relatively large size of the monthly establishment survey assures a high degree of accuracy, the estimates derived from it also may differ from the figures obtained if a complete census using the same schedules and procedures were possible. However, since the estimating procedures utilize the previous month's level as the base in computing the current month's level of employment (link-relative technique), sampling and response errors may accumulate over several months. To remove this accumulated error, the employment estimates are adjusted to new benchmarks (comprehensive counts of employment), usually on an annual basis. In addition to taking account of sampling and response errors, the benchmark revision adjusts the estimates for changes in the industrial classification of individual establishments. Employment estimates are currently projected from March 1974 levels, plus an interim benchmark adjustment based on December 1975 levels.

One measure of the reliability of the employment estimates for individual industries is the root-mean-square error (RMSE). The RMSE is the standard deviation adjusted for the bias in estimates. If the bias is small, the chances are about 68 out of 100 that an estimate from the sample would differ from its benchmark by less than the RMSE. For total nonagricultural employment, the RMSE is on the order of plus or minus 81,000. Measures of reliability (approximations of the RMSE) for establishment-survey data and actual amounts of revision due to benchmark adjustments are provided in tables J through O in the "Explanatory Notes" of Employment and Earnings.

HOUSEHOLD DATA

NOTE: Household survey data for periods prior to January 1978 shown in tables A-1 through A-7 are not strictly comparable with current data because of the introduction of an expansion in the sample and revisions in the estimation procedures. As a result, the overall civilian labor force and employment totals in January were raised by roughly a quarter of a million; unemployment levels and rates were essentially unchanged. An explanation of the procedural changes and an indication of the differences appear in "Revisions in the Current Population Survey in January 1978," *Employment and Earnings*, February 1978 Vol. 25 No. 2.

HOUSEHOLD DATA

Table A-1. Employment status of the noninstitutional population

[Numbers in thousands]

Employment status	Not seasonally adjusted			Seasonally adjusted					
	Apr. 1977	Mar. 1978	Apr. 1978	Apr. 1977	Dec. 1977	Jan. 1978	Feb. 1978	Mar. 1978	Apr. 1978
TOTAL									
Total noninstitutional population[1]	157,986	160,313	160,504	157,986	159,736	159,937	160,128	160,313	160,504
Armed Forces[1]	2,132	2,122	2,118	2,132	2,129	2,121	2,124	2,122	2,118
Civilian noninstitutional population[1]	155,854	158,190	158,386	155,854	157,608	157,816	158,004	158,190	158,386
Civilian labor force	95,826	98,443	98,866	96,746	98,919	99,107	99,093	99,414	99,784
Participation rate	61.5	62.2	62.4	62.1	62.8	62.8	62.7	62.8	63.0
Employed	89,258	91,964	93,180	89,877	92,609	92,881	93,003	93,266	93,801
Employment-population ratio[2]	56.5	57.4	58.1	56.9	58.0	58.1	58.1	58.2	58.4
Agriculture	3,140	2,913	3,151	3,256	3,323	3,354	3,242	3,310	3,275
Nonagricultural industries	86,118	89,051	90,029	86,621	89,286	89,527	89,761	89,956	90,526
Unemployed	6,568	6,479	5,685	6,869	6,310	6,226	6,090	6,148	5,983
Unemployment rate	6.9	6.6	5.8	7.1	6.4	6.3	6.1	6.2	6.0
Not in labor force	60,028	59,747	59,520	59,108	58,689	58,709	58,911	58,776	58,602
Men, 20 years and over									
Total noninstitutional population[1]	67,209	68,327	68,419	67,209	68,052	68,148	68,240	68,327	68,419
Civilian noninstitutional population[1]	65,522	66,645	66,740	65,522	66,364	66,467	66,556	66,645	66,740
Civilian labor force	51,909	52,870	53,003	52,147	53,122	53,153	53,142	53,242	53,263
Participation rate	79.2	79.3	79.4	79.6	80.0	80.0	79.8	79.9	79.8
Employed	49,114	50,106	50,725	49,419	50,688	50,673	50,759	50,833	51,038
Employment-population ratio[2]	73.1	73.3	74.1	73.5	74.5	74.4	74.4	74.4	74.6
Agriculture	2,259	2,145	2,274	2,280	2,346	2,394	2,283	2,289	2,295
Nonagricultural industries	46,855	47,961	48,451	47,139	48,342	48,279	48,476	48,544	48,743
Unemployed	2,795	2,765	2,278	2,728	2,434	2,480	2,383	2,409	2,225
Unemployment rate	5.4	5.2	4.3	5.2	4.6	4.7	4.5	4.5	4.2
Not in labor force	13,614	13,774	13,737	13,375	13,242	13,314	13,414	13,403	13,477
Women, 20 years and over									
Total noninstitutional population[1]	73,958	75,196	75,300	73,958	74,883	74,991	75,095	75,196	75,300
Civilian noninstitutional population[1]	73,863	75,093	75,198	73,863	74,783	74,892	74,996	75,093	75,198
Civilian labor force	35,418	36,982	37,133	35,428	36,418	36,595	36,654	36,849	37,117
Participation rate	48.0	49.2	49.4	48.0	48.7	48.9	48.9	49.1	49.4
Employed	33,080	34,817	35,083	32,954	34,009	34,348	34,569	34,722	34,948
Employment-population ratio[2]	44.7	46.3	46.6	44.6	45.4	45.8	46.0	46.2	46.4
Agriculture	511	484	552	577	543	517	604	628	623
Nonagricultural industries	32,570	34,333	34,531	32,377	33,466	33,831	33,965	34,094	34,325
Unemployed	2,337	2,165	2,050	2,474	2,409	2,247	2,085	2,127	2,169
Unemployment rate	6.6	5.9	5.5	7.0	6.6	6.1	5.7	5.8	5.8
Not in labor force	38,446	38,111	38,065	38,435	38,365	38,297	38,342	38,244	38,081
Both sexes, 16-19 years									
Total noninstitutional population[1]	16,819	16,790	16,785	16,819	16,802	16,798	16,794	16,790	16,785
Civilian noninstitutional population[1]	16,468	16,453	16,449	16,468	16,460	16,457	16,453	16,452	16,449
Civilian labor force	8,499	8,591	8,730	9,171	9,379	9,359	9,297	9,323	9,404
Participation rate	51.6	52.2	53.1	55.7	57.0	56.9	56.5	56.7	57.2
Employed	7,063	7,041	7,372	7,504	7,912	7,860	7,675	7,711	7,815
Employment-population ratio[2]	42.0	41.9	43.9	44.6	47.1	46.8	45.7	45.9	46.6
Agriculture	370	284	326	399	434	443	355	393	357
Nonagricultural industries	6,693	6,758	7,047	7,105	7,478	7,417	7,320	7,318	7,458
Unemployed	1,436	1,549	1,357	1,667	1,467	1,499	1,622	1,612	1,589
Unemployment rate	16.9	18.0	15.5	18.2	15.6	16.0	17.4	17.3	16.9
Not in labor force	7,969	7,862	7,719	7,297	7,081	7,098	7,156	7,129	7,045
WHITE									
Total noninstitutional population[1]	138,894	140,714	140,863	138,894	140,264	140,421	140,571	140,714	140,863
Civilian noninstitutional population[1]	137,139	138,997	139,149	137,139	138,523	138,687	138,834	138,997	139,149
Civilian labor force	84,890	86,736	87,198	85,625	87,193	87,425	87,360	87,532	87,945
Participation rate	61.9	62.4	62.7	62.4	62.9	63.0	62.9	63.0	63.2
Employed	79,618	81,737	82,848	80,149	82,391	82,650	82,697	82,880	83,386
Employment-population ratio[2]	57.3	58.1	58.8	57.7	58.7	58.9	58.8	58.9	59.2
Unemployed	5,273	4,999	4,351	5,476	4,802	4,775	4,663	4,652	4,559
Unemployment rate	6.2	5.8	5.0	6.4	5.5	5.5	5.3	5.3	5.2
Not in labor force	52,249	52,261	51,951	51,514	51,330	51,262	51,474	51,465	51,204
BLACK AND OTHER									
Total noninstitutional population[1]	19,091	19,599	19,641	19,091	19,473	19,516	19,558	19,599	19,641
Civilian noninstitutional population[1]	18,714	19,194	19,237	18,714	19,084	19,129	19,170	19,194	19,237
Civilian labor force	10,935	11,707	11,667	11,086	11,761	11,725	11,785	11,871	11,816
Participation rate	58.4	61.0	60.6	59.2	61.6	61.3	61.5	61.8	61.4
Employed	9,640	10,227	10,333	9,725	10,271	10,238	10,391	10,402	10,418
Employment-population ratio[2]	50.5	52.2	52.6	50.9	52.7	52.5	53.1	53.1	53.0
Unemployed	1,295	1,480	1,335	1,361	1,490	1,487	1,394	1,469	1,398
Unemployment rate	11.8	12.6	11.4	12.3	12.7	12.7	11.8	12.4	11.8
Not in labor force	7,779	7,486	7,569	7,628	7,323	7,404	7,385	7,323	7,421

[1] The population and Armed Forces figures are not adjusted for seasonal variations; therefore, identical numbers appear in the unadjusted and seasonally adjusted columns.

[2] Civilian employment as a percent of the total noninstitutional population (including Armed Forces).

Table A-2. Major unemployment indicators, seasonally adjusted

Selected categories	Number of unemployed persons (In thousands)		Unemployment rates					
	Apr. 1977	Apr. 1978	Apr. 1977	Dec. 1977	Jan. 1978	Feb. 1978	Mar. 1978	Apr. 1978
CHARACTERISTICS								
Total, 16 years and over	6,869	5,983	7.1	6.4	6.3	6.1	6.2	6.0
Men, 20 years and over	2,728	2,225	5.2	4.6	4.7	4.5	4.5	4.2
Women, 20 years and over	2,474	2,169	7.0	6.6	6.1	5.7	5.8	5.8
Both sexes, 16-19 years	1,667	1,589	18.2	15.6	16.0	17.4	17.3	16.9
White, total	5,476	4,559	6.4	5.5	5.5	5.3	5.3	5.2
Men, 20 years and over	2,228	1,696	4.8	4.0	4.0	3.9	4.0	3.6
Women, 20 years and over	1,902	1,640	6.2	5.9	5.5	5.0	4.9	5.1
Both sexes, 16-19 years	1,346	1,223	16.2	12.7	13.7	14.8	14.6	14.6
Black and other, total	1,361	1,398	12.3	12.7	12.7	11.8	12.4	11.8
Men, 20 years and over	466	501	8.6	9.1	9.8	8.6	8.5	8.8
Women, 20 years and over	581	539	12.2	11.5	10.8	10.1	11.4	10.5
Both sexes, 16-19 years	314	358	35.8	38.0	38.7	38.0	39.0	35.3
Married men, spouse present	1,463	1,098	3.7	3.2	2.9	2.9	3.0	2.8
Married women, spouse present	1,491	1,146	6.6	6.2	5.6	5.2	5.1	5.0
Women who head families	404	482	9.4	8.1	7.9	7.6	8.6	10.1
Full-time workers	5,427	4,558	6.6	5.9	5.8	5.7	5.6	5.4
Part-time workers	1,443	1,438	9.9	8.9	8.9	8.6	9.6	9.6
Unemployed 15 weeks and over[1]	1,828	1,384	1.9	1.8	1.7	1.6	1.5	1.4
Labor force time lost[2]	--	--	7.4	7.0	6.8	6.6	6.6	6.3
OCCUPATION[3]								
White-collar workers	2,068	1,720	4.4	4.0	3.6	3.5	3.4	3.5
Professional and technical	444	362	3.2	2.8	2.7	2.5	2.6	2.5
Managers and administrators, except farm	286	206	2.9	2.5	2.5	1.9	2.3	2.0
Sales workers	319	261	5.3	4.7	3.9	4.3	4.3	4.3
Clerical workers	1,019	891	6.0	5.5	5.0	5.0	4.5	5.1
Blue-collar workers	2,586	2,196	7.9	7.2	7.1	7.1	7.1	6.5
Craft and kindred workers	623	553	5.0	5.2	5.4	5.0	5.1	4.3
Operatives, except transport	1,082	909	9.5	8.5	7.9	8.1	8.0	7.6
Transport equipment operatives	241	197	6.5	5.6	5.4	5.0	5.2	5.2
Nonfarm laborers	640	537	12.6	10.6	11.0	11.5	11.9	10.0
Service workers	1,116	1,066	8.3	7.8	7.6	7.1	7.7	7.7
Farm workers	137	87	4.7	3.9	3.9	4.7	4.7	3.1
INDUSTRY[3]								
Nonagricultural private wage and salary workers[4]	4,951	4,273	7.1	6.3	6.2	6.1	6.0	5.9
Construction	560	469	12.2	10.8	11.7	11.5	11.3	9.5
Manufacturing	1,458	1,155	6.7	5.7	5.6	5.7	5.4	5.3
Durable goods	776	575	6.1	5.6	5.2	5.0	4.8	4.4
Nondurable goods	682	580	7.7	5.9	6.1	6.5	6.2	6.5
Transportation and public utilities	222	198	4.5	4.9	4.3	3.2	3.7	3.7
Wholesale and retail trade	1,425	1,307	7.9	7.3	7.1	7.1	7.3	7.2
Finance and service industries	1,250	1,100	6.2	5.5	5.3	5.1	5.1	5.2
Government workers	645	603	4.1	4.3	4.2	3.5	3.7	3.8
Agricultural wage and salary workers	179	117	12.1	9.6	9.0	10.1	10.0	7.7
VETERAN STATUS								
Male Vietnam-era veterans:[5]								
20 to 24 years	493	279	7.6	5.6	5.7	5.2	5.0	4.5
20 to 24 years	147	77	15.5	11.8	12.9	12.5	13.2	10.7
25 to 29 years	228	104	7.9	6.1	6.1	5.4	4.6	4.5
30 to 34 years	118	98	4.5	3.7	3.5	3.4	3.5	3.1
Male nonveterans:								
20 to 34 years	1,177	1,086	7.5	6.9	7.1	6.7	6.9	6.5
20 to 24 years	700	632	10.2	9.4	10.1	9.7	9.5	8.8
25 to 29 years	315	344	6.3	5.2	5.4	5.0	5.8	6.1
30 to 34 years	162	110	4.2	4.5	4.0	3.8	3.5	2.9

[1] Unemployment rate calculated as a percent of civilian labor force.

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

[3] Unemployment by occupation includes all experienced unemployed persons, whereas that by industry covers only unemployed wage and salary workers.

[4] Includes mining, not shown separately.

[5] Vietnam-era veterans are those who served between August 5, 1964, and May 7, 1975.

Table A-3. Selected employment indicators

[In thousands]

Selected categories	Not seasonally adjusted		Seasonally adjusted					
	Apr. 1977	Apr. 1978	Apr. 1977	Dec. 1977	Jan. 1978	Feb. 1978	Mar. 1978	Apr. 1978
CHARACTERISTICS								
Total employed, 16 years and over	89,258	93,180	89,877	92,609	92,881	93,003	93,264	93,801
Men	52,955	54,674	53,482	55,012	54,975	54,897	55,013	55,209
Women	36,303	38,506	36,395	37,597	37,906	38,106	38,253	38,593
Married men, spouse present	38,305	38,473	38,450	38,682	38,645	38,466	38,465	38,628
Married women, spouse present	21,076	21,869	21,053	21,416	21,638	21,738	21,674	21,847
OCCUPATION								
White-collar workers	44,791	46,766	44,804	46,316	46,547	46,555	46,835	46,789
Professional and technical	13,659	14,257	13,568	13,981	14,057	14,016	14,060	14,158
Managers and administrators, except farm	9,292	9,987	9,498	9,939	10,067	10,134	10,169	10,212
Sales workers	5,794	5,914	5,744	5,796	5,913	5,811	5,985	5,861
Clerical workers	16,045	16,608	15,994	16,600	16,510	16,594	16,621	16,558
Blue-collar workers	29,521	30,996	30,139	30,807	30,942	31,198	31,039	31,655
Craft and kindred workers	11,670	12,093	11,869	12,153	12,111	12,220	12,169	12,302
Operatives, except transport	10,207	10,809	10,357	10,424	10,755	10,738	10,766	10,974
Transport equipment operatives	3,440	3,539	3,462	3,555	3,432	3,643	3,541	3,560
Nonfarm laborers	4,204	4,554	4,451	4,675	4,644	4,597	4,563	4,819
Service workers	12,252	12,786	12,294	12,617	12,704	12,703	12,572	12,830
Farm workers	2,694	2,632	2,752	2,805	2,872	2,769	2,788	2,687
MAJOR INDUSTRY AND CLASS OF WORKER								
Agriculture:								
Wage and salary workers	1,252	1,353	1,302	1,405	1,387	1,345	1,389	1,408
Self-employed workers	1,534	1,521	1,553	1,605	1,604	1,587	1,527	1,539
Unpaid family workers	355	278	361	346	342	314	389	283
Nonagricultural industries:								
Wage and salary workers	79,753	83,147	80,221	82,692	82,915	83,078	83,124	83,648
Government	15,140	15,473	14,980	15,422	15,267	15,237	15,154	15,305
Private industries	64,613	67,673	65,241	67,270	67,648	67,841	67,970	68,343
Private households	1,331	1,378	1,341	1,436	1,421	1,383	1,293	1,388
Other industries	63,282	66,295	63,900	65,834	66,227	66,458	66,677	66,955
Self-employed workers	5,853	6,364	5,946	6,182	6,259	6,268	6,427	6,467
Unpaid family workers	511	517	500	442	439	488	500	506
PERSONS AT WORK [1]								
Nonagricultural industries	81,788	86,652	81,188	83,662	83,304	84,054	84,285	86,043
Full-time schedules	66,436	70,338	66,603	68,574	68,812	69,215	69,417	70,550
Part time for economic reasons	2,897	3,017	3,192	3,220	2,986	3,193	3,164	3,327
Usually work full time	1,187	1,223	1,188	1,247	1,043	1,128	1,226	1,224
Usually work part time	1,710	1,794	2,004	1,973	1,943	2,065	1,938	2,103
Part time for noneconomic reasons	12,455	13,297	11,393	11,868	11,506	11,646	11,704	12,166

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

Table A-4. Duration of unemployment

[Numbers in thousands]

Weeks of unemployment	Not seasonally adjusted		Seasonally adjusted					
	Apr. 1977	Apr. 1978	Apr. 1977	Dec. 1977	Jan. 1978	Feb. 1978	Mar. 1978	Apr. 1978
DURATION								
Less than 5 weeks	2,545	2,335	3,041	2,628	2,700	2,586	2,820	2,790
5 to 14 weeks	1,666	1,565	1,899	1,937	1,861	1,820	1,877	1,784
15 weeks and over	2,357	1,785	1,828	1,797	1,688	1,568	1,463	1,384
15 to 26 weeks	1,140	1,052	720	941	864	897	766	716
27 weeks and over	1,217	733	1,108	856	824	671	697	668
Average (mean) duration, in weeks	16.3	13.9	14.4	13.8	13.1	12.5	12.3	12.3
Median duration, in weeks	8.9	7.3	7.0	7.1	6.6	7.0	6.2	5.8
PERCENT DISTRIBUTION								
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 5 weeks	38.8	41.1	44.9	41.3	43.2	43.3	45.8	46.8
5 to 14 weeks	25.4	27.5	28.1	30.4	29.8	30.5	30.5	29.9
15 weeks and over	35.9	31.4	27.0	28.2	27.0	26.2	23.8	23.2
15 to 26 weeks	17.4	18.5	10.6	15.0	13.8	15.0	12.4	12.0
27 weeks and over	18.5	12.9	16.4	13.5	13.2	11.2	11.3	11.2

Table A-5. Reasons for unemployment

[Numbers in thousands]

Reasons	Not seasonally adjusted		Seasonally adjusted					
	Apr. 1977	Apr. 1978	Apr. 1977	Dec. 1977	Jan. 1978	Feb. 1978	Mar. 1978	Apr. 1978
NUMBER OF UNEMPLOYED								
Lost last job	3,216	2,616	3,043	2,748	2,698	2,540	2,493	2,475
On layoff	844	631	793	687	768	709	660	593
Other job losers	2,372	1,986	2,250	2,061	1,930	1,831	1,833	1,882
Left last job	774	778	868	877	856	898	862	872
Reentered labor force	1,735	1,509	1,993	1,886	1,821	1,786	1,911	1,734
Seeking first job	842	782	985	820	914	868	923	925
PERCENT DISTRIBUTION								
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Job losers	49.0	46.0	44.2	43.4	42.9	41.6	40.3	41.2
On layoff	12.9	11.1	11.5	10.9	12.2	11.6	10.7	9.9
Other job losers	36.1	34.9	32.7	32.6	30.7	30.0	29.6	31.3
Job leavers	11.8	13.7	12.6	13.9	13.6	14.7	13.9	14.5
Reentrants	26.4	26.5	28.9	29.8	29.0	29.4	30.9	28.9
New entrants	12.8	13.3	14.3	13.0	14.5	14.2	14.9	15.4
UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE								
Job losers	3.4	2.6	3.1	2.8	2.7	2.6	2.5	2.5
Job leavers	.8	.8	.9	.9	.9	.9	.9	.9
Reentrants	1.8	1.5	2.1	1.9	1.8	1.8	1.9	1.7
New entrants	.9	.8	1.0	.8	.9	.9	.9	.9

Table A-6. Unemployment by sex and age, seasonally adjusted

Sex and age	Number of unemployed persons (in thousands)		Unemployment rates					
	Apr. 1977	Apr. 1978	Apr. 1977	Dec. 1977	Jan. 1978	Feb. 1978	Mar. 1978	Apr. 1978
Total, 16 years and over	6,869	5,983	7.1	6.4	6.3	6.1	6.2	6.0
16 to 19 years	1,667	1,589	18.2	15.6	16.0	17.4	17.3	16.9
16 to 17 years	749	798	19.7	17.8	18.2	20.8	20.4	19.9
18 to 19 years	909	782	16.8	13.7	14.5	15.0	15.2	14.4
20 to 24 years	1,574	1,488	11.0	10.2	10.5	10.1	10.3	10.0
25 years and over	3,646	2,933	5.0	4.4	4.2	3.9	4.0	3.9
25 to 54 years	3,075	2,490	5.2	4.6	4.3	4.1	4.2	4.1
55 years and over	580	463	4.1	4.0	3.5	3.3	3.1	3.2
Men, 16 years and over	3,592	3,056	6.3	5.5	5.6	5.6	5.6	5.2
16 to 19 years	864	831	17.5	15.3	14.9	17.2	17.1	16.6
16 to 17 years	384	429	18.5	16.7	17.2	21.1	21.0	19.9
18 to 19 years	462	384	16.1	13.9	13.4	14.3	14.3	13.4
20 to 24 years	843	736	10.8	9.8	10.5	10.3	10.1	9.1
25 years and over	1,887	1,491	4.3	3.6	3.5	3.4	3.5	3.3
25 to 54 years	1,550	1,196	4.4	3.6	3.6	3.4	3.5	3.3
55 years and over	335	297	3.8	3.7	3.2	3.2	3.2	3.3
Women, 16 years and over	3,277	2,927	8.3	7.6	7.3	6.9	7.0	7.0
16 to 19 years	803	758	18.9	16.1	17.4	17.7	17.5	17.2
16 to 17 years	365	369	21.2	19.2	19.5	20.4	19.6	19.9
18 to 19 years	447	398	17.7	13.5	15.8	15.7	16.1	15.6
20 to 24 years	731	752	11.3	10.8	10.5	9.8	10.4	11.0
25 years and over	1,759	1,442	6.1	5.7	5.2	4.7	4.7	4.8
25 to 54 years	1,525	1,294	6.5	6.0	5.5	5.1	5.2	5.2
55 years and over	245	166	4.5	4.4	3.8	3.3	3.0	3.0

Table A-7. Range of unemployment measures based on varying definitions of unemployment and the labor force, seasonally adjusted

Percent[1]

Measures	Quarterly averages					Monthly data		
	1977				1978	1978		
	I	II	III	IV	I	Feb.	Mar.	Apr.
U-1—Persons unemployed 15 weeks or longer as a percent of the civilian labor force	2.2	1.9	1.9	1.9	1.6	1.6	1.5	1.4
U-2—Job losers as a percent of the civilian labor force	3.4	3.1	3.2	3.0	2.6	2.6	2.5	2.5
U-3—Unemployed persons 25 years and over as a percent of the civilian labor force 25 years and over	5.2	5.0	4.9	4.7	4.0	3.9	4.0	3.9
U-4—Unemployed full-time jobseekers as a percent of the full-time labor force	6.9	6.6	6.5	6.2	5.7	5.7	5.6	5.4
U-5—Total unemployed as a percent of the civilian labor force (official measure)	7.4	7.1	6.9	6.6	6.2	6.1	6.2	6.0
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	9.0	8.7	8.6	8.2	7.6	7.6	7.6	7.5
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	10.0	9.7	9.7	9.2	8.5	N.A.	N.A.	N.A.

N.A.=not available.

Table A-8. Employment status of the noninstitutional population in the ten largest States

[Numbers in thousands]

State and employment status	Not seasonally adjusted[2]			Seasonally adjusted					
	Apr. 1977	Mar. 1978	Apr. 1978	Apr. 1977	Dec. 1977	Jan. 1978	Feb. 1978	Mar. 1978	Apr. 1978
California									
Civilian noninstitutional population[1]	15,842	16,148	16,175	15,842	16,090	16,099	16,124	16,148	16,175
Civilian labor force	9,969	10,524	10,538	10,075	10,317	10,288	10,422	10,568	10,643
Employed	9,116	9,681	9,777	9,200	9,602	9,584	9,628	9,745	9,862
Unemployed	853	843	760	875	715	704	794	823	781
Unemployment rate	8.6	8.0	7.2	8.7	6.9	6.8	7.6	7.8	7.3
Florida									
Civilian noninstitutional population[1]	6,327	6,498	6,515	6,327	6,453	6,465	6,481	6,498	6,515
Civilian labor force	3,417	3,608	3,669	(2)	(2)	(2)	(2)	(2)	(2)
Employed	3,141	3,381	3,446	(2)	(2)	(2)	(2)	(2)	(2)
Unemployed	275	227	223	(2)	(2)	(2)	(2)	(2)	(2)
Unemployment rate	8.1	6.3	6.1	(2)	(2)	(2)	(2)	(2)	(2)
Illinois									
Civilian noninstitutional population[1]	8,133	8,200	8,205	8,133	8,194	8,189	8,195	8,200	8,205
Civilian labor force	5,115	5,230	5,236	5,167	5,276	5,299	5,262	5,243	5,291
Employed	4,840	4,880	4,950	4,866	4,945	4,943	4,923	4,912	4,977
Unemployed	276	350	287	301	331	356	339	331	314
Unemployment rate	5.4	6.7	5.5	5.8	6.3	6.7	6.4	6.3	5.9
Massachusetts									
Civilian noninstitutional population[1]	4,285	4,323	4,327	4,285	4,317	4,315	4,319	4,323	4,327
Civilian labor force	2,747	2,799	2,794	(2)	(2)	(2)	(2)	(2)	(2)
Employed	2,499	2,627	2,635	2,536	2,613	2,649	2,641	2,657	2,672
Unemployed	248	172	160	(2)	(2)	(2)	(2)	(2)	(2)
Unemployment rate	9.0	6.2	5.7	(2)	(2)	(2)	(2)	(2)	(2)
Michigan									
Civilian noninstitutional population[1]	6,532	6,602	6,609	6,532	6,590	6,590	6,596	6,602	6,609
Civilian labor force	4,062	4,125	4,155	(2)	(2)	(2)	(2)	(2)	(2)
Employed	3,765	3,829	3,881	(2)	(2)	(2)	(2)	(2)	(2)
Unemployed	297	296	274	277	319	330	242	229	254
Unemployment rate	7.3	7.2	6.6	(2)	(2)	(2)	(2)	(2)	(2)
New Jersey									
Civilian noninstitutional population[1]	5,400	5,448	5,453	5,400	5,440	5,439	5,444	5,448	5,453
Civilian labor force	3,316	3,267	3,302	3,352	3,487	3,406	3,356	3,274	3,339
Employed	2,981	3,037	3,064	3,010	3,226	3,175	3,109	3,067	3,093
Unemployed	334	230	238	342	261	231	247	207	246
Unemployment rate	10.1	7.1	7.2	10.2	7.5	6.8	7.4	6.3	7.4
New York									
Civilian noninstitutional population[1]	13,294	13,321	13,324	13,294	13,326	13,317	13,318	13,321	13,324
Civilian labor force	7,773	7,773	7,830	7,789	7,906	7,906	7,826	7,784	7,842
Employed	7,055	7,132	7,245	7,049	7,246	7,278	7,192	7,182	7,239
Unemployed	718	641	585	740	660	628	634	602	603
Unemployment rate	9.2	8.2	7.5	9.5	8.3	7.9	8.1	7.7	7.7
Ohio									
Civilian noninstitutional population[1]	7,761	7,820	7,826	7,761	7,814	7,812	7,816	7,820	7,826
Civilian labor force	4,711	4,744	4,788	4,772	4,842	4,787	4,795	4,787	4,850
Employed	4,418	4,452	4,518	4,474	4,580	4,526	4,541	4,538	4,574
Unemployed	292	291	270	298	262	261	254	249	276
Unemployment rate	6.2	6.1	5.6	6.2	5.4	5.5	5.3	5.2	5.7
Pennsylvania									
Civilian noninstitutional population[1]	8,799	8,850	8,856	8,799	8,847	8,842	8,846	8,850	8,856
Civilian labor force	5,133	5,232	5,207	5,173	5,207	5,166	5,188	5,269	5,248
Employed	4,772	4,818	4,848	4,789	4,800	4,802	4,862	4,899	4,866
Unemployed	361	414	359	384	407	364	326	370	382
Unemployment rate	7.0	7.9	6.9	7.4	7.8	7.0	6.3	7.0	7.3
Texas									
Civilian noninstitutional population[1]	8,948	9,143	9,160	8,948	9,101	9,108	9,125	9,143	9,160
Civilian labor force	5,704	5,950	5,913	5,754	5,932	5,984	5,919	5,990	5,955
Employed	5,423	5,670	5,683	5,435	5,625	5,692	5,612	5,702	5,695
Unemployed	282	280	230	319	307	292	307	288	260
Unemployment rate	4.9	4.7	3.9	5.5	5.2	4.9	5.2	4.8	4.4

[1] The population figures are not adjusted for seasonal variations; therefore, identical numbers appear in the unadjusted and the seasonally adjusted columns.

[2] These are the official Bureau of Labor Statistics' estimates used in the administration of Federal fund allocation programs.

[3] Seasonally-adjusted data are not presented for this series, because the variations that are due to seasonal influences cannot be separated with sufficient precision from those which stem from the trend-cycle and irregular components of the original time series.

NOTE: A comprehensive reappraisal of the seasonal adjustment of the employment and unemployment series for all 10 States is now underway. Revisions in certain series will be introduced in the near future.

ESTABLISHMENT DATA

Table B-1. Employees on nonagricultural payrolls, by industry

[In thousands]

Industry	Not seasonally adjusted				Seasonally adjusted					
	APR. 1977	FEB. 1978	MAR. 1978 p	APR. 1978 p	APR. 1977	DEC. 1977	JAN. 1978	FEB. 1978	MAR. 1978 p	APR. 1978 p
TOTAL	81,332	82,652	83,715	84,752	81,620	83,429	83,719	84,046	84,527	85,156
GOODS-PRODUCING	23,946	23,992	24,349	24,986	24,176	24,526	24,593	24,733	24,933	25,334
MINING	839	697	713	684	847	711	705	711	725	853
CONTRACT CONSTRUCTION	3,681	3,508	3,712	4,053	3,930	3,947	3,916	3,947	4,044	4,217
MANUFACTURING	19,327	19,790	19,924	20,049	19,499	19,866	19,972	20,075	20,164	20,224
Production workers	13,893	14,229	14,339	14,426	14,044	14,306	14,403	14,489	14,555	14,591
DURABLE GOODS	11,349	11,746	11,829	11,942	11,404	11,748	11,828	11,909	11,961	12,001
Production workers	8,113	8,427	8,495	8,578	8,167	8,459	8,514	8,575	8,611	8,630
Ordnance and accessories	155.5	156.9	156.9	157.6	156	155	156	157	157	158
Lumber and wood products	626.1	641.9	649.2	660.4	635	666	667	664	669	670
Furniture and fixtures	501.0	531.9	535.1	535.5	506	530	532	537	540	540
Stone, clay, and glass products	643.5	649.2	661.5	682.6	650	671	675	676	680	689
Primary metal industries	1,205.4	1,207.5	1,205.0	1,214.4	1,208	1,204	1,212	1,217	1,215	1,217
Fabricated metal products	1,423.4	1,451.1	1,499.9	1,511.7	1,433	1,492	1,499	1,515	1,516	1,522
Machinery, except electrical	2,152.1	2,265.6	2,293.5	2,316.3	2,150	2,257	2,265	2,279	2,293	2,314
Electrical equipment	1,901.8	2,004.7	2,014.2	2,028.0	1,915	1,987	1,998	2,017	2,035	2,042
Transportation equipment	1,800.5	1,826.3	1,848.2	1,871.1	1,802	1,830	1,862	1,879	1,882	1,873
Instruments and related products	522.2	538.9	542.3	543.4	525	536	539	541	546	547
Miscellaneous manufacturing	415.5	411.7	413.0	421.0	424	420	423	427	423	429
NONDURABLE GOODS	7,978	8,044	8,095	8,107	8,095	8,120	8,144	8,166	8,203	8,223
Production workers	5,775	5,801	5,844	5,848	5,877	5,868	5,891	5,913	5,944	5,951
Food and kindred products	1,664.5	1,654.2	1,671.4	1,664.4	1,741	1,714	1,728	1,729	1,743	1,741
Tobacco manufacturers	66.5	67.6	65.3	61.9	74	69	69	69	70	68
Textile mill products	978.4	990.6	991.4	990.9	979	993	991	995	995	992
Apparel and other textile products	1,295.2	1,279.5	1,293.9	1,293.2	1,290	1,291	1,299	1,293	1,291	1,297
Paper and allied products	689.4	705.0	707.7	712.8	695	705	707	713	714	719
Printing and publishing	1,100.5	1,127.1	1,130.7	1,134.9	1,103	1,123	1,125	1,125	1,133	1,137
Chemicals and allied products	1,055.2	1,061.9	1,066.4	1,070.5	1,057	1,064	1,066	1,070	1,071	1,075
Petroleum and coal products	206.4	210.1	211.5	213.1	209	212	214	217	217	216
Rubber and plastics products, nec	667.7	693.0	694.4	700.4	681	689	693	701	706	714
Leather and leather products	266.3	260.4	262.3	264.3	266	263	262	263	263	264
SERVICE-PRODUCING	57,494	58,860	59,367	59,966	57,444	58,903	59,126	59,313	59,604	59,822
TRANSPORTATION AND PUBLIC UTILITIES	4,539	4,591	4,632	4,662	4,575	4,652	4,628	4,651	4,674	4,700
WHOLESALE AND RETAIL TRADE	18,026	18,343	18,512	18,746	18,175	18,610	18,744	18,744	18,843	18,902
WHOLESALE TRADE	4,332	4,465	4,494	4,511	4,371	4,460	4,482	4,510	4,539	4,552
RETAIL TRADE	13,694	13,878	14,018	14,235	13,804	14,150	14,262	14,234	14,304	14,350
FINANCE, INSURANCE, AND REAL ESTATE	4,457	4,605	4,639	4,682	4,465	4,611	4,630	4,647	4,672	4,696
SERVICES	15,182	15,602	15,755	15,993	15,182	15,663	15,693	15,791	15,882	15,953
GOVERNMENT	15,290	15,719	15,829	15,823	15,049	15,367	15,431	15,480	15,533	15,571
FEDERAL	2,716	2,720	2,725	2,732	2,721	2,713	2,736	2,736	2,736	2,737
STATE AND LOCAL	12,574	12,999	13,104	13,091	12,328	12,654	12,695	12,744	12,797	12,834

p=preliminary.

ESTABLISHMENT DATA

Table B-2. Average weekly hours of production or nonsupervisory workers,[1] on private nonagricultural payrolls, by industry

Industry	Not seasonally adjusted				Seasonally adjusted					
	NOV. 1977	DEC. 1978	JAN. 1979	FEB.p 1979	SEP. 1977	OCT. 1977	NOV. 1977	DEC. 1978	JAN. 1979	FEB.p 1979
TOTAL PRIVATE	35.3	35.5	35.6	35.6	35.2	35.2	35.6	35.8	35.1	36.2
MINING	43.6	43.4	44.2	43.7	44.3	43.7	43.2	43.6	44.7	44.1
CONTRACT CONSTRUCTION	37.2	36.1	36.3	36.5	37.3	36.4	36.6	36.7	36.7	37.2
MANUFACTURING	40.3	39.6	40.3	40.3	40.3	40.5	39.6	39.6	40.5	40.5
Overtime hours	3.1	3.4	3.4	3.4	3.4	3.5	3.2	3.3	3.6	3.6
DURABLE GOODS	40.7	40.2	40.9	40.6	40.8	41.2	40.2	40.5	41.1	41.1
Overtime hours	3.3	3.7	3.8	3.6	3.5	3.7	3.5	4.0	3.8	3.8
Ordnance and accessories	41.0	37.7	39.4	39.5	41.0	41.1	40.2	37.9	39.3	38.5
Lumber and wood products	40.0	39.2	39.7	39.8	40.0	40.2	39.4	39.4	40.0	39.8
Furniture and fixtures	37.6	36.3	39.4	39.0	38.5	39.6	37.7	38.4	39.5	39.6
Stone, clay, and glass products	41.4	40.2	41.2	41.7	41.7	41.6	40.3	40.5	41.4	42.0
Primary metal industries	41.4	41.1	41.3	41.5	41.4	41.4	41.3	41.5	41.4	41.5
Fabricated metal products	40.5	40.4	41.0	41.0	40.6	41.5	40.3	40.7	41.2	41.3
Machinery, except electrical	41.1	41.0	42.1	41.9	41.4	41.9	40.9	41.7	42.1	42.1
Electrical equipment	39.9	39.4	40.1	39.6	40.1	40.3	39.5	39.8	40.2	40.0
Transportation equipment	42.0	40.0	41.4	41.8	42.5	42.2	41.1	40.6	41.6	41.8
Instruments and related products	40.3	40.0	40.5	40.6	40.3	40.4	39.8	40.3	41.0	40.9
Miscellaneous manufacturing	38.9	38.1	39.2	39.1	38.6	38.9	38.0	38.3	39.1	39.2
NONDURABLE GOODS	39.8	38.7	39.4	39.3	39.6	39.5	38.7	39.1	39.6	39.7
Overtime hours	2.9	3.1	3.1	3.1	3.2	3.1	3.1	3.4	3.3	3.4
Food and kindred products	39.0	38.3	39.4	39.1	40.3	39.7	39.1	39.6	40.0	39.8
Tobacco manufacturers	37.2	37.2	38.5	38.0	38.2	38.3	37.5	38.5	39.0	39.3
Textile mill products	40.1	40.0	40.4	40.3	40.5	40.6	40.0	40.3	40.6	40.7
Apparel and other textile products	35.0	34.7	35.7	35.8	35.3	35.5	33.9	35.2	35.8	36.1
Paper and allied products	42.4	41.8	42.4	42.7	43.5	42.9	42.2	42.4	43.2	43.4
Printing and publishing	37.4	37.0	37.9	37.7	37.5	37.5	37.4	37.5	38.0	38.1
Chemicals and allied products	41.8	41.5	42.3	41.9	41.8	41.8	41.6	41.7	42.1	41.6
Petroleum and coal products	42.7	42.9	43.6	44.0	42.7	43.3	43.6	42.4	43.0	44.8
Rubber and plastics products, nec	41.0	39.4	40.5	40.5	41.1	40.7	39.8	39.6	40.5	40.9
Leather and leather products	36.7	36.3	37.2	37.4	37.3	37.2	36.6	36.6	37.4	38.0
TRANSPORTATION AND PUBLIC UTILITIES	39.7	40.1	40.2	40.2	40.1	40.2	39.9	40.4	40.6	40.4
WHOLESALE AND RETAIL TRADE	33.1	32.4	32.7	32.9	33.4	33.3	32.9	32.9	33.0	33.1
WHOLESALE TRADE	38.5	38.5	39.2	39.4	38.6	38.9	38.6	38.8	39.0	39.1
RETAIL TRADE	31.6	30.8	31.1	31.3	31.8	31.7	31.1	31.1	31.3	31.4
FINANCE, INSURANCE, AND REAL ESTATE	36.6	36.6	36.6	36.9	36.6	36.6	36.5	36.5	36.7	36.9
SERVICES	33.3	33.1	33.2	33.3	33.5	33.4	33.5	33.2	33.4	33.5

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

p=preliminary.

Table B-3. Average hourly and weekly earnings of production or nonsupervisory workers[1] on private nonagricultural payrolls, by industry

Industry	Average hourly earnings				Average weekly earnings			
	APR. 1977	FEB. 1978	MAR. 1978 P	APR. 1978 P	APR. 1977	FEB. 1978	MAR. 1978 P	APR. 1978 P
TOTAL PRIVATE	$5.15	$5.54	$5.54	$5.60	$195.40	$195.61	$198.96	$201.60
Seasonally adjusted	5.17	5.52	5.56	5.62	197.15	197.62	200.72	203.44
MINING	6.40	6.85	6.87	7.37	295.52	297.29	303.65	322.07
CONTRACT CONSTRUCTION	7.96	8.30	8.33	8.33	281.56	296.84	302.39	306.27
MANUFACTURING	5.52	5.96	5.96	5.99	220.80	235.22	240.19	241.40
DURABLE GOODS	5.58	6.03	6.05	6.07	239.32	254.47	259.76	261.35
Ordnance and accessories	6.16	6.71	6.73	6.76	251.74	252.67	265.16	260.26
Lumber and wood products	4.76	5.14	5.14	5.19	197.60	208.33	211.46	214.12
Furniture and fixtures	4.21	4.56	4.54	4.57	158.56	176.28	178.98	178.23
Stone, clay, and glass products	5.66	6.10	6.02	6.12	234.32	241.20	248.02	255.20
Primary metal industries	7.22	7.77	7.69	8.06	283.91	320.18	320.16	334.49
Fabricated metal products	5.71	6.04	6.10	6.15	231.26	243.41	250.13	252.15
Machinery, except electrical	6.07	6.54	6.55	6.54	249.48	272.06	275.71	275.27
Electrical equipment	5.20	5.65	5.65	5.66	207.48	222.61	226.57	225.27
Transportation equipment	7.01	7.48	7.56	7.60	294.42	298.20	312.99	317.68
Instruments and related products	5.11	5.49	5.48	5.48	204.40	219.60	224.54	222.49
Miscellaneous manufacturing	4.27	4.57	4.57	4.59	165.10	174.12	179.14	179.09
NONDURABLE GOODS	4.96	5.35	5.37	5.39	195.11	207.05	211.56	211.83
Food and kindred products	5.26	5.65	5.66	5.70	208.30	220.35	223.00	222.87
Tobacco manufacturers	5.55	5.98	6.23	6.32	211.30	227.02	239.86	245.85
Textile mill products	3.87	4.16	4.16	4.17	155.19	166.40	168.07	168.05
Apparel and other textile products	3.57	3.85	3.87	3.91	124.95	134.37	136.97	136.96
Paper and allied products	6.76	6.27	6.27	6.27	247.41	262.05	268.36	267.73
Printing and publishing	5.78	6.34	6.38	6.36	223.65	235.95	241.40	240.90
Chemicals and allied products	6.27	6.78	6.75	6.81	262.71	281.37	285.18	283.58
Petroleum and coal products	7.70	8.40	8.34	8.49	326.70	358.68	361.96	375.60
Rubber and plastics products, nec	5.36	5.81	5.89	5.93	207.46	225.21	214.25	216.45
Leather and leather products	3.61	3.97	3.97	3.97	132.49	140.48	143.96	144.74
TRANSPORTATION AND PUBLIC UTILITIES	6.90	7.32	7.34	7.41	271.32	283.53	285.07	287.98
WHOLESALE AND RETAIL TRADE	4.23	4.55	4.56	4.60	140.01	147.42	148.11	150.88
WHOLESALE TRADE	5.49	5.84	5.86	5.93	212.08	224.84	227.37	230.69
RETAIL TRADE	3.78	4.08	4.09	4.12	119.07	124.85	126.38	128.13
FINANCE, INSURANCE, AND REAL ESTATE	4.34	4.84	4.84	4.92	166.16	177.14	177.14	181.55
SERVICES	4.64	5.02	5.01	5.06	154.51	166.16	166.33	168.50

[1] See footnote 1, table B-2.
P=preliminary.

Table B-4. Hourly earnings index for production or nonsupervisory workers[1] on private nonagricultural payrolls, by industry division, seasonally adjusted

(1967=100)

Industry	APR. 1977	NOV. 1977	DEC. 1977	JAN. 1978	FEB. 1978	MAR. P 1978	APR. P 1978	Percent change from: APR. 1977–APR. 1978	Percent change from: MAR. 1978–APR. 1978
TOTAL PRIVATE NONFARM:									
Current dollars	195.6	204.1	205.2	208.1	208.8	210.2	211.9	8.3	0.8
Constant (1967) dollars	108.7	110.2	110.3	111.0	110.6	110.5	N.A.	(2)	(3)
MINING	211.5	221.7	219.1	221.4	223.2	225.2	231.0	9.2	2.6
CONTRACT CONSTRUCTION	191.2	198.5	198.9	201.1	201.6	203.2	203.5	5.3	.2
MANUFACTURING	195.6	205.4	206.3	208.3	209.7	210.9	212.0	8.4	.5
TRANSPORTATION AND PUBLIC UTILITIES	209.2	219.1	221.5	223.3	223.9	226.3	228.0	9.0	.8
WHOLESALE AND RETAIL TRADE	190.0	197.1	198.8	202.4	203.3	204.6	206.4	8.6	.9
FINANCE, INSURANCE, AND REAL ESTATE	177.3	185.3	185.8	188.5	187.5	188.9	192.0	8.3	1.6
SERVICES	199.8	208.8	209.4	214.4	214.3	215.5	217.9	9.0	1.1

[1] SEE FOOTNOTE 1, TABLE B-2.
[2] PERCENT CHANGE WAS 1.6 FROM MARCH 1977 TO MARCH 1978, THE LATEST MONTH AVAILABLE.
[3] PERCENT CHANGE WAS -.1 FROM FEBRUARY 1978 TO MARCH 1978, THE LATEST MONTH AVAILABLE.

N.A. = not available.
P=preliminary.

NOTE: All series are in current dollars except where indicated. The index excludes effects of two types of changes that are unrelated to underlying wage-rate developments: fluctuations in overtime premiums in manufacturing (the only sector for which overtime data are available) and the effects of changes in the proportion of workers in high-wage and low-wage industries.

Table B-5. Indexes of aggregate weekly hours of production or nonsupervisory workers,[1] on private nonagricultural payrolls, by industry, seasonally adjusted

(1967=100)

Industry division and group	1977 APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	1978 JAN.	FEB.	MAR. P	APR. P
TOTAL PRIVATE	115.4	115.9	115.8	115.8	115.6	115.9	116.8	117.2	117.5	116.1	117.0	118.9	120.3
GOODS-PRODUCING	100.4	101.4	101.8	101.4	100.6	100.9	101.7	102.3	102.1	99.5	101.4	104.0	106.3
MINING	141.6	140.6	142.3	139.9	134.7	142.5	143.9	144.8	113.3	110.7	112.6	118.3	119.7
CONTRACT CONSTRUCTION	111.7	112.4	111.8	112.9	110.8	110.4	112.3	114.0	113.5	104.7	108.9	115.7	123.5
MANUFACTURING	97.5	98.1	98.7	98.0	97.6	97.8	98.4	98.8	99.7	98.2	99.7	101.5	101.8
DURABLE GOODS	96.9	97.8	98.7	98.3	98.1	98.4	99.3	99.5	100.8	99.3	100.9	102.6	102.9
Ordnance and accessories	40.1	40.7	41.0	40.5	39.3	39.1	38.2	38.2	40.2	39.8	39.1	39.5	38.7
Lumber and wood products	103.5	104.1	104.0	105.3	104.0	106.0	106.6	106.5	109.4	107.6	106.8	104.4	108.9
Furniture and fixtures	106.1	107.1	107.9	108.4	107.2	108.3	110.6	111.7	113.8	109.3	110.5	111.6	110.9
Stone, clay, and glass products	103.9	104.2	105.4	104.9	104.1	103.3	103.2	106.7	107.0	104.3	105.4	107.5	110.9
Primary metal industries	99.7	90.7	90.9	89.0	88.2	89.0	89.7	89.5	89.7	89.5	91.2	90.8	91.0
Fabricated metal products	101.3	102.8	104.2	103.7	103.3	103.1	105.0	105.7	107.7	105.3	107.6	108.9	109.5
Machinery, except electrical	98.8	100.2	101.6	101.2	100.5	101.6	105.5	104.9	106.0	104.0	107.0	108.8	109.7
Electrical equipment and supplies	96.3	97.2	97.9	98.3	98.3	97.8	98.8	99.4	100.4	98.9	100.3	103.0	102.5
Transportation equipment	94.7	95.3	96.5	94.8	95.4	96.5	96.2	94.5	96.7	96.5	96.3	98.5	98.3
Instruments and related products	111.7	112.3	113.2	111.7	111.3	112.4	113.2	113.4	114.4	113.4	114.8	117.5	117.2
Miscellaneous manufacturing industry	95.0	94.7	94.6	91.4	91.3	90.3	91.1	91.5	93.9	92.3	93.9	96.1	96.7
NONDURABLE GOODS	98.5	98.5	98.7	97.7	96.9	96.9	97.1	97.8	98.1	96.5	97.8	99.7	100.1
Food and kindred products	98.5	97.3	97.3	95.9	94.5	94.1	92.8	94.2	94.6	94.4	96.0	97.8	97.0
Tobacco manufactures	80.5	78.2	80.2	77.2	71.7	73.2	72.4	72.2	74.2	72.4	74.6	76.7	74.5
Textile mill products	99.6	100.2	99.7	99.9	98.9	99.4	100.2	101.4	100.8	99.3	100.4	101.4	101.3
Apparel and other textile products	87.7	88.6	89.8	87.6	87.8	87.2	87.8	88.6	89.0	84.2	87.2	89.0	90.4
Paper and allied products	100.8	100.4	101.1	100.3	99.4	99.7	100.2	99.6	100.8	99.3	100.2	102.8	103.5
Printing and publishing	95.2	95.1	95.3	95.6	95.1	95.7	95.7	95.9	95.9	94.6	95.3	97.0	97.4
Chemicals and allied products	102.9	103.3	103.8	103.7	103.4	103.0	102.6	103.0	103.5	103.8	104.5	105.5	104.4
Petroleum and coal products	119.6	119.3	121.9	119.9	120.4	120.8	122.2	124.8	125.7	126.6	127.8	126.0	130.1
Rubber and plastics products, nec	134.8	135.3	133.9	132.5	126.7	129.3	130.5	132.5	133.8	131.3	131.9	137.1	139.9
Leather and leather products	73.4	73.3	72.9	69.9	71.8	72.7	73.8	73.7	71.9	70.7	70.7	72.3	74.1
SERVICE-PRODUCING	125.5	125.9	125.6	125.8	126.1	126.4	127.2	127.5	128.2	127.6	127.8	129.2	130.0
TRANSPORTATION AND PUBLIC UTILITIES	103.8	104.6	104.1	103.1	103.5	103.9	102.9	105.1	105.6	103.5	105.4	106.3	106.4
WHOLESALE AND RETAIL TRADE	121.0	121.4	121.2	121.6	121.6	121.8	122.7	122.4	123.2	122.3	122.3	123.7	124.4
WHOLESALE TRADE	117.3	117.3	117.3	117.5	117.5	117.8	118.7	118.5	119.9	118.5	120.3	121.5	122.2
RETAIL TRADE	122.4	123.0	122.7	123.1	123.1	123.3	124.2	123.7	124.8	123.5	123.1	124.5	125.2
FINANCE, INSURANCE, AND REAL ESTATE	131.0	131.6	131.7	132.3	132.7	133.2	134.2	134.9	134.9	135.4	135.9	137.1	138.8
SERVICES	140.1	140.3	139.9	140.1	140.6	140.9	142.7	142.6	143.4	143.8	143.4	144.9	146.0

[1] See footnote 1, table B-2.

P=preliminary.

Table B-6. Indexes of diffusion: Percent of industries in which employment[1] increased

Year and month	Over 1-month span	Over 3-month span	Over 6-month span	Over 12-month span
1975				
January	15.1	12.8	12.8	16.6
February	15.7	12.8	11.9	17.4
March	25.6	18.6	17.7	17.7
April	39.0	32.3	28.2	20.6
May	51.2	43.9	41.6	27.0
June	40.7	52.3	56.7	40.7
July	58.1	57.0	67.2	50.6
August	73.0	76.2	70.1	63.1
September	80.8	81.7	75.3	72.4
October	66.9	74.1	82.3	77.3
November	62.2	72.4	83.4	80.2
December	74.1	74.7	81.7	82.6
1976				
January	78.5	82.0	83.1	86.0
February	77.9	84.3	81.7	84.6
March	74.1	85.2	79.9	81.1
April	79.4	77.9	79.4	74.4
May	66.6	71.5	70.9	79.7
June	54.1	61.0	68.6	79.1
July	57.3	52.0	57.0	74.1
August	67.1	62.5	57.3	74.7
September	69.8	56.7	63.7	78.5
October	42.4	62.8	69.8	76.5
November	69.5	58.7	73.5	75.0
December	73.0	79.9	78.5	74.7
1977				
January	75.0	79.7	89.0	75.9
February	73.5	86.0	86.6	75.6
March	82.5	85.8	83.1	78.2
April	77.6	84.0	80.5	78.2
May	68.6	73.3	71.5	79.1
June	63.7	70.1	68.0	77.6
July	65.7	56.1	68.3	78.8
August	50.0	62.5	68.3	78.8
September	61.3	57.0	72.1	77.3p
October	59.9	73.3	75.0	77.0p
November	75.0	76.2	80.5	
December	73.8	77.9	85.8p	
1978				
January	66.9	80.5	83.4p	
February	70.1	82.8p		
March	75.3p	78.8p		
April	68.6p			
May				
June				
July				
August				
September				
October				
November				
December				

[1] Number of employees, seasonally adjusted, on payrolls of 172 private nonagricultural industries.
p = preliminary.

Senator BENTSEN. Commissioner Stein, the very large increase in employment in the last 4 months is welcome, of course. We are delighted to see that. But are we now faced with a problem of possible labor shortages where we are beginning to reach a level of employment where we will see an acceleration of wage inflation? Do you see any problem with that? Will we begin to have bottlenecks in labor markets?

Mr. STEIN. I think that is the type of question, Mr. Vice Chairman to which anything I can say would be only speculative at this point. But it appears to us that we still have a fair amount of slack in the labor market at a 6-percent overall unemployment rate.

Senator BENTSEN. Why do you think we have such a strong demand for labor at a time of modest economic growth?

Mr. STEIN. We think there are both temporary and long-term factors involved there. I wonder if I could refer that question to Mr. Mark, who has been studying that particular phenomenon recently.

Mr. MARK. I think there was this interplay of short term and longer term factors. The shorter term reflected the production decline in the first quarter. At the same time we have a very large employment increase. The output decline was largely a reflection of temporary dislocations, the cold weather, the sharp winter, the coal strike, and many other things. At the same time the employment increase was a reflection of longer term expectations; businessmen, had been hiring for sometime and with the view perhaps toward longer range considerations and longer range growth. So the two effects took place.

It seems to be that the employment increase was a reflection of expectations where the output decline was a reflection of short-term reality, which resulted in the productivity decline.

Senator BENTSEN. I am encouraged to see black teenage unemployment showing some reduction from 39 percent to 35 percent. Obviously, it is still at an intolerably high level. But to what do you attribute the decline and do you think that is an accurate sampling of what is happening?

Mr. STEIN. The figures we have on black teenage unemployment are very volatile, and I don't know that I would attribute much to this change. We know the range for that particular group has been between 35 and 40 percent over the past 3 years. If this is the beginning of a downtrend, we would be very pleased. But I think we need to go at least below that 35 percent level and remain below for awhile before we could be confident about it.

Senator BENTSEN. I noticed a very substantial increase in the contract construction employment in April of 175,000 and a large part of the increase in employment really is in that area. To what do you attribute that? And, in turn, what do you think will happen as a consequence of the increases in interest rates that are now taking place?

Mr. STEIN. We have been trying to track down that increase in construction. It surprised us to see such a big increase. Part of it, we believe, is due to EDA funding being put in place over the past several months and having an effect now. We have seen a very substantial increase in the roadbuilding sector of construction and it is really pretty widespread.

We are worried about our sample. But, the increase was widespread geographically and includes all sectors of construction. We think housing starts, which are picking up, are being reflected in the employment and man-hour figures.

I wouldn't care to speculate as to what might happen in the future as a result of interest rates.

Senator BENTSEN. One of the things that I would add to my question of high figures on black teenagers, and you, in turn, are not too sure of its reliability. I notice for black men 20 years and over, your figures show an actual increase. That seems to be in contradiction to the black teenager reduction. Can you explain that phenomenon?

Mr. STEIN. I think we are dealing with numbers which don't have the same reliability as our overall figures on a month-to-month basis. Our minorities are approximately 12 percent of the total and, therefore, our survey sample includes only a proportionate number of such households. It takes a fair change before we can have confidence in a change in the percentage rates. I wouldn't attribute much significance to the latest decline for black teenagers. But I think the picture for black workers has emerged over a period of time and they have not shown the kind of improvement that white workers have.

Senator BENTSEN. I note the unemployment rate for women, who are heads of families, increased in April. To what do you attribute that?

Mr. STEIN. I am afraid we don't have any specific explanation for that. We noticed that they normally have a higher unemployment rate than other women. It is probably the difficulty of just finding the right kind of job that will fit with their other responsibilities and probably many of them are seeking jobs that fit into certain hours, making it more difficult to find jobs.

It is a problem of finding adequate care for children, and problems of that kind.

But over this past particular month I don't believe we have any indication of the reason for the unemployment rate increase.

Senator BENTSEN. I am particularly concerned about the inflation figures we have seen. I can recall when I ran for election in 1970. The President came in and campaigned against me and the Vice President came in and campaigned against me. I had a very attractive, well-financed opponent in the election. But what I ran and won on was what was happening on inflation and unemployment.

The unemployment figures are making some real headway. But, on the inflation side it is very discouraging. We will pay the price at the polls unless we really come up with some answers to turn this around.

I am concerned about one of the things that I feel we don't do in this country, which is save enough, and therefore don't have the kind of capital needed to expand and create job opportunities. But the other side of that coin is that people say, how can you save when the cost of living has gone to the point that it has? I want to find some answers and they will not be easy.

With that, I turn to my colleague, Senator Proxmire, who might have some of those answers.

Senator PROXMIRE. I have some questions; I don't have any answers. If I had answers. I wouldn't be here this morning.

Mr. Vice Chairman, I think your opening statement that was inserted in the record was excellent, as was the statement by Mr. Stein. But I would like to see if we can just put this whole thing in perspective.

It really is an extraordinary report you are making this morning, Mr. Stein. We have more people at work than we have ever had in the history of this country. We had a particularly big increase, over half

a million, both in the household survey and in the establishment figures. They are consistent this time, as I see them. We have the largest work force. We are just at the edge of 100 million people in the work force. We have the highest percentage of population at work than we have ever had before, over 58 percent.

As you have reported, we have the lowest unemployment in 3½ years. The diffusion index, throughout industry there is 69 percent of industry reporting increased employment over the preceding month, which is unusually good.

When you put all these developments together, it suggests that we are really moving ahead with considerable force. And yet it seems that we may be on the verge of turning down for these reasons.

I want you to comment.

No. 1, we are right at the trigger edge now of the 6 percent figure which would mean that we would no longer provide for cyclical revenue sharing. Is that correct?

Mr. STEIN. I believe that is the cutoff point.

Senator PROXMIRE. Do you have any figures on what this will do if we go to 5.9 percent or less next month and we begin to reduce the amount that Government is providing for jobs in this sector?

Mr. STEIN. We do not have any figures on that, Senator Proxmire.

Senator PROXMIRE. The amount is something like $1 million a year, which is not a great deal in a $2 trillion economy. Can you give us any notion of the dimensions of that? Would that be 50,000 jobs, 100,000 jobs, or would it be more significant than that?

Mr. STEIN. We have not made any such estimates, Senator.

Senator PROXMIRE. I want to pursue also the question asked by the vice chairman, but in a little different way. We have had consistent rises in interest rates and pretty big rises in interest rates on a short basis. The Federal funds have gone up more than 2½ percent in the last year and the mortgage rate is beginning to decline. Yet, you report that construction—we had this big increase in construction in April. It is very hard to understand that. That contradicts all our experience in the past, all of the economic theory, when interest rates rise and homebuiding begins to suffer.

Do you have an explanation for that at all?

Mr. STEIN. I don't think we know whether this is a temporary catch-up for what was happening over the past several months in terms of the bad weather, or whether it is a more permanent kind of change. I really don't feel in a position to respond to the question on what would happen as a result of changing interest rates.

Senator PROXMIRE. But it is more than that. In the total value index of construction contracts it has been declining steadily since December of last year. It has been declining for at least 4 months. I don't understand how you can have a decline in the value of construction contracts and yet have more people working in construction.

Do you feel that shakes your faith in the construction figures? Or do you think that there is some other explanation for it?

Mr. STEIN. I think that is something I would not want to comment on without having looked into the specifics more closely, Senator.

Senator PROXMIRE. In the pricing area, there was a random development which seems to have distorted the figures, the big increase in jewelry prices. Could you leave that out and give us a notion of what the increase would be if we laid the jewelry prices aside? That does seem to be a 1-month phenomenon.

Mr. STEIN. I think Mr. Layng might be able to do that.

Senator PROXMIRE. That was a 30-percent increase.

Mr. LAYNG. Excluding that increase from the 1.3 percent rise for finished goods would leave you at roughly 0.9 percent rise; because 0.4 of a point of the change was due to the jewelry increases.

Senator PROXMIRE. That is quite a difference. If you take the first 4 months of this year, which gives you a pretty broad picture, we had a 3.6-percent rate and an annualized rate of almost 12-percent increase in the level.

Mr. Layng, what element of this increase do you think is unlikely to follow through the year? The jewelry price is one of them. Food prices, of course, are volatile, but that is a 4-month period; it is not just a 1-month period.

Mr. LAYNG. It seems like the food sector has been very strong and played a very major role in this most recent increase that you mentioned. Food prices have been increasing at the finished stage.

Senator PROXMIRE. This is food prices at the finished stage but not to the consumer level. So the consumer is still to come.

Mr. LAYNG. That is correct. The consumer increases are still coming. These increases which began 7 months ago have begun to be reflected in the Consumer Price Index. Very large increases in the retail food prices in the last 3 months have occurred and it appears that there continue to be pressures in the finished level of production on food prices. We don't have any forecasts of the future with respect to that.

But what I have read is that there is an expectation for some easing in the second half of the year, particularly in the beef sector. Perhaps the more troublesome or area of concern is the nonfood sector which has not accelerated as sharply. It has increased at rates which are relatively high, 0.5 or 0.6 of a percent a month. These are rates which have to be worrisome in terms of the future, and also when you look at the nonfood sector at the intermediate stage and crude stage processes, they are continuing to increase.

Crude nonfood materials have increased for 7 months in a row. Nonfood intermediate materials are increasing. There are increases on the horizon that have been announced but not reflected in this figure, for example, in passenger cars, glass containers, and more recently I read that aluminum prices are rising for canned material and sheet material used in automobiles. So this indicates that there is upward pressure in the system.

How far it will go is the question of greatest interest.

Senator PROXMIRE. The vice chairman spoke of the unlikelihood that we will be able to hold down inflation to 6 percent and it could be 7 percent or more. Here we have only 4 months. We already have 3.6 percent, so we are more than halfway to the 7 percent.

If in the remaining 8 months you get only 3.6 percent, you still have a 7 percent for the year. So it appears that we are in a position where if we are going to hold inflation down for the year it will be a tough, hard, uphill battle.

Mr. LAYNG. I did the same rough calculation based on the first quarter rate of 9.3 percent. What you would have to do for the remaining three quarters to get the 7 percent is an average rate of 6 or 6½ percent. You should remember that this was the situation last year and we did roughly achieve it.

We had a high rate of 10 percent in the first quarter——

Senator PROXMIRE. But it is higher this year.

Mr. LAYNG. Right. But my point is we did have a deceleration in 1977. We had a very high first quarter rate but the second half made up for it and primarily it was because food came down to a rate below 5 percent.

Senator PROXMIRE. But there is very little prospect that you will get this this year in view of the prospect that farm income is likely to be higher. In fact, that is one of the cornerstones of our policy. We want farm income higher. We expect to have to pay the price of higher farm income and that means higher food prices. So that deceleration seems unlikely this year. It seems that we would be very likely to have an inflation rate of better than 7 percent.

Mr. LAYNG. Either unlikely or the deceleration will not be as large. I think the expectation is still for deceleration, but the deceleration may not be as large as is required to achieve 7 percent for the year.

Senator PROXMIRE. Let me ask you one more question. What I am concerned about is the momentum effect of inflation. The President has called on businesses to hold down their price increases and labor unions and workers to hold down their wage demands. This is, I think, more at the heart of his inflation appeal. It is a good appeal.

But, isn't it extremely difficult to do this when you have inflation already rising at this rate? How can a union settle for a lower wage increase than the cost of living and projected cost of living around 6 or 7 percent for a year, which means they will have wage demands in that area? If we have wage demands in that area, then with productivity as low as it is it means union costs and pressures on prices.

Mr. LAYNG. I think that situation is probably accurate. I think the magnitudes are very important with respect to how far it goes. What you are really touching on is the role of expectations in this whole process which is a very complex one, and one I don't think we understand a great deal. When prices start rising and rising frequently, and over a broad spectrum of commodities there is an expectation built in, both on the wage side and on the price side, both at the producer level and the consumer level.

People expect prices to increase so they don't do very much except say, my wages have to go up if prices go up. It is a cycle that starts and it is very hard to break. I think Chairman Burns felt, and still does feel, that expectations are very important and most students of business cycles feel that expectations play a very important but unknown role in a cycle that is very hard to break.

Senator PROXMIRE. Could you, Mr. Stein or Mr. Layng, give us any guidance as to what effect the rising prices will have on unemployment? Is it likely that the very good news that we have had in the past 6 or 8 months in which unemployment has dropped steadily and now is down to 6 percent, is likely to be interrupted in the face of rising prices?

I can see one area, the rise in interest rates, which is used as an instrument to fight inflation, will slow down construction although it has not done it as yet. Can you think of any other explicit element of inflation that is likely to slow down the progress toward diminishing unemployment?

Mr. LAYNG. Mr. Shiskin is very concerned about the stage of the business cycle that we are at. As you reach the latter part of the cycle, profits decline and that essentially turns you down into a recession.

I think he is very carefully watching the price situation, the unit labor cost situation, to see whether excess were building up.

I think he is very concerned that there are some early signs that there may be excesses, particularly the wage-price productivity indexes. That leads to decline in economic activity in a business cycle sense.

Mr. STEIN. I don't have anything to add to that, Senator.

Mr. MARK. The Commissioner in his last testimony did allude somewhat to this when he was pointing out the increases in unit labor costs in the fourth quarter. The substantial one we have had in the first quarter is an indicator which has to be watched as a potential danger.

Senator PROXMIRE. The combination of inflation and low productivity, they are likely to push us into a position where, first, profits diminish and, then, business begins to cut back and we lose more.

Mr. Vice Chairman, thank you very much.

Senator BENTSEN. Let me follow up on that question a little. We have been in a period of economic growth for 4 years. That is a long period for economic recovery.

Mr. Layng, you made some comments that we are seeing some signs of excesses that one often sees at the end of a period of economic growth and could portend our moving into a recession.

Would you further elaborate on that?

Mr. LAYNG. I think the difficulty is due to the fact that at this point in time there are a great many factors operating. One of the most important is the weather.

As Mr. Mark indicated, it appears that the first quarter performance was influenced by the weather, particularly the decline in productivity. That produced to some extent the unit labor cost figures. I should let him comment on that.

I think our position is that there is nothing there that says that a recession is going to occur.

Senator BENTSEN. I understand that. But there are enough alarming signals there that have to give us some concern, that it might happen unless we try to take some action.

Mr. LAYNG. That we need watch it very carefully in the next few months to see what will happen.

People expect a very strong second quarter performance rebounding from the bad weather. What that produces will have to be watched.

Senator Proxmire discussed prices and wages. You also have to to look at productivity. Why have prices risen? Rising prices are usually the result of changes in costs. One of the things that people like to look at is unit labor costs and unit nonlabor costs, and when you see these, rising prices are usually not far behind.

Senator BENTSEN. Don't we have an inconsistency here? Are we seeing an increase in employment and a lowering of unemployment and at the same time a lowering in productivity? Isn't there an inconsistency and why is that coming about?

Mr. LAYNG. I will let Mr. Mark comment.

Mr. MARK. We are having an increase in employment and this has been positive but output has lagged. I would expect that we would have some change in productivity growth, certainly not like in the fourth quarter and the first quarter of this year. We should have more positive things taking place as far as productivity is concerned in the second and, perhaps, third quarters. For the year as a whole, I am not sure. It is a little early.

We did fall off last year from our productivity growth rate and it was along the lines of the general pattern of things that take place in a recovery period. I compared the current recovery where we were in the fourth quarter of last year with where we had been in the average of all previous recoveries after a similar period of recovery. We were actually somewhat better.

In the average of the past recessions and recovery periods from the trough to the trough plus 11 quarters, which was where we were at the end of last year, and the average was 8.9 percent higher. We had a 9.9 percent recovery in this current period. But after, there is some falloff which does take place and we probably will have some falloff again. But it probably will not be as severe.

I imagine our increase will not be much less than last year's growth, but not as alarming as might appear when you look at the first quarter figures.

Senator BENTSEN. When you were talking about employment in contract construction, were you talking about heavy construction as a part of that? What part was home building?

Mr. STEIN. I don't have those exact figures, but I am told that all sectors of construction show an increase.

Senator BENTSEN. All sectors?

Mr. STEIN. Right.

Senator BENTSEN. The increase in interest rates that is taking place will not have its effect for sometime. We have had plentiful mortgage money in the first quarter. It is only now that we are seeing the increases in the rates taking place that could defer some of the home starts.

On the other side, too, is that when we are talking about heavy contracting, a lot is a combination of Federal and State funds. That is money that in fact is in the pipeline and will stay in that pipeline. You will see a very substantial highway bill passed by the Senate and the House and that will continue. So I don't see how interest rates will affect that, but I can see an effect on home building. Would you agree with that?

Mr. STEIN. It certainly seems like a fair assessment.

Senator BENTSEN. The question was asked what inflation would have been in April without jewelry being in it. I don't believe it was answered, but I am advised that that inflation would still be 11.4 percent.

Mr. LAYNG. That is the annualized rate. I gave the month-to-month change, 0.9 percent. The annualized rate would be very close to the figure you gave.

Senator BENTSEN. On the productivity gains, which have been disappointing, do you see any substantial change taking place in that?

Mr. MARK. As I mentioned earlier, Senator Bentsen, I would exexpect we should have some improvement taking place in the second quarter. Normally we don't forecast, but the data seem to indicate that there may be certainly a better picture than in the first quarter. I feel the first quarter this year was a bit of an aberration because of the weather problem and the coal strike. We are already seeing a turnaround in industrial production.

That would indicate we should see perhaps a more positive situation in terms of productivity growth itself. If employment con-

tinues to increase at the rate it has in the first quarter, this will be moderated somewhat. But, I would be more optimistic about productivity in the second quarter.

Senator BENTSEN. Really a big increase came in the unit labor cost in private business, an annual rate of 18.3 percent in the first quarter. That is the highest we have seen since the Korean war. How much of that was attributed to increases in the minimum wage, and the rising social security and unemployment insurance taxes?

Mr. MARK. We tried to analyze what the contribution of each of the components was, and I think one of the ways of looking at it is to compare the average hourly earnings of nonfarm workers with the hourly compensation. The reason for this comparison is there was no acceleration in the average hourly earnings. It was 8.8 percent in the fourth quarter of last year and 8.7 in this first quarter this year.

So the difference in the acceleration lies in the area of the supplements and in terms of coverage. The additional compensation coverage includes the self-employed, the farm sector, nonproduction workers, and supervisory workers. Also, there is some coverage difference in the inclusion of government enterprises. These differences in coverage accounted for about 1.4 percentage points.

The difference I am talking about is the difference between the 14-percent growth rate in hourly compensation for private business versus the 8.7 percent in hourly earnings for nonfarm workers. Of that total, the coverage difference accounted for about 1.4 percentage points. But the supplements accounted for 2.4 percent. The supplements involve basically three things: The old age and survivor insurance tax rate change, the tax base change, the unemployment insurance tax base change, and then all other supplements.

The estimate we have is that the old age and survivors' insurance contribution to the total was 1.1 percentage points of the 2.4 percent. The change in the tax rate accounted for 0.7 of that. The change in the tax base accounted for 0.4 of it. The U.I., the unemployment insurance tax base change added 0.8 and all others about 0.5.

So in fact the 8.7 was increased by 1.4 and 2.4 percentage points for the supplements. A very substantial portion did come from all supplements. Other differences could come in, such as seasonal adjustments. But the major portion of the expansion lies in the supplements, the increase in the supplements. That will not take place in the second quarter, particularly the tax rate change that has already taken place. So it will not be reflected in the second quarter.

This was an extremely and unusually high increase in the hourly compensation. That coupled with the productivity decline led to this phenomenal increase in the unit labor cost that we had. I don't expect it to be as high in the second quarter.

Senator BENTSEN. Mr. Stein, it is obvious that stagflation is getting worse. Unless we come up with some answers on inflation the average hardworking American will suffer.

I appreciated your coming to testify this morning. It has been very helpful to us.

Mr. STEIN. Thank you very much.

Senator BENTSEN. The hearing is adjourned.

[Whereupon, at 10:45 a.m., the committee adjourned, subject to the call of the Chair.]

EMPLOYMENT-UNEMPLOYMENT

FRIDAY, JUNE 2, 1978

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

The committee met, pursuant to notice, at 10 a.m., in room 5110, Dirksen Senate Office Building, Hon. Gillis W. Long (member of the committee) presiding.

Present: Representative Long.

Also present: Lloyd C. Atkinson, Thomas F. Dernburg, Kent H. Hughes, and William D. Morgan, professional staff members; Mark Borchelt, administrative assistant; and Charles H. Bradford and Mark R. Policinski, minority professional staff members.

OPENING STATEMENT OF REPRESENTATIVE LONG

Representative LONG. The hearing will come to order.

I am sure that all of you join me in regretting that Commissioner Shiskin is not feeling well, and is not able to be here this morning. I am sure you all share my hope, also, that he recovers swiftly and will be able to be with us again next month.

In the meantime, I am pleased to announce that his capable deputy, Robert L. Stein, Assistant Commissioner for Current Employment Analysis, is here to help us interpret the most recent employment and producer price data.

Mr. Stein, the news you bring us appears to indicate a modest reversal in the trends we have been experiencing so far this year.

The employment situation has deteriorated slightly, while the price picture is considerably better than it was in April.

Overall, we experienced a healthy employment increase of 311,000 in May, but nonfarm payroll employment increased only by 175,000, far less than in April.

Meanwhile, unemployment rose 166,000 and the unemployment rate rose from 6.0 to 6.1 percent.

Unfortunately, the unemployment rate for adult women rose sharply from 5.8 to 6.3 percent, a very substantial rise, and—after a welcome drop in April—black teenage unemployment is again close to 40 percent.

Finally, hours worked by production workers decreased and because of this, weekly average earnings were down somewhat.

Producer prices rose at double-digit rates in March, and the information released earlier this week showed this to be true of consumer prices in April as well.

The May increase of seven-tenths of 1 percent in the finished goods index is a welcome decline from the huge increase of 1.3 registered in April.

Producer food prices seem to be easing off a bit, but finished goods prices are rising more rapidly than at any time in the last year.

Mr. Stein, I thank you and thank your colleagues for coming this morning. Please proceed with your statement.

STATEMENT OF HON. ROBERT L. STEIN, ASSISTANT COMMISSIONER, OFFICE OF CURRENT EMPLOYMENT ANALYSIS, BUREAU OF LABOR STATISTICS, DEPARTMENT OF LABOR, ACCOMPANIED BY W. JOHN LAYNG, ASSISTANT COMMISSIONER, OFFICE OF PRICES AND LIVING CONDITIONS; JEROME A. MARK, ASSISTANT COMMISSIONER, OFFICE OF PRODUCTIVITY AND TECHNOLOGY; AND DEBORAH KLEIN, SENIOR EMPLOYMENT SPECIALIST, OFFICE OF CURRENT EMPLOYMENT ANALYSIS

Mr. STEIN. Thank you.

On my left is Mr. John Layng, who is Assistant Commissioner of the Office of Prices and Living Conditions. On my right is Mr. Jerome A. Mark of the Office of Productivity and Technology, and on his right, Deborah Klein, our senior employment specialist.

Congressman Long, I am glad to have this opportunity to offer the committee a few brief comments to supplement "The Employment Situation: May 1978" and "Producer Price Indexes—May 1978" press releases issued this morning at 9 a.m.

In regard to the employment situation, employment continued to expand in May, but the increase was not as large as in the previous month and did not quite keep pace with a further substantial rise in the civilian labor force.

The labor force grew by 477,000 between April and May, exceeding the 100-million mark for the first time in the Nation's history.

Employment rose by 311,000 and the employment-population ratio reached a new high of 58.6 percent.

Unemployment increased by 166,000 and the unemployment rate edged up from 6.0 to 6.1 percent. The rate has been at or close to this level since February, following a fairly persistent decline during 1977 and early 1978.

The rise in unemployment between April and May took place entirely among adult women. This appeared to be mainly the result of a further expansion of the female labor force; employment of adult women showed very little change over the month.

The proportion of adult women in the labor force continued to edge up, moving closer to the 50 percent mark.

The increased unemployment in May was in the short duration category. Altogether, half the unemployed had been seeking work for 5 weeks or less at the time of the May survey. Long-term unemployment of 15 weeks or longer was at its lowest level in over 3 years.

The unemployment rate for black workers continued to be more than twice that of white workers, and has shown less improvement than that of white workers over the past year.

Because of the recent large increases in employment, there has been some discussion of emerging labor shortages in particular occupations and in certain areas of the country.

Direct statistical evidence on shortages is not available. However, the unemployment rates for the least-unemployment prone occupation groups in the labor force are still above their 1973 lows.

The table attached to my statement shows that for professional and technical workers the unemployment rate in May 1978 was 2.4 percent. Its lowest quarterly rate in 1973 was 2.1 percent.

For managers and administrators the May 1978 rate was 2 and was as low as 1.4 percent in 1973.

For craft and kindred workers in May 1978 it was 4.3, and the 1973 rate was 3.6 percent.

The number of employees on nonfarm payrolls, as measured by the establishment survey, continued to rise in May but the gain was not as strong or as widespread as in recent months.

The employment advance of 175,000 in May was about half the average monthly increase between October 1977 and April 1978.

The BLS diffusion index, showing the percentage of 172 industries with rising employment, was 56 percent in May compared with 69 percent in April.

The workweek of production and nonsupervisory workers in private industry fell by 0.3 hours between April and May. There was a similar decline in the factory workweek.

It is possible that hours of work had been lengthened in some firms in March and April to make up for earlier production slowdowns caused by the unusually cold weather and the long coal strike.

As a result of the shorter average workweek, the index of aggregate weekly hours moved down from 120.4 in April to 119.8 in May.

This drop reversed—at least temporarily—a sharp uptrend in progress since January. Over the year the increase in that index was 3.4 percent.

Both total employment—household survey data—and nonfarm payroll employment—establishment survey data—were up by more than 3½ million from a year earlier.

During this same period, the Nation's jobless rate was reduced by 1 percentage point. Growth in the civilian labor force has continued rather strong in 1978. The participation rates of women and teenagers have continued upward rapidly while those of adult men have been on a 2-year plateau.

We have a statement on prices included which was prepared in Mr. Layng's office.

In the price area, the Producer Price Indexes for May was also released this morning and the Consumer Price Index for April was released earlier this week.

The nine-tenths of 1 percent increase in the consumer price index for all urban consumers was primarily due to another large increase in food prices, the fourth so far this year.

Prices also continued to increase at the consumer level for prices other than food, particularly in the housing and clothing components of the index.

The producer price index for finished goods for May increased seven-tenths of 1 percent on a seasonally adjusted basis.

The increase was considerably less than the 1.3 percent advance in April and was about the same as the six-tenths of 1 percent increase in March.

Much of the smaller increase in May was caused by a smaller increase in prices of consumer foods, which increased five-tenths of 1 percent, the smallest rise so far this year.

Prices of other finished goods increased eight-tenths of 1 percent. The increase was less than last month only because jewelry prices did not increase as much as in April.

At the intermediate or semifinished stage of processing, prices of commodities rose by about as much as in April, while prices of crude materials moved up much less than in any of the 7 preceding months.

The three-tenths of 1 percent increase in crude material prices compares with an average monthly rise of 2.1 percent during the previous 7 months.

Prices of crude foodstuffs and feedstuffs were unchanged in contrast to the large advances registered during each of the first 4 months of 1978; prices of crude nonfood materials increased four-tenths of 1 percent, following a nine-tenths of 1 percent rise in April and much larger increases since October of last year.

My colleagues and I are now ready to try to answer your questions.

Representative LONG. Thank you very much, Mr. Stein.

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

UNEMPLOYMENT RATES BY ALTERNATE SEASONAL ADJUSTMENT METHODS

Month and year	Unadjusted rate	Official adjusted rate	Alternative procedures								Other aggregations (multiplicative)		Direct adjustment of rate	Range (cols. 2–13)
			Official procedure used in 1976–77	Unemployed all multiplicative	Unemployed all additive	Year ahead	Concurrent		Stable		Total	Residual		
							First computed	Revised	1967–73	1967–77				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1976:														
January	8.8	7.9	7.8	7.8	8.0	7.8	7.8	7.9	8.1	7.9	7.9	8.1	7.9	0.3
February	8.7	7.7	7.6	7.6	7.8	7.6	7.6	7.7	7.7	7.7	7.6	7.7	7.7	.2
March	8.1	7.6	7.5	7.5	7.6	7.5	7.5	7.6	7.7	7.6	7.5	7.6	7.6	.2
April	7.4	7.6	7.6	7.6	7.6	7.4	7.4	7.6	7.6	7.6	7.6	7.6	7.6	.2
May	6.7	7.4	7.4	7.5	7.2	7.2	7.2	7.4	7.5	7.5	7.5	7.3	7.5	.3
June	8.0	7.5	7.5	7.5	7.5	7.5	7.6	7.5	7.5	7.5	7.4	7.5	7.4	.1
July	7.8	7.7	7.8	7.8	7.8	7.8	7.8	7.7	7.7	7.7	7.7	7.7	7.7	.1
August	7.6	7.8	7.8	7.8	7.8	7.9	7.9	7.8	7.7	7.8	7.8	7.8	7.9	.2
September	7.4	7.7	7.8	7.8	7.7	7.8	7.8	7.7	7.6	7.7	7.8	7.7	7.8	.2
October	7.2	7.7	7.8	7.9	7.8	7.9	7.9	7.7	7.7	7.7	7.8	7.7	7.8	.2
November	7.4	7.8	7.8	7.8	7.8	8.1	8.0	7.9	7.8	7.9	7.8	7.7	7.8	.4
December	7.4	7.8	7.8	7.8	7.8	7.9	7.8	7.8	7.9	7.9	7.8	7.8	7.8	.1
977:														
January	8.3	7.4	7.3	7.3	7.4	7.3	7.4	7.5	7.5	7.4	7.4	7.6	7.5	.3
February	8.5	7.6	7.5	7.5	7.6	7.5	7.5	7.6	7.6	7.5	7.5	7.5	7.5	.1
March	7.9	7.4	7.4	7.4	7.4	7.3	7.3	7.4	7.5	7.4	7.4	7.3	7.4	.2
April	6.9	7.1	7.1	7.1	7.1	7.0	7.0	7.1	7.1	7.1	7.1	7.1	7.1	.1
May	6.4	7.1	7.1	7.1	6.9	6.9	7.0	7.1	7.1	7.1	7.1	7.0	7.2	.3
June	7.5	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.0	7.0	7.0	7.1	7.0	.1
July	7.0	6.9	7.0	7.0	7.0	6.9	6.9	6.9	6.8	6.9	7.0	6.9	7.0	.2
August	6.8	7.0	7.0	7.0	7.1	7.1	7.0	7.0	6.9	7.0	7.1	7.1	7.0	.2
September	6.6	6.8	6.9	6.9	6.9	6.9	6.9	6.8	6.7	6.8	6.9	6.9	6.9	.2
October	6.3	6.8	6.9	6.9	6.9	7.0	6.9	6.8	6.8	6.8	6.9	6.9	6.8	.2
November	6.4	6.7	6.7	6.7	6.8	6.9	6.8	6.8	6.8	6.8	6.8	6.7	6.7	.2
December	6.0	6.4	6.4	6.3	6.4	6.4	6.4	6.3	6.5	6.4	6.3	6.4	6.3	.2
1978:														
January	7.0	6.3	6.2	6.2	6.2	6.3	6.4	6.4	6.4	6.3	6.3	6.3	6.3	.2
February	6.9	6.1	6.1	6.1	6.0	6.1	6.1	6.1	6.2	6.1	6.1	5.9	6.1	.3
March	6.6	6.2	6.1	6.2	6.1	6.2	6.2	6.2	6.3	6.2	6.1	6.0	6.1	.3
April	5.8	6.0	6.0	6.0	6.0	6.0	6.0	6.1	6.0	6.0	5.9	6.0	5.9	.1
May	5.5	6.1	6.1	6.1	6.0	6.1	6.9	6.0	6.2	6.2	6.1	6.1	6.2	.2

Note.—See "Column Notes" on p. 2314.

Source: U.S. Department of Labor, Bureau of Labor Statistics, May 1978.

COLUMN NOTES

(1) Unadjusted rate. Unemployment rate not seasonally adjusted.

(2) Official rate. This is the published seasonally adjusted rate. Each of 4 unemployed age-sex components—males and females, 16–19 and 20 yrs of age and over—is independently adjusted. The teenage unemployment and nonagricultural employment components are adjusted using the additive procedure of the X–11 method, while adults are adjusted using the X–11 multiplicative option. Adult male unemployment is adjusted multiplicatively using a prior trend adjustment procedure. The rate is calculated by aggregating the 4 and dividing them by 12 summed labor force components—these 4 plus 8 employment components, which are the 4 age-sex groups in agriculture and nonagricultural industries. This employment total is also used in the calculation of the labor force base in cols. 3–9. The current "implicit" factors for the total unemployment rate derived by dividing the original unemployment rate by the seasonally adjusted rate for the months of 1977, are: January, 112.2; February, 112.6; March, 106.7; April, 96.5; May, 90.1; June, 106.2; July, 101.2; August, 97.6; September, 96.6; October, 92.6; November, 95.3; December, 93.6.

(3) Official procedure used in 1976–77. Only teenage unemployment components are adjusted using the additive procedure of X–11; all other series are adjusted with the multiplicative option. The prior adjustment is not used for adult male unemployment.

(4) Unemployed all multiplicative. The 4 basic unemployed age-sex groups—males and females, 16–19 and 20 yrs and over—are adjusted by the X–11 multiplicative procedure. This procedure was used to adjust unemployment data in 1975 and previous years.

(5) Additive rate. The 4 basic unemployed age-sex groups—males and females, 16–19 and 20 yrs and over—are adjusted by the X–11 additive procedure.

(6) Year-ahead factors. The official seasonal adjustment procedure for each of the components is followed through computation of the factor for the last years of data. A projected factor—the factor for the last year plus one-half of the difference from the previous year—is then computed for each of the components, and the rate is calculated. The rates shown are as first calculated and are not subject to revision.

(7) Concurrent adjustment through current month (first computed). The official procedure is followed with data reseasonally adjusted incorporating the experience through the current month, i.e., the rate for March 1976 is based on adjustment of data for the period, January 1967–March 1976. The rates are as first calculated and are not subject to revision.

(8) Concurrent adjustment through current month (revised). Follows the same procedures as used in computation of col. 7. Each month, however, revisions in the entire time series are made. This column provides an indication, as the year progresses, of the scope of the revisions and provides the best portrayal of movements in the series.

(9) Stable seasonals (January 1967–December 1973). The stable seasonal option in the X–11 program uses an unweighted average of all available seasonal-irregular ratios to compute final seasonal factors. In essence, it assumes that seasonal patterns are relatively constant from year to year. A cutoff of input data as of December 1973 was selected to avoid the impact of cyclical changes in the 1974–75 period.

(10) Stable seasonals (January 1967–December 1977). Follows the same procedures as used in col. 9, except that the unweighted average is based on seasonal-irregular ratios for the 1967–77 period.

(11) Total. Unemployment and labor force levels adjusted directly.

(12) Residual. Labor force and employment levels adjusted directly, unemployment as a residual and rate then calculated.

(13) Direct adjustment. Unemployment rate adjusted directly.

(14) Average of cols. 2–12.

Note: The X–11 method, developed by Julius Shiskin at the Bureau of the Census over the period 1955–65, was used in computing all the seasonally adjusted series described above.

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THE EMPLOYMENT SITUATION: MAY 1978

Employment continued to rise in May and unemployment edged up slightly, as the Nation's labor force surpassed the 100 million mark, the Bureau of Labor Statistics of the U. S. Department of Labor reported today. The unemployment rate was 6.1 percent; it has shown little movement since February, following more than a year of fairly steady declines.

Total employment--as measured by the monthly survey of households--was 94.1 million in May, up 310,000 over the month. Over the past year, total employment has grown by 3.6 million.

Nonfarm payroll employment--as measured by the monthly survey of establishments--advanced by 175,000 to 85.3 million. Payroll jobs have grown by 3.5 million since May 1977.

Unemployment

The number of persons unemployed in May was up slightly from the previous month, returning to the 6.1 million level that had prevailed in February and March. The unemployment rate, at 6.1 percent in May, has been in the 6.0-6.2 percent range over the past 4 months, after falling gradually throughout most of 1977 and into 1978. The rate had been 7.8 percent at the end of 1976.

The unemployment rate for adult males (4.2 percent) was unchanged from April to May, as a sharp drop in joblessness among 20-24 year-olds was countered by an increase among men 25-54 years. The rate among women in this central age group also increased over the month, as did the rate among married women. The jobless rate for all adult women reached 6.3 percent in May, up from 5.8 percent in April. The unemployment rate for teenagers has been inching down in the past few months and stood at 16.5 percent in May. Unemployment rates for both black and white workers, at 12.3 and 5.2 percent, respectively, were about unchanged over the month. (See tables A-2 and A-6.)

Jobless rates among white-collar and service workers held fairly steady in May at levels that have generally prevailed since the beginning of the year. The unemployment rate for blue-collar workers, which has improved slightly in 1978, was unchanged in May, as a decrease among

nonfarm laborers was offset by an increase among operatives. (See table A-2.)

Total Employment and the Labor Force

The growth in the number of employed persons continued in May, increasing by 310,000 and pushing total employment up to 94.1 million. Over the past year, total employment has risen by 3.6 million (after adjusting for changes in the survey introduced in January). All of the major age-sex groups shared in this over-the-year expansion, with adult men and women posting similar gains. (See table A-1.)

The employment-population ratio--the proportion of total noninstitutional population 16 years and over that is employed--also sustained its recent steady rise, reaching an all-time high of 58.6 percent in May.

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

Selected categories	Quarterly averages					Monthly data		
	1977				1978	1978		
	I	II	III	IV	I	Mar.	Apr.	May
HOUSEHOLD DATA	Thousands of persons							
Civilian labor force	96,221	97,153	97,559	98,622	99,205	99,414	99,784	100,261
Total employment	89,059	90,264	90,823	92,069	93,050	93,266	93,801	94,112
Unemployment	7,161	6,889	6,736	6,554	6,155	6,148	5,983	6,149
Not in labor force	59,225	58,941	59,205	58,777	58,799	58,776	58,602	58,340
Discouraged workers	942	1,062	1,067	969	903	N.A.	N.A.	N.A.
	Percent of labor force							
Unemployment rates:								
All workers	7.4	7.1	6.9	6.6	6.2	6.2	6.0	6.1
Adult men	5.7	5.2	5.0	4.8	4.6	4.5	4.2	4.2
Adult women	7.1	7.0	7.0	6.8	5.9	5.8	5.8	6.3
Teenagers	18.6	18.1	17.6	16.7	16.9	17.3	16.9	16.5
White	6.7	6.3	6.1	5.8	5.4	5.3	5.2	5.2
Black and other	12.9	12.8	13.6	13.3	12.3	12.4	11.8	12.3
Full-time workers	6.9	6.6	6.5	6.2	5.7	5.6	5.4	5.6
ESTABLISHMENT DATA	Thousands of jobs							
Nonfarm payroll employment	80,925	81,871	82,548	83,192	84,107	84,555	85,170p	85,345p
Goods-producing industries	23,788	24,265	24,359	24,497	24,757	24,945	25,331p	25,382p
Service-producing industries	57,137	57,606	58,189	58,695	59,350	59,610	59,839p	59,963p
	Hours of work							
Average weekly hours:								
Total private nonfarm	36.1	36.2	36.0	36.2	35.9	36.2	36.3p	36.0p
Manufacturing	40.1	40.4	40.3	40.5	40.0	40.6	40.7p	40.3p
Manufacturing overtime	3.3	3.4	3.3	3.5	3.7	3.7	3.6p	3.5p

p=preliminary. N.A.=not available.

The civilian labor force passed the 100 million milestone in May, as a result of an over-the-month surge of nearly half a million workers. Increases were pervasive among major demographic groups, with large gains posted by both black and white workers.

The overall labor force participation rate also reached a record high, 63.2 percent. The percentage of the civilian working age population participating in the labor force has been rising rapidly in recent years, paced by the strong growth of adult women and teenagers.

Industry Payroll Employment

Following substantially larger over-the-month increases in March and April, nonagricultural payroll employment rose by 175,000 in May to 85.3 million. Most of the major industry divisions posted modest gains, as employment increased in 56 percent of the 172 industries that comprise the BLS diffusion index of private nonagricultural payrolls. Total nonfarm payroll employment has risen 3.5 million since May 1977. (See tables B-1 and B-6.)

In the goods-producing sector, manufacturing employment edged up by 25,000 over the month. Machinery was the largest gainer among the manufacturing industries, while the only notable decline was in food processing. Employment in contract construction rose by 20,000; this followed 2 straight months of unusually sharp expansion in the industry. Over the year, employment in contract construction has risen by nearly 400,000 to a new high of 4.2 million. In the service-producing industries, job gains occurred over the month in trade (55,000), services (35,000), and finance, insurance, and real estate (25,000).

Hours

The average workweek for production or nonsupervisory workers on private nonagricultural payrolls decreased 0.3 hour in May to 36.0 hours. This was also 0.3 hour below the year-earlier level. Almost all of the major industry groups posted declines over the month. The manufacturing workweek was down 0.4 hour, but factory overtime, at 3.5 hours, was little changed from the April level. After 3 months of strong gains, the workweek in contract construction receded 0.9 hour in May. (See table B-2.)

Because of the decline in hours, coupled with only modest employment growth, the index of aggregate weekly hours of production or nonsupervisory workers on nonagricultural payrolls fell by 0.5 percent in May to 119.8 (1967=100). The index was 3.4 percent above the year-ago level. (See table B-5.)

Hourly and Weekly Earnings

Average hourly earnings of production or nonsupervisory workers on private nonagricultural payrolls edged up from the April level, but, because of the decline in the average workweek, average weekly earnings were down slightly over the month. Since last May, average hourly and weekly earnings have risen 8.5 and 7.6 percent, respectively.

Before adjustment for seasonality, average hourly earnings were $5.63, up 2 cents from April and 44 cents from a year earlier. Average weekly earnings fell by 41 cents over the month to $201.55 but have risen $14.19 since last May. (See table B-3.)

The Hourly Earnings Index

The Hourly Earnings Index--earnings adjusted for overtime in manufacturing, seasonality, and the effects of changes in the proportion of workers in high-wage and low-wage industries--was 212.6 (1967=100) in May, 0.3 percent higher than in April. The index was 8.2 percent above May a year ago. During the 12-month period ended in April, the Hourly Earnings Index in dollars of constant purchasing power rose 1.7 percent. (See table B-4.)

Explanatory Note

This release presents and analyzes statistics from two major surveys. Data on labor force, total employment, and unemployment (A tables) are derived from the Current Population Survey—a sample survey of households which is conducted by the Bureau of the Census for the Bureau of Labor Statistics. Beginning in September 1975, the sample was enlarged by 9,000 households in order to provide greater reliability for smaller States and thus permit the publication of annual statistics for all 50 States and the District of Columbia. These supplementary households were added to the 47,000 national household sample in January 1978; thus the sample now consists of about 56,000 households selected to represent the U.S. civilian noninstitutional population 16 years and over.

Statistics on nonagricultural payroll employment, hours, and earnings (B tables) are collected by the Bureau of Labor Statistics, in cooperation with State agencies, from payroll records of a sample of approximately 165,000 establishments. Unless otherwise indicated, data for both statistical series relate to the week containing the 12th day of the specified month.

Comparability of household and payroll employment statistics

Employment data from the household and payroll surveys differ in several basic respects. The household survey provides information on the labor force activity of the entire civilian noninstitutional population, 16 years of age and over, without duplication. Each person is classified as either employed, unemployed, or not in the labor force. The household survey counts employed persons in both agriculture and nonagricultural industries and, in addition to wage and salary workers (including private household workers), counts the self-employed, unpaid family workers, and persons "with a job but not at work" and not paid for the period absent.

The payroll survey relates only to paid wage and salary employees (regardless of age) on the payrolls of nonagricultural establishments. Persons who worked at more than one job during the survey week or otherwise appear on more than one payroll are counted more than once in the establishment survey. Such persons are counted only once in the household survey and are classified in the job at which they worked the greatest number of hours.

Unemployment

To be classified in the household survey as unemployed an individual must: (1) Have been without a job during the survey week; (2) have made specific efforts to find employment sometime during the prior 4 weeks; and (3) be presently available for work. In addition, persons on layoff and those waiting to begin a new job (within 30 days), neither of whom must meet the jobseeking requirements, are also classified as unemployed. The unemployed total includes all persons who satisfactorily meet the above criteria, regardless of their eligibility for unemployment insurance benefits or any kind of public assistance. The unemployment rate represents the unemployed as a proportion of the civilian labor force (the employed and unemployed combined).

The Bureau regularly publishes a wide variety of labor market measures. See, for example, the demographic, occupational, and industry detail in tables A-2 and A-3 of this release and the comprehensive data package in Employment and Earnings each month. A special grouping of seven unemployment measures is set forth in table A-7. Identified by the symbols U-1 through U-7, these measures represent a range of possible definitions of unemployment and of the labor force—from the most restrictive (U-1) to the most comprehensive (U-7). The official rate of unemployment appears as U-5.

Seasonal adjustment

Nearly all economic phenomena are affected to some degree by seasonal variations. These are recurring, predictable events which are repeated more or less regularly each year—changes in weather, opening and closing of schools, major holidays, industry production schedules, etc. The cumulative effects of these events are often large. For example, on average over the year, they explain about 95 percent of the month-to-month variance in the unemployment figures. Since seasonal variations tend to be large relative to the underlying cyclical trends, it is necessary to use seasonally-adjusted data to interpret short-term economic developments. At the beginning of each year, seasonal adjustment factors for unemployment and other labor force series are calculated for use during the entire year, taking into account the prior year's experience, and revised seasonally-adjusted data are introduced in the release containing January data.

All seasonally-adjusted civilian labor force and unemployment rate statistics, as well as the major employment and unemployment estimates, are computed by aggregating independently adjusted series. The official unemployment rate for all civilian workers is derived by dividing the estimate for total unem-

ployment (the sum of four seasonally-adjusted age-sex components) by the civilian labor force (the sum of 12 seasonally-adjusted age-sex components).

For establishment data, the seasonally-adjusted series for all employees, production workers, average weekly hours, and average hourly earnings are adjusted by aggregating the seasonally-adjusted data from the respective component series. These data are also revised annually, often in conjunction with benchmark (comprehensive counts of employment) adjustments. (The most recent revision of seasonally-adjusted data was based on data through August 1977.)

Sampling variability

Both the household and establishment survey statistics are subject to sampling error, which should be taken into account in evaluating the levels of a series as well as changes over time. Because the household survey is based upon a probability sample, the results may differ from the figures that would be obtained if it were possible to take a complete census using the same questionnaires and procedures. The standard error is the measure of sampling variability, that is, of the variation that occurs by chance because a sample rather than the entire population is surveyed. The chances are about 68 out of 100 that an estimate from the survey differs from a figure that would be obtained through a complete census by less than the standard error. Tables A through H in the "Explanatory Notes" of Employment and Earnings provide approximations of the standard errors for unemployment and other labor force categories. To obtain a 90-percent level of confidence, the confidence interval generally used by BLS, the errors should be multiplied by 1.6. The following examples provide an indication of the magnitude of sampling error: For a monthly change in total employment, the standard error is on the order of plus or minus 182,000. Similarly, the standard error on a change in total unemployment is approximately 115,000. The standard error on a change in the national unemployment rate is 0.12 percentage point.

Although the relatively large size of the monthly establishment survey assures a high degree of accuracy, the estimates derived from it also may differ from the figures obtained if a complete census using the same schedules and procedures were possible. However, since the estimating procedures utilize the previous month's level as the base in computing the current month's level of employment (link-relative technique), sampling and response errors may accumulate over several months. To remove this accumulated error, the employment estimates are adjusted to new benchmarks (comprehensive counts of employment), usually on an annual basis. In addition to taking account of sampling and response errors, the benchmark revision adjusts the estimates for changes in the industrial classification of individual establishments. Employment estimates are currently projected from March 1974 levels, plus an interim benchmark adjustment based on December 1975 levels.

One measure of the reliability of the employment estimates for individual industries is the root-mean-square error (RMSE). The RMSE is the standard deviation adjusted for the bias in estimates. If the bias is small, the chances are about 68 out of 100 that an estimate from the sample would differ from its benchmark by less than the RMSE. For total nonagricultural employment, the RMSE is on the order of plus or minus 81,000. Measures of reliability (approximations of the RMSE) for establishment-survey data and actual amounts of revision due to benchmark adjustments are provided in tables J through O in the "Explanatory Notes" of Employment and Earnings.

NOTE: Household survey data for periods prior to January 1978 shown in tables A-1 through A-7 are not strictly comparable with current data because of the introduction of an expansion in the sample and revisions in the estimation procedures. As a result, the overall civilian labor force and employment totals in January were raised by roughly a quarter of a million; unemployment levels and rates were essentially unchanged. An explanation of the procedural changes and an indication of the differences appear in "Revisions in the Current Population Survey in January 1978," *Employment and Earnings*, February 1978 Vol. 25 No. 2

HOUSEHOLD DATA

Table A-1. Employment status of the noninstitutional population

[Numbers in thousands]

Employment status	Not seasonally adjusted			Seasonally adjusted					
	May 1977	Apr. 1978	May 1978	May 1977	Jan. 1978	Feb. 1978	Mar. 1978	Apr. 1978	May 1978
TOTAL									
Total noninstitutional population[1]	158,228	160,504	160,713	158,228	159,937	160,128	160,313	160,504	160,713
Armed Forces[1]	2,128	2,118	2,113	2,128	2,121	2,124	2,122	2,118	2,113
Civilian noninstitutional population[1]	156,101	158,386	158,601	156,101	157,816	158,004	158,190	158,386	158,601
Civilian labor force	96,193	98,866	99,309	97,161	99,107	99,093	99,414	99,784	100,261
Participation rate	61.6	62.4	62.6	62.2	62.8	62.7	62.8	63.0	63.2
Employed	90,042	93,180	93,851	90,267	92,881	93,003	93,266	93,801	94,112
Employment-population ratio[2]	56.9	58.1	58.4	57.0	58.1	58.1	58.2	58.4	58.6
Agriculture	3,478	3,151	3,369	3,335	3,354	3,242	3,310	3,275	3,235
Nonagricultural industries	86,564	90,029	90,483	86,932	89,527	89,761	89,956	90,526	90,877
Unemployed	6,151	5,685	5,457	6,894	6,226	6,090	6,148	5,983	6,149
Unemployment rate	6.4	5.8	5.5	7.1	6.3	6.1	6.2	6.0	6.1
Not in labor force	59,907	59,520	59,292	58,940	58,709	58,911	58,776	58,602	58,340
Men, 20 years and over									
Total noninstitutional population[1]	67,324	68,419	68,519	67,324	68,148	68,240	68,327	68,419	68,519
Civilian noninstitutional population[1]	65,641	66,740	66,845	65,641	66,467	66,556	66,645	66,740	66,845
Civilian labor force	52,062	53,003	53,225	52,273	53,153	53,142	53,242	53,263	53,414
Participation rate	79.3	79.4	79.6	79.6	80.0	79.8	79.9	79.8	79.9
Employed	49,487	50,725	51,149	49,505	50,673	50,759	50,833	51,038	51,182
Employment-population ratio[2]	73.5	74.1	74.6	73.5	74.4	74.4	74.4	74.6	74.7
Agriculture	2,423	2,274	2,393	2,356	2,394	2,283	2,289	2,295	2,328
Nonagricultural industries	47,064	48,451	48,756	47,149	48,279	48,476	48,544	48,743	48,854
Unemployed	2,575	2,278	2,076	2,768	2,480	2,383	2,409	2,225	2,232
Unemployment rate	4.9	4.3	3.9	5.3	4.7	4.5	4.5	4.2	4.2
Not in labor force	13,579	13,737	13,620	13,368	13,314	13,414	13,403	13,477	13,431
Women, 20 years and over									
Total noninstitutional population[1]	74,081	75,300	75,412	74,081	74,991	75,095	75,196	75,300	75,412
Civilian noninstitutional population[1]	73,987	75,198	75,310	73,987	74,892	74,996	75,093	75,198	75,310
Civilian labor force	35,478	37,133	37,025	35,711	36,595	36,654	36,849	37,117	37,264
Participation rate	48.0	49.4	49.2	48.3	48.9	48.9	49.1	49.4	49.5
Employed	33,299	35,083	34,960	33,249	34,348	34,569	34,722	34,948	34,931
Employment-population ratio[2]	44.9	46.6	46.4	44.9	45.8	46.0	46.2	46.4	46.3
Agriculture	641	552	590	572	517	604	628	623	527
Nonagricultural industries	32,658	34,531	34,370	32,677	33,831	33,965	34,094	34,325	34,404
Unemployed	2,179	2,050	2,065	2,462	2,247	2,085	2,127	2,169	2,333
Unemployment rate	6.1	5.5	5.6	6.9	6.1	5.7	5.8	5.8	6.3
Not in labor force	38,509	38,065	38,285	38,276	38,297	38,342	38,244	38,081	38,046
Both sexes, 16-19 years									
Total noninstitutional population[1]	16,823	16,785	16,782	16,823	16,798	16,794	16,790	16,785	16,782
Civilian noninstitutional population[1]	16,473	16,449	16,446	16,473	16,457	16,453	16,452	16,449	16,446
Civilian labor force	8,653	8,730	9,059	9,177	9,359	9,297	9,323	9,404	9,583
Participation rate	52.5	53.1	55.1	55.7	56.9	56.5	56.7	57.2	58.3
Employed	7,256	7,372	7,742	7,513	7,860	7,675	7,711	7,815	7,999
Employment-population ratio[2]	43.1	43.9	46.1	44.7	46.8	45.7	45.9	46.6	47.7
Agriculture	414	326	385	407	443	355	393	357	380
Nonagricultural industries	6,842	7,047	7,356	7,106	7,417	7,320	7,318	7,458	7,619
Unemployed	1,397	1,357	1,317	1,664	1,499	1,622	1,612	1,589	1,584
Unemployment rate	16.1	15.5	14.5	18.1	16.0	17.4	17.3	16.9	16.5
Not in labor force	7,820	7,719	7,387	7,296	7,098	7,156	7,129	7,045	6,863
WHITE									
Total noninstitutional population[1]	139,089	140,863	141,026	139,089	140,421	140,571	140,714	140,863	141,026
Civilian noninstitutional population[1]	137,337	139,149	139,317	137,337	138,687	138,834	138,997	139,149	139,317
Civilian labor force	85,214	87,198	87,567	85,899	87,425	87,360	87,532	87,945	88,209
Participation rate	62.0	62.7	62.9	62.5	63.0	62.9	63.0	63.2	63.3
Employed	80,373	82,848	83,446	80,512	82,650	82,697	82,880	83,386	83,590
Employment-population ratio[2]	57.8	58.8	59.2	57.9	58.9	58.8	58.9	59.2	59.3
Unemployed	4,841	4,351	4,120	5,387	4,775	4,663	4,652	4,559	4,619
Unemployment rate	5.7	5.0	4.7	6.3	5.5	5.3	5.3	5.2	5.2
Not in labor force	52,123	51,951	51,750	51,438	51,262	51,474	51,465	51,204	51,108
BLACK AND OTHER									
Total noninstitutional population[1]	19,140	19,641	19,687	19,140	19,516	19,558	19,599	19,641	19,687
Civilian noninstitutional population[1]	18,763	19,237	19,284	18,763	19,129	19,170	19,194	19,237	19,284
Civilian labor force	10,979	11,667	11,742	11,175	11,725	11,785	11,871	11,816	11,934
Participation rate	58.5	60.6	60.9	59.6	61.3	61.5	61.8	61.4	61.9
Employed	9,669	10,333	10,405	9,732	10,238	10,391	10,402	10,418	10,467
Employment-population ratio[2]	50.5	52.6	52.9	50.8	52.5	53.1	53.1	53.0	53.2
Unemployed	1,310	1,335	1,337	1,443	1,487	1,394	1,469	1,398	1,467
Unemployment rate	11.9	11.4	11.4	12.9	12.7	11.8	12.4	11.8	12.3
Not in labor force	7,784	7,569	7,541	7,588	7,404	7,385	7,323	7,421	7,350

[1] The population and Armed Forces figures are not adjusted for seasonal variations; therefore, identical numbers appear in the unadjusted and seasonally adjusted columns.

[2] Civilian employment as a percent of the total noninstitutional population (including Armed Forces).

Table A-2. Major unemployment indicators, seasonally adjusted

Selected categories	Number of unemployed persons (in thousands)		Unemployment rates					
	May 1977	May 1978	May 1977	Jan. 1978	Feb. 1978	Mar. 1978	Apr. 1978	May 1978
CHARACTERISTICS								
Total, 16 years and over	6,894	6,149	7.1	6.3	6.1	6.2	6.0	6.1
Men, 20 years and over	2,768	2,232	5.3	4.7	4.5	4.5	4.2	4.2
Women, 20 years and over	2,462	2,333	6.9	6.1	5.7	5.8	5.8	6.3
Both sexes, 16-19 years	1,664	1,584	18.1	16.0	17.4	17.3	16.9	16.5
White, total	5,387	4,619	6.3	5.5	5.3	5.3	5.2	5.2
Men, 20 years and over	2,221	1,728	4.7	4.0	3.9	4.0	3.6	3.6
Women, 20 years and over	1,848	1,720	6.0	5.5	5.0	4.9	5.1	5.4
Both sexes, 16-19 years	1,318	1,171	15.9	13.7	14.8	14.6	14.6	13.8
Black and other, total	1,443	1,467	12.9	12.7	11.8	12.4	11.8	12.3
Men, 20 years and over	550	505	10.0	9.8	8.6	8.5	8.8	8.8
Women, 20 years and over	556	558	11.6	10.8	10.1	11.4	10.5	10.9
Both sexes, 16-19 years	337	404	38.4	38.7	38.0	39.0	35.3	38.4
Married men, spouse present	1,455	1,137	3.6	2.9	2.9	3.0	2.8	2.9
Married women, spouse present	1,460	1,370	6.5	5.6	5.2	5.1	5.0	5.9
Women who head families	393	449	9.1	7.9	7.6	8.6	10.1	9.3
Full-time workers	5,450	4,750	6.6	5.8	5.7	5.6	5.4	5.6
Part-time workers	1,434	1,398	9.9	8.9	8.6	9.6	9.6	9.2
Unemployed 15 weeks and over[1]	1,869	1,358	1.9	1.7	1.6	1.5	1.4	1.4
Labor force time lost[2]	--	--	7.6	6.8	6.6	6.6	6.3	6.6
OCCUPATION[3]								
White-collar workers	1,987	1,771	4.3	3.6	3.5	3.4	3.5	3.6
Professional and technical	408	350	2.9	2.7	2.5	2.6	2.5	2.4
Managers and administrators, except farm	267	206	2.7	2.5	1.9	2.3	2.0	2.0
Sales workers	331	275	5.5	3.9	4.3	4.3	4.3	4.4
Clerical workers	981	940	5.8	5.0	5.0	4.5	5.1	5.3
Blue-collar workers	2,632	2,233	8.0	7.1	7.1	7.1	6.5	6.6
Craft and kindred workers	702	545	5.6	5.4	5.0	5.1	4.3	4.3
Operatives, except transport	1,044	996	9.1	7.9	8.1	8.0	7.6	8.4
Transport equipment operatives	265	221	7.0	5.4	5.0	5.2	5.2	5.9
Nonfarm laborers	621	471	12.3	11.0	11.5	11.9	10.0	8.7
Service workers	1,192	1,056	8.8	7.6	7.1	7.7	7.7	7.6
Farm workers	133	101	4.4	3.9	4.7	4.7	3.1	3.6
INDUSTRY[3]								
Nonagricultural private wage and salary workers[4]	5,051	4,323	7.2	6.2	6.1	6.0	5.9	5.9
Construction	591	450	12.8	11.7	11.5	11.3	9.5	9.2
Manufacturing	1,402	1,234	6.5	5.6	5.7	5.4	5.3	5.6
Durable goods	757	664	5.9	5.2	5.0	4.8	4.4	5.0
Nondurable goods	645	570	7.2	6.1	6.5	6.2	6.5	6.4
Transportation and public utilities	217	205	4.4	4.3	3.2	3.7	3.7	3.8
Wholesale and retail trade	1,498	1,246	8.3	7.1	7.1	7.3	7.2	6.8
Finance and service industries	1,313	1,142	6.5	5.3	5.1	5.1	5.2	5.3
Government workers	636	643	4.0	4.2	3.5	3.7	3.8	4.1
Agricultural wage and salary workers	171	119	11.5	9.0	10.1	10.0	7.7	7.7
VETERAN STATUS								
Male Vietnam-era veterans:[5]								
20 to 34 years	487	248	7.5	5.7	5.2	5.0	4.5	4.0
20 to 24 years	127	47	13.8	12.9	12.5	13.2	10.7	6.9
25 to 29 years	228	126	8.0	6.1	5.4	4.6	4.5	5.5
30 to 34 years	132	75	4.9	3.5	3.4	3.5	3.1	2.3
Male nonveterans:								
20 to 34 years	1,143	977	7.3	7.1	6.7	6.9	6.5	5.9
20 to 24 years	701	552	10.3	10.1	9.7	9.5	8.8	7.7
25 to 29 years	279	275	5.6	5.4	5.0	5.8	6.1	4.8
30 to 34 years	163	150	4.3	4.0	3.8	3.5	2.9	3.9

[1] Unemployment rate calculated as a percent of civilian labor force.

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

[3] Unemployment by occupation includes all experienced unemployed persons, whereas that by industry covers only unemployed wage and salary workers.

[4] Includes mining, not shown separately.

[5] Vietnam-era veterans are those who served between August 5, 1964, and May 7, 1975.

Table A-3. Selected employment indicators

(In thousands)

Selected categories	Not seasonally adjusted		Seasonally adjusted					
	May 1977	May 1978	May 1977	Jan. 1978	Feb. 1978	Mar. 1978	Apr. 1978	May 1978
CHARACTERISTICS								
Total employed, 16 years and over	90,042	93,851	90,267	92,881	93,003	93,266	93,801	94,112
Men	53,525	55,312	53,644	54,975	54,897	55,013	55,208	55,446
Women	36,517	38,539	36,623	37,906	38,106	38,253	38,593	38,666
Married men, spouse present	38,470	38,665	38,430	38,645	38,666	38,465	38,628	38,626
Married women, spouse present	20,920	21,694	20,928	21,638	21,738	21,674	21,847	21,694
OCCUPATION								
White-collar workers	44,485	46,726	44,655	46,547	46,555	46,835	46,789	46,895
Professional and technical	13,483	14,356	13,520	14,057	14,016	14,060	14,158	14,399
Managers and administrators, except farm	9,428	9,913	9,449	10,067	10,134	10,169	10,212	9,933
Sales workers	5,661	5,887	5,686	5,913	5,811	5,985	5,861	5,911
Clerical workers	15,913	16,569	16,000	16,510	16,594	16,621	16,558	16,652
Blue-collar workers	30,284	31,513	30,318	30,942	31,198	31,039	31,655	31,544
Craft and kindred workers	11,870	12,206	11,884	12,111	12,220	12,169	12,302	12,218
Operatives, except transport	10,393	10,781	10,455	10,755	10,738	10,766	10,974	10,846
Transport equipment operatives	3,534	3,530	3,537	3,432	3,643	3,541	3,560	3,534
Nonfarm laborers	4,487	4,995	4,442	4,644	4,597	4,563	4,819	4,946
Service workers	12,294	12,804	12,372	12,704	12,703	12,572	12,830	12,883
Farm workers	2,981	2,809	2,861	2,872	2,769	2,788	2,687	2,698
MAJOR INDUSTRY AND CLASS OF WORKER								
Agriculture:								
Wage and salary workers	1,325	1,441	1,318	1,387	1,345	1,389	1,408	1,434
Self-employed workers	1,688	1,614	1,646	1,604	1,587	1,527	1,539	1,573
Unpaid family workers	465	314	378	342	314	389	283	255
Nonagricultural industries:								
Wage and salary workers	79,758	83,413	80,353	82,915	83,078	83,124	83,648	84,049
Government	15,196	15,325	15,078	15,267	15,237	15,154	15,305	15,203
Private industries	64,561	68,088	65,275	67,648	67,841	67,970	68,343	68,846
Private households	1,317	1,386	1,324	1,421	1,383	1,293	1,388	1,393
Other industries	63,244	66,702	63,951	66,227	66,458	66,677	66,955	67,453
Self-employed workers	6,219	6,502	6,017	6,259	6,268	6,427	6,467	6,288
Unpaid family workers	587	567	539	439	488	500	506	520
PERSONS AT WORK [1]								
Nonagricultural industries	82,957	86,911	81,666	83,304	84,054	84,285	86,043	85,528
Full-time schedules	67,555	70,648	67,083	68,812	69,215	69,417	70,550	70,157
Part time for economic reasons	3,070	3,043	3,268	2,986	3,193	3,164	3,327	3,243
Usually work full time	1,240	1,182	1,270	1,043	1,128	1,226	1,224	1,211
Usually work part time	1,830	1,861	1,998	1,943	2,065	1,938	2,103	2,032
Part time for noneconomic reasons	12,332	13,220	11,315	11,506	11,646	11,704	12,166	12,128

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

Table A-4. Duration of unemployment

(Numbers in thousands)

Weeks of unemployment	Not seasonally adjusted		Seasonally adjusted					
	May 1977	May 1978	May 1977	Jan. 1978	Feb. 1978	Mar. 1978	Apr. 1978	May 1978
DURATION								
Less than 5 weeks	2,437	2,563	2,789	2,700	2,586	2,820	2,790	2,932
5 to 14 weeks	1,635	1,385	2,128	1,861	1,820	1,877	1,784	1,803
15 weeks and over	2,078	1,510	1,869	1,688	1,568	1,463	1,384	1,358
15 to 26 weeks	959	792	812	864	897	766	716	680
27 weeks and over	1,120	718	1,057	824	671	697	668	678
Average (mean) duration, in weeks	16.4	13.3	14.9	13.1	12.5	12.3	12.3	12.1
Median duration, in weeks	8.1	5.8	7.3	6.6	7.0	6.2	5.8	5.2
PERCENT DISTRIBUTION								
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 5 weeks	39.6	47.0	41.1	43.2	43.3	45.8	46.8	48.1
5 to 14 weeks	26.6	25.4	31.4	29.8	30.5	30.5	29.9	29.6
15 weeks and over	33.8	27.7	27.5	27.0	26.2	23.8	23.2	22.3
15 to 26 weeks	15.6	14.5	12.0	13.8	15.0	12.4	12.0	11.2
27 weeks and over	18.2	13.2	15.6	13.2	11.2	11.3	11.2	11.1

Table A-5. Reasons for unemployment

[Numbers in thousands]

Reasons	Not seasonally adjusted		Seasonally adjusted					
	May 1977	May 1978	May 1977	Jan. 1978	Feb. 1978	Mar. 1978	Apr. 1978	May 1978
NUMBER OF UNEMPLOYED								
Lost last job	2,774	2,322	3,080	2,698	2,540	2,493	2,475	2,577
On layoff	664	565	803	768	709	660	593	683
Other job losers	2,110	1,757	2,277	1,930	1,831	1,833	1,882	1,894
Left last job	758	680	913	856	898	862	872	819
Reentered labor force	1,818	1,643	1,961	1,821	1,796	1,911	1,734	1,772
Seeking first job	801	812	890	914	868	923	925	901
PERCENT DISTRIBUTION								
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Job losers	45.1	42.6	45.0	42.9	41.6	40.3	41.2	42.5
On layoff	10.8	10.4	11.7	12.2	11.6	10.7	9.9	11.3
Other job losers	34.3	32.2	33.3	30.7	30.0	29.6	31.3	31.2
Job leavers	12.3	12.5	13.3	13.6	14.7	13.9	14.5	13.5
Reentrants	29.6	30.1	28.7	29.0	29.4	30.9	28.9	29.2
New entrants	13.0	14.9	13.0	14.5	14.2	14.9	15.4	14.8
UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE								
Job losers	2.9	2.4	3.2	2.7	2.6	2.5	2.5	2.6
Job leavers	.8	.7	.9	.9	.9	.9	.9	.8
Reentrants	1.9	1.7	2.0	1.8	1.8	1.9	1.7	1.8
New entrants	.8	.8	.9	.9	.9	.9	.9	.9

Table A-6. Unemployment by sex and age, seasonally adjusted

Sex and age	Number of unemployed persons (In thousands)		Unemployment rates					
	May 1977	May 1978	May 1977	Jan. 1978	Feb. 1978	Mar. 1978	Apr. 1978	May 1978
Total, 16 years and over	6,894	6,149	7.1	6.3	6.1	6.2	6.0	6.1
16 to 19 years	1,664	1,584	18.1	16.0	17.4	17.3	16.9	16.5
16 to 17 years	783	792	20.6	18.2	20.8	20.4	19.9	19.3
18 to 19 years	881	793	16.4	14.5	15.0	15.2	14.4	14.5
20 to 24 years	1,560	1,332	10.9	10.5	10.1	10.3	10.0	9.0
25 years and over	3,628	3,195	4.9	4.2	3.9	4.0	3.9	4.2
25 to 54 years	3,053	2,745	5.2	4.3	4.1	4.2	4.1	4.5
55 years and over	586	467	4.1	3.5	3.3	3.1	3.2	3.2
Men, 16 years and over	3,638	3,001	6.4	5.6	5.6	5.6	5.2	5.1
16 to 19 years	870	769	17.4	14.9	17.2	17.1	16.6	15.3
16 to 17 years	410	406	19.2	17.2	21.1	21.0	19.9	18.4
18 to 19 years	460	364	16.1	13.4	14.3	14.3	13.4	12.9
20 to 24 years	836	632	10.8	10.5	10.3	10.1	9.1	7.9
25 years and over	1,916	1,589	4.3	3.5	3.4	3.5	3.3	3.5
25 to 54 years	1,578	1,297	4.4	3.6	3.4	3.5	3.3	3.6
55 years and over	343	295	3.9	3.2	3.2	3.2	3.3	3.3
Women, 16 years and over	3,256	3,148	8.2	7.3	6.9	7.0	7.0	7.5
16 to 19 years	794	815	19.0	17.4	17.7	17.5	17.2	17.9
16 to 17 years	373	386	22.2	19.5	20.4	19.6	19.9	20.3
18 to 19 years	421	429	16.8	15.8	15.7	16.1	15.6	16.1
20 to 24 years	724	700	11.1	10.5	9.8	10.4	11.0	10.3
25 years and over	1,712	1,606	5.9	5.2	4.7	4.7	4.8	5.3
25 to 54 years	1,475	1,448	6.2	5.5	5.1	5.2	5.2	5.8
55 years and over	243	172	4.4	3.8	3.3	3.0	3.0	3.1

Table A-7. Range of unemployment measures based on varying definitions of unemployment and the labor force, seasonally adjusted

[Percent]

Measures	Quarterly averages					Monthly data		
	1977				1978	1978		
	I	II	III	IV	I	Mar.	Apr.	May
U-1—Persons unemployed 15 weeks or longer as a percent of the civilian labor force	2.2	1.9	1.9	1.9	1.6	1.5	1.4	1.4
U-2—Job losers as a percent of the civilian labor force	3.4	3.1	3.2	3.0	2.6	2.5	2.5	2.6
U-3—Unemployed persons 25 years and over as a percent of the civilian labor force 25 years and over	5.2	5.0	4.9	4.7	4.0	4.0	3.9	4.2
U-4—Unemployed full-time jobseekers as a percent of the full-time labor force	6.9	6.6	6.5	6.2	5.7	5.6	5.4	5.6
U-5—Total unemployed as a percent of the civilian labor force (official measure)	7.4	7.1	6.9	6.6	6.2	6.2	6.0	6.1
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	9.0	8.7	8.6	8.2	7.6	7.6	7.5	7.6
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	10.0	9.7	9.7	9.2	8.5	N.A.	N.A.	N.A.

N.A.= not available.

Table A-8. Employment status of the noninstitutional population for ten large States

[Numbers in thousands]

State and employment status	Not seasonally adjusted *			Seasonally adjusted					
	May 1977	Apr. 1978	May 1978	May 1977	Jan. 1978	Feb. 1978	Mar. 1978	Apr. 1978	May 1978
California									
Civilian noninstitutional population [1]	15,878	16,175	16,202	15,878	16,099	16,124	16,148	16,175	16,202
Civilian labor force	10,048	10,538	10,559	10,103	10,288	10,422	10,568	10,643	10,615
Employed	9,252	9,777	9,819	9,235	9,584	9,628	9,745	9,862	9;802
Unemployed	795	760	740	868	704	794	823	781	813
Unemployment rate	7.9	7.2	7.0	8.6	6.8	7.6	7.8	7.3	7.7
Florida									
Civilian noninstitutional population [1]	6,339	6,515	6,533	6,339	6,465	6,481	6,498	6,515	6,533
Civilian labor force	3,437	3,669	3,649	(2)	(2)	(2)	(2)	(2)	(2)
Employed	3,157	3,446	3,424	(2)	(2)	(2)	(2)	(2)	(2)
Unemployed	280	223	225	(2)	(2)	(2)	(2)	(2)	(2)
Unemployment rate	8.1	6.1	6.2	(2)	(2)	(2)	(2)	(2)	(2)
Illinois									
Civilian noninstitutional population [1]	8,142	8,205	8,212	8,142	8,189	8,195	8,200	8,205	8,212
Civilian labor force	5,139	5,236	5,275	5,197	5,299	5,262	5,343	5,291	5,347
Employed	4,889	4,950	4,955	4,903	4,943	4,923	4,912	4,977	4,969
Unemployed	249	287	320	294	356	339	331	314	378
Unemployment rate	4.9	5.5	6.1	5.7	6.7	6.4	6.3	5.9	7.1
Massachusetts									
Civilian noninstitutional population [1]	4,288	4,327	4,331	4,288	4,315	4,319	4,323	4,327	4,331
Civilian labor force	2,769	2,794	2,806	(2)	(2)	(2)	(2)	(2)	(2)
Employed	2,585	2,635	2,654	2,593	2,649	2,641	2,657	2,672	2,662
Unemployed	184	160	152	(2)	(2)	(2)	(2)	(2)	(2)
Unemployment rate	6.6	5.7	5.4	(2)	(2)	(2)	(2)	(2)	(2)
Michigan									
Civilian noninstitutional population [1]	6,539	6,609	6,615	6,539	6,590	6,596	6,602	6,609	6,615
Civilian labor force	4,044	4,155	4,154	(2)	(2)	(2)	(2)	(2)	(2)
Employed	3,746	3,881	3,882	(2)	(2)	(2)	(2)	(2)	(2)
Unemployed	297	274	272	312	330	242	229	254	287
Unemployment rate	7.3	6.6	6.6	(2)	(2)	(2)	(2)	(2)	(2)
New Jersey									
Civilian noninstitutional population [1]	5,404	5,453	5,458	5,404	5,439	5,444	5,448	5,453	5,458
Civilian labor force	3,322	3,302	3,343	3,341	3,406	3,356	3,274	3,339	3,363
Employed	3,037	3,064	3,099	3,038	3,175	3,109	3,067	3,093	3,101
Unemployed	285	238	244	303	231	247	207	246	262
Unemployment rate	8.6	7.2	7.3	9.1	6.8	7.4	6.3	7.4	7.8
New York									
Civilian noninstitutional population [1]	13,295	13,324	13,328	13,295	13,317	13,318	13,321	13,324	13,328
Civilian labor force	7,678	7,830	7,764	7,740	7,906	7,826	7,784	7,842	7,815
Employed	6,999	7,245	7,183	6,980	7,278	7,192	7,182	7,239	7,165
Unemployed	680	585	581	760	628	634	602	603	650
Unemployment rate	8.8	7.5	7.5	9.8	7.9	8.1	7.7	7.7	8.3
Ohio									
Civilian noninstitutional population [1]	7,767	7,826	7,832	7,767	7,812	7,816	7,820	7,826	7,832
Civilian labor force	4,757	4,788	4,852	4,787	4,787	4,795	4,787	4,850	4,883
Employed	4,500	4,518	4,606	4,497	4,526	4,541	4,538	4,574	4,603
Unemployed	257	270	247	290	261	254	249	276	280
Unemployment rate	5.4	5.6	5.1	6.1	5.5	5.3	5.2	5.7	5.7
Pennsylvania									
Civilian noninstitutional population [1]	8,804	8,856	8,861	8,804	8,842	8,846	8,850	8,856	8,861
Civilian labor force	5,112	5,207	5,151	5,149	5,166	5,188	5,269	5,248	5,189
Employed	4,785	4,848	4,852	4,786	4,802	4,862	4,899	4,866	4,853
Unemployed	327	359	299	363	364	326	370	382	336
Unemployment rate	6.4	6.9	5.8	7.0	7.0	6.3	7.0	7.3	6.5
Texas									
Civilian noninstitutional population [1]	8,967	9,160	9,179	8,967	9,108	9,125	9,143	9,160	9,179
Civilian labor force	5,703	5,913	5,937	5,767	5,984	5,919	5,990	5,955	6,003
Employed	5,468	5,683	5,690	5,508	5,692	5,612	5,702	5,695	5,730
Unemployed	234	230	247	259	292	307	288	260	273
Unemployment rate	4.1	3.9	4.2	4.5	4.9	5.2	4.8	4.4	4.5

[1] The population figures are not adjusted for seasonal variations; therefore, identical numbers appear in the unadjusted and the seasonally adjusted columns.

* These are the official Bureau of Labor Statistics' estimates used in the administration of Federal fund allocation programs.

[2] Seasonally-adjusted data are not presented for this series, because the variations that are due to seasonal influences cannot be separated with sufficient precision from those which stem from the trend-cycle and irregular components of the original time series.

Table B-1. Employees on nonagricultural payrolls, by industry

(In thousands)

Industry	Not seasonally adjusted				Seasonally adjusted					
	MAY 1977	MAR. 1978	APR. p 1978	MAY p 1978	MAY 1977	JAN. 1978	FEB. 1978	MAR. 1978	APR. p 1978	MAY p 1978
TOTAL	82,029	83,734	84,867	85,552	81,837	83,719	84,046	84,555	85,170	85,345
GOODS-PRODUCING	24,167	24,361	24,984	25,285	24,264	24,593	24,733	24,945	25,331	25,382
MINING	844	716	887	901	845	705	711	728	896	902
CONTRACT CONSTRUCTION	3,853	3,721	4,061	4,245	3,853	3,916	3,947	4,053	4,226	4,245
MANUFACTURING	19,470	19,924	20,036	20,140	19,566	19,972	20,075	20,164	20,209	20,235
Production workers	14,021	14,341	14,432	14,519	14,102	14,403	14,489	14,556	14,588	14,598
DURABLE GOODS	11,442	11,833	11,928	12,018	11,451	11,828	11,909	11,965	11,986	12,026
Production workers	8,237	8,498	8,578	8,647	8,211	8,512	8,575	8,614	8,632	8,652
Ordnance and accessories	155.2	157.1	156.4	157.1	156	156	157	157	157	158
Lumber and wood products	634.0	650.1	660.8	673.4	638	667	664	670	670	674
Furniture and fixtures	504.1	534.9	532.4	532.3	508	532	537	540	537	536
Stone, clay, and glass products	655.7	661.5	680.5	688.3	653	675	676	680	687	686
Primary metal industries	1,217.8	1,205.1	1,213.8	1,223.9	1,215	1,212	1,217	1,215	1,216	1,221
Fabricated metal products	1,440.1	1,498.7	1,507.8	1,516.8	1,444	1,499	1,515	1,515	1,518	1,521
Machinery, except electrical	2,161.0	2,301.5	2,313.4	2,324.6	2,165	2,265	2,279	2,295	2,311	2,329
Electrical equipment	1,915.1	2,014.3	2,023.7	2,034.2	1,925	1,998	2,017	2,035	2,038	2,044
Transportation equipment	1,811.0	1,850.6	1,873.8	1,895.2	1,797	1,862	1,879	1,884	1,876	1,880
Instruments and related products	525.4	541.5	544.6	547.7	528	539	541	545	548	550
Miscellaneous manufacturing	419.9	418.0	420.7	424.2	422	423	427	428	428	427
NONDURABLE GOODS	8,028	8,091	8,108	8,122	8,115	8,144	8,166	8,199	8,223	8,209
Production workers	5,814	5,843	5,854	5,868	5,891	5,891	5,913	5,942	5,956	5,946
Food and kindred products	1,673.9	1,668.0	1,665.2	1,661.1	1,733	1,728	1,729	1,739	1,742	1,720
Tobacco manufacturers	63.2	65.3	61.9	61.8	72	69	69	70	68	70
Textile mill products	983.5	990.9	989.9	995.7	986	991	995	995	991	998
Apparel and other textile products	1,295.9	1,294.6	1,297.5	1,297.7	1,292	1,289	1,285	1,292	1,301	1,294
Paper and allied products	696.0	707.4	711.8	715.6	701	707	710	714	718	721
Printing and publishing	1,105.4	1,131.2	1,135.1	1,135.7	1,108	1,125	1,129	1,133	1,137	1,138
Chemicals and allied products	1,056.4	1,066.3	1,069.5	1,070.4	1,062	1,066	1,070	1,071	1,074	1,076
Petroleum and coal products	209.8	211.4	213.4	215.3	210	214	217	217	216	215
Rubber and plastics products, nec	673.9	694.1	698.5	701.6	684	693	701	705	712	712
Leather and leather products	269.7	262.1	264.9	267.5	267	262	263	263	264	265
SERVICE-PRODUCING	57,862	59,373	59,883	60,266	57,573	59,126	59,313	59,610	59,839	59,963
TRANSPORTATION AND PUBLIC UTILITIES	4,577	4,630	4,670	4,697	4,586	4,628	4,651	4,672	4,708	4,706
WHOLESALE AND RETAIL TRADE	18,176	18,518	18,720	18,906	18,202	18,744	18,744	18,849	18,876	18,933
WHOLESALE TRADE	4,353	4,495	4,511	4,534	4,379	4,482	4,510	4,540	4,552	4,561
RETAIL TRADE	13,823	14,023	14,209	14,372	13,823	14,262	14,234	14,309	14,324	14,372
FINANCE, INSURANCE, AND REAL ESTATE	4,476	4,617	4,673	4,706	4,481	4,630	4,647	4,673	4,687	4,711
SERVICES	15,298	15,748	15,954	16,087	15,197	15,693	15,791	15,875	15,954	15,991
GOVERNMENT	15,345	15,840	15,866	15,870	15,107	15,431	15,480	15,544	15,614	15,622
FEDERAL	2,728	2,725	2,739	2,747	2,725	2,736	2,736	2,736	2,744	2,744
STATE AND LOCAL	12,617	13,115	13,127	13,123	12,382	12,695	12,744	12,808	12,870	12,878

p=preliminary.

Table B-2. Average weekly hours of production or nonsupervisory workers,[1] on private nonagricultural payrolls, by industry

Industry	Not seasonally adjusted				Seasonally adjusted					
	MAY 1977	MAR. 1978	APR. 1978 p	MAY 1978 p	MAY 1977	JAN. 1978	FEB. 1978	MAR. 1978	APR. 1978 p	MAY 1978 p
TOTAL PRIVATE	36.1	35.9	36.0	35.8	36.3	35.6	35.8	36.2	36.3	36.0
MINING	44.1	44.1	43.8	43.7	44.1	43.2	43.6	44.6	44.2	43.7
CONTRACT CONSTRUCTION	37.5	36.4	37.1	36.6	37.4	34.6	35.7	36.8	37.4	36.5
MANUFACTURING	40.3	40.4	40.4	40.3	40.4	39.6	39.9	40.6	40.7	40.3
Overtime hours	3.3	3.4	3.4	3.4	3.4	3.5	3.8	3.7	3.6	3.5
DURABLE GOODS	41.0	41.0	41.0	41.0	41.0	40.2	40.5	41.2	41.2	41.0
Overtime hours	3.5	3.7	3.6	3.6	3.6	3.7	4.0	3.9	3.8	3.7
Ordnance and accessories	41.3	41.2	40.3	40.0	41.1	40.2	37.9	41.1	40.3	40.1
Lumber and wood products	40.3	39.5	40.0	39.7	40.0	39.4	39.4	39.9	40.0	39.4
Furniture and fixtures	38.4	39.4	39.2	39.0	38.7	37.7	39.4	39.9	39.8	39.3
Stone, clay, and glass products	41.8	41.4	42.0	41.9	41.6	40.3	40.9	41.6	42.3	41.7
Primary metal industries	41.5	41.4	41.4	41.4	41.5	41.0	41.5	41.5	41.4	41.4
Fabricated metal products	41.0	41.1	41.2	41.1	41.0	40.3	40.7	41.3	41.5	41.1
Machinery, except electrical	41.4	42.2	41.9	41.7	41.6	40.9	41.7	42.2	42.2	42.0
Electrical equipment	40.1	40.3	40.1	40.1	40.2	39.5	39.6	40.4	40.3	40.2
Transportation equipment	42.6	41.5	41.9	41.9	42.5	41.1	40.6	41.7	41.9	41.6
Instruments and related products	40.3	41.0	40.9	40.6	40.4	39.8	40.3	41.1	41.2	40.7
Miscellaneous manufacturing	39.0	39.3	39.2	39.1	39.0	38.0	38.3	39.2	39.3	39.1
NONDURABLE GOODS	39.3	39.4	39.4	39.3	39.5	38.7	39.1	39.7	39.8	39.4
Overtime hours	3.0	3.1	3.1	3.0	3.2	3.1	3.4	3.3	3.4	3.2
Food and kindred products	39.7	39.4	39.3	39.4	40.0	39.1	39.6	40.0	40.0	39.7
Tobacco manufacturers	38.1	38.5	38.5	38.4	38.4	37.5	38.5	39.0	38.9	38.7
Textile mill products	40.6	40.4	40.3	40.4	40.5	40.0	40.3	40.6	40.7	40.3
Apparel and other textile products	35.5	35.8	35.8	35.6	35.6	33.9	34.2	35.9	36.1	35.7
Paper and allied products	42.7	43.0	42.7	42.6	42.9	42.2	42.4	43.4	43.4	42.8
Printing and publishing	37.5	38.0	37.7	37.4	37.6	37.4	37.5	38.1	38.1	37.5
Chemicals and allied products	41.7	42.0	42.0	41.8	41.7	41.6	41.7	42.1	41.9	41.8
Petroleum and coal products	42.5	43.6	43.8	43.4	42.6	43.6	43.4	44.0	43.8	43.4
Rubber and plastics products, nec	41.1	40.6	40.8	40.5	41.3	39.8	39.4	40.6	41.1	40.7
Leather and leather products	37.3	37.2	37.6	37.5	37.1	36.6	36.6	37.4	38.2	37.3
TRANSPORTATION AND PUBLIC UTILITIES	40.3	40.2	40.1	39.9	40.3	39.8	40.4	40.6	40.3	40.2
WHOLESALE AND RETAIL TRADE	33.2	32.8	32.8	32.8	33.5	32.8	32.8	33.1	33.1	33.1
WHOLESALE TRADE	38.7	38.8	38.8	38.7	38.8	38.6	38.8	39.0	39.0	38.8
RETAIL TRADE	31.5	31.0	31.1	31.1	31.9	31.1	31.1	31.4	31.4	31.4
FINANCE, INSURANCE, AND REAL ESTATE	36.6	36.5	36.8	36.5	36.7	36.5	36.5	36.6	36.8	36.6
SERVICES	33.3	33.3	33.3	33.0	33.5	33.5	33.2	33.5	33.5	33.2

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

p=preliminary.

ESTABLISHMENT DATA

Table B-3. Average hourly and weekly earnings of production or nonsupervisory workers[1] on private nonagricultural payrolls, by industry

Industry	Average hourly earnings				Average weekly earnings			
	MAY 1977	MAR. 1978	APR. 1978 p	MAY 1978 p	MAY 1977	MAR. 1978	APR. 1978 p	MAY 1978 p
TOTAL PRIVATE	$5.19	$5.54	$5.61	$5.63	$187.36	$198.89	$201.96	$201.55
Seasonally adjusted	5.20	5.56	5.62	5.64	188.76	201.27	204.01	203.04
MINING	6.81	6.87	7.55	7.60	300.32	302.97	330.69	332.12
CONTRACT CONSTRUCTION	7.91	8.36	8.32	8.43	296.63	304.30	308.67	308.54
MANUFACTURING	5.56	5.96	5.99	6.03	224.07	240.78	242.00	243.01
DURABLE GOODS	5.95	6.35	6.39	6.43	243.95	260.35	261.99	263.63
Ordnance and accessories	6.16	6.68	6.69	6.64	252.56	275.22	269.61	265.60
Lumber and wood products	4.97	5.34	5.40	5.47	200.29	210.93	216.00	217.16
Furniture and fixtures	4.23	4.53	4.56	4.58	162.43	178.48	178.15	178.62
Stone, clay, and glass products	5.73	6.04	6.14	6.19	239.51	250.06	257.68	259.36
Primary metal industries	7.39	7.97	7.99	8.09	306.69	329.96	330.79	334.93
Fabricated metal products	5.77	6.11	6.17	6.20	236.57	251.12	254.20	254.82
Machinery, except electrical	6.10	6.55	6.56	6.57	252.54	276.41	274.86	273.97
Electrical equipment	5.23	5.65	5.67	5.70	209.72	227.70	227.37	228.57
Transportation equipment	7.10	7.57	7.62	7.64	303.88	314.16	319.28	320.12
Instruments and related products	5.13	5.49	5.50	5.51	206.74	225.09	224.55	223.71
Miscellaneous manufacturing	4.31	4.56	4.59	4.60	168.09	179.21	179.93	179.86
NONDURABLE GOODS	4.99	5.37	5.39	5.41	196.11	211.58	212.37	212.61
Food and kindred products	5.28	5.66	5.70	5.75	209.62	223.00	224.01	226.55
Tobacco manufactures	5.58	6.22	6.29	6.28	212.60	239.47	242.17	241.15
Textile mill products	3.86	4.16	4.17	4.17	156.72	168.06	168.05	168.47
Apparel and other textile products	3.56	3.89	3.91	3.91	126.38	139.26	139.98	139.20
Paper and allied products	5.80	6.27	6.28	6.32	247.66	269.61	268.16	269.23
Printing and publishing	6.02	6.37	6.37	6.40	225.75	242.06	240.15	239.36
Chemicals and allied products	6.29	6.79	6.81	6.84	262.29	285.18	286.02	285.91
Petroleum and coal products	7.69	8.34	8.36	8.32	327.59	363.62	366.17	361.09
Rubber and plastics products, nec	5.05	5.29	5.33	5.40	207.56	214.77	217.46	218.70
Leather and leather products	3.63	3.89	3.89	3.89	135.40	144.71	146.26	145.88
TRANSPORTATION AND PUBLIC UTILITIES	6.83	7.31	7.40	7.40	273.20	293.86	296.74	295.26
WHOLESALE AND RETAIL TRADE	4.25	4.57	4.61	4.62	141.10	149.90	151.21	151.54
WHOLESALE TRADE	5.52	5.87	5.96	5.97	213.62	227.76	231.25	231.04
RETAIL TRADE	3.80	4.09	4.12	4.13	120.08	126.79	128.13	128.44
FINANCE, INSURANCE, AND REAL ESTATE	4.58	4.83	4.92	4.90	167.63	176.30	181.06	178.85
SERVICES	4.67	5.02	5.05	5.07	155.51	167.17	168.17	167.31

[1] See footnote 1, table B-2.
p=preliminary.

Table B-4. Hourly earnings index for production or nonsupervisory workers[1] on private nonagricultural payrolls, by industry division, seasonally adjusted

(1967=100)

Industry	MAY 1977	DEC. 1977	JAN. 1978	FEB. 1978	MAR. 1978	APR. P 1978	MAY P 1978	Percent change from: MAY 1977–MAY 1978	Percent change from: APR. 1978–MAY 1978
TOTAL PRIVATE NONFARM:									
Current dollars	196.4	205.2	208.1	208.8	210.2	212.0	212.6	8.2	0.3
Constant (1967) dollars	108.6	110.3	111.0	110.6	110.5	110.5	N.A.	(2)	(3)
MINING	213.1	219.1	221.4	223.2	225.3	235.9	237.2	11.3	.5
CONTRACT CONSTRUCTION	193.3	198.9	201.1	201.6	203.8	204.2	205.7	6.5	.8
MANUFACTURING	196.9	206.3	208.3	209.7	210.9	212.1	213.3	8.3	.6
TRANSPORTATION AND PUBLIC UTILITIES	209.9	221.5	223.3	223.9	225.0	227.7	227.4	8.3	-.1
WHOLESALE AND RETAIL TRADE	190.6	198.8	202.4	203.0	204.8	206.9	206.8	8.5	-.1
FINANCE, INSURANCE, AND REAL ESTATE	178.5	185.8	188.5	187.5	188.5	191.7	190.7	6.8	-.5
SERVICES	200.5	209.8	214.4	214.3	215.7	217.5	218.1	8.8	.3

[1] SEE FOOTNOTE 1, TABLE B-2.
[2] PERCENT CHANGE WAS 1.7 FROM APRIL 1977 TO APRIL 1978, THE LATEST MONTH AVAILABLE.
[3] PERCENT CHANGE WAS .0 FROM MARCH 1978 TO APRIL 1978, THE LATEST MONTH AVAILABLE.

N.A. = not available.
P=preliminary.

NOTE: All series are in current dollars except where indicated. The index excludes effects of two types of changes that are unrelated to underlying wage-rate developments: Fluctuations in overtime premiums in manufacturing (the only sector for which overtime data are available) and the effects of changes in the proportion of workers in high-wage and low-wage industries.

Table B-5. Indexes of aggregate weekly hours of production or nonsupervisory workers,[1] on private nonagricultural payrolls, by industry, seasonally adjusted

(1967=100)

Industry division and group	1977 MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	1978 JAN.	FEB.	MAR.	APR. P	MAY P
TOTAL PRIVATE	115.9	115.6	115.8	115.6	115.9	116.8	117.2	117.5	116.1	117.0	119.2	120.4	119.8
GOODS-PRODUCING	101.4	101.8	101.4	100.6	100.9	101.7	102.3	102.1	99.5	101.4	104.3	106.8	105.8
MINING	140.6	142.3	139.9	134.7	142.5	143.9	144.8	113.3	110.7	112.6	118.7	149.9	149.3
CONTRACT CONSTRUCTION	112.9	111.8	112.8	110.8	110.4	112.3	114.0	113.5	104.7	108.9	116.5	124.6	122.1
MANUFACTURING	98.1	98.7	98.0	97.6	97.8	98.4	98.8	99.2	98.2	99.7	101.7	102.1	101.4
DURABLE GOODS	97.8	98.7	98.3	98.1	98.4	99.3	99.5	100.8	99.3	100.9	103.0	103.4	102.9
Ordnance and accessories	40.7	41.0	40.5	39.3	39.1	38.2	38.2	40.2	38.8	38.1	41.3	39.9	39.2
Lumber and wood products	104.1	104.0	105.3	104.0	106.0	106.8	109.5	109.8	107.6	106.8	109.3	109.4	108.4
Furniture and fixtures	107.1	107.9	108.4	107.2	108.3	110.6	111.7	113.3	109.3	110.5	117.6	117.0	115.0
Stone, clay, and glass products	104.2	105.4	104.9	104.1	103.3	103.2	106.7	107.0	104.3	105.4	108.0	111.3	109.3
Primary metal industries	90.7	90.9	89.0	88.2	89.0	89.7	89.5	89.7	89.5	91.2	90.9	90.9	91.5
Fabricated metal products	102.8	104.2	103.7	103.3	103.1	105.0	105.7	107.7	105.3	107.6	109.1	109.8	108.9
Machinery, except electrical	100.2	101.6	103.2	103.5	103.6	105.5	106.9	106.0	104.0	107.0	109.1	110.0	110.4
Electrical equipment and supplies	97.2	97.9	98.3	98.3	97.8	98.8	99.4	100.4	98.9	100.3	103.4	103.1	103.3
Transportation equipment	95.3	96.5	94.8	95.4	96.5	96.2	94.5	96.7	96.5	96.3	99.0	99.1	98.3
Instruments and related products	112.3	113.2	111.7	111.3	112.4	113.2	113.4	114.4	113.4	114.8	117.8	119.2	117.7
Miscellaneous manufacturing industry	94.7	94.6	91.4	91.3	90.3	91.1	91.9	93.9	92.3	93.6	96.4	96.9	95.8
NONDURABLE GOODS	98.5	98.7	97.7	96.9	96.9	97.1	97.8	98.1	96.5	97.8	99.9	100.3	99.2
Food and kindred products	97.3	97.3	95.9	94.5	94.1	92.8	94.2	94.6	94.4	96.0	97.6	97.6	95.5
Tobacco manufacturers	78.2	80.2	77.2	71.7	73.2	72.4	72.2	74.0	72.4	74.4	76.7	73.8	76.1
Textile mill products	100.2	99.7	99.9	98.9	99.4	100.2	101.4	100.8	99.3	100.4	101.3	101.2	100.9
Apparel and other textile products	88.6	89.6	87.6	87.8	87.2	87.8	88.6	89.0	84.2	87.2	89.4	90.7	89.2
Paper and allied products	100.4	101.1	100.3	99.4	99.7	100.2	99.6	100.8	99.3	100.2	103.1	103.5	103.0
Printing and publishing	95.1	95.3	95.6	95.1	95.7	95.7	95.9	95.9	94.6	95.3	97.4	97.6	96.0
Chemicals and allied products	103.3	103.8	103.7	103.4	103.0	102.6	103.0	103.5	103.8	104.5	105.5	105.2	105.3
Petroleum and coal products	119.3	121.6	119.9	120.4	120.8	122.8	124.8	125.7	126.6	127.8	128.6	128.1	125.1
Rubber and plastics products, nec	135.3	133.9	132.5	129.7	129.3	130.5	132.5	133.8	131.3	131.9	137.4	140.1	138.5
Leather and leather products	73.3	72.9	69.9	71.8	72.7	73.8	73.7	71.9	70.7	70.7	72.6	74.5	73.1
SERVICE-PRODUCING	125.9	125.6	125.8	126.1	126.4	127.2	127.5	128.2	127.0	127.8	129.4	129.8	129.6
TRANSPORTATION AND PUBLIC UTILITIES	104.6	104.1	103.1	103.5	103.9	102.9	105.1	105.6	103.5	105.4	106.3	106.3	106.1
WHOLESALE AND RETAIL TRADE	121.4	121.2	121.6	121.6	121.8	122.7	122.4	123.2	122.3	122.3	124.1	124.1	124.4
WHOLESALE TRADE	117.3	117.3	117.5	117.5	117.8	118.7	118.8	118.9	118.9	120.3	121.7	122.0	121.7
RETAIL TRADE	123.0	122.7	123.1	123.1	123.3	124.2	123.7	124.8	123.5	123.1	124.9	124.9	125.4
FINANCE, INSURANCE, AND REAL ESTATE	131.0	131.7	132.3	132.7	133.2	134.2	134.9	134.9	135.4	135.9	136.7	138.1	138.0
SERVICES	140.3	139.6	140.1	140.6	140.9	142.7	142.6	143.4	143.8	143.4	145.3	146.0	145.2

[1] See footnote 1, table B-2.

pPreliminary.

ESTABLISHMENT DATA

Table B-6. Indexes of diffusion: Percent of industries in which employment[1] increased

Year and month	Over 1-month span	Over 3-month span	Over 6-month span	Over 12-month span
1975				
January	15.1	12.8	12.8	16.6
February	15.7	12.8	11.9	17.4
March	25.6	18.6	17.7	17.7
April	39.0	32.3	28.2	20.6
May	51.2	43.9	41.6	27.0
June	40.7	52.3	56.7	40.7
July	58.1	57.0	67.2	50.6
August	73.0	76.2	70.1	63.1
September	80.8	81.7	75.3	72.4
October	66.9	74.1	82.3	77.3
November	62.2	72.4	83.4	80.2
December	74.1	74.7	81.7	82.6
1976				
January	78.5	82.0	83.1	86.0
February	77.9	84.3	81.7	84.6
March	74.1	85.2	79.9	81.1
April	79.4	77.9	79.4	74.4
May	66.6	71.5	70.9	79.7
June	54.1	61.0	68.6	79.1
July	57.3	52.9	57.0	74.1
August	47.1	62.5	57.3	74.7
September	69.8	56.7	63.7	78.5
October	42.4	62.8	69.8	76.5
November	69.5	58.7	73.5	75.0
December	73.0	79.9	78.5	74.7
1977				
January	75.0	79.7	89.0	75.9
February	73.5	86.0	86.6	75.6
March	82.3	85.8	85.1	78.2
April	77.6	84.0	80.5	78.2
May	68.6	73.3	71.5	79.1
June	63.7	70.1	68.0	77.6
July	65.7	56.1	68.3	78.8
August	50.0	62.5	68.3	78.8
September	61.3	57.0	72.1	75.6
October	59.9	73.3	75.0	77.6p
November	75.9	76.2	80.5	76.2p
December	73.8	77.9	83.7	
1978				
January	66.9	80.5	85.2p	
February	70.1	81.7	80.2p	
March	74.4	77.9p		
April	68.9p	68.3p		
May	55.8p			
June				
July				
August				
September				
October				
November				
December				

[1] Number of employees, seasonally adjusted, on payrolls of 172 private nonagricultural industries.
p = preliminary.

Representative LONG. I really have three areas I would like to explore with you, Mr. Stein, which seem to me to be the most disturbing of the information that you have brought to us; perhaps you can shed some additional light on these problems, insofar as their significance is concerned.

One of them is inflation. The second is the rate of black teenage unemployment, and the third is the rate of unemployment among adult women.

Of the three areas, perhaps the most distressing news is that the consumer and producer prices both increased at double-digit rates.

I think this worries everybody in the whole country more than anything else. If the mail I am getting is any indication of what is happening, it worries my constituents more than anything.

Do you see any trend that is at all predictable in this producer price performance?

Mr. STEIN. Congressman Long, I would like to refer that question to Mr. Layng, who is our foremost expert in the price area.

Mr. LAYNG. Congressman Long, perhaps the most encouraging news contained within the Producer Price Indexes report for May released this morning was in the crude sector of the economy, where both crude foodstuffs and feedstuffs, as well as the other nonfood materials, performed favorably in May.

The crude foodstuffs were unchanged following 7 months of substantial increases. That is encouraging.

Representative LONG. That would indicate to you the possibility that this is leveling off?

Mr. LAYNG. Certainly this month.

The difficulty with crude materials is that they are very volatile, and it takes several months to see whether a change in trend has occurred.

So, 1 month is insufficient, but from the viewpoint of this month, it is encouraging, and if it continues, we would expect pressure at the retail level to subside as well, but we need more data before we can tell that.

There is a similar situation with respect to nonfood crude materials which increased only 0.4 percent, following increases of 1 to 2 percent since November of last year.

So, there again, we see some easing this month at that level. I think that that is the only encouraging information in this month's report.

At the finished level, I think it is still very worrisome that nonfood materials continue to increase at historically very high rates.

The eight-tenths of 1 percent increase in nonfood finished goods certainly indicates that at that level there is still pressure in the price structure.

Representative LONG. If we look at the finished goods category, I think that, except for perhaps April itself, this is the most rapid increase that we have had in any recent time. Is that so?

Mr. LAYNG. Certainly within the past year. I believe the eight-tenths of 1 percent increase was the largest since April 1977, with the exception of April, which was, of course, distorted to some extent by the very large increase in jewelry prices which occurred.

Representative LONG. You are stating, then, that although it is impossible to determine from 1 month's prices, we do have a continuation

of something that has been in existence long enough, perhaps, to develop a trend, and might even suggest, if we are not careful, an acceleration in the inflation rate of the nonagriculture commodities. Is that correct?

Mr. LAYNG. Certainly, we are in an uptrend in the nonagriculture area, and have been for several months.

Representative LONG. And there are no indications in the information you bring us today that suggests a reversal, or even a slowing down, really, of that trend?

Mr. LAYNG. In the finished goods components, that is correct. The exception is the favorable indications at the crude level of the price structure.

Representative LONG. I thank you for being so frank.

Mr. Stein, the black teenage unemployment, as we have discussed with Mr. Shiskin before, and as I am sure you and all your colleagues are very much aware, has been a continuing and very difficult problem; the social implications of the problem cause a great many of us a lot of concern.

When we look at the unemployment figures among black teenagers for the month of April, it showed at that time a welcome decline, as I recall those figures, but it has again jumped up from 35.3 to 38.4 percent in May—that is, from April to May.

That is an increase of over 3 percentage points in a relatively short period of time.

What significance can you attach to that?

Mr. STEIN. Congressman Long, I would like to make a couple of observations about that.

Representative LONG. Feel free to do so.

Mr. STEIN. We are very disturbed about the high unemployment rate for black teenagers. That rate has remained in a range of 35 to 40 percent for several years, and although we have occasionally seen some temporary improvements, it seems like we cannot get a sustained decline in that rate.

The question came up before this committee last month when the rate went down to 35 percent as to whether we might be now moving downward, and I believe I commented at that time that we would have to see a significant drop below the 35 percent mark to really feel that we were getting any improvement.

On the other hand, I would also like to point out that there is—it is exceedingly difficult to reduce that rate because labor force participation for black teenagers is considerably lower than that for white teenagers.

That means that when programs are inaugurated to reduce unemployment for teenagers, we begin to see an influx into the labor force of black teenagers. In other words, we sort of have to go twice as fast just to stand still, as Commissioner Shiskin has put it from time to time.

I think we have seen some improvement in the employment ratio of black teenagers over the past year.

Representative LONG. Is this influx caused by new people coming into the market, or by those who had sort of given up, and are no longer included in your statistics, but when they see jobs available, move back to the labor market, Mr. Stein?

Mr. STEIN. Although I cannot answer that question with any degree of precision, I think it is probably more the latter.

There are probably a considerable number who are on the fringes of the labor force and ready to join it when jobs become available.

Representative LONG. It is a serious problem. I am sorry I interrupted you.

Did you have more you wanted to comment on with respect to the overall question of the black teenage employment?

Mr. STEIN. No, sir, I think that is all I was going to say.

Representative LONG. Let's get to the question of adult women unemployment.

The unemployment rate for adult women increased from 5.8 in April to 6.3 percent in May, if I am reading your figures correctly.

What accounts for this marked increase?

Mr. STEIN. Well, we have had a continuing increase in the female labor force, and I would suppose at certain points it is just impossible for the economy to absorb everyone who is coming in immediately as they start looking for work.

Representative LONG. One additional area that I would like to explore with you for a moment, if I may, and also with your colleagues, is this: If we look at the nonfarm payroll employment during this period, it rose only 175,000 in May, after the huge increase experienced in April of something over 600,000 people.

Really, I guess, I have two questions in this regard. Is this not an alarming deterioration, a deterioration that is obscured by the household data which, in turn, shows an employment increase of 311,000?

Mr. STEIN. Well, Congressman Long, if I could remind you, part of our increase in April was the return of the coalminers from their strike, and while they were off payrolls they were not included in payroll employment, and when they returned to work they were.

Representative LONG. That is a very good point.

Mr. STEIN. I don't think it detracts from the validity of your point. The increase was less than what we have been getting in recent months.

Whether this is a slowdown or not, I think as cautious statisticians we are reluctant to draw that conclusion at this point.

Representative LONG. Examining the data, if we take the enormous discrepancy between the establishment figures on the one hand and the household figures on the other, how can there be, in your opinion, such a large discrepancy?

Mr. STEIN. Congressman Long, it is not unprecedented.

We have seen short-term deviations between these two series simply by virtue of the way in which the data are compiled.

The definitions are different, the sources are different, the samples are different, and so on.

We usually like to consider a somewhat longer period of time.

If we took as a reference point May a year ago, we would see an increase of about 3½ million, both in the household survey and in the payroll survey.

Representative LONG. Well, thank you very much, gentlemen and lady.

I know how dedicated you all are in preserving the integrity of what you present to us, and we appreciate it.

In dealing on the other side of the Hill, on the House side, as I have been doing recently with statistical data in my chairmanship of a subcommittee on the Rules Committee, I recognize the complexity of the problem.

Thank you for coming today.

Mr. STEIN. Thank you, Congressman Long.

Representative LONG. The hearing is adjourned.

[Whereupon, at 10:21 a.m., the committee adjourned, subject to the call of the Chair.]

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