937

EMPLOYMENT-UNEMPLOYMENT

HEARINGS

BEFORE THE

JOINT ECONOMIC COMMITTEE

CONGRESS OF THE UNITED STATES

NINETY-FIFTH CONGRESS

SECOND SESSION

PART 13

JULY 7, AUGUST 4, OCTOBER 6, AND DECEMBER 8, 1978, AND JANUARY 12, 1979

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CONTENTS

WITNESSES AND STATEMENTS

SUBMISSIONS FOR THE RECORD

EMPLOYMENT-UNEMPLOYMENT

FRIDAY, JULY 7, 1978

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

The committee met, pursuant to notice, at 10 a.m., in room 6226, Dirksen Senate Office Building, Hon. William Proxmire (member of the committee) presiding.

Present: Senators Sparkman and Proxmire.

Also present: Richard F. Kaufman, assistant director-general counsel; John M. Albertine, William R. Buechner, Thomas F. Dernburg, L. Douglas Lee, Deborah Norelli Matz, and M. Catherine Miller, professional staff members; Mark Borchelt, administrative assistant; Stephen J. Entin and Mark R. Policinski, minority professional staff members.

OPENING STATEMENT OF SENATOR PROXMIRE

Senator PROXMIRE. The commmittee will come to order.

We are delighted this morning to have Mrs. Slater from Commerce, who is the chief economist there, because the figures we have available this morning, Mrs. Slater, are somewhat encouraging and perplexing.

We are glad to have Mr. Stein, Mr. Early, and especially Mr. Mark because he is in charge of productivity and because productivity seems to be at the heart of this difficulty and hard to explain.

The most remarkable aspect of the figures is that we have a very sharp drop in unemployment, that drop is from 6.1 to 5.7, the biggest in unemployment that we have had—when was the last time that it was this low?

Mr. STEIN. August 1974.

Senator PROXMIRE. August 1974. So that is very encouraging. There are a number of most encouraging aspects about the situation. I notice, for instance, that unemployment for married men is down below 4 percent—actually 3.7 percent. Unemployment for teenagers is down. Employment and jobs are increasing throughout the economy.

But the most puzzling aspect of this, which I hope we can reconcile, is how can we have a 700,000 increase in jobs in June, according to the household survey, and only a 235,000 job increase according to the monthly survey of establishments? If we go out and ask about nonagricultural jobs, we find that factories and employers are saying they have hired 235,000. When we tap on doors and ask this question

we find an increase of 700,000. So reconciling that will be something we certainly will want to get at.

Staff tells me and, I think it is a very good suggestion because it might be the deterioration in productivity which explains the relationship between growth in output and employment. It is very puzzling.

The first half of the year we had growth of about 4 percent, very little growth in the first quarter and a sharp growth in the second quarter averaging, as Mrs. Slater points out, about 4 percent annual rate corrected for inflation.

For quite some time economists have held that it takes 4 percent just to hold employment constant. In the first half of the year 4 percent should have meant no unemployment drop. Yet unemployment dropped and dropped very sharply. In addition, there was no growth at all during the first quarter, but the economy still managed to create 1 million new jobs. As I say, part of that might be explained by the fact that even to get a 4-percent increase, if you get very little productivity increases it should mean you have more people working.

As you know, the administration's midyear report on the budget was submitted yesterday, which gives us a prediction of less growth and worse inflation for the rest of the year.

On the inflation front, it appears, in spite of everything the administration says it is doing to control inflation that prices will probably rise faster in 1978 than anyone predicted at the beginning of the year.

If the administration's inflation prediction of 7.2 percent is borne out, this will be the second year in a row in which inflation has accelerated beyond productivity growth in the first half of the year.

The administration's growth and unemployment predictions also appear to have been wrong. The report indicates that real GNP will grow about 4.2 percent for the year, which represents a significant deterioration from the 4.7 percent real growth predicted in January. As a result the administration predicts that there will be virtually no improvement in the unemployment rates between now and the end of this year.

They may modify that in view of the statistics this morning, but it does not indicate much of an improvement before that.

The Joint Economic Committee is currently conducting its 1978 midyear review of the economy. Two things concern me. First, it is conceivable that we may not achieve even the administration's tuned down goals for growth and inflation.

Second, an increasing number of economists are talking about the possibility of a recession or growth-recession next year. We would like to have your views on that.

Mr. Stein, I understand you have a statement for us. We prefer that we have it in advance, but you do not want us to get it in advance, and you are quite right.

Go ahead.

STATEMENT OF ROBERT L. STEIN, ASSISTANT COMMISSIONER, OFFICE OF CURRENT EMPLOYMENT ANALYSIS, BUREAU OF LABOR STATISTICS, DEPARTMENT OF LABOR, ACCOMPANIED BY JEROME A. MARK, ASSISTANT COMMISSIONER, OFFICE OF PRODUCTIVITY AND TECHNOLOGY; AND JOHN F. EARLY, CHIEF, DIVISION OF INDUSTRIAL PRICES AND PRICE INDEXES

Mr. STEIN. Senator Proxmire 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 "Employment Situation" and "Producer Price Indexes" press releases, issued this morning at 9 a.m.

THE EMPLOYMENT SITUATION

Employment expanded vigorously in June and the unemployment rate fell below 6 percent for the first time since October 1974. At 5.7 percent, the rate was at its lowest level in nearly 4 years.

The number of unemployed persons declined by about 400,000 between May and June. Teenagers and adult men both showed significant reductions in jobless totals.

Total employment grew by 700,000 over the month, with a third of the gain in agriculture. The employment-population ratio rose for the fourth consecutive month, reaching a new alltime high.

Senator PROXMIRE. Let me interrupt you at that point. You hit it right there. You say, total employment grew by 700,000 over the month, with a third of the gain in agriculture. That would mean that there would be a gain of over 450,000 in nonagriculture.

Mr. STEIN. That is right.

Senator PROXMIRE. How do you square that with the establishment's data, which indicate a much lesser increase in jobs?

Mr. STEIN. Each month we attempt to reconcile the two surveys by correcting for conceptual differences in the employment counts. However, we really cannot explain why only one of the surveys shows an exceptionally large increase over a single month, but this occurrence is by no means unusual.

Senator PROXMIRE. You just have no explanation at all?

Mr. STEIN. We have no explanation. We know, however, that in many months—including May—we have had significant upward revisions of the establishment data. So, one should keep in mind that the establishment figures are preliminary——

Senator PROXMIRE. But you have about twice as many jobs in the establishment data as you have in the household survey.

Mr. STEIN. There is a gap of about 200,000 between the two, over-the-month increases if you just take the nonagricultural sector.

Senator PROXMIRE. But you have no explanation for that?

Mr. STEIN. No; except to repeat that this is a not unusual occurence, which tends to average out over longer periods of time.

Senator PROXMIRE. Mr. Mark, Mr. Early, Mrs. Slater, do you have any explanation for that? It leaves the country in a dilemma. We have what we think are the best unemployment statistics in the world, and yet you have a great discrepancy.

Mr. STEIN. It is by no means the first time.

Senator PROXMIRE. That is right. But it is one of the biggest differences.

Mr. STEIN. We have become used to living with the differences between the two series and between their monthly movements, because the series differ so much conceptually and in terms of data collection.

Senator PROXMIRE. I don't want to detain you, but could you tell us at the next meeting what you have done, or what you can do, to get at this. Because it seems to me to be a challenge.

You come up too often with this varying estimate, and it is hard to place reliance on estimates that are so far off on additional jobs that we have.

Mr. STEIN. We do know that the household survey tends to be a much more volatile instrument. What we see from time to time is that it gets ahead of the establishment survey which later catches up. We make that point later on in the statement.

Senator PROXMIRE. Please continue, Mr. Stein.

Mr. STEIN. Nonagricultural employment—as measured by the household survey—rose by 470,000, while nonfarm payroll employment—as measured by the establishment survey—moved up by 275,000 in June. Despite some differences in monthly changes, the two employment series have shown consistent growth patterns over the past year. Payroll employment recorded an increase of 3.6 million, while total nonagricultural employment showed a gain of 3.9 million—after allowing for the technical improvements introduced into the household survey in January 1978.

The May-June increase in nonfarm payroll employment was paced by contract construction and was reflected in every major industry division except manufacturing. The BLS diffusion index, showing the percentage of 172 industries with rising employment, was 58 percent in June compared with 63 percent in May.

The workweek of production and nonsupervisory workers in private industry was unchanged in June while the factory workweek edged up by 0.1 hour. The index of aggregate weekly hours was unchanged at 120.0 in June, but was up by 3½ percent from a year earlier.

All of the unemployment measures, included in the U–1 through U–7 series formulated by Commissioner Shiskin, have been trending downward during the past year, as indicated by the table below. I won't go through the entire table.

[The table referred to follows:]

		June 1977	June 1978
U–1	Long-term unemployment rate	1.8	1.2
U–2	Job loser rate	3.0	2.3
U–3	Unemployment rate, persons 25 years and over	5.0	3.9
U–4	Full-time worker unemployment rate	6.5	5.2
U–5	Official rate	7.1	5.7
U–6	Percent unemployed plus those on involuntary part time for economic reasons (latter given half weight)	8.7	7.4
U–7	Same as U–6 plus discouraged workers	[1] 9.7	[1] 8.3

[1] Figures relate to 2d quarter. Not available on a monthly basis.

Note: See table A–7 of "The Employment Situation" for more complete definitions.

Mr. STEIN. All of the U–1 through U–7 indicators were at their lowest levels in more than 3½ years. The number of discouraged workers was a little under 850,000 in the second quarter of 1978. This

group has declined by 225,000 since the third quarter of 1977. On the other hand, the number of nonfarm workers on involuntary part-time schedules because of slack work and other economic reasons—3.5 million in June—has shown no consistent downtrend in recent years and was only slightly below its 1975 peak levels.

The civilian labor force continued its persistent expansion, rising by more than 300,000 between May and June. The labor force has grown by 2.8 million from a year earlier. Women and teenagers increased their participation rates over the past year, while the rate for adult men remained unchanged.

PRICES

In the price area, the "Producer Price Index" for June was also released this morning, and the "Consumer Price Index for May was released last week. The CPI for all urban consumers rose nine-tenths of 1 percent in May, on a seasonally adjusted basis. This was about the same as in March and April. The May rise reflected continued sharp price advances for food and housing groups, as well as a larger increase than in recent months for transportation.

The "Producer Price Index for Finished Goods" increased seven-tenths of 1 percent in June on a seasonally adjusted basis. This index has averaged about this same rate of increase since early last fall. As has been true for most of that period, a sharp price rise for finished consumer foods was a major contributor to the increase. Among foods, meats and fresh fruits and vegetables have shown the greatest price rise.

Prices for finished goods other than food rose six-tenths of 1 percent in June, about the same as the average increase during the last three quarters. Among finished nonfood items, however, there has been some diversity of movement. Capital equipment price increases have accelerated in the last couple of months, especially for motor trucks and metal-cutting machine tools. Consumer nondurable goods have accelerated slightly with fairly broad-based price increases.

The largest increases have occurred for tobacco products, heating oil, and paper products. Only gasoline has shown any noticeable declines. Prices for consumer durables rose much less in June than in recent months, when both automobiles and jewelry had shown major price increases.

At the intermediate or semifinished stage of processing, prices rose less than in any month so far this year. This slowdown was largely the result of price declines for certain types of animal feeds. Among nonfood intermediate materials, prices have increased five-tenths of 1 percent in each of the last 4 months.

Prices for crude materials were 1.8 percent higher in June. This was greater than last month's three-tenths rise and it compares with an average monthly rise of 2.1 percent during the 7 months prior to that. In addition to rapid increases among crude food materials, there have been substantial increases in prices for scrap metals, natural gas, and coal.

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 procedures used in 1976–77	Unemployed all multiplicative	Unemployed all additive	Year ahead	Concurrent		Stable					
							1st computed	Revised	1967–73	1967–77	Total	Residual		
	(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	7.3	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	7.6	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	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	7.4	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	7.2	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	7.0	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	7.2	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	6.0	6.0	6.0	5.9	6.0	5.9	.1
May	5.5	6.1	6.1	6.1	6.0	6.1	6.0	6.0	6.2	6.2	6.1	6.1	6.2	.2
June	6.2	5.7	5.7	5.8	5.7	5.7	5.8	5.8	5.7	5.7	5.8	5.8	5.8	.1
July														
August														
September														
October														
November														
December														

EXPLANATION OF COLUMN HEADS

(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 yr 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	July	101.2
February	112.6	August	97.6
March	106.7	September	96.6
April	96.5	October	92.6
May	90.1	November	95.3
June	106.2	December	93.6

(3) Official procedures 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 yr 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 yr 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 ½ 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 procedurec 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 procedure 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) Range 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.

Source: U.S. Department of Labor, Bureau of Labor Statistics, July 7, 1978.

[Press release No. 78–598, Bureau of Labor Statistics, Department of Labor, Washington, D.C., July 7, 1978]

THE EMPOYMENT SITUATION: JUNE 1978

Employment rose sharply in June and unemployment declined, the Bureau of Labor Statistics of the U.S. Department of Labor reported today. The Nation's unemployment rate moved from 6.1 percent in May to 5.7 percent, the lowest in nearly 4 years.

Total employment—as measured by the monthly survey of households—was 94.8 million in June, up over 700,000 from May. As a result of this strong increase, the proportion of the working-age population that is employed rose to a new record high of 58.9 percent.

Nonfarm payroll employment—as measured by the monthly survey of establishments—posted a gain of 275,000 jobs in June to 85.7 million.

Unemployment

The June unemployment rate, 5.7 percent, and the number of unemployed persons, 5.8 million, were down sharply from the levels of the previous month. This decline followed a 4-month period in which the unemployment rate hovered around 6.1 percent. June marked the first time that the jobless rate had been below 6 percent since October 1974.

Teenagers accounted for about half of the 400,000 June decline in unemployment, as their rate dropped from 16.5 to 14.2 percent. Most of the remaining reduction occurred among adult men, whose rate fell from 4.2 to 3.9 percent. The rate for adult women, on the other hand, was little changed over the month at 6.1 percent. The gradual downtrend in joblessness for white workers continued in June, while among blacks the only real over-the-month improvement occurred among adult men. Among other worker categories, unemployment declined substantially for job losers, full-time workers, and persons looking for work for 15 weeks or longer. (See tables A–2 and A–5.)

Total employment and the labor force

The growth in the number of employed persons was particularly strong in June, increasing by 710,000 to 94.8 million. Substantial gains took place in both the agricultural and nonagricultural sectors of the economy. All three of the major age-sex groups shared in the expansion, with adult men and teenagers posting slightly larger gains than adult women. Over the year, total employment increased by 3.9 million, after adjusting for changes in the survey introduced in January. (See table A–1.)

The employment-population ratio sustained its recent growth path in June, reaching an all-time high of 58.9 percent. The ratio was 1.5 points higher than a year earlier (after adjustment).

The civilian labor force increased by 310.000 to 100.6 million in June. The labor force has risen by 2.8 million since last June (adjusted), with adult women accounting for nearly 60 percent of this growth.

The civilian labor force participation rate—the proportion of the population that is either working or looking for work—was up slightly in June to an all-time high of 63.3 percent. Participation rates among adults were 79.9 percent for men and 49.6 percent for women, while teenage participation was 58.4 percent.

TABLE A.—MAJOR INDICATORS OF LABOR MARKET ACTIVITY, SEASONALLY ADJUSTED

Selected categories	Quarterly average					Monthly data, 1978		
	1977			1978				
	II	III	IV	I	II	April	May	June
HOUSEHOLD DATA								
Thousands of Persons								
Civilian labor force	97,153	97,559	98,622	99,205	100,206	99,784	100,261	100,573
Total employment	90,264	90,823	92,069	93,050	94,244	93,801	94,112	94,819
Unemployment	6,889	6,736	6,554	6,155	5,962	5,983	6,149	5,754
Not in labor force	58,941	59,205	58,777	58,799	58,399	58,602	58,340	58,257
Discouraged workers	1,062	1,067	969	903	842	(1)	(1)	(1)
Percent of Labor Force								
Unemployment rates:								
All workers	7.1	6.9	6.6	6.2	5.9	6.0	6.1	5.7
Adult men	5.2	5.0	4.8	4.6	4.1	4.2	4.2	3.9
Adult women	7.0	7.0	6.8	5.9	6.1	5.8	6.3	6.1
Teenagers	18.1	17.6	16.7	16.9	15.9	16.9	16.5	14.2
White	6.3	6.1	5.8	5.4	5.1	5.2	5.2	4.9
Black and other	12.8	13.6	13.3	12.3	12.0	11.8	12.3	11.9
Full-time workers	6.6	6.5	6.2	5.7	5.4	5.4	5.6	5.2
ESTABLISHMENT DATA								
Thousands of Jobs								
Nonfarm payroll employment	81,871	82,548	83,192	84,107	[2] 85,469	85,223	[2] 85,454	[2] 85,729
Goods-producing industries	24,265	24,359	24,497	24,757	[2] 25,438	25,351	[2] 25,435	[2] 25,527
Service-producing industries	57,606	58,189	58,695	59,350	[2] 60,031	59,872	[2] 60,019	[2] 60,202
Hours of Work								
Average weekly hours:								
Total private nonfarm	36.2	36.0	36.2	35.9	[2] 36.1	36.3	[2] 36.0	[2] 36.0
Manufacturing	40.4	40.3	40.5	40.0	[2] 40.5	40.6	[2] 40.3	[2] 40.6
Manufacturing overtime	3.4	3.3	3.5	3.7	[2] 3.5	3.6	[2] 3.5	[2] 3.5

[1] Not available.
[2] Preliminary.

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 current 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 in the second quarter, the number of discouraged workers also fell. The second quarter average was 840,000, down from 900,000 in the first quarter. The discouraged total had been nearly 1.1 million as recently as mid-1977. The entire decline over the past quarter was among those citing job market factors as their reason for not seeking work. (See table A–8.)

Industry payroll employment

Nonagricultural payroll employment rose by 275,000 in June to 85.7 million. With the exception of manufacturing, all of the major industry groups posted gains, as employment increased in nearly three-fifths of the 172 industries that comprise the BLS diffusion index of private non-agricultural payroll employment. Nonfarm payroll jobs have expanded by 3.6 million over the past year. (See tables B–1 and B–6.)

The largest over-the-month employment gain took place in contract construction—85,000. Over the year, nearly one-half million jobs have been added in this industry, bringing employment to a new high of 4.4 million in June. Virtually all of this increase has occurred since January of this year.

Sizeable over-the-month gains also took place in State and local government (60,000), services (55,000), retail trade (45,000), and finance, insurance, and

real estate (20,000). The lack of growth in manufacturing employment was in marked contrast to the sharp job gains which occurred in late 1977 and early 1978. Manufacturing employment has risen by 645,000 over the past year to a level of 20.3 million in June; about 85 percent of this gain was registered in the durable goods industries.

Hours

The average workweek for production or nonsupervisory workers on private nonagricultural payrolls was 36.0 hours in June, unchanged from the May level and slightly below a year earlier.

Consistent with the strong employment gain, contract construction hours were up 0.6 hour to 37.2 in June, almost returning to the April high level. The manufacturing workweek edged up 0.1 hour to 40.4 hours, while factory overtime, at 3.5 hours, was unchanged from the May level. All other major industry groups posted modest declines in hours of work. (See table B–2).

The index of aggregate weekly hours of production or nonsupervisory workers on private nonagricultural payrolls was unchanged in June at 120.0. The index was 3.6 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 advanced 0.5 percent in June, seasonally adjusted. Average weekly earnings rose by the same margin over the month. Compared with their year-ago levels, average hourly and weekly earnings have increased by 8.6 and 8.0 percent, respectively.

Before adjustment for seasonality, average hourly earnings were $5.66 in June, up 3 cents from May and 44 cents from a year earlier. Average weekly earnings were $205.46, $3.91 above their May level and $15.45 higher than last June. (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 213.5 (1967=100) in June, 0.5 percent higher than in May. The index was 8.2 percent above June a year ago. During the 12-month period ended in May, the Hourly Earnings Index in dollars of constant purchasing power rose 1.1 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 unemployment (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 questionnaries 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 Earning" 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 consus 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-meansquare 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

TABLE A-1.—EMPLOYMENT STATUS OF THE NONINSTITUTIONAL POPULATION

[Numbers in thousands]

Employment status	Not seasonally adjusted			Seasonally adjusted					
	June 1977	May 1978	June 1978	June 1977	February 1978	March 1978	April 1978	May 1978	June 1978
TOTAL									
Total noninstitutional population [1]	158,456	160,713	160,928	158,456	160,128	160,313	160,540	160,713	160,928
Armed Forces [1]	2,129	2,113	2,098	2,129	2,124	2,122	2,118	2,113	2,098
Civilian noninstitutional population [1]	156,327	158,601	158,830	156,327	158,004	158,190	158,386	158,601	158,830
Civilian labor force	99,135	99,309	102,178	97,552	99,093	99,414	99,784	100,261	100,573
Participation rate	63.4	62.6	64.3	62.4	62.7	62.8	63.0	63.2	63.3
Employed	91,682	93,851	95,852	90,648	93,003	93,266	93,801	94,112	94,819
Employment-population ratio [2]	57.9	58.4	59.6	57.2	58.1	58.2	58.4	58.6	58.9
Agriculture	3,820	3,369	3,983	3,330	3,242	3,310	3,275	3,235	3,473
Nonagricultural industries	87,862	90,483	91,869	87,318	89,761	89,956	90,526	9,877	91,346
Unemployed	7,453	5,457	6,326	6,904	6,090	6,148	5,983	6,149	5,754
Unemployment rate	7.5	5.5	6.2	7.1	6.1	6.2	6.0	6.1	5.7
Not in labor force	57,192	59,292	56,651	58,775	58,911	58,776	58,602	58,340	58,257
Men, 20 years and over									
Total noninstitutional population [1]	67,431	68,519	68,623	67,431	68,240	68,327	68,419	68,519	68,623
Civilian noninstitutional population [1]	65,743	66,845	66,947	65,743	66,556	66,645	66,740	66,845	66,947
Civilian labor force	52,885	53,225	53,931	52,511	53,142	53,242	53,263	53,414	53,522
Participation rate	80.4	79.6	80.6	79.9	79.8	79.9	79.8	79.9	79.9
Employed	50,308	51,159	51,907	49,850	50,749	50,833	51,038	51,182	51,433
Employment-population ratio [2]	74.6	74.6	75.6	73.9	74.4	74.4	74.6	74.7	75.0
Agriculture	2,536	2,393	2,617	2,362	2,283	2,289	2,295	2,328	2,437
Nonagricultural industries	47,772	48,756	49,290	47,488	48,476	48,544	48,743	48,854	48,996
Unemployed	2,577	2,076	2,024	2,661	2,383	2,409	2,225	2,232	2,089
Unemployment rate	4.9	3.9	3.8	5.1	4.5	4.5	4.2	4.2	3.9
Not in labor force	12,858	13,620	13,016	13,232	13,414	13,403	13,477	13,431	13,425
Women, 20 years and over									
Total noninstitutional population [1]	74,198	75,412	75,527	74,198	75,095	75,196	75,300	75,412	75,527
Civilian noninstitutional population [1]	74,101	75,310	75,422	74,101	74,996	75,093	75,198	75,310	75,422
Civilian labor force	35,263	37,025	37,057	35,629	36,654	36,849	37,117	37,264	37,439
Participation rate	47.6	49.2	49.1	48.1	48.9	49.1	49.4	49.5	49.6
Employed	32,755	34,960	34,793	33,079	34,569	34,722	34,948	34,931	35,137
Employement-population ratio [3]	44.1	46.4	46.1	44.6	46.0	46.2	46.4	46.3	46.5
Agriculture	690	590	761	564	604	628	623	527	623
Nonagricultural industries	32,064	34,370	34,031	32,515	33,965	34,094	34,325	34,404	34,514
Unemployed	2,508	2,065	2,265	2,550	2,085	2,127	2,169	2,333	2,302
Unemployment rate	7.1	5.6	6.1	7.2	5.7	5.8	5.8	6.3	6.1
Not in labor force	38,838	38,286	38,364	38,472	38,342	38,244	38,081	38,046	37,983

See footnotes at end of table.

TABLE A-1.—EMPLOYMENT STATUS OF THE NONINSTITUTIONAL POPULATION—Continued

[Numbers in thousands]

Employment status	Not seasonally adjusted			Seasonally adjusted					
	June 1977	May 1978	June 1978	June 1977	February 1978	March 1978	April 1978	May 1978	June 1978
Both sexes, 16–19 years									
Total noninstitutional population [1]	16,827	16,782	16,779	16,827	16,794	16,790	16,785	16,782	16,779
Civilian noninstitutional population [1]	16,483	16,446	16,461	16,483	16,453	16,452	16,449	16,446	16,461
Civilian labor force	10,987	9,059	11,190	9,412	9,297	9,323	9,404	9,583	9,612
Participation rate	66.7	55.1	68.0	57.1	56.5	56.7	57.2	58.3	58.4
Employed	8,620	7,742	9,153	7,719	7,675	7,711	7,815	7,999	8,249
Employment-population ratio [2]	51.2	46.1	54.6	45.9	45.7	45.9	46.6	47.7	49.2
Agriculture	594	385	605	404	355	393	357	380	413
Nonagricultural industries	8,025	7,356	8,548	7,315	7,320	7,318	7,458	7,619	7,836
Unemployed	2,367	1,317	2,037	1,693	1,622	1,612	1,589	1,584	1,363
Unemployment rate	21.5	14.5	18.2	18.0	17.4	17.3	16.9	16.5	14.2
Not in labor force	5,495	7,387	5,271	7,071	7,156	7,129	7,045	6,863	6,849
WHITE									
Total noninstitutional population [1]	139,270	141,026	141,194	139,270	140,571	140,714	140,863	141,026	141,194
Civilian noninstitutional population [1]	137,522	139,317	139,503	137,522	138,834	138,997	139,149	139,317	139,503
Civilian labor force	87,530	87,567	89,917	86,258	87,360	87,532	87,945	88,209	88,623
Participation rate	63.6	62.9	64.5	62.7	62.9	63.0	63.2	63.3	63.5
Employed	81,749	83,446	85,198	80,816	82,697	82,880	83,386	83,590	84,270
Employment-population ratio [2]	58.7	59.2	60.3	58.0	58.8	58.9	59.2	59.3	59.7
Unemployed	5,781	4,120	4,719	5,442	4,663	4,652	4,559	4,619	4,353
Unemployment rate	6.6	4.7	5.2	6.3	5.3	5.3	5.2	5.2	4.9
Not in labor force	49,992	51,750	49,586	51,264	51,474	51,465	51,204	51,108	50,880
BLACK AND OTHER									
Total noninstitutional population [1]	19,186	19,687	19,734	19,186	19,558	19,599	19,641	19,687	19,734
Civilian noninstitutional population [1]	18,805	19,284	19,327	18,805	19,170	19,194	19,237	19,284	19,327
Civilian labor force	11,605	11,742	12,261	11,325	11,785	11,871	11,816	11,934	11,980
Participation rate	61.7	60.9	63.4	60.2	61.5	61.8	61.4	61.9	62.0
Employed	9,933	10,405	10,655	9,834	10,391	10,402	10,418	10,467	10,553
Employment-population ratio [2]	51.8	52.9	54.0	51.3	53.1	53.1	53.0	53.0	53.5
Unemployed	1,671	1,337	1,606	1,491	1,394	1,469	1,398	1,467	1,427
Unemployment rate	14.4	11.4	13.1	13.2	11.8	12.4	11.8	12.3	11.9
Not in labor force	7,200	7,541	7,066	7,480	7,385	7,323	7,421	7,350	7,347

[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).

Note: Household survey data for periods prior to January 1978 shown in tables A-1 through A-8 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.

TABLE A-2.—MAJOR UNEMPLOYMENT INDICATORS, SEASONALLY ADJUSTED

Selected categories	Number of unemployed persons (in thousands)		Unemployment rates					
	June 1977	June 1978	June 1977	Feb. 1978	Mar. 1978	Apr. 1978	May 1978	June 1978
CHARACTERISTICS								
Total, 16 yr and over	6,904	5,754	7.1	6.1	6.2	6.0	5.1	5.7
Men, 20 yr and over	2,661	2,089	5.1	4.5	4.5	4.2	4.2	3.9
Women, 20 yr and over	2,550	2,302	7.2	5.7	5.8	5.8	6.3	6.1
Both sexes, 16-19 yr	1,693	1,363	18.0	17.4	17.3	16.9	16.5	14.2
White, total	5,442	4,353	6.3	5.3	5.3	5.2	5.2	4.9
Men, 20 yr and over	2,133	1,643	4.5	3.9	4.0	3.6	3.5	3.4
Women, 20 yr and over	1,991	1,720	6.5	5.0	4.9	5.1	5.4	5.3
Both sexes, 16-19 yrs	1,318	990	15.7	14.3	14.6	14.6	13.8	11.6
Black and other, total	1,491	1,427	13.2	11.8	12.4	11.8	12.3	11.9
Men, 20 yr and over	532	448	9.6	8.6	8.5	8.8	8.8	7.8
Women, 20 yr and over	563	585	11.8	10.1	11.4	10.5	10.9	11.3
Both sexes, 16-19 yrs	396	394	40.0	38.0	39.0	35.3	38.4	37.1
Married man, spouse present	1,361	1,073	3.4	2.9	3.0	2.8	2.9	2.7
Married women, spouse present	1,515	1,297	6.8	5.2	5.1	5.0	5.9	5.6
Women who head families	413	421	9.4	7.6	8.6	10.1	9.3	8.8
Full-time workers	5,443	4,511	6.5	5.7	5.6	5.4	5.6	5.2
Part-time workers	1,489	1,267	10.5	8.6	9.6	9.6	9.2	8.8
Unemployed 15 weeks and over [1]	1,788	1,231	1.8	1.6	1.5	1.4	1.4	1.2
Labor force time lost [2]			7.6	6.6	6.6	6.3	6.6	6.4
OCCUPATION [3]								
White-collar workers	1,981	1,711	4.2	3.5	3.4	3.5	3.6	3.5
Professional and technical	427	356	3.0	2.5	2.6	2.5	2.4	2.4
Managers and administrators, except farm	264	190	2.7	1.9	2.3	2.0	2.0	1.8
Sales workers	316	273	5.3	4.3	4.3	4.3	4.4	4.4
Clerical workers	974	892	5.8	5.0	4.5	5.1	5.3	5.0
Blue-collar workers	2,581	2,185	7.8	7.1	7.1	6.5	6.6	6.5
Craft and kindred workers	695	550	5.5	5.0	5.1	4.3	4.3	4.2
Operatives, except transport	1,073	949	9.4	8.1	8.0	7.6	8.4	7.9
Transport equipment operatives	218	170	5.9	5.0	5.2	5.2	5.9	4.6
Nonfarm laborers	595	516	11.6	11.5	11.9	10.0	8.7	9.9
Service workers	1,143	1,011	8.3	7.1	7.7	7.7	7.6	7.2
Farm workers	142	91	4.8	4.7	4.7	3.1	3.6	3.0
INDUSTRY [3]								
Nonagricultural private wage and salary workers [4]	4,897	4,110	6.9	6.1	6.0	5.9	5.9	5.6
Construction	574	460	12.3	11.5	11.3	9.5	9.2	9.3
Manufacturing	1,377	1,244	6.4	5.7	5.4	5.3	5.6	5.6
Durable goods	725	640	5.7	5.0	4.8	4.4	5.0	4.8
Nondurable goods	652	604	7.4	6.5	6.2	6.5	6.4	6.7
Transportation and public utilities	215	200	4.3	3.2	3.7	3.7	3.8	3.7
Wholesale and retail trade	1,450	1,170	8.0	7.1	7.3	7.2	6.8	6.3
Finance and service industries	1,242	1,010	6.0	5.1	5.1	5.2	5.3	4.7
Government workers	655	641	4.2	3.5	3.7	3.8	4.1	4.0
Agricultural wage and salary workers	169	128	10.9	10.1	10.0	7.7	7.7	8.0
VETERANS STATUS								
Male Vietnam era veterans: [5]								
20 to 34 yr	492	268	7.6	5.2	5.0	4.5	4.0	4.3
20 to 24 yr	166	64	17.7	12.5	13.2	10.7	6.9	9.4
25 to 29 yr	207	119	7.1	5.4	4.6	4.5	5.5	5.3
30 to 34 yr	119	85	4.5	3.4	3.5	3.1	2.3	2.6
Male nonveterans:								
20 to 34 yr	1,125	925	7.1	6.7	6.9	6.5	5.9	5.5
20 to 24 yr	644	565	9.3	9.7	9.5	8.8	7.7	7.9
25 to 29 yr	318	218	6.4	5.0	5.8	6.1	4.8	3.8
30 to 34 yr	163	142	4.1	3.8	3.5	2.9	3.9	3.7

[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 Aug. 5, 1964, and May 7, 1975.

TABLE A-3.—SELECTED EMPLOYMENT INDICATORS

[In thousands]

Selected categories	Not seasonally adjusted		Seasonally adjusted					
	June 1977	June 1978	June 1977	Feb. 1978	Mar. 1978	Apr. 1978	May 1978	June 1978
CHARACTERISTICS								
Total employed, 16 yrs and over	91,682	95,852	90,648	93,003	93,266	93,801	94,112	94,819
Men	55,095	56,978	54,006	54,897	55,013	55,208	55,446	55,869
Women	36,587	38,875	36,642	38,106	38,253	38,593	38,666	38,950
Married men, spouse present	38,659	38,788	38,565	38,666	38,465	38,628	38,626	38,711
Married women, spouse present	20,394	21,262	20,825	21,738	21,674	21,847	21,694	21,718
OCCUPATION								
White-collar workers	44,422	46,761	44,840	46,555	46,835	46,789	46,895	47,209
Professional and technical	13,161	13,848	13,648	14,016	14,060	14,158	14,399	14,365
Managers and administrators, except farm	9,560	10,087	9,577	10,134	10,169	10,212	9,933	10,107
Sales workers	5,752	6,002	5,682	5,811	5,985	5,861	5,911	5,931
Clerical workers	15,949	16,823	15,933	16,594	16,621	16,558	16,652	16,806
Blue-collar workers	31,324	32,736	30,301	31,198	31,039	31,655	31,544	31,683
Craft and kindred workers	12,105	12,691	11,887	12,220	12,169	12,302	12,218	12,467
Operatives, except transport	10,482	11,127	10,364	10,738	10,766	10,974	10,846	11,006
Transport equipment operatives	3,558	3,575	3,495	3,643	3,541	3,560	3,534	3,512
Nonfarm laborers	5,179	5,342	4,555	4,597	4,563	4,819	4,946	4,698
Service workers	12,688	13,019	12,660	12,703	12,572	12,830	12,883	12,993
Farm workers	3,248	3,337	2,815	2,769	2,788	2,687	2,698	2,895
MAJOR INDUSTRY AND CLASS OF WORKER								
Agriculture:								
Wage and salary workers	1,607	1,723	1,382	1,345	1,389	1,408	1,434	1,482
Self-employed workers	1,695	1,792	1,578	1,587	1,527	1,539	1,573	1,669
Unpaid family workers	519	468	373	314	389	283	255	336
Nonagricultural industries:								
Wage and salary workers	81,214	85,077	80,704	83,078	83,124	83,648	84,049	84,513
Government	14,602	14,813	15,003	15,237	15,154	15,305	15,203	15,224
Private industries	66,613	70,264	65,701	67,841	67,970	68,343	68,846	69,289
Private households	1,430	1,423	1,375	1,383	1,293	1,388	1,393	1,368
Other industries	65,183	68,841	64,326	66,458	66,677	66,955	67,453	67,921
Self-employed workers	6,111	6,310	6,005	6,268	6,427	6,467	6,288	6,198
Unpaid family workers	536	482	520	488	500	506	520	468
PERSONS AT WORK[1]								
Nonagricultural industries	81,067	85,322	81,714	84,054	84,285	86,043	85,528	86,051
Full-time schedules	67,462	71,144	67,172	69,215	69,417	70,550	70,157	70,861
Part time for economic reasons	3,938	4,006	3,390	3,193	3,164	3,327	3,243	3,458
Usually work full time	1,416	1,529	1,327	1,128	1,226	1,224	1,211	1,433
Usually work part time	2,522	2,477	2,063	2,065	1,938	2,103	2,032	2,025
Part time for noneconomic reasons	9,667	10,172	11,152	11,646	11,704	12,166	12,128	11,732

[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 int housands]

Weeks of unemployment	Not seasonally adjusted		Seasonally adjusted					
	June 1977	June 1978	June 1977	Feb. 1978	Mar. 1978	Apr. 1978	May 1978	June 1978
DURATION								
Less than 5 weeks	3,917	3,474	3,076	2,586	2,820	2,790	2,932	2,727
5 to 14 weeks	1,699	1,588	2,050	1,820	1,877	1,784	1,803	1,916
15 weeks and over	1,836	1,264	1,788	1,568	1,463	1,384	1,358	1,231
15 to 26 weeks	809	644	826	897	766	716	680	651
27 weeks and over	1,028	620	962	671	697	668	678	580
Average (mean) duration, in weeks	12.9	10.8	14.3	12.5	12.3	12.3	12.1	12.0
Median duration, in weeks	4.8	4.6	6.1	7.0	6.2	5.8	5.2	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	52.6	54.9	44.5	43.3	45.8	46.8	48.1	46.4
5 to 14 weeks	22.8	25.1	29.6	30.5	30.5	29.9	29.6	32.6
15 weeks and over	24.6	20.0	25.9	26.2	23.8	23.2	22.3	21.0
15 to 26 weeks	10.9	10.2	11.9	15.0	12.4	12.0	11.2	11.1
27 weeks and over	13.8	9.8	13.9	11.2	11.3	11.2	11.1	9.9

TABLE A-5.—REASONS FOR UNEMPLOYMENT

[Numbers in thousands]

Reasons	Not seasonally adjusted		Seasonally adjusted					
	June 977	June 1978	June 1977	Feb. 1978	Mar. 1978	Apr. 1978	May 1978	June 1978
NUMBER OF UNEMPLOYED								
Lost last job	2,687	2,115	2,972	2,540	2,493	2,475	2,577	2,340
On layoff	677	499	822	709	660	593	683	606
Other job losers	2,011	1,615	2,150	1,831	1,833	1,882	1,894	1,734
Left last job	894	809	938	898	862	872	819	849
Reentered labor force	2,339	2,147	1,917	1,796	1,911	1,734	1,772	1,760
Seeking first job	1,532	1,255	1,087	868	923	925	901	810
PERCENT DISTRIBUTION								
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Job losers	36.1	33.4	43.0	41.6	40.3	41.2	42.5	40.6
On layoff	9.1	7.9	11.9	11.6	10.7	9.9	11.3	10.5
Other job losers	27.0	25.5	31.1	30.0	29.6	31.3	31.2	30.1
Job leavers	12.0	12.8	13.6	14.7	13.9	14.5	13.5	14.7
Reentrants	31.4	33.9	27.7	29.4	30.9	28.9	29.2	30.6
New entrants	20.6	19.8	15.7	14.2	14.9	15.4	14.8	14.1
UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE								
Job losers	2.7	2.1	3.0	2.6	2.5	2.5	2.6	2.3
Job leavers	.9	.8	1.0	.9	.9	.9	.8	.8
Reentrants	2.4	2.1	2.0	1.8	1.9	1.7	1.8	1.8
New entrants	1.5	1.2	1.1	.9	.9	.9	.9	.8

TABLE A-6.—UNEMPLOYMENT BY SEX AND AGE, SEASONALLY ADJUSTED

Sex and age	Number of unemployed persons (in thousands)							
	June 1977	June 1978	June 1977	Feb. 1978	Mar. 1978	Apr. 1978	May 1978	June 1978
Total, 16 yr and over	6,904	5,754	7.1	6.1	6.2	6.0	6.1	5.7
16 to 19 yr	1,693	1,363	18.0	17.4	17.3	16.9	16.5	14.2
16 to 17 yr	828	678	21.2	20.8	20.4	19.9	19.3	16.7
18 to 19 yr	898	718	16.3	15.0	15.2	14.4	14.5	12.9
20 to 24 yr	1,547	1,373	10.7	10.1	10.3	10.0	9.0	9.2
25 yr and over	3,655	2,997	5.0	3.9	4.0	3.9	4.2	3.9
25 to 54 yr	3,099	2,538	5.2	4.1	4.2	4.1	4.5	4.1
55 yr and over	538	449	3.8	3.3	3.1	3.2	3.2	3.1
Men, 16 yr and over	3,543	2,728	6.2	5.6	5.6	5.2	5.1	4.7
16 to 19 yr	882	639	17.5	17.2	17.1	16.6	15.3	12.6
16 to 17 yr	477	350	22.4	21.1	21.0	19.9	18.4	16.1
18 to 19 yr	444	328	15.3	14.3	14.3	13.4	12.9	11.3
20 to 24 yr	810	657	10.3	10.3	10.1	9.1	7.9	8.1
25 yr and over	1,846	1,424	4.1	3.4	3.5	3.3	3.5	3.1
25 to 54 yr	1,541	1,144	4.3	3.4	3.5	3.3	3.6	3.2
55 yr and over	296	275	3.3	3.2	3.2	3.3	3.3	3.0
Women, 16 yr and over	3,361	3,026	8.4	6.9	7.0	7.0	7.5	7.2
16 to 19 yr	811	724	18.5	17.7	17.5	17.2	17.9	16.0
16 to 17 yr	351	328	19.8	20.4	19.6	19.9	20.3	17.4
18 to 19 yr	454	390	17.5	15.7	16.1	15.6	16.1	14.8
20 to 24 yr	737	716	11.2	9.8	10.4	11.0	10.3	10.4
25 yr and over	1,809	1,573	6.2	4.7	4.7	4.8	5.3	5.2
25 to 54 yr	1,558	1,394	6.6	5.1	5.2	5.2	5.8	5.6
55 yr and over	242	174	4.5	3.3	3.0	3.0	3.1	3.1

TABLE A-7.—RANGE OF UNEMPLOYMENT MEASURES BASED ON VARYING DEFINITIONS OF UNEMPLOYMENT AND THE LABOR FORCE, SEASONALLY ADJUSTED

[In percent]

Measures	Quarterly averages					Monthly data (1978)		
	1977			1978				
	II	III	IV	I	II	Apr.	May	June
U-1—Persons unemployed 15 weeks or longer as a percent of the civilian labor force	1.9	1.9	1.9	1.6	1.3	1.4	1.4	1.2
U-2—Job losers as a percent of the civilian labor force	3.1	3.2	3.0	2.6	2.5	2.5	2.6	2.3
U-3—Unemployed persons 25 yr and over as a percent of the civilian labor force 25 yr and over	5.0	4.9	4.7	4.0	4.0	3.9	4.2	3.9
U-4—Unemployed full-time jobseekers as a percent of the full-time labor force	6.6	6.5	6.2	5.7	5.4	5.4	5.6	5.2
U-5—Total unemployed as a percent of the civilian labor force (official measure)	7.1	6.9	6.6	6.2	5.9	6.0	6.1	5.7
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	8.7	8.6	8.2	7.6	7.5	7.5	7.6	7.4
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 force	9.7	9.7	9.2	8.5	8.3	(1)	(1)	(1)

[1] Not available.

TABLE A-8.—PERSONS NOT IN THE LABOR FORCE BY SELECTED CHARACTERISTICS, QUARTERLY AVERAGES

[In thousands]

Characteristics	Not seasonally adjusted (II)		Seasonally adjusted					
			1977				1978	
	1977	1978	I	II	III	IV	I	II
Total not in labor force	59,042	58,488	59,225	58,941	59,205	58,777	58,799	58,399
Do not want a job now	52,806	52,895	53,825	53,263	53,213	53,207	53,789	53,294
Want a job now	6,198	5,593	5,539	5,739	5,936	5,581	5,448	5,231
Discouraged workers	1,039	826	942	1,062	1,067	969	903	842
Job-market factors [1]	759	550	657	739	747	630	621	537
Personal factors [2]	280	275	285	323	320	339	282	305
Men	316	310	297	310	360	306	352	293
Women	723	516	654	753	707	662	550	544
White	716	567	676	732	735	726	640	576
Black and other	322	258	283	298	329	248	274	249

[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 FOR TEN LARGE STATES

[Numbers in thousands]

State and employment status	Not seasonally adjusted*			Seasonally adjusted					
	June 1977	May 1978	June 1978	June 1977	Feb. 1978	Mar. 1978	Apr. 1978	May 1978	June 1978
CALIFORNIA									
Civilian noninstitutional population [1]	15,913	16,202	16,232	15,913	16,124	16,148	16,175	16,202	16,232
Civilian labor force	10,148	10,559	10,588	10,105	10,422	10,568	10,643	10,615	10,544
Employed	9,289	9,819	9,828	9,244	9,628	9,745	9,862	9,802	9,783
Unemployed	860	740	760	861	794	823	781	813	751
Unemployment rate	8.5	7.0	7.2	8.5	7.6	7.8	7.3	7.7	7.2

See footnotes at end of table.

TABLE A-9.—EMPLOYMENT STATUS OF THE NONINSTITUTIONAL POPULATION FOR TEN LARGE STATES—Con.

[Numbers in thousands]

State and employment status	Not seasonally adjusted*			Seasonally adjusted					
	June 1977	May 1978	June 1978	June 1977	Feb. 1978	Mar. 1978	Apr. 1978	May 1978	June 1978
FLORIDA									
Civilian noninstitutional population [1]	6,350	6,533	6,552	6,350	6,481	6,498	6,515	6,533	6,552
Civilian labor force	3,504	3,649	3,803	(2)	(2)	(2)	(2)	(2)	(2)
Employed	3,169	3,424	3,544	(2)	(2)	(2)	(2)	(2)	(2)
Unemployed	335	225	259	(2)	(2)	(2)	(2)	(2)	(2)
Unemployment rate	9.6	6.2	6.8	(2)	(2)	(2)	(2)	(2)	(2)
ILLINOIS									
Civilian noninstitutional population [1]	8,151	8,212	8,219	8,151	8,195	8,200	8,205	8,212	8,219
Civilian labor force	5,348	5,275	5,408	5,251	5,262	5,243	5,291	5,347	5,321
Employed	4,953	4,955	5,075	4,922	4,923	4,912	4,977	4,969	5,044
Unemployed	395	320	333	329	339	331	314	378	277
Unemployment rate	7.4	6.1	6.2	6.3	6.4	6.3	5.9	7.1	5.2
MASSACHUSETTS									
Civilian noninstitutional population [1]	4,292	4,331	4,335	4,292	4,319	4,323	4,327	4,331	4,335
Civilian labor force	2,821	2,806	2,940	(2)	(2)	(2)	(2)	(2)	(2)
Employed	2,603	2,654	2,736	2,556	2,641	2,657	2,672	2,662	2,690
Unemployed	218	152	203	(2)	(2)	(2)	(2)	(2)	(2)
Unemployment rate	7.7	5.4	6.9	(2)	(2)	(2)	(2)	(2)	(2)
MICHIGAN									
Civilian noninstitutional population [1]	6,545	6,615	6,264	6,545	6,596	6,602	6,609	6,615	6,624
Civilian labor force	4,172	4,154	4,240	(2)	(2)	(2)	(2)	(2)	(2)
Employed	3,820	3,882	3,941	(2)	(2)	(2)	(2)	(2)	(2)
Unemployed	352	272	299	329	242	229	254	287	276
Unemployment rate	8.4	6.6	7.0	(2)	(2)	(2)	(2)	(2)	(2)
NEW JERSEY									
Civilian noninstitutional population [1]	5,408	5,458	5,464	5,408	5,444	5,448	5,453	5,458	5,464
Civilian labor force	3,407	3,343	3,428	3,353	3,356	3,274	3,339	3,363	3,374
Employed	3,092	3,099	3,168	3,052	3,109	3,067	3,093	3,101	3,128
Unemployed	315	244	260	301	247	207	246	262	246
Unemployment rate	9.2	7.3	7.6	9.0	7.4	6.3	7.4	7.8	7.3
NEW YORK									
Civilian noninstitutional population [1]	13,297	13,328	13,334	13,297	13,318	13,321	13,324	13,328	13,334
Civilian labor force	7,890	7,764	7,918	7,754	7,826	7,784	7,842	7,815	7,784
Employed	7,201	7,183	7,339	7,073	7,192	7,182	7,239	7,165	7,211
Unemployed	689	581	580	681	634	602	603	650	573
Unemployment rate	8.7	7.5	7.3	8.8	8.1	7.7	7.7	8.3	7.4
OHIO									
Civilian noninstitutional population [1]	7,774	7,832	7,838	7,774	7,816	7,820	7,826	7,832	7,838
Civilian labor force	4,867	4,852	4,955	4,787	4,795	4,787	4,850	4,883	4,875
Employed	4,522	4,606	4,686	4,470	4,541	4,538	4,574	4,603	4,634
Unemployed	344	247	268	317	254	249	276	280	241
Unemployment rate	7.1	5.1	5.4	6.6	5.3	5.2	5.7	5.7	4.9
PENNSYLVANIA									
Civilian noninstitutional population [1]	8,810	8,861	8,868	8,810	8,846	8,850	8,856	8,861	8,868
Civilian labor force	5,257	5,151	5,316	5,165	5,188	5,269	5,248	5,189	5,221
Employed	4,831	4,852	4,968	4,784	4,862	4,899	4,866	4,853	4,919
Unemployed	427	299	348	381	326	370	382	336	302
Unemployment rate	8.1	5.8	6.6	7.4	6.3	7.0	7.3	6.5	5.8
TEXAS									
Civilian noninstitutional population [1]	8,987	9,179	9,198	8,987	9,125	9,143	9,160	9,179	9,193
Civilian labor force	5,870	5,937	6,125	5,736	5,919	5,990	5,955	6,003	5,994
Employed	5,536	5,690	5,805	5,449	5,612	5,702	5,695	5,730	5,719
Unemployed	334	247	320	287	307	288	260	273	275
Unemployment rate	5.7	4.2	5.2	5.0	5.2	4.8	4.4	4.5	4.9

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

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

[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					
	June 1977	April 1978	May 1978 [1]	June 1978 [1]	June 1977	February 1978	March 1978	April 1978	May 1978 [1]	June [1] 1978
Total	82,930	84,918	85,663	86,547	82,157	84,046	84,555	85,223	85,454	85,729
Goods-producing	24,679	25,001	25,341	25,876	24,355	24,733	24,945	25,351	35,435	25,527
Mining	870	889	902	928	856	711	728	898	903	912
Contract construction	4,047	4,072	4,275	4,541	3,888	3,947	4,053	4,237	4,275	4,362
Manufacturing	19,762	20,040	20,164	20,407	19,611	20,075	20,164	20,216	20,257	20,253
Production workers	14,258	14,432	14,539	14,713	14,132	14,488	14,556	14,588	14,622	14,577
Durable goods	11,598	11,931	12,020	12,151	11,484	11,909	11,965	11,992	12,028	12, 34
Production workers	8,334	8,578	8,654	8,744	8,236	8,575	8,614	8,632	8,659	8,639
Ordnance and accessories	156.5	156.8	156.0	157.5	157	157	157	157	157	158
Lumber and wood products	659.9	660.0	672.3	687.5	638	664	670	669	673	665
Furniture and fixtures	511.1	532.8	532.5	536.0	510	537	540	538	536	535
Stone, clay, and glass products	672.2	679.8	691.0	705.5	659	676	680	687	688	692
Primary metal industries	1,233.9	1,214.0	1,225.9	1,239.4	1,218	1,217	1,215	1,216	1,223	1,223
Fabricated metal products	1,463.6	1,503.9	1,521.3	1,534.7	1,452	1,515	1,515	1,520	1,526	1,523
Machinery, except electrical	2,180.8	2,313.5	2,315.4	2,342.2	2,170	2,279	2,295	2,311	2,320	2,331
Electrical equipment	1,938.8	2,026.3	2,035.0	2,057.4	1,931	2,017	2,035	2,041	2,045	2,049
Transportation equipment	1,827.5	1,873.7	1,897.4	1,901.6	1,802	1,879	1,885	1,876	1,882	1,875
Instruments and related products	530.4	544.6	548.5	556.2	527	541	545	548	551	553
Miscellaneous manufacturing	423.4	420.8	424.3	433.4	420	427	428	429	427	430
Nondurable goods	8,164	8,109	8,144	8,256	8,127	81,66	8,199	8,224	8,229	8,219
Production workers	5,924	5,854	5,885	5,969	5,896	5,913	5,942	5,956	5,963	5,938
Food and kindred products	1,727.0	1,663.9	1,671.5	1,711.9	1,736	1,729	1,739	1,740	1,730	1,721
Tobacco manufactures	64.8	62.0	61.7	62.3	72	69	70	68	70	70
Textile mill products	995.6	989.6	993.5	1,006.7	986	995	995	991	995	997
Apparel and other textile products	1,316.3	1,299.3	1,304.5	1,313.5	1,301	1,283	1,292	1,303	1,301	1,298
Paper and allied products	709.6	712.1	716.8	728.9	703	710	714	718	722	722
Printing and publishing	1,112.6	1,135.2	1,137.5	1,146.2	1,113	1,129.	1,133	1,137	1,140	1,146
Chemical and allied products	1,067.5	1,069.6	1,073.7	1,085.6	1,061	1,070	1,071	1,074	1,079	1,079
Petroleum and coal products	213.7	213.2	215.5	219.1	210	217	217	216	215	215
Rubber and plastics products, n.e.c.	684.3	699.1	702.0	711.8	680	701	705	713	712	708
Leather and leather products	272.1	264.9	267.6	270.0	265	263	263	264	265	263
Service-producing	58,251	59,917	60,322	60,671	57,802	59,313	59,610	59,872	60,019	60,202
Transportation and public utilities	4,629	4,671	4,704	4,758	4,588	4,651	4,672	4,709	4,713	4,716
Wholesale and retail trade	18,342	18,735	18,934	19,083	18,264	18,744	18,849	18,891	18,961	19,002
Wholesale trade	4,409	4,514	4,539	4,586	4,387	4,510	4,540	4,555	4,566	4,563
Retail trade	13,933	14,221	14,395	14,496	13,877	14,234	14,309	14,336	14,395	14,439
Finance, insurance, and real estate	4,534	4,669	4,705	4,773	4,494	4,647	4,670	4,683	4,710	4,730
Services	15,458	15,962	16,063	16,338	15,260	15,791	15,875	15,962	15,967	16,020
Government	15,288	15,880	15,916	15,829	15,196	15,480	15,544	15,627	15,668	15,734
Federal	2,765	2,739	2,756	2,788	2,735	2,736	2,736	2,744	2,753	2,758
State and local	12,523	13,141	13,160	13,041	12,461	12,744	12,808	12,883	12,915	12,976

[1] 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					
	June 1977	April 1978	May 1978	June 1978 [2]	June 1977	February 1978	March 1978	April 1978	May 1978 [2]	June 1978 [2]
Total private	36.4	36.0	35.8	36.3	36.2	35.8	36.2	36.3	36.0	36.0
Mining	44.6	43.9	43.5	43.8	44.1	43.6	44.6	44.3	43.5	43.3
Contract construction	37.4	37.1	36.7	37.8	36.8	35.7	36.8	37.4	36.6	37.2
Manufacturing	40.8	40.4	40.3	40.6	40.5	39.9	40.6	40.6	40.3	40.4
Overtime hours	3.5	3.4	3.4	3.6	3.4	3.8	3.7	3.6	3.5	3.5
Durable goods	41.5	41.0	40.9	41.3	41.2	40.5	41.2	41.2	40.9	41.0
Overtime hours	3.7	3.7	3.6	3.8	3.6	4.0	3.9	3.9	3.7	3.7
Ordnance and accessories	41.0	40.3	40.5	41.0	40.8	37.9	41.1	40.3	40.6	40.8
Lumber and wood products	40.7	39.9	39.7	40.1	39.9	39.4	39.9	39.9	39.4	39.3
Furniture and fixtures	39.2	39.2	39.0	39.6	38.9	39.8	39.9	39.8	39.3	39.2
Stone, clay, and glass products	42.0	41.8	41.8	42.1	41.6	40.9	41.6	42.1	41.6	41.7
Primary metal industries	41.7	41.4	41.6	42.2	41.5	41.5	41.5	41.4	41.6	41.9
Fabricated metal products	41.6	41.1	41.0	41.3	41.3	40.7	41.3	41.4	41.0	41.0
Machinery, except electrical	41.9	41.9	41.7	42.2	42.0	41.7	42.2	42.2	42.0	42.3
Electrical equipment	40.6	40.1	40.0	40.4	40.4	39.6	40.4	40.3	40.1	40.2
Transportation equipment	43.2	41.9	41.7	42.0	42.8	40.6	41.7	41.9	41.4	41.6
Instruments and related products	40.7	40.9	40.6	40.7	40.7	40.3	41.1	41.2	40.7	40.7
Miscellaneous manufacturing	39.4	39.2	38.9	39.0	39.3	38.3	39.2	39.3	38.9	38.9
Nondurable goods	39.8	39.4	39.4	39.6	39.5	39.1	39.7	39.8	39.5	39.4
Overtime hours	3.2	3.1	3.0	3.2	3.1	3.4	3.3	3.4	3.2	3.1
Food and kindred products	40.1	39.3	39.5	39.7	40.0	39.6	40.0	40.0	39.8	39.6
Tobacco manufacturers	38.9	38.5	38.6	41.4	38.7	38.5	39.0	38.9	38.9	41.2
Textile mill products	40.9	40.3	40.4	40.6	40.3	40.3	40.6	40.7	40.3	40.0
Apparel and other textile products	36.0	35.8	35.7	36.0	35.8	35.2	35.9	36.1	35.8	35.8
Paper and allied products	43.3	42.7	42.7	43.0	43.1	42.4	43.4	43.4	42.9	42.8
Printing and publishing	37.7	37.7	37.3	37.7	37.7	37.5	38.1	38.1	37.4	37.7
Chemicals and allied products	42.0	42.0	41.9	42.0	41.9	41.7	42.1	41.9	41.9	41.9
Petroleum and coal products	43.2	43.8	43.4	43.6	43.1	43.4	44.0	43.8	43.4	43.5
Rubber and plastics products, nec	41.3	40.7	40.6	41.2	41.2	39.4	40.6	41.0	40.8	41.1
Leather and leather products	38.0	37.7	37.8	38.0	37.2	36.6	37.4	38.3	37.6	37.2
Transportation and public utilities	40.3	39.9	39.7	40.1	40.1	40.4	40.6	40.1	40.0	39.9
Wholesale and retail trade	33.6	32.8	32.8	33.3	33.3	32.8	33.1	33.1	33.1	32.9
Wholesale trade	38.9	38.8	38.8	39.1	38.8	38.8	39.0	39.0	38.9	39.0
Retail trade	32.1	31.1	31.1	31.6	31.7	31.1	31.4	31.4	31.4	31.2
Finance, insurance, and real estate	36.6	36.8	36.4	36.4	36.6	36.5	36.6	36.8	36.5	36.4
Services	33.5	33.2	33.1	33.3	33.3	33.2	33.5	33.4	33.3	33.1

[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 ⅘ of the total employment on private nonagricultural payrolls.

[2] Preliminary.

TABLE B-3.—AVERAGE HOURLY AND WEEKLY EARNINGS OF PRODUCTION OR NONSUPERVISORY WORKERS[1] ON PRIVATE NONAGRICULTURAL PAYROLLS, BY INDUSTRY

[In dollars]

Industry	Average hourly earnings				Average weekly earnings			
	June 1977	Apr. 1978	May 1978[2]	June 1978[2]	June 1977	Apr. 1978	May 1978[2]	June 1978[2]
Total private	5.22	5.61	5.63	5.66	190.01	201.96	201.55	205.46
Seasonally adjusted	5.22	5.62	5.64	5.67	188.96	204.01	203.04	204.12
Mining	6.88	7.54	7.54	7.54	306.35	331.01	327.99	330.25
Contract construction	7.97	8.32	8.46	8.52	298.03	308.67	310.48	322.06
Manufacturing	5.60	5.99	6.02	6.06	228.48	242.00	242.61	246.04
Durable goods	6.00	6.39	6.42	6.47	249.00	261.99	262.58	267.21
Ordnance and accessories	6.15	6.67	6.62	6.66	252.15	268.80	268.11	273.06
Lumber and wood products	5.01	5.40	5.46	5.60	203.91	215.46	215.76	224.56
Furniture and fixtures	4.28	4.56	4.59	4.62	167.78	178.75	179.91	182.95
Stone, clay, and glass products	5.79	6.14	6.19	6.27	243.18	256.65	258.74	263.97
Primary metal industries	7.45	8.00	8.04	8.14	310.67	331.20	334.46	343.51
Fabricated metal products	5.85	6.17	6.20	6.21	243.36	253.59	254.20	256.47
Machinery, except electrical	6.15	6.56	6.58	6.62	257.69	274.86	274.39	279.36
Electrical equipment	5.29	5.67	5.69	5.70	214.77	227.37	227.60	230.28
Transportation equipment	7.18	7.61	7.62	7.67	310.18	318.86	317.75	322.14
Instruments and related products	5.15	5.50	5.53	5.58	209.61	224.95	224.52	227.11
Miscellaneous manufacturing	4.31	4.59	4.61	4.64	169.81	179.93	179.33	180.96
Nondurable goods	5.03	5.39	5.41	5.45	200.19	212.37	213.15	215.82
Food and kindred products	5.28	5.71	5.73	5.74	211.73	224.40	226.34	227.88
Tobacco manufacturers	5.77	6.28	6.35	6.67	224.45	241.78	245.11	276.14
Textile mill products	3.90	4.17	4.18	4.21	159.51	168.05	168.87	170.93
Apparel and other textile products	3.62	3.91	3.90	3.92	130.32	139.98	139.23	141.12
Paper and allied products	5.86	6.29	6.32	6.43	253.74	268.53	269.86	276.49
Printing and publishing	6.06	6.38	6.41	6.44	228.46	240.53	239.00	242.79
Chemicals and allied products	6.35	6.83	6.87	6.91	266.70	286.86	287.85	290.22
Petroleum and coal products	7.73	8.37	8.35	8.38	333.94	366.61	362.39	365.37
Rubber and plastics products, nec	5.12	5.33	5.40	5.45	211.46	216.93	219.24	224.54
Leather and leather products	3.63	3.90	3.90	3.91	137.94	147.03	147.42	148.58
Transportation and public utilities	6.83	7.41	7.42	7.41	275.25	295.66	294.57	297.14
Wholesale and retail trade	4.26	4.62	4.62	4.63	143.14	151.54	151.54	154.18
Wholesale trade	5.51	5.97	5.97	6.00	214.34	231.64	231.64	234.60
Retail trade	3.82	4.13	4.13	4.14	122.62	128.44	128.44	130.82
Finance, insurance, and real estate	4.54	4.91	4.92	4.93	166.16	180.69	179.09	179.45
Services	4.66	5.04	5.06	5.04	155.11	167.33	167.49	167.83

[1] Data relate to production workers in mining and manufacturing; to construction workers in construction; and to nonsupervisory workers in transportation and public utilities; wholesale and retail trade; finance, insurance, and real estate; and services. These groups account for approximately ⅘ of the total employment on private nonagricultural payrolls.
[2] 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	June 1977	January 1987	February 1978	March 1978	April 1978	May 1978[2]	June 1978[2]	Percent change from—June1977 June 1978	Percent change from—May 1978–June 1978
Total private nonfarm:									
Current dollars	197.4	209.1	208.8	210.2	212.1	212.5	213.5	8.2	0.5
Constant (1967) dollars	108.6	111.0	110.6	110.5	110.6	109.8	N.A.	(3)	(4)
Mining	215.4	221.4	223.2	225.3	235.6	236.4	237.2	10.1	.4
Contract construction	194.9	201.1	201.6	203.8	204.2	206.4	208.6	7.0	1.1
Manufacturing	198.5	208.3	209.7	210.9	212.1	213.2	214.6	8.1	.6
Transportation and public utilities	210.3	223.3	223.9	225.0	228.2	228.4	227.9	8.4	.2
Wholesale and retail trade	191.1	202.4	203.0	204.8	207.1	206.4	207.6	8.6	.6
Finance, insurance, and real estate	177.7	188.5	187.5	188.5	191.5	191.5	198.0	8.6	.8
Services	201.4	214.4	214.3	215.7	217.4	217.3	217.3	7.9	(5)

[1] Data relate to production workers in mining and manufacturing; to construction workers in construction; and to nonsupervisory workers in transportation and public utilities; wholesale and retail trade; finance, insurance, and real estate and services. These groups account for approximately 4/5 of the total employment on private nonagricultural payrolls.
[2] Preliminary.
[3] Percent change was 1.1 from May 1977 to May 1978. The latest month available.
[4] Percent change was −0.7 from April 1978 to May 1978, the latest month available.
[5] Less than 0.05 percent.

N.A.–Not available.

Note: All series are in current dollars except where indicated. The index excludes effects of 2 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-wge 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					
	June	July	August	September	October	November	December	January	February	March	April	May[2]	June[2]
Total private	115.8	115.8	115.6	115.9	116.8	117.2	117.5	116.1	117.0	119.2	120.3	120.0	120.0
Goods producing	101.8	101.4	100.6	100.9	101.7	102.3	102.1	99.5	101.4	104.3	106.8	106.1	106.7
Mining	142.3	139.9	134.7	142.5	143.9	144.8	113.3	110.7	112.6	118.7	150.5	149.1	149.0
Contract construction	111.8	112.8	110.8	110.4	112.3	114.0	113.5	104.7	108.9	116.5	125.0	123.6	128.6
Manufacturing	98.7	98.0	97.6	97.8	98.4	98.8	99.7	98.2	99.7	101.7	102.1	101.5	101.4
Durable goods	98.7	98.3	98.1	98.4	99.3	99.5	100.8	99.3	100.9	103.0	103.3	102.9	103.0
Ordnance and accessories	41.0	40.5	39.3	39.1	38.2	38.2	40.2	39.8	38.1	41.3	40.5	40.2	40.4
Lumber and wood products	104.0	105.3	104.0	106.0	106.8	109.5	109.8	107.6	106.8	109.3	109.0	108.0	106.4
Furniture and fixtures	107.9	108.4	107.2	108.3	110.6	111.7	113.8	109.3	116.5	117.6	117.0	115.4	113.9
Stone, clay, and glass products	105.4	104.9	104.1	103.3	103.2	106.7	107.0	104.3	105.4	108.0	110.7	109.6	110.1
Primary metal industries	90.9	89.0	88.2	89.0	89.7	89.5	89.7	89.5	91.2	90.9	90.8	92.1	92.4
Fabricated metal products	104.2	103.7	103.3	103.1	105.0	105.7	107.7	105.3	107.6	109.1	109.7	109.1	108.8
Machinery, except electrical	101.6	103.2	103.5	103.6	105.5	104.9	106.0	104.0	107.0	109.1	110.0	109.9	111.1
Electrical equipment and supplies	97.9	98.3	98.3	97.8	98.8	99.4	100.4	98.9	100.3	103.4	103.1	102.9	102.7
Transportation equipment	96.5	94.8	95.4	96.5	96.2	94.5	96.7	96.5	96.3	99.0	99.1	98.2	97.9
Instruments and related products	113.2	111.7	111.3	112.4	113.2	113.4	114.4	113.4	114.8	117.8	119.2	118.1	119.5
Miscellaneous manufacturing industry	94.6	91.4	91.3	90.3	91.1	91.5	93.9	92.3	93.9	96.4	96.9	95.3	95.9
Nondurable goods	98.7	97.7	96.9	96.9	97.1	97.8	98.1	96.5	97.8	99.9	100.3	99.6	99.2
Food and kindred products	97.3	95.9	94.5	94.1	92.8	94.2	94.6	94.4	96.0	97.6	97.5	96.4	94.8
Tobacco manufacturers	80.2	77.2	71.7	73.2	72.4	72.2	74.0	72.4	74.4	76.7	73.8	75.1	79.6
Textile mill products	99.7	99.9	98.9	99.4	100.2	101.4	100.8	99.3	100.4	101.3	101.2	100.6	99.9
Apparel and other textile products	89.8	87.6	87.8	87.2	87.8	88.6	89.0	84.2	87.2	89.4	90.8	89.9	89.5
Paper and allied products	101.1	100.3	99.4	99.7	100.2	99.6	100.8	99.3	100.2	103.1	103.7	103.5	102.8
Printing and publishing	95.3	95.6	95.1	95.7	95.7	95.9	95.9	94.6	95.3	97.4	97.6	95.9	96.7
Chemicals and allied products	103.8	103.7	103.4	103.0	102.6	103.0	103.5	103.8	104.5	105.5	105.2	106.0	106.6
Petroleum and coal products	121.6	119.9	120.4	120.8	122.8	124.8	125.7	126.6	127.8	128.6	127.2	125.1	125.4
Rubber and plastics products, nec	113.9	132.5	129.7	129.3	130.5	132.5	133.8	131.3	131.9	137.4	139.8	139.1	138.9
Leather and leather products	72.9	69.9	71.8	72.7	73.8	73.7	71.9	70.7	70.7	72.6	74.7	73.6	71.9
Service producing	125.6	125.8	126.1	126.4	127.2	127.5	128.2	127.6	127.8	129.4	129.7	129.7	129.3
Transportation and public utilities	104.1	103.1	103.5	103.9	102.9	105.1	105.6	103.5	105.4	106.3	105.6	105.5	105.2
Wholesale and retail trade	121.2	121.6	121.6	121.8	122.7	122.4	123.2	122.3	122.3	124.1	124.2	124.7	124.4
Wholesale trade	117.3	117.5	117.5	117.8	118.7	118.8	118.9	118.9	120.3	121.7	122.0	122.0	122.1
Retail trade	122.7	123.1	123.1	123.3	124.2	123.7	124.8	123.5	123.1	124.9	125.0	125.6	125.3
Finance, insurance, and real estate	131.7	132.3	132.7	133.2	134.2	134.9	134.9	135.4	135.9	136.7	138.0	137.5	137.9
Services	139.6	140.1	140.6	140.9	142.7	142.6	143.4	143.8	143.4	145.3	145.7	145.3	144.4

[1] Data relate to production workers in mining and manufacturing; to construction workers in construction; and to nonsupervisory workers in transportation and public utilities; wholesale and retail trade, finance, insurance, and real estate; and services. These groups account for approximately ⅘ of the total employment on private nonagricultural payrolls.

[2] Preliminary.

TABLE B-6.—INDEXES OF DIFFUSION: PERCENT OF INDUSTRIES IN WHICH EMPLOYMENT[1] INCREASED

Year and month	Over 1-mo span	Over 3-mo span	Over 6-mo span	Over 12-mo 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	73.2
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	77.9
November	75.9	76.2	80.5	[2] 77.3
December	73.8	77.9	83.7	[2] 78.2
1978:				
January	66.9	80.5	85.2	----
February	70.1	81.7	[2] 84.0	----
March	74.4	77.6	[2] 76.5	----
April	68.9	[2] 73.3	----	----
May	[2] 63.4	[2] 65.1	----	----
June	[2] 57.8	----	----	----
July	----	----	----	----
August	----	----	----	----
September	----	----	----	----
October	----	----	----	----
November	----	----	----	----
December	----	----	----	----

[1] Number of employees, seasonally adjusted, on payrolls of 172 private nonagricultural industries.
[2] Preliminary.

Senator PROXMIRE. Thank you very much.
Mrs. Slater.

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

Mrs. SLATER. I am very pleased to be here, Senator. I only regret that I can bring you only speculation. We will not release the second quarter gross national product figures until July 21. So my comments this morning reflect simply my own assessment of what probably has happened, based on limited data that is presently available.

I should further note that the annual GNP revisions, going back to 1975, will also be released July 21. This may cause some change in the quarterly growth patterns during that period, including the first

quarter of this year. Therefore our estimates as to the change in the GNP during the second quarter are subject to more uncertainty than usual, because we are working at this time from an unrevised base.

We presently think that real GNP growth in the second quarter will be at about an 8-percent annual rate. We estimate that something in the neighborhood of 3 percentage points of this amount represents a recovery of the losses sustained during the winter and the coal strike earlier in the year, with this catchup occurring primarily in construction activities, retail sales, and coal production. Accordingly, the second quarter's unusually strong pace of economic activity stems from temporary factors and will not continue. A better perspective on growth trends can be obtained by viewing the first two quarters of 1978 together and noting that real output probably rose slightly less than 4 percent during the first half.

The transition from the rapid "catchup" pace of March and April to a more moderate and sustainable growth pattern began in May, as evidenced by a variety of economic indicators. The judgment of many forecasters is that the annual rate of growth in real GNP will continue in the somewhat under 4 percent range during the second half of 1978. Others, however, are anticipating a more pronounced slowdown. Developments in the third quarter should be monitored carefully so that timely policy actions can be taken if the economy weakens unduly.

Looking at the second quarter, consumer outlays for goods posted a strong recovery in the second quarter from the depressed first quarter level. Much of the strength was in durable goods, especially motor vehicles. Outlays for nondurable goods, in constant dollars, rose moderately with food purchases apparently actually declining. Consumers may have reacted to the recent sharp rise in food prices by shifting their spending toward less expensive food items. Growth in expenditures for services was also moderate, with household use of electricity and natural gas declining to a more normal level following unusually heavy winter demands.

Real business fixed investment grew rapidly in the second quarter partly due to a substantial increase in construction activity, which was held down earlier in the year. This again is probably a catchup from the cold winter.

The motor vehicle component of investment in producers' durable equipment also rose strongly, but investment in other types of machinery and equipment apparently rose only modestly, continuing the rather sluggish pattern of the past year.

The point has been made from time to time that investment in producers' durable equipment has risen more strongly than nonresidential construction during the recovery period, indicating an emphasis on refurbishing existing plant rather than on building new. Once motor vehicles are excluded, however, this pattern has changed during the past year, with construction showing the stronger growth. I have no feeling at this point as to what that might imply. But I do think it is worth noting that we no longer have this pattern of concentration in equipment rather than new construction.

Business inventory accumulation, based on fragmentary data, apparently continued in the second quarter at about the rate of the first quarter. Key factors in overall inventory behavior included a working

down of the earlier excessive level of new car stocks and the rebuilding of coal inventories.

Real residential construction expenditures contributed to economic growth in the second quarter as construction activity picked up with better weather. Viewing the first half as a whole, this sector remained about at the high level of the fourth quarter of last year, but did not rise further.

Net exports of goods and services detracted from growth in the first quarter, reflecting the very large first quarter merchandise trade deficit. In the second quarter, the trade deficit has narrowed and net exports in the GNP accounts may be expected to rise. On a balance-of-payments basis, the merchandise trade deficit declined from a monthly average of $3.7 billion in the first quarter to an average of $2.8 billion in April and May.

Federal Government purchases, in constant dollars, may have declined again in the second quarter because of net sales by the Commodity Credit Corporation. State and local government purchases, however, rose sharply with a recovery in outlays for structures and further growth in employment.

Among other major economic developments in the second quarter, growth of real disposable personal income accelerated to an annual rate of about 4 percent. The overall rate of inflation, as measured by the implicit price deflator for GNP, appears to have risen somewhat more than the 7-percent annual rate of gain in the first quarter, due primarily to stepped up increases in consumer prices of food and energy. Data available so far suggest that other prices, on balance, rose in the second quarter at a pace similar to that of the first quarter.

With both output and employment growing strongly, productivity in the nonfarm business sector apparently rose very little in the second quarter. This means, of course, that unit labor cost rose at a high rate once again, although by considerably less than the extraordinarily large increase of the first quarter.

In summing up, I would again stress that it is helpful to view the first half as a whole, rather than focussing on the quarterly pattern. In the first half of this year, real Federal purchases declined while the rest of the economy; that is, private and State and local government purchases, grew fairly strongly. This growth has been reflected in very strong gains in employment. Having now seen the June data we can underline that the growth in employment in the first half of the year was very strong indeed. Again, this was employment outside the Federal sector, where employment has not changed for some time.

Looking ahead, however, some troublesome questions face us with the underlying rate of inflation stubbornly failing to diminish and increasing concern emerging as to the probability of maintaining a satisfactory rate of real growth over the coming quarters.

This completes my statement. I would be pleased to answer questions.

Senator PROXMIRE. Thank you very much.

Are there any other statements?

First, of course, the big question concerns June, because, in the past, we have had some difficulties with June. The figures have been hard to

adjust, I take it, because of the remarkable change in the employment situation, young people getting out of high school, out of college, looking for work who were not working before, and having to make an adjustment to that situation that would be accurate and fair.

You told me that the seasonal adjustments were made in January of 1978. Is that right?

Mr. STEIN. That is right.

Senator PROXMIRE. Is there any way you can tell us, on the basis of past experience, how much reliance we can place on this June figure of unemployment, the drop to 5.7 percent?

Mr. STEIN. Senator, I think as you imply, we always have to take the June figures with a little bit of caution, because of the huge influx into the labor force. But I think the fact that we are using an additive adjustment to teenage employment gives us a better adjustment than we used to get.

Nevertheless, we have a fairly late survey week in June; that is, the 11th through the 17th, and we also have a 5-week spread between May and June. So it is possible there was more opportunity there for some young people to find jobs than otherwise would have been the case.

Senator PROXMIRE. One of the elements that would seem to me could distort a seasonally adjusted figure, I think, is a dramatic change in the number of high school and college students who are now working during the year; there are much more than in the past.

So the pattern perhaps of young people entering the work force in large numbers in June may be somewhat diminished this year, because so many were working during the year. Is it possible that you might have failed to adjust for that, and therefore, you might have understated the unemployment rate, overstated the improvement?

Mr. STEIN. It would appear that our teenage labor force expanded at least as much as we would have expected. The unadjusted participation rates on table I show a rise between May and June, for teenagers, from 55.1 to 68.0. That increase was in line with what we would have expected on a seasonal basis as is pointed out by the seasonally adjusted rate holding steady or rising slightly.

So I don't think we are getting a smaller-than-expected increase.

Senator PROXMIRE. Let me ask both you and Mrs. Slater to comment. We have had a remarkable drop in unemployment over the past year, and over the past 6 months. In December unemployment was 6.3. Now it is 5.7 percent. These monthly changes are not as reliable as 6 month's changes. In view of the fact that the economy only grew at a 4-percent rate in that period, did not grow at all in the first quarter, and grew at 8 percent in the second quarter, how do you explain this remarkable drop in unemployment, and this remarkable increase of 2½ million jobs between December of 1977 and June of 1978, when there was so little growth?

Maybe Mr. Mark can tell us that there was not much productivity.

Mr. MARK. I am not sure I know, but much of the productivity change would be the result as much as the reflection. Short-term movements in productivity, as you know, are more sensitive to output changes and employment adjusted to output changes.

However, there are long-term factors involved in our productivity

growth which are also underlying this change and may have an influence. I would be hard pressed to quantify or assess what the impact was.

As you know, for the last decade or so, we have had a substantial drop in our productivity growth rate. However, by and large, productivity changes in the short run really are sensitive to output changes. The answer to the question of the employment rise might lie more in what expectations were in terms of employment.

Senator PROXMIRE. Maybe I can make it a little simpler by asking it this way: What happens, as I understand, is that a particular company may be hiring more people but not producing much more. One explanation could be that there is labor hoarding.

In other words, you are hiring people because you feel it might be more difficult to get them in the future. Is there any evidence that that policy is being followed?

Mr. MARK. Not really. It would depend more on an assessment of the tightness of the labor market. I am not sure that is present.

I do not know if it is pervasive. It may be, though, that it is a different form in terms of what expectations are. There may be higher expectations, and therefore, the hiring has increased.

I think, though, as far as the productivity aspect is concerned, there are other things that are puzzling in the sense that during the recession in 1974 there were some efficiencies that were introduced—I guess it could be called wringing out—and consequently the employment increases that took place in the recovery of the last 11 quarters perhaps have been somewhat less than they might have been prior to these changes.

Now, we are reaching the stage where the employment increases you would expect will be less than we have been having. That is the surprising aspect of it.

Senator PROXMIRE. Do you have any explanation for that? Why were more people hired when we are not increasing production that much?

If you look at this breakdown for unions, you find not much increase in some areas, but I think in contrast, construction gains were about 85,000; State and local government increases were about 60,000; and increase in retail of 45,000; an increase in finance, insurance, and real estate of 20,000.

Mr. MARK. But no increase in manufacturing.

Senator PROXMIRE. No increase in manufacturing.

Mr. MARK. That is right, which was rather unusual in the face of such large increases in other sectors.

Senator PROXMIRE. That is right. But in all of these, we do usually have an increase in the gross national product when you hire more people. Isn't that right? What is your explanation?

Mr. SLATER. Senator, no one I have discussed this with has an explanation in which they have any confidence. It is very clear that labor force and employment have both grown very much more rapidly than has been expected; and unemployment correspondingly has declined more than we had expected.

As Mr. Mark has pointed out, this has had the effect of greatly reducing our short run productivity gains. In fact, if you look at the first half of the year, we probably have had no growth in productivity. We had a drop in the first quarter due to the weather and unusual circumstances, and probably only a modest gain in the second quarter.

Some part of the growth in employment, and the drop in unemployment, recently, can be attributed to Federal policies we have been pursuing to bring this about. I am referring here to the public service employment program, which now employs about 700,000 people.

Senator PROXMIRE. How much of an increase since December in the public service employment?

Mrs. SLATER. It has been a substantial growth in the past year. Public service employment increased from 352,000 in June 1977 to 594,000 in December and subsequently to its current level of about 700,000. The past year's increase has thus been about 350,000 with 100,000 of that occurring since December. Total employment has grown nearly 4 million over the past year. It does not account for a major share. It accounts for a small part of the growth in employment that is higher than the growth in GNP. There is a very large additional amount which cannot be explained by that factor.

Senator PROXMIRE. You see, what puzzles me particularly, is the evidence of a real caution on the part of business management with respect to inventories. Inventories have increased, but less than sales. So there is a very healthy relationship here.

There is not too much stock. In addition, there has been a considerable caution on the part of business people in expanding capital equipment.

As you point out in your statement, there is some increase in equipment that is going to refurbish plant, but not much in the way of expanding; and yet they are hiring additional people at a very, very rapid rate, except in manufacturing.

Mrs. SLATER. Yes. As I said, we have no good explanation for this. All that we can really conclude from what we know about the past history of the economy is that this is probably a temporary relationship that will turn around.

So we may, in the year ahead, be looking at employment gains that will not keep pace with the GNP gains. This is why even though there is a substantial reduction in unemployment in the past year, we continually caution you to remember this. It will probably remain very close to the present level.

Senator PROXMIRE. I will yield to Senator Sparkman in a minute. But before I do, is it possible that this substantial increase in hiring may reverse itself, and that we may get a rather disappointing performance in employment and unemployment in the next 6 to 8 months?

Mrs. SLATER. That is not only possible, but I think it is probable. Therefore, we cannot predict further declines in the unemployment rate in the next 6 months; and, indeed, some small increases may well be seen.

You do have a new official forecast by the administration predicting 5.9 percent——

Senator PROXMIRE. Higher than it is now?

Mrs. SLATER. It would be equal to the 5.9 percent average of the second quarter. So our judgment would be that we are looking at a plateau in the unemployment rate for some months to come.

Senator PROXMIRE. I have to make one further observation. It seems the administration has been wrong in predicting inflation. They have underestimated that. But they have been wrong also in predicting

unemployment, and the increase in employment. They have been too pessimistic. So I hope you are wrong again. I know you do, too.

Senator SPARKMAN. Let me ask you this: How would you assess the economic condition of the country at the present time?

Is it healthy? Is it good? Is it bad? Whatever description you may give it.

Mrs. SLATER. Mixed.

Senator SPARKMAN. Sometimes up, sometimes down?

Mrs. SLATER. Some aspects are very healthy, and some are not. We have some substantial economic progress in the last year in the growth of output and the growth of employment. We have, as pointed out in this month's statistics, a larger proportion of our population at work than ever before. This has been a dramatic increase in labor force participation.

We have, at the same time, a rather serious problem of inflation which does not seem to be going away. Thus, along with the economic growth, in which we take some satisfaction, we do have some serious problems, and also some uncertainties as to whether this growth will continue quite as strongly as we would like.

I would say we are in good health, but with some problems that need attention.

Senator SPARKMAN. Of course, unemployment increases cause inflation.

Mrs. SLATER. I think many of us are in a considerable quandary these days about the relationship between inflation and employment. In general, I would think the kind of inflation we have suffered from is not tied very closely to the rates of unemployment. It seems to have come from world oil prices and other factors.

Senator SPARKMAN. How many jobs are there in the United States?

Mr. STEIN. At the present time, Senator Sparkman, total employment is 94.8 million, which represents 58.9 percent of the working age population.

Senator SPARKMAN. Do you remember when Henry Wallace, I think when he was Secretary of Commerce, predicted how many jobs?

Mr. STEIN. I believe it was 60 million.

Senator SPARKMAN. And do you remember the razzing he got for that?

Mr. STEIN. Yes.

Senator SPARKMAN. And today it is 94?

Mr. STEIN. 94.8; close to 95 million.

Senator SPARKMAN. So sometimes we all make mistakes. I believe that is about all.

I enjoyed the discussion very much. I think it is a healthy discussion.

Senator PROXMIRE. That is the highest number, and the highest proportion of the adult population at work than we have ever had in history?

Mr. STEIN. That is correct.

Senator PROXMIRE. So while unemployment is too high, based on historical experience, we do have a favorable relationship; more people at work.

Let me ask you this, Mrs. Slater: the OMB has estimated that the budget deficit for fiscal 1978 will be $51.1 billion, and the deficit for

fiscal 1979 will be $48.5 billion, based on an assumption that unemployment will fall to 5.9 percent by the end of this year, and 5.6 percent by the end of 1979, in other words, stay exactly where it is now.

In your judgment, how does today's unemployment rate figure affect the accuracy of those predictions?

Mrs. SLATER. I do have to say that I do find today's employment information rather surprising. It is very good news, obviously, but if somebody asked me what I expected, I would not have said this strong growth in employment.

But I think we have to observe the usual caution about reading too much into any one month's figures. All our information about this economy suggests that, as we were saying a moment ago, this continual decline in unemployment and growth in employment is not going to continue, and that we will find ourselves on something of a plateau in this regard.

Senator PROXMIRE. We find ourselves right now at a point where we have had a sharp drop in unemployment. The figures just out today on finished goods indicate another discouraging increase in prices; as a matter of fact, the annual rate is over 8 percent for finished goods and raw materials, or crude goods has had one of the biggest increases we have had in a long time.

If inflation is worse, and unemployment is better, does this indicate that we should consider a different fiscal policy? In other words, should we suggest that maybe reducing the tax cut would be wise?

Does it indicate once again that there should be more pressure to hold down Federal spending?

Mrs. SLATER. The budget figures released yesterday do reflect a significant reduction in the expected budget deficit, about $10 billion for 1978 and 1979. In the case of 1979, the major cause of that lower deficit is the change in the tax cut proposal, postponed to January, and reducing the annual size to $20 rather than $25 billion. The administration has indicated that seems to be appropriate in view of the——

Senator PROXMIRE. More recently it was down to $15 billion.

Mrs. SLATER [continuing]. The President's proposal, as presented in the midyear review is $20 billion. Of course, in Congress, there has been a discussion of various numbers. It would be my view, at least, that to move in the direction of further restricting policy, and to fail to enact to tax cut, or to enact one smaller than $20 billion would be moving to slow the economy down too much and getting us into a situation where unemployment would be rising again. So I think we have gone far enough.

Senator PROXMIRE. Let me follow up on those estimates. You have said that more forecasters predict a growth rate of something under 4 percent for the second half of the year, with some predicting a marked slowdown. What is the range of forecasts?

Mrs. SLATER. Most of them I am familiar with fall in the range of 2 to 4 percent.

Senator PROXMIRE. Some as low as 2 percent? And what is your personal view of the second half?

Mrs. SLATER. I think it will be close to 4 percent.

Senator PROXMIRE. If we follow current policies with a $20 billion tax reduction with expenditures maintained at the level the President

requested, would that lead us into a recession in 1979, or would it mean continued growth at the 4 percent level or a little less in 1979?

Mrs. SLATER. You have pointed out very tellingly how much our forecasters can be wrong. But making the best judgment we can for next year, we would think that if the fiscal policy the President has recommended is followed, and if monetary policy is reasonably accommodative—of course, there is considerable importance attached to that—that growth next year would be in approximately the same range as this year, something around 4 percent.

Senator PROXMIRE. This morning's Washington Post reported on yesterday's CBO study which found that the $7 billion proposition No. 13 tax cut in California will reduce the inflation rate by up to 0.4 percentage points within 2 years.

CBO also holds that it should have a stimulative effect on the economy if the overall spending level is maintained by reducing the State government's surplus. How reasonable do you think the CBO's estimates are?

Mrs. SLATER. I have not had an opportunity to look at that study, and I would not want to comment on the quantitative estimates. Certainly, the direction of those figures should be the way CBO indicated.

Senator PROXMIRE. If you have a $7 billion tax cut out there, and a reduction in local spending will be offset by using $5 billion of the surplus, does that mean there ought to be a lower tax cut on a nationwide basis, or would this be localized?

Mrs. SLATER. I would not think so, because looking at the appropriate Federal response to that, you should also keep in mind that because those taxpayers will be paying less State taxes, they will have a small deduction on their Federal taxes, and they will be paying higher Federal taxes, some $2 billion to $2½ billion, as a result of proposition No. 13 from California.

So the immediate effect of that kind of change is to make the Federal budget slightly more restrictive than it otherwise would have been. In trying to reach some kind of conclusion, you have to make a judgment on what will be done in other States.

The change in California is not of the magnitude that would lead you to much. I think it is worth noting that the administration, as part of its anti-inflation effort, has requested State and local governments to try and reduce their taxes, and if possible, to do it in the form of those kinds of taxes which directly push up prices, particularly sales taxes. While we are not advocating proposition No. 13's all over the country, we are urging those State and local governments which do have a surplus, and which probably will be taking some kind of tax action, to design this to take into account some action to directly reduce inflation.

Senator PROXMIRE. California is so big. It represents more than 10 percent of the total population of the country. This tax cut is so large.

Do you fear that the economic effects will be primarily localized in California, or will it affect the country as a whole?

Mrs. SLATER. The effect will be primarily in California. But California, as you pointed out, is a large fraction of the whole, and——

Senator PROXMIRE. It would seem to me that if you are going to accept the initial assumption that the administration makes, and you made, of the $20 billion tax cut, then that action in California might persuade you to follow a policy of having a greater tax cut.

Mrs. SLATER. I'm not sure I would reach quite that conclusion.

Senator PROXMIRE. Let me say it this way: California is a unique case. But the Wall Street Journal had a report on this that many other States will follow suit in one way or another.

In a way, that would reduce their surplus, reduce their taxes, and probably would not reduce their services as much. We are all told that one of the reasons we have to have a large Federal deficit as we have is that we have to counterbalance the huge surpluses that the State and local governments have been running. If those are reduced by $5 or $10 billion, would that suggest we follow a more restrictive national fiscal policy?

Mrs. SLATER. This reduction in the surplus in California—the stimulative effect of that will be a one-time, one-year thing. They will spend the surplus. That will have some stimulative effect.

Beyond that effect, they will have to raise some other taxes, or cut the services in California. Either way they do that, it would seem the impact on economic activity would be approximately neutral.

Senator PROXMIRE. Except it may result in less surplus. If you wind out the surplus, if that pattern establishes itself around the country—then that would have an effect, would it not, on economic activity?

Mrs. SLATER. If that effect does occur on a widespread basis, yes. If State and local governments alter their relationship between taxes and spending in such a way that they no longer are accumulating surpluses, you would want to take that into account.

Senator SPARKMAN. I want to ask you this question: If the economy grew at an annual rate of 4 percent during the first half of the year, and you say that most forecasters predict a growth rate of somewhat less than 4 percent during the second half, how then could the OMB predict an overall 4.2 for the year as a whole, as they did yesterday in submitting their midyear budget review?

Mrs. SLATER. That OMB estimate for 1978 is an annual average figure, the annual average of this year as compared to last year. That is not inconsistent with the quarterly pattern during the year. The differences are not large.

I think the easiest way to characterize it is that we have been growing in this 4-percent range, and we can expect that to continue in the future.

Senator PROXMIRE. Mr. Stein, the data on table A–2 shows that the biggest increases in unemployment have occurred among adult women, and in particular, among married women living with their husbands.

This indicates that much of the stickiness in unemployment rates is due to second wage earners entering the labor market. Do you concur with this analysis, and if so, how much of this has been caused by our current high rate of inflation?

You hear this a lot. I just came back from my State, Wisconsin. Women are saying they have to work. They don't want to. They would rather stay at home with their children. But they have to work because inflation is so high, and it is the only way to maintain their living standard.

Mr. STEIN. Much of the labor force participation of married women appears to be caused by necessity; that is to say the husbands are either unemployed or not in the labor force, or most likely, earning less than the family considers sufficient.

Senator PROXMIRE. If we bring down the rate of inflation, would that tend to correct that problem? Would it then be more likely that women will stay out of the labor force, or leave it, because under those circumstances they would be able to keep up with inflation better?

Mr. STEIN. I am not sure I can answer that, Senator Proxmire. I know at the same time we probably have a certain rising level of expectations, and once people get accustomed to more than one income, it may be hard to revert to a somewhat lower standard of living.

But I think there is some general agreement that inflation has been one of the factors that has introduced married women into the labor force.

Senator PROXMIRE. Mrs. Slater, in view of the fact that not only the administration and this committee—and certainly this committee—have been dead wrong in our expectation of unemployment, we thought the unemployment rate would be worse, or at least would not decline as rapidly; I would like to ask you—to challenge you—on your estimate that growth will continue at 4 percent.

Where do you see growth in the economy? Here you see residential construction, which is not increasing; State and local expenditures are not increasing.

We have a foreign trade situation which indicates it is not particularly optimistic. We have a decline in leading indicators for May, which suggest the future will not be as good. We have the consumer survey people telling us that consumer attitudes are not as good.

All of this seems gloomy evidence that the economy will turn down, in which case it will be hard to maintain the rate you say. Where is the strength coming from?

Mrs. SLATER. First, it is worth pointing out that we have had a relatively balanced growth pattern among sectors. While we do have a number of uncertainties, we are in one sense fortunate that there are no big imbalances. There is no buildup of inventories which one usually sees at the top of a downturn of a recession; and in fact, business inventories have been quite low relative to sales.

I would suspect that in the second half of this year that there will be some strength coming from some additions to business inventories. There will be strength in the business fixed-investment sector. The consumer sector, not a boom performance, but a continuation of the steady, moderate rate of expansion in the consumer sector, and possibly some strength from exports.

It is true that we have a large trade deficit, and it is going to stay large.

But we are at least hopeful that it will be diminished somewhat, and as it diminishes, this will contribute to GNP growth.

Senator PROXMIRE. Isn't it likely that we will have a restraint on the monetary side, that interest rates will continue to rise, and that will slow down not only residential construction, but also business capital spending?

Every estimate I have seen is that interest rates are likely to go up.

Mrs. SLATER. The forecast of the administration assumes very little further increase in interest rates. Monetary policy is a key assumption underneath that. If you change the assumption, you change the outlook.

Senator PROXMIRE. How are those assumptions, in view of the recent attitude of the Federal Reserve Board, and the figures we have today with unemployment dropping sharply, and with prices rising dangerously? Isn't it likely that that is exactly the kind of activity that would urge the Federal Reserve to follow a policy of restraint, as they have in the past?

Mrs. SLATER. You are certainly right; there have been examples in the past in my judgment, of an excessively tight monetary policy which has led to recession. There is no question that that is a possibility that could occur.

Our assumption is that the Federal Reserve is as much interested in seeing the economy remain healthy as the rest of us, and they are aware of the importance of monetary policy in producing that outcome.

Senator PROXMIRE. Mr. Stein, how could you explain—or can you explain for us—the sharp improvement in recent months in the unemployment rate for veterans, especially Vietnam-era veterans?

For the last decade, their unemployment rate had been higher than nonveterans; but recently it has improved, and improved sharply. What is the explanation for that?

Are there policies that we are following that are at least getting us results, or is this some general movement?

Mr. STEIN. I don't know if we can quantify the results of the Government programs. They certainly have some effect.

But there has been a continuing change in their age-composition, vis-a-vis nonveterans. That is to say, the population of Vietnam veterans is aging. There are no new Vietnam veterans entering into the stream, and the ones we have mainly are in the upper years of the 20–34 age group.

Vietnam veterans have been out of the service for some time, and have had an opportunity to adjust to the civilian market.

On the other hand, nonveterans, as a group are much younger. As you look at the 20–34-year-old group, the portion of nonveterans in the 20 age group, where unemployment is relatively high, is much, much higher than that for veterans.

So what we are thinking of is perhaps a change in the age bracket for tabulating veterans' data.

Senator PROXMIRE. I see.

There are not as many veterans in the 20–24-year-old category, so therefore veterans have a lower unemployment rate, which is most encouraging, something which we have been working hard to achieve.

But you say that is primarily a matter of the aging of the veteran population. The war has been over now for a number of years.

I imagine they were as young as 20.

Mr. STEIN. They would all be at least 23 or 24 now.

Senator PROXMIRE. I would like to ask Mr. Stein and Mrs. Slater, and also Mr. Mark, and particularly Mr. Mark, during the first quarter,

output stayed constant and employment grew substantially. As a result, productivity fell at a rate of 3.6 percent.

Everybody argues that one action we have to take if we are going to get inflation under control is to improve our productivity. Is there any evidence that productivity is getting back on track. Do you have any ideas why productivity in the first quarter was so poor?

Mr. MARK. The first quarter was a bit of an aberration, because the downtown reflected in part the coal strike, which had a very big effect, and also the severe weather which was present.

So in that sense, the sharp decline——

Senator PROXMIRE. Both of these factors would tend to increase productivity. People would have their workers, even though they have nothing for them to do?

Mr. MARK. And there were dislocations that arose because of the coal strike. That is pretty well taken care of.

That is why we would expect, in the second quarter, while we will not come back necessarily to the early growth rates in productivity, as Mrs. Slater indicated, it is most likely that we will have a slightly positive or virtually small change, but certainly not a large decrease like we had in the first quarter.

We are coming back, but somewhat slower than we would have anticipated.

Senator PROXMIRE. The reason I ask that is, because of the unit labor cost. Obviously, if unit labor costs go up, prices have to go up.

The other ingredient is hourly compensation, that increased by 14 percent in the first quarter. Is there any evidence that that is an aberration?

Mr. MARK. Yes. Part of that is because of the social security tax rate change, social security tax base change and also the increase in the unemployment insurance base.

Those have been taken care of. So our second quarter increase in the hourly compensation increase would not show any thing like that.

Senator PROXMIRE. The administration is changing their inflation estimate to give us more than 7 percent inflation for the rest of the year. Can you tell us what the unit labor cost—that is, productivity and wage increases—imply for the future? Do you think that is reasonable, a 7-percent inflation rate, given those basic elements?

Mr. MARK. As you know, we try not to forecast. But it certainly would appear that we are talking about an average growth rate of 9, 8½——

Senator PROXMIRE. 8½ to 9 percent hourly compensation, and what productivity?

Mr. MARK. The expectation, I would imagine, with the output growth that Mrs. Slater has mentioned, would be running around 1 to 2 percent.

Senator PROXMIRE. So this gives us 7 percent? It is 7 percent just about on the nose. Would you agree with that Mrs. Slater?

Mrs. SLATER. Yes.

Senator PROXMIRE. You would agree that unit labor costs would rise by about 7 percent, and that would be a reasonable expectation for inflation on that basis?

Mrs. SLATER. I think perhaps a little less than 7 percent.

I would like to point out that the revision in our inflation forecast for this year reflects largely what has happened in terms of the very large and partially unexpected rise in food prices which has already taken place, and also the decline in the value of the dollar abroad.

In other words, for the inflation rate for the year as a whole to come out at 7 or 7.2 percent, which is in the administration's forecast, that implies a considerably lower rate of increase, something more in the range of 5 percent for the remainder of this year.

So our revised inflation forecast should not be taken really to imply a change in the underlying relationship between wages and costs and prices, which are not very different than we expected at the beginning of the year.

Senator PROXMIRE. Mr. Stein, in the first 6 months of this year, prices of finished goods have been rising at an annual rate of 10.2 percent. That has not been fully reflected in the consumer price index, and that is one of the reasons we are so concerned about inflation.

Each month, some new special category is singled out as responsible for the bad news. Do we have enough of a trend to know definitely if the underlying inflation has increased by the 6 percent we talk about?

Mr. STEIN. I would like to refer that to Mr. Early.

Mr. EARLY. I think as was indicated in the statement, the trend for finished goods, both food and nonfood portions, while there has been a great deal of up and down, has been roughly constant over the last three quarters.

It has been on the order of 0.7 of a percent for finished goods, and on the order of 1.1 percent for the food component. Whether those rates continue or not, we cannot say. But clearly, we have been, for the last three quarters, at a rate which is higher than the rate prior to that.

Senator PROXMIRE. What can happen to those finished goods figures? They are bound to be translated into higher consumer prices—or perhaps not?

Mr. EARLY. They have been.

Senator PROXMIRE. But this is the June figure, up 0.7 of 1 percent. It is up once again for crude goods.

In other words, at the most distant stage of production, we have another sharp increase in prices which is likely to be reflected in higher prices maybe 6 months or a year from now.

Mr. EARLY. The food portion will pass quickly. The nonfood portion will take several months to pass through.

So in the crude nonfood portion, the rate is back up again after 2 months of what looked like the beginning of some improvement.

Of course, the intermediate materials continued——

Senator PROXMIRE. We reconcile the 7 percent unemployment figure with a compensation for labor, and with productivity.

The other element is trying to reconcile with the crude goods, intermediate goods, and finished goods and so forth. Do you see that same pattern as reasonable and consistent? In other words, based on the record we have so far of wholesale prices, for producer prices, that we can expect about a 7 percent increase in the consumer prices for the year?

Mr. EARLY. Of course, in order to get 7.2 percent for the Consumer Price Index, it seems we would have to average 5 percent for the remainder of the year. That would be a sharp departure.

Senator PROXMIRE. So you expect it to be higher than that?

Mr. EARLY. I cannot predict.

Senator PROXMIRE. But on the basis of past experience, would that seem to be logical, to expect 8 or 9 percent?

Mr. EARLY. I cannot say where it would head. But certainly there is nothing in the current numbers that would suggest a quick slowdown, like next month, on the consumer side.

Senator PROXMIRE. Mrs. Slater, in your statement you mentioned that third quarter movement should be monitored until policies can be changed.

But the evidence is that the administration is unwilling to do anything to exacerbate inflation, including the stimulation of aggregate growth. What policy measures would you recommend, and how many are politically feasible?

Mrs. SLATER. Certainly we are unwilling, or reluctant, to do anything that will exacerbate inflation.

I would stress, however, that I don't think a policy to maintain a moderate rate of growth will in any way exacerbate inflation.

Senator PROXMIRE. You are down to 3.7 percent, is that correct, for adult men, and in some skilled categories, it must be——

Mrs. SLATER. If you go back to the past period of 1973 or 1975, you would find considerably lower rates of unemployment for adult men.

I would interject that you should keep in mind that there has been a lot of change in the structure of employment.

Senator PROXMIRE. It is hard to find policies. I would be willing to see a policy that would stem inflation if you do not use the aggregate policy tools. If you don't use monetary policy, if you don't use fiscal policy—wage and price controls are out. Jawboning is necessary, but it is limited. Guidelines will not be used. Prenotification of wage and price increases have been discarded.

What policies are there that are likely to restrain inflation?

Mrs. SLATER. It is important that policy not be so expansive that it exacerbates inflation. If the growth rate weakens below what we are forecasting, where unemployment would start to rise, I do not then think it would be inflationary to sustain a growth rate in the 4 percent range.

Among the aggregate policies that one may use to influence the growth rate, the primary one would be tax policy, or the primary one with which the administration and the Congress have available.

Beyond this, I think the policies that are being pursued by the administration, the deceleration programs, the jawboning, if you want to call it that, have effects, and potential effects, and are very important.

Senator PROXMIRE. What policies?

Mrs. SLATER. The program of seeking business and labor cooperation, the deceleration program. You may refer to it as jawboning.

Senator PROXMIRE. But it would seem at this point one of the most constructive elements is the 3.9 percent for adult men. When was the last time it was that low?

Mr. STEIN. At least 1974.

Senator PROXMIRE. Under those circumstances, when you talk to businessmen about this, that we need structural policies, policies to provide better training for unskilled people, particularly for blacks and teenagers——

Mrs. SLATER. I think we do. We are pursuing those. We have had large gains in the training for public service——

Senator PROXMIRE. I was just back in Madison. Madison has a tremendous technical college where they train people in all kinds of skills. All over the State I find that vocational education is oversubscribed. In other words, the Federal Government provides far less than the local people provide.

Every referendum that is held on vocational education, the people vote for it big. They are right. It is a fine program.

The problem is, how long does it take to work? We are training more people. We have more skills. Why are we not able to get more results? Why do we have a situation now where 5.7 percent unemployment exists, and we seem to be in danger of running out of skilled people?

Mrs. SLATER. My analysis of the labor market does not lead to that. I do not think we are in danger of running out of skilled workers. I think our labor resources are quite adequate in the sense of being well trained and experienced.

The labor force is getting older and, on the average, more experienced.

Senator PROXMIRE. You might be right, but when I spoke at this technical college, they graduate 1,300. They told me they could have graduated 3,000. There is much more demand than we have people to fill the demand.

Mrs. SLATER. I don't know the particular situation in Madison, but this is a relatively new development. We have been through a period, certainly partly because we have been through a recession, and also because we have been through a period of population growth, where we had a great bulk of young people, and where we had been graduating more people than could be immediately absorbed. This is turning around, and this will contribute to productivity gains. That will not happen tomorrow. That is a long run factor.

I think that training is very important. But it is certainly not a substitute for the things we are doing in the short run.

Senator PROXMIRE. The administration's previous forecast for unemployment, several months ago incorporated, for example, the assumption that the entire tax package would be enacted, as well as its energy proposal.

Do you know what assumptions are contained in the midyear forecast? Do they assume we will get a $20 billion tax cut?

Mrs. SLATER. It is, of course, customary for an administration's forecast to assume that the administration's policies are adopted.

Senator PROXMIRE. We would like to know that, but I do not think it is realistic.

Mrs. SLATER. We are trying to propose a package of what we think the policies should be. In the case of taxation, it assumes a $20 billion cut beginning in January, and that is some change from the previous assumption of a $25 billion cut in October.

In the case of energy, I could not give you detailed assumptions. It does assume an energy package is adopted. It gives some allowance for a later starting date than assumed originally, but the energy package is still in there.

The impact of the energy program on the 1978 fiscal year, and the 1979 fiscal year, is not all that large, because the main budgetary effects will take some time.

Senator PROXMIRE. Mr. Stein, do you and Mr. Mark and Mr. Early, do you all agree with Mrs. Slater's view that we are not in a position where the labor markets are tight enough in any significant area—there are undoubtedly some—to feel that further stimulation to the economy would not be inflationary?

Mr. STEIN. I don't know that I would go that far. I would say that our unemployment rate for critical areas are higher than——

Senator PROXMIRE. Let me interrupt you. I think my staff told you that I was very anxious to get from you folks your response to the Federal Reserve Board of St. Louis and several other economists who argue that the unemployment figures today are not comparable to those of years ago.

They consider, in 1957, an unemployment rate of 6 percent would be equivalent—6 percent now would be equivalent to 4½ percent at that time. Others tell me that the difference is about a 1 percent difference, 5.7 is equivalent to 4.7.

They argue this on the grounds that there are more women and teenagers, a higher proportion, and those groups always had a higher level. And if you compare adult men and adult women and so forth—the unemployment rate now would have to be adjusted, the 5.7 would be 4.7.

Do you have any views on that that you can tell me about?

Mr. STEIN. We have done some research on that. One of the men who worked on that is here in the audience.

Senator PROXMIRE. Is he here?

Mr. STEIN. Yes.

Senator PROXMIRE. Why don't you have him come up?

Could you tell us your name, and spell your last name, please?

Mr. FLAIM. Paul Flaim, F-l-a-i-m.

Senator PROXMIRE. Go ahead.

Mr. FLAIM. I would rather you asked me some questions.

Senator PROXMIRE. I asked the question, how do you compare an unemployment rate of 5.7 today with an unemployment rate—it has been argued by the St. Louis Federal Reserve Board that the rates now and years ago are not equivalent.

Mr. FLAIM. I have done some work on this, and what I have tried to do, essentially, was to see how we got from 4 percent, or a rate somewhere in that area, in the late 1950's, to the present rate.

What I have tried to do was quantify that part of the increase which can be attributed to either changes in the structure of the population, or changes in the participation rates of given labor force groups.

Depending on what technique you use, or how conservative you want to be in your calculations, you can quantify that at least 0.6 of the change are due to——

Senator PROXMIRE. Six-tenths of 1 percent?

Mr. FLAIM [continuing]. The changes in the age structure of the population. This is the most conservative estimate that you can get if you leave out the so-called interaction term, which is kind of a technical term which I would have a difficult time explaining. If you use a somewhat more liberal approach, I think you could say that

anywhere from 0.6 to one whole percentage point of the increase in the rate from the mid-1950's to now has come about because of changes in the labor force. And when you further dissect this into the changes that have been brought about by the changes in the participation rate, and the changes in the population structure, you find that the changes in participation, that is, the increase in the female participation rates, have really played a rather small role in this. They account for only about 0.2 of this change.

The bulk of the compositional effect on the State must be attributed to the teenagers coming into the population since the mid-1960's.

Senator PROXMIRE. So the major part of the change is not a matter of more women, but more teenagers, and you say the estimates are between 0.6 and 1 point difference?

Mr. FLAIM. Correct. There are other economists who go beyond that, and who will say that because of the increase in the teenage population, you not only have had the effect of their weight on the overall unemployment rate, but that, because of the crowding effect, the teenage unemployment rate has also increased, and that should also be factored into it.

Senator PROXMIRE. So you not only have that fact that there are more teenagers, but that the unemployment rate for teenagers is higher, because there are more.

But that is an additional factor that has to be separated. This suggests that Mrs. Slater is right.

Mrs. SLATER. I don't think one ought to attribute the economic differences we see today as compared to the past solely or primarily to these demographic changes.

Senator PROXMIRE. I just have a couple more questions.

The BLS reported that prices for capital equipment rose 0.8 percent in June, following a rise of 0.9 percent in May. Those are two big increases.

Interest rates have also been rising in the past 2 months. You reported during the first quarter that durable machinery was sluggish and has been during the recovery. How will rising prices for capital equipment affect business investment for the second quarter?

Is it likely to slow it down?

Mrs. SLATER. I would assume that in the very short run, businesses will have their investment plans already made, and they will go ahead and buy the equipment they need to carry them out, even if they have to pay somewhat more than they expected.

If you are looking a little further ahead, obviously, the higher the cost of capital equipment goes, that will have a restraining effect on investment, because cost estimates affect the calculation of profitability.

Senator PROXMIRE. The surest way to increase productivity is simply improve capital equipment. When you improve capital equipment, you produce more.

Mrs. SLATER. I would caution that I don't think I would build too much on the particular percentage change of the past 2 months, it would be necessary to look at a longer timeframe, and also at the particular kinds of equipment whose prices have been rising.

Senator PROXMIRE. There has been a significant rise?

Mrs. SLATER. Yes; and I think there is no question in the general sense that the inflationary environment, and business concerns about

inflation and the uncertainties that they feel about future investments has been a restraining force on business investments.

I don't think I would go further and say that it has gotten worse because of the producer price index of the past few months.

Senator PROXMIRE. Let me challenge your optimistic outlook on consumer spending. You say that the consumer spending was strong in the second quarter, after a weak first quarter.

Consumer installment credit has also been rising, but the Survey Research Center reports that consumers have turned pessimistic, especially after inflation which would combine with rising interest rates to turn off consumers.

What is your evaluation of consumer spending prospects for the second half? Is there any reason to be alarmed?

Mrs. SLATER. Not to be alarmed. There are reasons to expect, however, that the growth of real consumer spending will be no more than moderate. One is the higher rate of inflation for food, higher prices of food, which are already in place, and it obviously reduces the amount of disposable income to spend on other things.

Another is the relatively high ratio of debt repayment to personal income, which would seem to suggest that there is not a great deal of scope for expansion of installment purchases. However, people have been pointing this out for some months back, and despite that, we have seen a very strong purchasing pattern for automobiles, which is the thing that is more debt-financing than any other purchase. So there is no basis for arguing that consumer spending is heading for a collapse because debt is high. But it is a situation in which consumer spending is highly unlikely to grow any faster than the growth of real income.

As I am sure you know, during most of the recovery period consumers have drawn on their savings and spending outpaced the rate of income. That is unlikely to occur over the next year.

So to the extent that one is concerned about the strength of consumer spending, one has to look at income and what might be done about that.

Senator PROXMIRE. Let me conclude by observing that we had a real puzzler here in the statistics that we have today. Employment has increased 2½ million this year. The unemployment rate has dropped from 6.3 to 5.7, and yet Mrs. Slater's forecast of growth for the first half of the year is not likely to exceed 4 percent.

So here we have very little growth, and a dramatic drop in unemployment, and a very big increase in jobs. We have more jobs than ever in the history of this country, as reported this month. We have a higher proportion of our people at work. We have fewer discouraged workers than we have had in some time, and more people being hired.

Yet, on the price front, it is almost all bad news. We have inflation now estimated at 7 percent, and if anything, it is more likely to be worse than that. So we have a situation that is encouraging from the standpoint of providing more jobs, but we are apprehensive that it may not be continued; and yet it is discouraging on the inflation side.

I want to thank you very, very much for your testimony.

The committee is adjourned.

[Whereupon, at 11:40 a.m., the committee adjourned, subject to the call of the Chair.]

EMPLOYMENT-UNEMPLOYMENT

FRIDAY, AUGUST 4, 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 6226, Dirksen Senate Office Building, Hon. Lloyd Bentsen (vice chairman of the committee) presiding.

Present: Senators Bentsen, Sparkman, and Javits.

Also present: Louis C. Krauthoff II, assistant director; John M. Albertine, William R. Buechner, Paul B. Manchester, James L. McIntire, and Pella Pompier, professional staff members; and Robert H. Aten, Charles H. Bradford, and Mark R. Policinski, minority professional staff members.

OPENING STATEMENT OF SENATOR BENTSEN, VICE CHAIRMAN

Senator BENTSEN. This hearing will come to order.

We have had a lot of bad economic news this year. Our trade deficit is soaring. Business investment is inadequate. Worker productivity remains low. We are back to double-digit inflation.

The one bright spot on the horizon has been unemployment. From January to June of this year unemployment declined steadily from 6.3 to 5.7 percent.

But in the month of July even that bright spot has been dimmed. Unemployment rose by 0.5 percent, the sharpest monthly increase in 40 months. We are back now to 6.2 percent unemployment, almost where we started in January.

I hope that Acting Commissioner Norwood can give us some optimistic explanation for this; tell us it is a temporary aberration, or that the figures do not truly reflect the situation, or that there is some mitigating circumstance that is not immediately obvious.

I hope that she can do that, but frankly, I do not expect it.

I think one reason unemployment is high is because inflation is high. The Consumer Price Index last week showed an annual inflation rate of 11.4 percent for June.

To paraphrase Ben Franklin: The only certainties in life these days would seem to be death and inflation. Fortunately, the death rate does not get worse every time the Federal Government spends another billion dollars or issues a new regulation.

Unfortunately, the inflation rate does.

During the first 6 months of this year prices have been rising at an annual rate of 10.4 percent, more than double the inflation rate of last December, far in excess of the Government's predictions of January; and substantially above even the revised predictions of last month.

It is clear to me that the Federal Government must stop fanning the flames of inflation and embark on a tough program to get it under control.

First, we must begin to cut back on the Government red tape and regulation that drains our economy and spurs inflation. Our recent hearings in the Joint Economic Committee disclosed that Federal regulation costs the American economy about $105 billion a year. That is a lot of deadweight we cannot afford.

Second, we must bring Federal spending and the Federal deficit under control.

Third, we must restore incentives for investment in this country. Punitive capital gains taxes have caused a dismal investment record during the last several years.

Fourth, we need a vigorous program of export expansion to cut the $2 billion monthly trade deficit that erodes the value of the dollar and pushes up prices of imported goods.

These are essential elements of a strong and effective anti-inflation program.

We have seen today, and we should have learned in past years, that a high rate of inflation does not necessarily mean a lower rate of unemployment. I do not think that we have to sacrifice jobs to fight inflation. The fact is that inflation destroys jobs because higher prices mean lower consumer purchasing power, less sales, less production, and less jobs. I believe that an effective program to control inflation will yield dividends in terms of job creation.

Acting Commissioner Norwood, I will defer first to my colleague, Senator Javits, the Senator from New York.

Opening Statement of Senator Javits

Senator Javits. I just wanted to say one thing, Senator. Because we are a policy committee, I think it is important that we express ourselves. I thoroughly agree with you about capital investment. To me, the difficulty is the drop in productivity in this country. Productivity should be America's real strength. We are in the cellar, as they say in baseball, among the 10 leading industrial nations in the world.

If we don't modernize our industrial plant and increase productivity through greater technology, increased research and development, and improvements in worker morale, then I fear that our total standing as the most powerful nation on this Earth may be seriously eroded.

Senator, I agree with you as to the export drop, but that takes markets. I think the world is very deficient in markets. We must be enterprising enough to acquire additional markets through increased growth in those developing countries where there are now hundreds of millions of people who represent very little, if any, potential for the purchase of U.S. products and services.

Lastly, let us not forget the appraisal of the world of the dollar—the problem of the falling dollar. I consider it a catastrophe, which will have untold effects on our country, our standard of living, and the satisfaction of every American. The adverse appraisal of the world as to the economic job we are doing is bound to catch up with us.

I have reviewed the figures that Ms. Norwood will testify to, and I hope, Ms. Norwood, you will give us your views on the rate in youth unemployment which, again, shows a very alarming rise for July, for a rate close to three times the general rate of unemployment, and the rate of unemployment for blacks, which is once again double the normal rate of unemployment.

Since these are matters of great concern to our country, I would like you to cast some light on them, for I consider them extremely important.

Senator BENTSEN. Acting Commissioner Norwood, we are very pleased to have you with us this morning.

STATEMENT OF HON. JANET L. NORWOOD, ACTING COMMISSIONER, BUREAU OF LABOR STATISTICS, DEPARTMENT OF LABOR, ACCOMPANIED BY W. JOHN LAYNG, ASSISTANT COMMISSIONER, OFFICE OF PRICES AND LIVING CONDITIONS; AND ROBERT L. STEIN, ASSISTANT COMMISSIONER, OFFICE OF CURRENT EMPLOYMENT ANALYSIS

Ms. NORWOOD. First, let me say that I am accompanied by Mr. Stein, who is our labor force expert; and Mr. Layng, on my left, who is our price expert.

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

Following the unusually strong employment gain recorded between May and June, total employment in the household survey fell and unemployment rose between June and July. The unemployment rate returned to 6.2 percent in July, about in line with the rates prevailing during the first 5 months of the year.

Except for the month of June, unemployment was in the 6.0- to 6.2-percent range during most of 1978. In July, the employment-population ratio returned to 58.6 percent, the same as in May, but somewhat higher than the ratios prevailing earlier in the year.

Among major worker groups in the labor force—men, women, teenagers—unemployment rates moved up between June and July but were not significantly different from May levels. The unemployment rate for black workers remained more than twice that for whites, and the rates for women who head families was 10 percent.

This weakness in the household survey employment and unemployment figures between June and July is not consistent with the payroll survey employment rise of 265,000 over the month. In part, the explanation appears to be the difficulty of achieving a precise seasonal adjustment of the monthly labor force data during the May to July

period. Large changes in the labor market usually take place in June, and techniques for estimating are imperfect. In our judgment, the seasonal adjustment factors appear to have exaggerated the improvements in June and, consequently, the deterioration in July.

Evidence for this conclusion appears in the table on alternative seasonal adjustment methods attached to my statement. The table shows that alternative methods of seasonal adjustment show an increase between June and July ranging between 0.2 and 0.5 of a percentage point. I would particularly like to direct the committee's attention to column 8, which shows the results of the concurrent method.

This method uses all available data—in this case through July 1978—in the computations and, therefore, provides and advance indication of the revision that will appear when the data are reseasonalized at the end of calendar year 1978.

This is not the official method. The Bureau's practice is to publish official seasonal factors in January for use throughout the year ahead and not to revise previously published data until the new factors are introduced.

The concurrent adjustment method reveals a smaller drop in the rate between May and June, and a smaller increase between June and July, than does the official method.

Because of the problems with seasonal adjustment and the greater volatility in the monthly data from the household survey, our general assessment is that the June to July changes in the household survey may be exaggerated and that more emphasis should be placed on the payroll employment figures in interpreting developments in nonfarm employment over the past month.

Over the longer run, despite major differences in survey design and estimating methods, the two series have shown fairly consistent trends in employment growth. Both were up by about 3.5 million from a year earlier. This is entirely consistent with the drop in unemployment for virtually all worker groups over the past year.

Between June and July, according to the payroll survey, employment in construction continued its uptrend of recent months while trade and service establishments continued to add large numbers of employees to their payrolls. Employment in manufacturing showed little change over the month. The BLS diffusion index, showing the percentage of 172 industries with rising employment, was 60 percent in July compared with 62 percent in June.

The workweek of production and nonsupervisory workers in private nonfarm industries was unchanged in July, as was the factory workweek and overtime hours. The index of aggregate weekly hours was 121.0 in July compared with 120.5 in June, and was up by 4.5 percent from a year ago.

Thus, our examination of a wide range of data on employment, unemployment, and hours of work leads us to the conclusion that it would be premature to infer a change in the underlying strength of the labor market from the data the Bureau is publishing today. Of course, it is possible that subsequent data may reveal that July was the beginning of a new trend. On the basis of the data we have so far, however, our

evaluation is that the June figures from the household survey probably overstated the improvement, that the unemployment rate has actually been fairly stable for the past several months, and that nonfarm employment has shown continued growth.

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

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

UNEMPLOYMENT RATES 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 procedures used in 1976–77	Unemployed all multiplicative	Unemployed all additive	Year ahead	Concurrent		Stable					
							1st computed	Revised	1967–73	1967–77	Total	Residual		
	(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	7.6	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	7.8	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	.78	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	7.5	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	7.2	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	7.2	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	6.8	6.8	6.9	7.0	6.9	7.0	.2
August	5.8	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	6.3	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
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	7.0	6.0	6.0	6.0	6.0	5.9	6.0	6.9	.1
May	5.5	6.1	6.1	6.1	6.0	6.1	6.0	6.1	6.2	6.2	6.1	6.1	6.2	.2
June	6.2	5.7	5.7	5.8	5.7	5.7	5.8	5.9	5.7	5.7	5.8	5.8	5.8	.2
July	6.3	6.2	6.2	6.2	6.2	6.2	6.1	6.1	6.1	6.1	6.2	6.1	6.2	.1
August														
September														
October														
November														
December														

EXPLANATION OF COLUMN HEADS

(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 yr 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	July	101.2
February	112.6	August	97.6
March	106.7	September	96.6
April	96.5	October	92.6
May	90.1	November	95.3
June	106.2	December	93.6

(3) Official prodecures 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 yr and over—are adjusted by the X–11 multiplicative procedures. 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 yr 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 ½ 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 prevision.

(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 procedure 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) Range of cols. 2–12.

Note: The X–11 method, developed by Julius Shiskin at the Bureau of the Census over the period 1055–65, was used in computing all the seasonally adjusted series described above.

Source; U.S. Department of Labor, Bureau of Labor Statistics, Aug. 4, 1978.

[Press release No. 78-684, Bureau of Labor Statistics, Department of Labor, Washington, D.C., Aug. 4, 1978]

THE EMPLOYMENT SITUATION: JULY 1978

Unemployment rose in July, following a drop of about the same magnitude in June, it was reported today by the Bureau of Labor Statistics of the U.S. Department of Labor. The unemployment rate was 6.2 percent, up from 5.7 percent in June and returning to the 6.0–6.2 percent range which has prevailed throughout most of this year.

Employment movements differed sharply in the two major sample surveys between June and July. Total employment—as measured by the monthly survey of households—declined by 400,000 to 94.4 million in July. Employment had expanded by 700,000 in the prior month. The proportion of the population that is employed was 58.6 percent in July, down from the June peak but equal to the May level.

In contrast to the over-the-month downturn in total employment, nonfarm payroll employment—as measured by the monthly survey of establishments—rose by 265,000 in July, following a slightly larger increase in the previous month. Over the past year, nonagricultural employment in each survey has risen by approximately the same magnitude.

Unemployment

Both the July unemployment rate, 6.2 percent, and the number of persons unemployed, 6.2 million, were up from the previous month but were in line with the rates and levels which had prevailed from February through May of this year. During that 4-month period, the unemployment rate fluctuated between 6.0 and 6.2 percent, and unemployment averaged 6.1 million.

Teenagers accounted for half of the 440,000 increase in unemployment in July, as their rate rose from 14.2 to 16.3 percent. Most of the remaining increase occurred among adult women, whose rate advanced from 6.1 to 6.5 percent. The rate for adult men, 4.1 percent, rose slightly over the month but was a full percentage point below the July 1977 figure. (See table A–2.)

The white unemployment rate increased over the month from 4.9 to 5.3 percent. The unemployment rate for black workers, 12.5 percent, was little changed, remaining within a range of 11.8–12.7 percent evident since last December. Among other worker categories, unemployment increased for persons looking for full-time work, job losers, persons unemployed less than 5 weeks, and women who head families. However, virtually all worker groups have shown improvement over the past year. (See tables A–2, A–4, and A–5.)

Total employment and the labor force

The number of employed persons declined by 400,000 in July to 94.4 million (according to the household survey). However, employment growth has been generally strong and steady for some time and since last July has advanced by nearly 3.6 million (after adjustment—see the box on table A–1); nearly every major demographic group has shared in this expansion.

The civilian labor force was 100.6 million in July, essentially unchanged from the June level. Over the year, the labor force has risen by 3.1 million (adjusted), with adult women accounting for nearly three-fifths of the growth.

The civilian labor force participation rate remained at the all-time high of 63.3 percent attained in June. This percentage was almost a full point above the year-earlier level (adjusted).

Industry payroll employment

Nonagricultural payroll employment increased by 265,000 in July to 86.0 million (according to the establishment survey). Nearly all of the major industry groups posted gains, as employment increased in 60 percent of the 172 industries that comprise the BLS diffusion index of private nonagricultural payroll employment. Nonfarm payroll employment has expanded by 3.6 million over the past year. (See tables B–1 and B–6.)

Two-thirds of July's overall gain occurred in the service-producing industries, led by the services component. Services rose by 110,000, the largest month-to-month increase over the last 12 months in an industry that has shown sizeable gains all year. Over-the-month job increases also were posted in retail trade (60,000) and finance, insurance, and real estate (20,000). The only notable decline occurred in transportation and public utilities, where employment dropped by 25,000.

TABLE A.—MAJOR INDICATORS OF LABOR MARKET ACTIVITY, SEASONALLY ADJUSTED

Selected categories	Quarterly averages					Monthly data		
	1977			1978				
	II	III	IV	I	II	May	June	July
HOUSEHOLD DATA								
Thousands of Persons								
Civilian labor force	97,153	97,559	98,622	99,205	100,206	100,261	100,573	100,618
Total employment	90,264	90,823	92,069	93,050	94,244	94,112	94,819	94,425
Unemployment	6,889	6,736	6,554	6,155	5,962	6,149	5,754	6,193
Not in labor force	58,941	59,205	58,777	58,799	58,399	58,340	58,257	58,414
Discouraged workers	1,062	1,067	969	903	842	(1)	(1)	(1)
Percent of Labor Force								
Unemployment rates:								
All workers	7.1	6.9	6.6	6.2	5.9	6.1	5.7	6.2
Adult men	5.2	5.0	4.8	4.6	4.1	4.2	3.9	4.1
Adult women	7.0	7.0	6.8	5.9	6.1	6.3	6.1	6.5
Teenagers	18.1	17.6	16.7	16.9	15.9	16.5	14.2	16.3
White	6.3	6.1	5.8	5.4	5.1	5.2	4.9	5.3
Black and other	12.8	13.6	13.3	12.3	12.0	12.3	11.9	12.5
Full-time workers	6.6	6.5	6.2	5.7	5.4	5.6	5.2	5.7
ESTABLISHMENT DATA								
Thousands of Jobs								
Nonfarm payroll employment	81,871	82,548	83,192	84,107	[2] 85,485	85,466	[2] 85,767	[2] 86,031
Goods-producing industries	24,265	24,359	24,497	24,757	[2] 25,444	25,429	[2] 25,552	[2] 25,637
Service-producing industries	57,606	58,189	58,695	59,350	[2] 60,041	60,037	[2] 60,215	[2] 60,349
Hours of Work								
Average weekly hours:								
Total private nonfarm	36.2	36.0	36.2	35.9	[2] 36.1	36.0	[2] 36.1	[2] 36.1
Manufacturing	40.4	40.3	40.5	40.0	[2] 40.4	40.3	[2] 40.4	[2] 40.4
Manufacturing overtime	3.4	3.3	3.5	3.7	[2] 3.5	3.5	[2] 3.5	[2] 3.5

[1] Not available.
[2] Preliminary.

In the goods-producing sector, contract construction registered another large over-the-month increase—50,000. Construction jobs have increased by more than half a million over the past year. Employment in durable goods rose by 45,000 in July, led by machinery and electrical equipment. Both industries have posted reasonably steady, if not always large, employment gains since late 1977. By contrast, employment in nondurable goods edged down slightly, with the largest decline occurring in apparel and other textile products. Thus, employment in the manufacturing industry as a whole showed little movement over the month, and the gain over the past 3 months has totaled less than 100,000.

Hours

The average workweek for production or nonsupervisory workers on private nonagricultural payrolls was 36.1 hours in July, unchanged from both the previous month and a year earlier.

Contract construction hours rose 0.3 hours to 37.7, the longest workweek for the industry since early 1977. The manufacturing workweek (40.4 hours) and overtime (3.5 hours) were unchanged from the June level. (See table B-2.)

As a result of the increase in the level of employment, the index of aggregate hours of production or nonsupervisory workers on private nonagricultural payrolls increased from 120.5 to 121.0 in July (1967=100). The index was 4.5 percent above the year-earlier level. (See table B-5.)

Hourly and weekly earnings

Average hourly earnings of production or nonsupervisory workers on private nonagricultural payrolls increased 0.9 percent in July, seasonally adjusted. Average weekly earnings rose by the same margin. Since last July, average hourly and weekly earnings have increased by 8.7 percent.

Before adjustment for seasonality, average hourly earnings were $5.71 in July, up 4 cents from June and 46 cents from a year earlier. Average weekly earnings were $208.42, $2.60 above their June level and $16.79 higher than last July. (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 215.6 (1967=100) in July, 0.8 percent higher than in June. The index was 8.1 percent above July a year ago. During the 12-month period ended in June, the Hourly Earnings Index in dollars of constant purchasing power rose 0.8 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, wtihout 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 met 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 unemployment (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 standad 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

TABLE A-1.—EMPLOYMENT STATUS OF THE NONINSTITUTIONAL POPULATION

[Numbers in thousands]

Employment status	Not seasonally adjusted			Seasonally adjusted					
	July 1977	June 1978	July 1978	July 1977	March 1978	April 1978	May 1978	June 1978	July 1978
TOTAL									
Total noninstitutional population [1]	158,682	160,928	161,148	158,682	160,313	160,504	160,713	160,928	161,148
Armed Forces [1]	2,135	2,098	2,116	2,135	2,122	2,118	2,113	2,098	2,116
Civilian noninstitutional population [1]	156,547	158,830	159,032	156,547	158,190	158,386	158,601	158,830	159,032
Civilian labor force	99,314	102,178	102,639	97,307	99,414	99,784	100,261	100,573	100,618
Participation rate	63.4	64.3	64.5	62.2	62.8	63.0	63.2	63.3	63.3
Employed	92,372	95,852	96,202	90,588	93,266	93,801	94,112	94,819	94,425
Employment-population ratio [2]	58.2	59.6	59.7	57.1	58.2	58.4	58.6	58.9	58.6
Agriculture	3,790	3,983	3,997	3,206	3,310	3,275	3,235	3,473	3,387
Nonagricultural industries	88,582	91,869	92,204	87,382	89,956	90,526	90,877	91,346	91,038
Unemployed	6,941	6,326	6,438	6,719	6,148	5,983	6,149	5,754	6,193
Unemployment rate	7.0	6.2	6.3	6.9	6.2	6.0	6.1	5.7	6.2
Not in labor force	57,234	56,651	56,393	59,240	58,776	58,602	58,340	58,257	58,414
Men, 20 years and over									
Total noninstitutional population [1]	67,537	68,623	68,729	67,537	68,327	68,419	68,519	68,623	68,729
Civilian noninstitutional population [1]	65,845	66,947	67,039	65,845	66,645	66,740	66,845	66,947	67,039
Civilian labor force	52,902	53,931	53,956	52,375	53,242	53,263	53,414	53,522	53,391
Participation rate	80.3	80.6	80.5	79.5	79.9	79.8	79.9	79.9	79.6
Employed	50,379	51,907	51,880	49,728	50,833	51,038	51,182	51,433	51,213
Employment-population ratio [2]	74.6	75.6	75.5	73.6	74.4	74.6	74.7	75.0	74.5
Agriculture	2,464	2,617	2,599	2,295	2,289	2,295	2,328	2,437	2,420
Nonagricultural industries	47,916	49,290	49,281	47,433	48,544	48,743	48,854	48,996	48,793
Unemployed	2,522	2,024	2,076	2,647	2,409	2,225	2,232	2,089	2,178
Unemployment rate	4.8	3.8	3.8	5.1	4.5	4.2	4.2	3.9	4.1
Not in labor force	12,943	13,016	13,083	13,470	13,403	13,477	13,431	13,425	13,648
Women, 20 years and over									
Total noninstitutional population [1]	74,315	75,527	75,643	74,315	75,196	75,300	75,412	75,527	75,643
Civilian noninstitutional population [1]	74,217	75,422	75,537	74,217	75,093	75,198	75,310	75,422	75,537
Civilian labor force	34,918	37,057	36,818	35,619	36,849	37,117	37,264	37,439	37,542
Participation rate	47.0	49.1	48.7	48.0	49.1	49.4	49.5	49.6	49.7

Employed	32,456	34,793	34,384	33,160	34,722	34,948	34,931	35,137	35,110
Employment-population ratio [2]	43.7	46.1	45.5	44.6	46.2	46.4	46.3	46.5	46.4
Agriculture	683	761	759	529	628	623	527	623	587
Nonagricultural industries	31,772	34,031	33,625	32,631	34,094	34,325	34,404	34,514	34,523
Unemployed	2,462	2,265	2,434	2,459	2,127	2,169	2,333	2,302	2,432
Unemployment rate	7.1	6.1	6.6	6.9	5.8	5.8	6.3	6.1	6.5
Not in labor force	39,299	38,364	38,719	38,598	38,244	38,081	38,046	37,983	37,995
Both sexes, 16–19 years									
Total noninstitutional population [1]	16,830	16,779	16,776	16,830	16,790	16,785	16,782	16,779	16,776
Civilian noninstitutional population [1]	16,485	16,461	16,455	16,485	16,452	16,449	16,446	16,461	16,455
Civilian labor force	11,494	11,190	11,865	9,313	9,323	9,404	9,583	9,612	9,685
Participation rate	69.7	68.0	72.1	56.5	56.7	57.2	58.3	58.4	58.9
Employed	9,537	9,153	9,937	7,700	7,711	7,815	7,999	8,249	8,102
Employment-population ratio [2]	56.7	54.6	59.2	45.8	45.9	46.6	47.7	49.2	48.3
Agriculture	643	605	639	382	393	357	380	413	380
Nonagricultural industries	8,894	8,548	9,299	7,319	7,318	7,458	7,619	7,836	7,722
Unemployed	1,957	2,037	1,927	1,613	1,612	1,589	1,584	1,363	1,583
Unemployment rate	17.0	18.2	16.2	17.3	17.3	16.9	16.5	14.2	16.3
Not in labor force	4,992	5,271	4,591	7,172	7,129	7,045	6,863	6,849	6,770
WHITE									
Total noninstitutional population [1]	139,450	141,194	141,366	139,450	140,714	140,863	141,026	141,194	141,366
Civilian noninstitutional population [1]	137,698	139,503	139,660	137,698	138,997	139,149	139,317	139,503	139,660
Civilian labor force	87,616	89,917	90,179	85,962	87,532	87,945	88,209	88,623	88,521
Participation rate	63.6	64.5	64.6	62.4	63.0	63.2	63.3	63.5	63.4
Employed	82,331	85,198	85,410	80,758	82,880	83,386	83,590	84,270	83,862
Employment-population ratio [2]	59.0	60.3	60.4	57.9	58.9	59.2	59.3	59.7	59.3
Unemployed	5,285	4,719	4,769	5,204	4,652	4,559	4,619	4,353	4,659
Unemployment rate	6.0	5.2	5.3	6.1	5.3	5.2	5.2	4.9	5.3
Not in labor force	50,082	49,586	49,481	51,736	51,465	51,204	51,108	50,880	51,139
BLACK AND OTHER									
Total noninstitutional population [1]	19,232	19,734	19,782	19,232	19,599	19,641	19,687	19,734	19,782
Civilian noninstitutional population [1]	18,850	19,327	19,371	18,850	19,194	19,237	19,284	19,327	19,371
Civilian labor force	11,697	12,261	12,460	11,241	11,871	11,816	11,934	11,980	11,997
Participation rate	62.1	63.4	64.3	59.6	61.8	61.4	61.9	62.0	61.9
Employed	10,042	10,655	10,791	9,746	10,402	10,418	10,467	10,553	10,496
Employment-population ratio [2]	52.2	54.0	54.5	50.7	53.1	53.0	53.2	53.5	53.1
Unemployed	1,656	1,606	1,668	1,495	1,469	1,398	1,467	1,427	1,501
Unemployment rate	14.2	13.1	13.4	13.3	12.4	11.8	12.3	11.9	12.5
Not in labor force	7,152	7,066	6,911	7,609	7,323	7,411	7,350	7,347	7,374

[1] The population and Armed Forces figures are not adjusted for seasonal variations; therefore, identical numbers appear in the unadjusted and seasonally adjuste ' columns.
[2] Civilian employment as a percent of the total noninstitutional population (including Armed Forces).

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. 26, No. 2.

TABLE A-2.—MAJOR UNEMPLOYMENT INDICATORS, SEASONALLY ADJUSTED

Selected categories	Number of unemployed persons (In thousands)		Unemployment rates					
	July 1977	July 1978	July 1977	Mar. 1978	Apr. 1978	May 1978	June 1978	July 1978
CHARACTERISTICS								
Total, 16 yr and over	6,719	6,183	6.9	6.2	6.0	6.1	5.7	6.2
Men, 20 yr and over	2,647	2,178	5.1	4.5	4.2	4.2	3.9	4.1
Women, 20 yr and over	2,459	2,432	6.9	5.8	5.8	6.3	6.1	6.5
Both sexes, 16 to 19 yr	1,613	1,583	17.3	17.3	16.9	16.5	14.2	16.3
White, total	5,204	4,659	6.1	5.3	5.2	5.2	4.9	5.3
Men, 20 yr and over	2,110	1,718	4.5	4.0	3.6	3.6	3.5	3.6
Women, 20 yr and over	1,915	1,812	6.2	4.9	5.1	5.4	5.3	5.6
Both sexes, 16 to 19 yr	1,179	1,129	17.3	17.6	14.6	13.8	11.6	13.4
Black and other, total	1,495	1,501	13.3	12.4	11.8	12.3	11.9	12.5
Men, 20 yr and over	561	478	10.2	8.5	3.8	8.8	7.8	8.4
Women, 20 yr and over	528	598	11.1	11.7	10.5	10.9	11.3	11.6
Both sexes, 16 to 19 yr	406	425	40.8	39.0	35.3	38.4	37.1	37.0
Married men, spouse present	1,360	1,069	3.4	3.0	2.8	2.9	2.7	2.7
Married women, spouse present	1,450	1,283	6.5	5.1	5.0	5.9	5.6	5.6
Women who head families	406	485	9.3	8.6	10.1	9.3	8.8	10.1
Full-time workers	5,401	4,907	6.5	5.6	5.6	5.6	5.2	5.7
Part-time workers	1,323	1,288	9.3	9.6	9.6	9.2	8.8	8.8
Unemployed 15 weeks and over [1]	1,824	1,292	1.9	1.4	1.4	1.4	1.2	1.3
Labor force time lost [2]			7.5	6.6	6.3	6.6	6.4	6.8
OCCUPATION [3]								
White-collar workers	1,906	1,839	4.1	3.4	3.5	3.6	3.5	3.8
Professional and technical	404	367	2.9	2.6	2.5	2.4	2.4	2.5
Managers and administrators, except farm	259	232	2.6	2.3	2.0	2.0	1.8	2.2
Sales workers	327	277	5.4	4.3	4.3	4.4	4.4	4.4
Clerical workers	916	963	5.4	4.5	5.1	5.3	5.0	5.4
Blue-collar workers	2,650	2,300	8.1	7.1	6.5	6.6	6.5	6.9
Craft and kindered workers	689	513	5.5	5.1	4.3	4.3	4.2	4.0
Operatives, except transport	1,150	1,008	10.1	8.0	7.6	8.4	7.9	8.5
Transport equipment operatives	267	224	7.3	5.2	5.2	5.9	4.6	6.1
Nonfarm laborers	544	555	10.8	11.9	10.0	8.7	9.9	10.6
Service workers	1,047	1,037	7.8	7.7	7.7	7.6	7.2	7.5
Farm workers	119	111	4.2	4.7	3.1	3.6	3.0	3.8
INDUSTRY [3]								
Nonagricultural private wage and salary workers [4]	4,847	4,379	6.9	6.0	5.9	5.9	5.6	6.0
Construction	544	470	11.8	11.3	9.5	9.2	9.3	9.5
Manufacturing	1,444	1,238	6.7	5.4	5.3	5.6	5.6	5.6
Durable goods	780	661	6.1	4.8	4.4	5.0	4.8	5.1
Nondurable goods	664	577	7.5	6.2	6.5	6.4	6.7	6.4
Transportation and public utilities	238	219	4.7	3.7	3.7	3.8	3.7	4.1
Wholesale and retail trade	1,409	1,276	7.9	7.3	7.2	6.8	6.3	6.8
Finance and service industries	1,179	1,152	5.7	5.1	5.2	5.3	4.7	5.4
Government workers	621	652	3.9	3.7	3.8	4.1	4.0	4.1
Agricultural wage and salary workers	145	153	10.2	10.0	7.7	7.7	8.0	10.1
VETERAN STATUS								
Male Vietnam era veterans: [5]								
20 to 34 yr	508	314	7.8	5.0	4.5	4.0	4.3	5.1
20 to 24 yr	159	78	16.8	13.2	10.7	6.9	9.4	11.4
25 to 29 yr	207	140	7.1	4.6	4.5	5.5	5.3	6.4
30 to 34 yr	142	96	5.3	3.5	3.1	2.3	2.6	2.9
Male nonveterans:								
20 to 34 yr	1,194	981	7.5	6.9	6.5	5.9	5.5	5.9
20 to 24 yr	680	599	9.8	9.5	8.8	7.7	7.9	8.4
25 to 29 yr	332	255	6.6	5.8	6.1	4.8	3.8	4.4
30 to 34 yr	182	127	4.6	3.5	2.9	3.9	3.7	3.3

[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 Aug. 5, 1964, and May 7, 1975.

TABLE A-3.—SELECTED EMPLOYMENT INDICATORS

Selected categories	Not seasonally adjusted		Seasonally adjusted					
	July 1977	July 1978	July 1977	Mar. 1978	Apr. 1978	May 1978	June 1978	July 1978
CHARACTERISTICS								
Total employed, 16 yr and over	92,372	96,202	90,588	93,266	93,801	94,112	94,819	94,425
Men	55,677	57,324	53,901	55,013	55,208	55,446	55,869	55,534
Women	36,996	38,877	36,687	38,253	38,593	38,666	38,950	38,891
Married men, spouse present	38,549	38,797	38,380	38,465	38,628	38,626	38,711	38,642
Married women, spouse present	20,096	21,004	20,824	21,674	21,847	21,694	21,718	21,766
OCCUPATION								
White-collar workers	44,765	46,886	45,057	46,835	46,789	46,895	47,209	47,192
Professional and technical	13,253	13,712	13,758	14,060	14,158	14,399	14,365	14,239
Managers and administrators, except farm	9,660	10,233	9,614	10,169	10,212	9,933	10,107	10,182
Sales workers	5,750	6,053	5,715	5,985	5,861	5,911	5,931	6,017
Clerical workers	16,102	16,888	15,970	16,621	16,558	16,652	16,806	16,754
Blue-collar workers	31,652	32,843	30,086	31,039	31,655	31,544	31,683	31,225
Craft and kindred workers	12,398	12,755	11,884	12,169	12,302	12,218	12,467	12,229
Operatives, except transport	10,496	11,058	10,285	10,766	10,974	10,846	11,006	10,841
Transport equipment operatives	3,451	3,490	3,413	3,541	3,560	3,534	3,512	3,452
Nonfarm laborers	5,307	5,540	4,504	4,563	4,819	4,946	4,698	4,703
Service workers	12,706	13,133	12,426	12,572	12,830	12,883	12,993	12,838
Farm workers	3,249	3,339	2,725	2,788	2,687	2,698	2,895	2,802
MAJOR INDUSTRY AND CLASS OF WORKER								
Agriculture:								
Wage and salary workers	1,620	1,731	1,276	1,389	1,408	1,434	1,482	1,364
Self-employed workers	1,672	1,781	1,552	1,527	1,539	1,573	1,669	1,652
Unpaid family workers	499	486	357	389	283	255	336	348
Nonagricultural industries:								
Wage and salary workers	81,987	85,327	80,773	83,124	83,648	84,049	84,513	84,016
Government	14,662	14,660	15,130	15,154	15,305	15,203	15,224	15,129
Private industries	67,326	70,667	65,643	67,970	68,343	68,846	69,289	68,887
Private households	1,465	1,440	1,419	1,293	1,388	1,393	1,368	1,394
Other industries	65,861	69,227	64,224	66,677	66,955	67,453	67,921	67,493
Self-employed workers	6,073	6,386	5,899	6,427	6,467	6,288	6,198	6,206
Unpaid family workers	521	491	527	500	506	520	468	496
PERSONS AT WORK[1]								
Nonagricultural industries	77,467	80,885	82,479	84,285	86,043	85,528	86,051	86,205
Full-time schedules	64,745	67,967	67,693	69,417	70,550	70,157	70,861	71,095
Part time economic reasons	4,074	3,918	3,464	3,164	3,327	3,243	3,458	3,330
Usually work full time	1,309	1,253	1,446	1,226	1,224	1,211	1,433	1,385
Usually work part time	2,765	2,665	2,018	1,938	2,103	2,032	2,025	1,945
Part time for noneconomic reasons	8,648	9,000	11,322	11,704	12,166	12,128	11,732	11,780

[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					
	July 1977	July 1978	July 1977	Mar. 1798	Apr. 1978	May 1978	June 1978	July 1978
DURATION								
Less than 5 weeks	2,960	3,176	2,820	2,820	2,790	2,932	2,727	3,025
5 to 14 weeks	2,258	2,041	2,050	1,877	1,784	1,803	1,916	1,854
15 weeks and over	1,724	1,221	1,824	1,463	1,384	1,358	1,231	1,292
15 to 26 weeks	717	551	881	766	716	680	651	665
27 weeks and over	1,007	670	943	697	668	678	580	627
Average (mean) duration, in weeks	13.5	11.3	14.1	12.3	12.3	12.1	12.0	11.8
Median duration, in weeks	6.2	5.1	7.2	6.2	5.8	5.2	5.8	5.9
PERCENT DISTRIBUTION								
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 5 weeks	42.6	49.3	42.1	45.8	46.8	48.1	46.4	49.0
5 to 14 weeks	32.5	31.7	30.6	30.5	29.9	29.6	32.6	30.0
15 weeks and over	24.8	19.0	27.2	23.8	23.2	22.3	21.0	20.9
15 to 26 weeks	10.3	8.6	13.2	12.4	12.0	11.2	11.1	10.8
27 weeks and over	14.5	10.4	14.1	11.3	11.2	11.1	9.9	10.2

TABLE A-5.—REASONS FOR UNEMPLOYMENT

[Numbers in thousands]

Reasons	Not seasonally adjusted		Seasonally adjusted					
	July 1977	July 1978	July 1977	Mar. 1978	Apr. 1978	May 1978	June 1978	July 1978
NUMBER OF UNEMPLOYED								
Lost last job	2,869	2,407	3,042	2,493	2,475	2,577	2,340	2,552
On layoff	787	639	879	660	593	683	606	714
Other job losers	2,082	1,768	2,163	1,833	1,882	1,894	1,734	1,838
Left last job	879	907	842	862	872	819	849	869
Reentered labor force	1,886	1,909	1,860	1,911	1,734	1,772	1,760	1,883
Seeking first job	1,308	1,215	973	923	925	901	810	880
PERCENT DISTRIBUTION								
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Job losers	41.3	37.4	45.3	40.3	41.2	42.5	40.6	41.3
On layoff	11.3	9.9	13.1	10.7	9.9	11.3	10.5	11.5
Other job losers	30.0	27.5	32.2	29.6	31.3	31.2	30.1	29.7
Job leavers	12.7	14.1	12.5	13.9	14.5	13.5	14.7	14.1
Reentrants	27.2	29.7	27.7	30.9	28.9	29.2	30.6	30.4
New entrants	18.8	18.9	14.5	14.9	15.4	14.8	14.1	14.2
UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE								
Job losers	2.9	2.3	3.1	2.5	2.5	2.6	2.3	2.5
Job leavers	.9	.9	.9	.9	.9	.8	.8	.9
Reentrants	1.9	1.9	1.9	1.9	1.7	1.8	1.8	1.9
New entrants	1.3	1.2	1.0	.9	.9	.9	.8	.9

TABLE A-6.—UNEMPLOYMENT BY SEX AND AGE, SEASONALLY ADJUSTED

Sex and age	Number of unemployed persons (In thousands)		Unemployment rates					
	July 1977	July 1978	July 1977	Mar. 1978	Apr. 1978	May 1978	June 1978	July 1978
Total, 16 yr and over	6,719	6,193	6.9	6.2	6.0	6.1	5.7	6.2
16 to 19 yr	1,613	1,583	17.3	17.3	16.9	16.5	14.2	16.3
16 to 17 yr	760	826	19.8	20.4	19.9	19.3	16.7	20.1
18 to 19 yr	847	750	15.7	15.2	14.4	14.5	12.9	13.6
20 to 24 yr	1,545	1,477	10.7	10.3	10.0	9.0	9.2	9.9
25 yr and over	3,643	3,201	4.9	4.0	3.9	4.2	3.9	4.2
25 to 54 yr	3,032	2,692	5.1	4.2	4.1	4.5	4.1	4.4
55 yr and over	557	467	3.9	3.1	3.2	3.2	3.1	3.2
Men, 16 yr and over	3,498	2,965	6.1	5.6	5.2	5.1	4.7	5.1
16 to 19 yr	851	787	16.9	17.1	16.6	15.3	12.6	15.4
16 to 17 yr	422	406	20.0	21.0	19.9	18.4	16.1	18.8
18 to 19 yr	425	376	14.8	14.3	13.4	12.9	11.3	13.0
20 to 24 yr	834	715	10.6	10.1	9.1	7.9	8.1	8.9
25 yr and over	1,849	1,492	4.2	3.5	3.3	3.5	3.1	3.3
25 to 54 yr	1,519	1,189	4.3	3.5	3.3	3.6	3.2	3.3
55 yr and over	325	306	3.7	3.2	3.3	3.3	3.0	3.4
Women, 16 yr and over	3,221	3,228	8.1	7.0	7.0	7.5	7.2	7.7
16 to 19 yr	762	796	17.8	17.5	17.2	17.9	16.0	17.4
16 to 17 yr	338	420	19.6	19.6	19.9	20.3	17.4	21.6
18 to 19 yr	422	374	16.6	16.1	15.6	16.1	14.8	14.4
20 to 24 yr	711	762	10.9	10.4	11.0	10.3	10.4	11.0
25 yr and over	1,794	1,709	6.2	4.7	4.8	5.3	5.2	5.6
25 to 54 yr	1,513	1,503	6.4	5.2	5.2	5.8	5.6	6.0
55 yr and over	232	161	4.4	3.0	3.0	3.1	3.1	2.9

TABLE A-7.—RANGE OF UNEMPLOYMENT MEASURES BASED ON VARYING DEFINITIONS OF UNEMPLOYMENT AND THE LABOR FORCE, SEASONALLY ADJUSTED

[In percent]

Measures	Quarterly averages					Monthly data (1978)		
	1977			1978				
	II	III	IV	I	II	May	June	July
U-1—Persons unemployed 15 weeks or longer as a percent of the civilian labor force	1.9	1.9	1.9	1.6	1.3	1.4	1.2	1.3
U-2—Job losers as a percent of the civilian labor force	3.1	3.2	3.0	2.6	2.5	2.6	2.3	2.5
U-3—Unemployed persons 15 yr and over as a percent of the civilian labor force 25 yr and over	5.0	4.9	4.7	4.0	4.0	4.2	3.9	4.2
U-4—Unemployed full-time jobseekers as a percent of the full-time labor force	6.6	6.5	6.2	5.7	5.4	5.6	5.2	5.7
U-5—Total unemployed as a percent of the civilian labor force (official measure)	7.1	6.9	6.6	6.2	5.9	6.1	5.7	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	8.7	8.6	8.2	7.6	7.5	7.6	7.4	7.7
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	9.7	9.7	9.2	8.5	8.3	(1)	(1)	(1)

[1] 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					
	July 1977	June 1978	July 1978	July 1977	Mar. 1978	Apr. 1978	May 1978	June 1978	July 1978
CALIFORNIA									
Civilian noninstitutional population [1]	15,948	16,232	16,259	15,948	16,148	16,175	16,202	16,232	16,259
Civilian labor force	10,270	10,588	10,716	10,115	10,568	10,643	10,615	10,544	10,561
Employed	9,391	9,828	9,848	9,285	9,745	9,862	9,802	9,783	9,742
Unemployed	879	760	868	830	823	781	813	761	819
Unemployment rate	8.6	7.2	8.1	8.2	7.8	7.3	7.7	7.2	7.8
FLORIDA									
Civilian noninstitutional population [1]	6,361	6,552	6,569	6,361	6,498	6,515	6,533	6,552	6,569
Civilian labor force	1,534	3,803	3,829	(2)	(2)	(2)	(2)	(2)	(2)
Employed	3,264	3,544	3,568	(2)	(2)	(2)	(2)	(2)	(2)
Unemployed	270	259	261	(2)	(2)	(2)	(2)	(2)	(2)
Unemployment rate	7.6	6.8	6.8	(2)	(2)	(2)	(2)	(2)	(2)
ILLINOIS									
Civilian noninstitutional population [1]	8,160	8,219	8,224	8,160	8,200	8,205	8,212	8,219	8,224
Civilian labor force	5,312	5,408	5,409	5,191	5,243	5,291	5,347	5,321	5,289
Employed	4,966	5,075	5,064	4,877	4,912	4,977	4,969	5,044	4,975
Unemployed	345	333	345	314	331	314	378	277	314
Unemployment rate	6.5	6.2	6.4	6.0	6.3	5.9	7.1	5.2	5.9
MASSACHUSETTS									
Civilian noninstitutional population [1]	4,295	4,335	4,339	4,295	4,323	4,327	4,331	4,335	4,339
Civilian labor force	2,823	2,940	2,934	(2)	(2)	(2)	(2)	(2)	(2)
Employed	2,604	2,736	2,748	2,547	2,657	2,672	2,662	2,690	2,691
Unemployed	219	203	186	(2)	(2)	(2)	(2)	(2)	(2)
Unemployment rate	7.8	6.9	6.3	(2)	(2)	(2)	(2)	(2)	(2)
MICHIGAN									
Civilian noninstitutional population [1]	6,552	6,624	6,630	6,552	6,602	6,609	6,615	6,624	6,630
Civilian labor force	4,145	4,240	4,226	(2)	(2)	(2)	(2)	(2)	(2)
Employed	3,779	3,941	3,919	(2)	(2)	(2)	(2)	(2)	(2)
Unemployed	366	299	307	348	229	254	287	276	289
Unemployment rate	8.8	7.0	7.3	(2)	(2)	(2)	(2)	(2)	(2)
NEW JERSEY									
Civilian noninstitutional population [1]	5,412	5,464	5,468	5,412	5,448	5,453	5,458	5,464	5,468
Civilian labor force	3,414	3,428	3,485	3,314	3,274	3,339	3,363	3,374	3,385
Employed	3,104	3,168	3,209	3,022	3,067	3,093	3,101	3,128	3,127
Unemployed	310	260	276	292	207	246	262	246	258
Unemployment rate	9.1	7.6	7.9	8.8	6.3	7.4	7.8	7.3	7.6
NEW YORK									
Civilian noninstitutional population [1]	13,298	13,334	13,339	13,298	13,321	13,324	13,328	13,334	13,339
Civilian labor force	7,952	7,918	8,040	7,700	7,784	7,842	7,815	7,784	7,792
Employed	7,257	7,339	7,426	7,031	7,182	7,239	7,165	7,211	7,200
Unemployed	695	580	614	669	602	603	650	573	592
Unemployment rate	8.7	7.3	7.6	8.7	7.7	7.7	8.3	7.4	7.6
OHIO									
Civilian noninstitutional population [1]	7,781	7,838	7,844	7,781	7,820	7,826	7,832	7,838	7,844
Civilian labor force	4,933	4,955	5,024	4,839	4,787	4,850	4,883	4,875	4,930
Employed	4,630	4,686	4,758	4,527	4,538	4,574	4,603	4,634	4,654
Unemployed	303	268	267	312	249	276	280	241	276
Unemployment rate	6.1	5.4	5.3	6.4	5.2	5.7	5.7	4.9	5.6
PENNSYLVANIA									
Civilian noninstitutional population [1]	8,815	8,868	8,874	8,815	8,850	8,856	8,861	8,868	8,874
Civilian labor force	5,258	5,316	5,364	5,182	5,269	5,248	5,189	5,221	5,284
Employed	4,868	4,968	4,973	4,790	4,899	4,866	4,853	4,919	4,893
Unemployed	390	348	390	392	370	382	336	302	391
Unemployment rate	7.4	6.6	7.3	7.6	7.0	7.3	6.5	5.8	7.4
TEXAS									
Civilian noninstitutional population [1]	9,007	9,198	9,215	9,007	9,143	9,160	9,179	9,198	9,215
Civilian labor force	5,858	6,125	6,102	5,744	5,990	5,955	6,003	5,994	5,989
Employed	5,536	5,805	5,785	5,440	5,702	5,695	5,730	5,719	5,690
Unemployed	322	320	317	304	288	260	273	275	299
Unemployment rate	5.5	5.2	5.2	5.3	4.8	4.4	4.5	4.6	5.0

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

[1] The population figures are notadjusted for seasonal variations; therefore, identical numbers appears in the unadjusted and the seasonally adjusted columns.

[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					
	July 1977	May 1978	June 1978 [1]	July 1978 [1]	July 1977	Mar. 1978	April 1978	May 1978	June 1978 [1]	July 1978 [1]
Total	82,167	85,673	86,587	85,810	82,407	84,555	85,223	85,466	85,767	86,031
Goods-producing	24,551	25,332	25,902	25,807	24,412	24,945	25,351	25,429	25,552	25,637
Mining	848	902	928	938	833	728	898	903	912	921
Contract construction	4,148	4,268	4,536	4,672	3,913	4,053	4,237	4,268	4,357	4,408
Manufacturing	19,555	20,162	20,438	20,197	19,666	20,164	20,216	20,258	20,283	20,308
Production workers	14,024	14,533	14,751	14,483	14,145	14,556	14,588	14,614	14,617	14,607
Durable goods	11,485	12,018	12,165	12,028	11,548	11,965	11,992	12,029	12,048	12,093
Production workers	8,202	8,649	8,759	8,601	8,271	8,614	8,632	8,653	8,655	8,673
Ordnance and accessories	156.3	156.8	158.4	160.7	156	157	157	158	159	161
Lumber and wood products	659.2	671.1	693.5	691.7	640	670	669	672	671	672
Fixture and fixtures	501.1	533.1	537.0	525.7	515	540	538	537	536	540
Stone, clay, and glass products	672.0	691.6	704.6	701.9	659	680	687	689	691	688
Primary metal industries	1,211.3	1,226.2	1,238.2	1,219.9	1,204	1,215	1,216	1,224	1,222	1,213
Fabricated metal products	1,444.8	1,519.1	1,535.0	1,512.4	1,459	1,515	1,520	1,524	1,523	1,528
Machinery, except electrical	2,182.0	2,314.5	2,345.2	2,335.6	2,202	2,295	2,311	2,319	2,334	2,357
Electrical equipment	1,931.2	2,035.0	2,062.8	2,049.7	1,959	2,035	2,041	2,045	2,055	2,079
Transportation equipment	1,794.3	1,896.6	1,902.1	1,868.5	1,813	1,885	1,876	1,882	1,876	1,885
Instruments and related products	525.3	548.4	558.1	550.5	527	545	548	551	555	552
Miscellaneous manufacturing	407.8	425.1	430.2	410.9	414	428	429	428	426	418
Nondurable goods	8,070	8,144	8,273	8,169	8,118	8,199	8,224	8,229	8,235	8,215
Production workers	5,822	5,884	5,992	5,882	5,874	5,942	5,956	5,961	5,962	5,934
Food and kindred products	1,757.2	1,671.7	1,723.8	1,753.6	1,728	1,739	1,740	1,731	1,732	1,724
Tobacco manufacturers	65.8	61.4	62.5	62.4	72	70	68	69	70	68
Textile mill products	972.8	993.0	1,002.8	980.6	992	995	991	995	993	1,000
Apparel and other textile products	1,248.9	1,302.4	1,316.2	1,243.9	1,292	1,292	1,303	1,299	1,301	1,286
Paper and allied products	703.8	717.1	730.3	725.4	705	714	718	722	724	727
Printing and publishing	1,109.2	1,139.2	1,148.4	1,138.7	1,114	1,133	1,137	1,141	1,148	1,143
Chemicals and allied products	1,069.4	1,074.9	1,084.2	1,080.6	1,064	1,071	1,074	1,080	1,078	1,075
Petroleum and coal products	215.8	215.1	219.4	219.9	210	217	216	215	215	214
Rubber and plastics products, n.e.c.	675.2	701.9	713.9	704.3	683	705	713	712	710	712
Leather and leather products	251.7	267.6	271.4	259.5	258	263	264	265	264	266
Service-producing	57,616	60,341	60,685	60,003	57,995	59,610	59,872	60,037	60,215	60,394
Transportation and public utilities	4,604	4,705	4,767	4,730	4,572	4,672	4,709	4,714	4,724	4,697
Wholesale and retail trade	18,306	18,940	19,128	19,092	18,322	18,849	18,891	18,967	19,047	19,109
Wholesale trade	4,420	4,541	4,601	4,605	4,394	4,540	4,555	4,568	4,578	4,578
Retail trade	13,886	14,399	14,527	14,487	13,928	14,309	14,336	14,399	14,469	14,531
Finance, insurance, and real estate	4,565	4,707	4,781	4,820	4,506	4,670	4,683	4,712	4,738	4,758
Services	15,541	16,066	16,222	16,301	15,372	15,875	15,962	15,970	16,014	16,124
Government	14,600	15,923	15,787	15,060	15,223	15,544	15,627	15,674	15,692	15,706
Federal	2,773	2,756	2,802	2,820	2,721	2,736	2,744	2,753	2,772	2,767
State and local	11,827	13,167	12,985	12,240	12,502	12,808	12,883	12,921	12,920	12,939

[1] Preliminary.

TABLE B-2.—AVERAGE WEEKLY HOURS OF PRODUCTION OR NONSUPERVISORY WORKERS,[1] ON PRIVATE NONAGRICULTURAL PAYROLLS, BY INDUSTRY

[In thousands]

Industry	Not seasonally adjusted				Seasonally adjusted					
	July 1977	May 1978	June 1978[2]	July 1978[2]	July 1977	Mar. 1978	April 1978	May 1978	June 1978[1]	July 1978[1]
Total private	36.5	35.9	36.3	36.5	36.1	36.2	36.3	36.0	36.1	36.1
Mining	44.9	43.9	44.2	43.7	44.8	44.6	44.3	43.9	43.7	43.6
Contract construction	37.8	36.8	38.0	38.6	36.9	36.8	37.4	36.7	37.4	37.7
Manufacturing	40.1	40.3	40.7	40.3	40.2	40.6	40.6	40.3	40.4	40.4
Overtime hours	3.3	3.4	3.5	3.4	3.4	3.7	3.6	3.5	3.5	3.5
Durable goods	40.6	40.9	41.3	40.8	40.9	41.2	41.2	40.9	41.1	41.1
Overtime hours	3.5	3.6	3.8	3.6	3.6	3.9	3.9	3.7	3.7	3.7
Ordnance and accessories	40.0	40.6	41.2	40.9	40.3	41.1	40.3	40.7	41.0	41.2
Lumber and wood products	40.2	39.7	40.6	39.9	40.4	39.9	39.9	39.4	39.8	40.1
Furniture and fixtures	38.5	39.1	39.7	39.0	38.8	39.9	39.8	39.4	39.3	39.4
Stone, clay, and glass products	41.6	41.8	42.3	42.2	41.4	41.6	42.1	41.6	41.9	42.0
Primary metal industries	41.0	41.6	42.1	42.0	41.1	41.5	41.4	41.6	41.8	42.1
Fabricated metal products	40.6	41.0	41.3	40.5	41.0	41.3	41.4	41.0	41.0	40.9
Machinery, except electrical	41.1	41.7	42.1	41.5	41.8	42.2	42.2	42.0	42.2	42.2
Electrical equipment	39.6	40.0	40.4	39.5	40.2	40.4	40.3	40.1	40.2	40.1
Transportation equipment	42.2	41.7	42.1	41.7	42.0	41.7	41.9	41.4	41.7	41.5
Instruments and related products	39.9	40.6	40.8	40.4	40.3	41.1	41.2	40.7	40.8	40.8
Miscellaneous manufacturing	38.3	38.9	39.1	38.7	38.7	39.2	39.3	38.9	39.0	39.1
Nondurable goods	39.3	39.3	39.6	39.5	39.3	39.7	39.8	39.5	39.4	39.4
Overtime hours	3.1	3.0	3.2	3.2	3.0	3.3	3.4	3.2	3.1	3.1
Food and kindred products	40.1	39.5	39.7	39.9	39.8	40.0	40.0	39.8	39.6	39.6
Tobacco manufacturers	36.2	38.7	40.7	36.6	38.6	39.0	38.9	39.0	40.5	39.0
Textile mill products	40.1	40.4	40.7	40.1	40.1	40.6	40.7	40.3	40.1	40.1
Apparel and other textile products	35.4	35.7	36.0	36.0	35.3	35.9	36.1	35.8	35.8	35.9
Paper and allied products	42.7	42.7	43.1	42.8	42.7	43.4	43.4	42.9	42.9	42.8
Printing and publishing	37.7	37.3	37.5	37.6	37.8	38.1	38.1	37.4	37.5	37.7
Chemicals and allied products	41.6	41.8	42.0	41.8	41.7	42.1	41.9	41.8	41.9	41.9
Petroleum and coal products	43.3	43.5	43.8	45.0	42.8	44.0	43.8	43.5	43.7	44.5
Rubber and plastics products, nec	40.2	40.6	41.0	40.3	40.6	40.6	41.0	40.8	40.9	40.7
Leather and leather products	37.2	37.9	38.4	37.5	36.8	37.4	38.3	37.7	37.6	37.1
Transportation and public utilities	40.3	40.0	40.3	40.8	39.9	40.6	40.1	40.3	40.1	40.4
Wholesale and retail trade	34.1	32.8	33.4	33.8	33.3	33.1	33.1	33.0	33.0	33.0
Wholesale trade	39.0	38.8	39.1	39.1	38.8	39.0	39.0	38.9	39.0	38.9
Retail trade	32.7	31.0	31.7	32.3	31.7	31.4	31.4	31.3	31.3	31.3
Finance, insurance, and real estate	36.7	36.4	36.5	36.8	36.6	36.6	36.8	36.5	36.5	36.7
Services	33.8	33.0	33.4	33.8	33.2	33.5	33.4	33.2	33.2	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 4/5 of the total employment on private nonagricultural payrolls.

[2] Preliminary.

TABLE B-3.—AVERAGE HOURLY AND WEEKLY EARNINGS OF PRODUCTION OR NONSUPERVISORY WORKERS[1] ON PRIVATE NONAGRICULTURAL PAYROLLS, BY INDUSTRY

[In dollars]

Industry	Average hourly earnings				Average weekly earnings			
	July 1977	May 1978	June 1978[2]	July 1978[2]	July 1977	May 1978	June 1978[2]	July 1978[2]
Total private	$5.25	5.64	5.67	5.71	191.63	202.48	205.82	208.42
Seasonally adjusted	5.27	5.64	5.68	5.73	190.25	203.04	205.05	206.85
Mining	6.90	7.56	7.60	7.64	309.81	331.88	335.92	333.87
Contract construction	8.00	8.45	8.48	8.58	302.40	310.96	232.24	331.19
Manufacturing	5.65	6.02	6.07	6.12	226.57	242.61	247.05	246.64
Durable goods	6.03	6.42	6.47	6.51	244.82	262.58	267.21	265.61
Ordnance and accessories	6.24	6.65	6.70	6.73	249.60	269.99	276.04	275.26
Lumber and wood products	5.07	5.45	5.61	5.66	203.81	216.37	227.77	225.83
Furniture and fixtures	4.29	4.59	4.63	4.64	165.17	179.47	183.81	180.96
Stone, clay, and glass products	5.83	6.21	6.28	6.33	242.53	259.58	265.64	267.13
Primary metal industries	7.52	8.06	8.11	8.11	308.32	335.30	341.43	340.62
Fabricated metal products	5.84	6.19	6.22	6.25	237.10	253.79	256.89	253.13
Machinery, except electrical	6.17	6.59	6.65	6.69	253.59	274.80	279.97	277.64
Electrical equipment	5.34	5.69	5.71	5.79	211.46	227.60	230.68	228.71
Transportation equipment	7.15	7.62	7.67	7.69	301.73	317.75	322.91	320.67
Instruments and related products	5.20	5.54	5.55	5.58	207.48	224.92	226.44	225.43
Miscellaneous manufacturing	4.33	4.61	4.64	4.68	165.84	179.33	181.42	181.12
Nondurable goods	5.10	5.41	5.45	5.53	200.43	212.61	215.82	218.44
Food and kindred products	5.32	5.73	5.73	5.80	213.33	226.34	227.48	231.42
Tobacco manufacturers	5.68	6.36	6.55	6.47	205.62	246.13	266.59	236.80
Textile mill products	4.02	4.18	4.20	4.30	161.20	168.87	170.94	172.43
Apparel and other textile products	3.59	3.90	3.92	3.91	127.09	139.23	141.12	140.76
Paper and allied products	5.97	6.33	6.46	6.53	254.92	270.29	278.43	279.48
Printing and publishing	6.09	6.40	6.43	6.49	229.59	238.72	241.13	244.02
Chemicals and allied products	6.44	6.90	6.92	6.99	267.90	288.42	290.64	292.18
Petroleum and coal products	7.78	8.37	8.37	8.38	336.87	364.10	366.61	377.10
Rubber and plastics products, n.e.c.	5.12	5.40	5.44	5.47	205.82	219.24	223.04	220.44
Leather and leather products	3.60	3.91	3.91	3.91	133.92	148.19	150.14	146.63
Transportation and public utilities	6.97	7.42	7.43	7.50	280.89	296.80	299.43	306.00
Wholesale and retail trade	4.28	4.63	4.65	4.66	145.95	151.86	155.31	157.51
Wholesale trade	5.56	5.98	6.02	6.08	216.84	232.02	235.38	237.73
Retail trade	3.84	4.14	4.15	4.16	125.57	128.34	131.56	134.37
Finance insurance and real estate	4.59	4.92	4.96	5.02	168.45	179.09	181.04	184.74
Services	4.68	5.06	5.04	5.06	158.18	166.98	168.34	171.03

[1] Data relate to production workers in mining and manufacturing; to construction workers in construction; and to nonsupervisory workers in transportation and public utilities; wholesale and retail trade; finance, insurance, and real estate; and services. These groups account for approximately 415 of the total employment on private nonagricultural payrolls.
[2] 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	July 1977	February 1978	March 1978	April 1978	May 1978	June 1978[2]	July 1978[2]	Percent change from— July 1977 to July 1978	Percent change from— June 1978 to July 1978
Total private nonfarm:									
Current dollars	199.4	208.8	210.2	212.1	212.8	213.9	215.6	8.1	0.8
Constant (1967) dollars	109.3	110.6	110.5	110.6	109.9	109.5	NA	(3)	(4)
Mining	217.1	223.2	225.3	235.6	236.5	238.7	241.0	11.0	1.0
Contract construction	195.1	210.6	203.8	204.2	206.2	207.7	209.4	7.3	.8
Manufacturing	200.3	209.7	210.9	212.1	213.3	214.8	216.3	8.0	.7
Transportation and public utilities	214.3	223.9	225.0	228.2	228.3	228.8	230.0	7.3	.5
Wholesale and retail trade	193.1	203.0	204.8	207.1	207.2	208.2	210.3	8.9	1.0
Finance, insurance, and real estate	180.3	187.5	188.5	191.5	191.6	194.2	196.9	9.2	1.4
Services	203.5	214.3	215.7	217.4	217.5	217.5	219.5	7.9	.9

[1] Data relate to production workers in mining and manufacturing; to construction workers in construction; and to nonsupervisory workers in transportation and public utilities; wholesale and retail trade; finance, insurance, and real estate; and services. These groups account for approximately ⅘ of the total employment on private nonagricultural payrolls.
[2] Preliminary.
[3] Percent change was 0.8 from June 1977 to June 1978, the latest month available.
[4] Percent change was 0.4 from May 1978 to June 1978, the latest month available.

Note: All series are in current dollars except where indicated. The index excludes effects of 2 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						
	July	August	September	October	November	December	January	February	March	April	May	June [2]	July [2]
Total, private	115.8	115.6	115.9	116.8	117.2	117.5	116.1	117.0	119.2	120.3	120.0	120.5	121.0
Goods producing	101.4	100.6	100.9	101.7	102.1	99.5	102.1	99.5	104.3	106.1	106.1	107.5	107.5
Mining	139.9	134.7	142.5	143.9	144.8	113.3	110.7	112.6	118.7	150.5	150.5	150.6	152.3
Contract construction	112.8	110.8	110.4	112.3	114.0	113.5	104.7	108.9	116.5	125.0	123.6	129.2	131.8
Manufacturing	98.0	97.6	97.8	98.4	98.8	99.7	98.2	99.7	101.7	102.1	101.5	101.7	101.7
Durable goods	98.3	98.1	98.4	99.3	99.5	100.8	99.3	100.9	103.0	103.3	102.8	103.3	103.5
Ordnance and accessories	40.5	39.3	39.1	38.2	38.2	40.2	39.8	38.1	41.3	40.5	40.9	41.8	42.5
Lumber and wood products	105.3	104.0	106.0	106.8	109.5	109.8	107.6	106.8	109.3	109.0	107.8	109.1	109.9
Furniture and fixtures	103.4	107.2	108.3	110.6	111.7	113.8	109.3	116.5	117.6	117.0	115.3	114.5	115.6
Stone, clay, and glass products	104.9	104.1	103.3	103.2	106.7	107.0	104.3	105.4	108.0	110.7	109.8	110.6	110.5
Primary and metal industries	89.0	88.2	89.0	89.7	89.5	89.7	89.5	91.2	90.9	90.8	92.0	92.2	92.1
Fabricated metal products	103.7	103.3	103.1	105.0	105.7	107.7	105.3	107.6	109.1	109.7	108.9	108.7	108.4
Machinery, except electrical	103.2	103.5	103.6	105.5	104.9	106.0	104.0	107.0	109.1	110.0	109.7	111.0	112.9
Electrical equipment and supplies	98.3	98.3	97.8	98.6	99.4	100.4	98.9	100.3	103.4	103.1	102.8	103.3	103.7
Transportation equipment	94.8	95.4	96.5	96.2	94.5	96.7	96.5	96.3	99.0	99.1	98.2	98.0	97.5
Instruments and related products	111.7	111.3	112.4	113.2	113.4	114.4	113.4	114.8	117.8	119.2	118.1	119.8	119.0
Miscellaneous manufacturing industry	91.4	91.3	90.3	91.1	91.5	93.9	92.3	93.9	96.4	96.9	95.3	95.3	93.5
Nondurable goods	97.7	96.9	96.9	97.1	97.8	98.1	96.5	97.8	99.9	100.3	99.6	99.5	99.1
Food and kindred products	95.9	94.5	94.1	92.8	394.2	94.6	94.4	96.0	97.6	97.5	96.3	95.7	94.8
Tobacco manufacturers	77.2	71.7	73.2	72.4	72.2	74.0	72.4	74.4	76.7	73.8	75.3	78.2	73.9
Textile mill products	99.9	98.9	99.4	100.2	101.4	100.8	99.3	100.4	101.3	101.2	100.5	99.9	100.6
Apparel and other textile products	87.6	87.8	87.2	87.8	88.6	89.0	84.2	87.2	89.4	90.8	89.8	89.9	88.9
Paper and allied products	100.3	99.4	99.7	100.2	99.6	100.8	99.3	100.2	103.1	103.7	103.5	103.8	103.6
Printing and publishing	95.6	95.1	95.7	95.7	95.9	95.9	94.6	95.3	97.4	97.6	96.1	96.6	96.8
Chemicals and allied products	103.7	103.4	103.0	103.0	103.6	103.0	103.5	104.5	102.5	105.5	106.1	106.1	105.9
Petroleum and coal products	119.9	120.4	120.8	122.8	124.8	135.7	126.6	127.8	128.6	127.2	124.5	125.1	12.56
Rubber and plastics products, n.e.c.	132.5	129.7	129.3	130.5	132.5	133.8	131.2	131.9	137.4	139.8	139.1	138.9	138.5
Leather and leather products	69.9	71.8	72.7	73.8	73.7	71.9	70.7	70.7	72.7	73.5	73.5	73.3	72.3
Service producing	125.8	126.1	126.4	127.2	127.5	128.2	127.6	127.8	129.4	129.7	129.6	129.8	130.4
Transportation and public utilities	103.1	103.5	130.9	102.9	105.1	105.6	103.5	105.4	106.3	105.6	106.2	105.8	106.8
Wholesale and retail trade	121.6	121.6	121.8	122.7	122.4	123.2	122.3	122.3	124.1	124.2	124.5	124.9	125.2
Wholesale trade	117.5	117.5	117.8	118.7	118.8	118.9	118.9	120.3	121.7	122.0	122.1	122.5	122.3
Retail trade	123.1	123.1	123.3	124.2	123.7	124.8	123.5	123.1	124.9	125.0	125.4	125.9	126.3
Finance, insurance, and real estate	132.3	132.7	133.2	134.2	134.9	134.9	135.4	135.9	136.7	138.0	137.5	138.4	140.0
Services	140.1	140.6	140.9	142.7	142.6	143.4	143.8	143.5	145.3	145.7	145.0	145.0	146.0

[1] Data relate to production workers in mining and manufacturing; to construction workers in construction; and to nonsupervisory workers in transportation and public utilities; wholesale and retail trade; finance, insurance, and real estate; and services. These groups account for approximately ⅔ of the total employment on private nonagriculture payrolls.

[2] Preliminary.

TABLE B-6.—INDEXES OF DIFFUSION: PERCENT OF INDUSTRIES IN WHICH EMPLOYMENT [1] INCREASED

Year and month	Over 1-mo span	Over 3-mo span	Over 6-mo span	Over 12-mo 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	78.8
September	61.3	57.0	72.1	75.6
October	59.9	73.3	75.0	77.9
November	75.9	76.2	80.5	75.6
December	73.8	77.9	83.7	[2] 77.9
1978:				
January	66.9	80.5	85.2	[2] 79.4
February	70.1	81.7	84.0	----
March	74.4	77.6	[2] 77.6	----
April	68.9	74.4	[2] 73.0	----
May	62.8	[2] 66.3	----	----
June	[2] 62.2	[2] 61.3	----	----
July	[2] 60.2	----	----	----
August	----	----	----	----
September	----	----	----	----
October	----	----	----	----
November	----	----	----	----
December	----	----	----	----

[1] Number of employees, seasonally adjusted, on payrolls of 1972 private nonagricultural industries.
[2] Preliminary.

Senator BENTSEN. Thank you Ms. Norwood.

Last month, in response to a question from Senator Proxmire, Mr. Stein said that these seasonal adjustment problems, which are often distorted in the June employment figures, had been eliminated. If the July figures are accurate, then the June figures must have been terribly distorted.

Ms. Norwood, would you care to comment?

Ms. NORWOOD. Yes; I would. Last night, I reread the transcript of last month's hearing. What Mr. Stein said was that the Bureau had made some changes to try to improve the seasonal adjustment for the month of June because the large influx of teenagers who had come out of school and looked for jobs created difficulties in trying to make that adjustment. He discussed the changes that we had made, and we do believe those changes have improved the seasonal adjustment. But I don't think any of us in the Bureau feel that we have found the key to a really precise adjustment of the figures between May and July.

Senator BENTSEN. Senator Javits has commented on our lost productivity and his deep concern with that. I very much share that. It adds much to our inflation problem and makes us less competitive in the world, and adds to our imblance of trade. We had an increase in productivity during the second quarter for the private sector that was only 0.1 percent on an annualized basis. We had an increased productivity in manufacturing at a strong 7.3 percent. What sectors of the economy actually showed a decrease in productivity? Can you break that out for us?

Ms. NORWOOD. Senator, I have here one of our productivity experts, Mr. Norsworthy. I would like to ask him to answer that question.

Mr. NORSWORTHY. In answer to your question, Senator, the data which we have available on output by sectors is very limited. We are able to divide the private economy only into the farm and manufacturing sectors, and then the residual sector, that is, the non-farm, non-manufacturing sector. In the farm sector, productivity declined substantially for the second quarter in a row. We also know that in the non-farm, non-manufacturing sector, mining productivity declined substantially. That is largely because, when the coal strike was over, large numbers of workers returned to work in the sectors of the coal mining industry which are less productive, that is, the deep-mine workers returned to work. Productivity in deep mining is lower than in strip-mining, and productivity in coal mining is lower than in mining as an aggregate. So we know in that particular sector, productivity declined substantially because of what might be called a shift effect; that is, resurrection of employment in the less-productive sectors of that industry.

In the non-manufacturing sector generally, it may be noted that the increase in employment in the second quarter was substantially greater than the increase in employment in manufacturing.

That is to say, manufacturing may be leading the economy as a whole in its pattern of employment and subsequent productivity recovery. We expect that, barring any sharp dislocation to the economy, in subsequent quarters productivity will recover somewhat in the non-farm, non-manufacturing sectors, and that this will improve the productivity performance in the business sector generally.

Senator BENTSEN. One of my deep concerns is that much of the loss in an increase of productivity; and much of the increase in inflation, is the result of government-imposed action—regulations and that type of thing. Barry Bosworth, who is the Director of the Council on Wage and Price Stability, has said we have $35 billion of increased costs that are in the pipeline because of Government regulations. We have had testimony before this committee that $105 billion worth of additional costs are incurred per year because of Government regulations.

We have the Brookings Institution study which showed that half of the loss in the increase in productivity in the first quarter, I believe, was because of Government regulations. What happens if we keep adding these kinds of costs? Don't you feel that it puts a real drain on the private sector, causes a substantial increase in inflation, a loss in productivity as a result?

Ms. NORWOOD. Senator, it is extremely difficult to quantify the cost of regulatory action. I am sure you are quite aware of the fact——

Senator BENTSEN. But isn't it time we tried? We just pass regulations without any concern for the cost.

Ms. NORWOOD. I certainly think that many people, both in the legislative and the executive branch, who deal with the development and administration of regulatory action are very concerned about that, and a great deal of work is going on. I just think that it is very difficult to come up with an exact figure, and for that reason the Bureau has not published any information in this area. We are certainly keeping in close touch with those people in academia and government who are working in this area, because you are right, it is a very important area.

Senator BENTSEN. What do you think the inflation rate will be for the rest of the year?

Ms. NORWOOD. Senator, I am sure you are quite aware of the fact that the Bureau of Labor Statistics always avoids forecasting.

Senator BENTSEN. I can still get your judgment.

Ms. NORWOOD. That is right, but we have learned that it is very wise for us to report facts as they stand. I believe that that is one of the major ways in which we have maintained our credibility and our reputation.

Senator BENTSEN. With that effort, I will yield to my friend, Senator Javits.

Senator JAVITS. Ms. Norwood, I am very interested in two factors that show up in the BLS report: One which you note in particular, is women. You point out that women who are heads of households have a rate of unemployment almost equal to that of blacks, almost 17 percent. What is your judgment about that? Is there anything you think causes that in particular? Do you think it represents some vestige of discrimination? Here it stands out. Women are half the population, and, suddenly their unemployment rates appear as if they are another minority, which they obviously are not in America. There has been an enormous movement of women into the work force. Again, that is one of the big reasons for the increase in the aggregate work force. What do you think about that?

Ms. NORWOOD. I think that you are quite right, that women who head families comprise a labor force group which is becoming increasingly important. There are now well over 8 million women in this position. A very large proportion of them are living in poverty. I think that their problems are very varied. Many of them are unskilled and require training. Many of them are living in situations which make it very difficult for them to free themselves for the working hours, since they have very small children. I think that the Department of Labor is attempting to identify the problems of this group and the kinds of programs which could help.

Senator JAVITS. So you would say, in your judgment, there is definitely an ascertainable class, consisting of women who are heads of families, which you estimate is a figure of 8 million? By the way, how does that compare with the position of the working population which is black? Do you have any figures on that?

Ms. NORWOOD. There are about 12 million blacks in the labor force, but that 8-million figure that I gave you is the population of women who had families, about 59 percent of them are in the labor force. So the labor force of women who head families is somewhat smaller, about 5 million.

Senator JAVITS. Would you consider them a minority in terms of your BLS work? They have no other distinguishing characteristic.

Ms. NORWOOD. I guess there is a great deal of controversy over the definition of a minority or ethnic group. I don't think that I would consider them a particular minority. Many of them are, of course, black or Hispanics. The important thing, I think, is that they are a large and increasing social group, and they present a social problem for us that we must identify and try to work with. I know that the Women's Bureau in the Department of Labor and Secretary Marshall have a real interest in this group, and are trying to work out programs to help them.

Senator JAVITS. You answered the question better than I asked it. The fact that they are a distinguishable group that obviously needs help, as such, is clear.

I also want to understand the service element in the employment situation. Apparently, from the figures in your statement, there is a very significant rise.

Ms. NORWOOD. Yes; 179,000 over the month.

Senator JAVITS. You say that two-thirds of July's overall gain occurred in the service-producing industries, led by the services component. What does it mean to us in terms of policy, that we now have two-thirds of our work force in service industries, and that this work force is increasing, and that it seems to be the element on the move? What does that teach us? Shall we train more people for services? Shall we endeavor to develop further services as opposed to manufacturing? What are the implications representing the rationalization of our position in the economy of the world? Is the manufacturing responsibility passing elsewhere? What implication does the Bureau read into these figures?

Ms. NORWOOD. That is an extremely interesting question, Senator. I think that it is clear that this is a movement that has been going on for some time. My personal view is that it does not mean that the United States is phasing out of manufacturing for world trade. I don't think that one can draw that conclusion. I think that there have been changes going on in our standard of living which also is reflected in increasing services. One expects that as people become better off, they are interested in having more services.

The question in terms of employment policy involves a decision on where it is best to put training funds, and where the jobs are.

As I am sure you are aware, many of the jobs in the service industries have tended in the past to be lower paying jobs than those in manufacturing, where there frequently is a need for greater skill.

That is, I think, a very important policy issue.

Senator JAVITS. Do you break out training figures? In other words, you give us a figure and say, there are 6 million unemployed. In the training field, we are doing a lot of thinking and concentrating on the CETA program, with which I am directly concerned.

We have a big program after the President announced 4 or 5 weeks ago the enlisting of private enterprise to do the training, a program involving a quarter of a billion dollars. Does the Bureau break down any training figures so that we can say there are 6.1 million people unemployed, but x number are engaged in training programs to change their skills, or to upgrade their skills?

Ms. NORWOOD. Senator, we do not collect data in the household survey on specific employment training programs. We of course know the number of unemployed persons who are students, but we do not know the number of unemployed who are enrolled in Government-sponsored training programs. The employment and training division in the Department of Labor which is responsible for the administration of employment training programs does have program figures on the numbers of people who are being trained.

Senator JAVITS. Is there any delineation in your reporting as to whether that number appears in the unemployment statistics—in other words, how are trainees treated in your statistics? If somebody is in training, does that mean they are unemployed or employed?

Mr. STEIN. Senator Javits, if they are in institutional training, under public training programs, we treat them as unemployed.

However, we do not have a system really for identifying their numbers in the household survey. We found in the past people have difficulty reporting what kind of program they are in.

Senator JAVITS. If they are in a program in the private sector, like the President's program or our program in the youth bill—the one we have already and the one we have coming up, those figures are not broken down?

Ms. NORWOOD. That is correct. It is very difficult to do that, Senator, because many people who are in training programs are not really aware of where the funding comes from.

As a matter of fact, I am serving as chairman of a Working Party on Employment and Unemployment Statistics for the OECD. One of the issues with which that group is charged is to devise some method for quantification of the people who are receiving training so that it would be easier for governments to evaluate the success or failure of various programs.

As far as we have been able to ascertain, for the most part, the developing countries are having the same kinds of statistical problems.

Senator JAVITS. I think here we have touched a raw nerve. Here we pay billions of dollars in unemployment compensation. Last year the Federal Government spent $13 billion on these programs. These men or women are doing nothing. Here is the opportunity to train them, to educate them. Many have nothing but high school diplomas; some don't even have that. Yet this great skill is allowed to lie fallow, and we are paying the tab through taxpayers.

So, Senator Bentsen, because I think this has been a key point—I have been trying to get at it for awhile—I would hope that our committee would consider helping this international effort which Ms. Norwood described.

I am sure you are talking about the Organization for Economic Cooperation and Development. We should try to see what figures we could break out on public and institutional programs and training and apprenticeship in the United States. I think there are about a million people in such programs. We need to know the relationship which they have to the overall unemployment rate, and whether we are stuck with the fact that we get nothing from our payments for unemployment compenation, except that the unemployed person is maintained with no upgrading of skills, no increase in the level of education, and no activities. He can stay home and do what is neces-

sary in looking for a job, and then go down to the office and collect for his or her paycheck.

I respectfully submit that our committee should give attention to this.

Senator BENTSEN. I think you make a very valid point and one we should get into. I also hope next year we can get back to another point we are very much concerned about, and that we make it the subject of a major study, and that is, the question of productivity and what we do about it in this country of ours.

And speaking of the unemployed—I want to get to the post-Vietnam group. I know the Vietnam veterans have an unemployment rate higher than the rest of the public. But when we get to the post-Vietnam veterans we run into serious problems.

I have some figures here that show according to the Bureau of Labor Statistics that this group had a 13.2 percent rate in June, and 17.4 percent unemployment rate in July. Are those figures reliable?

Ms. NORWOOD. I am not quite sure which figures you are quoting.

Senator BENTSEN. These are from the Bureau of Labor Statistics. They are not seasonally adjusted.

The numbers we have, the breakout of post-Vietnam era veterans is, June, 13.2 percent; and July, 17.4. The Vietnam veterans are 9.3 and nonveterans are 8.2 and 8.

For July, the post-Vietnam veterans are twice as high in unemployment as the nonveterans. Is that a reliable figure?

Ms. NORWOOD. Senator, I think that there may be some confusion in the particular category that you are describing.

You will note in table A–2——

Senator BENTSEN. I hope there is. That figure is of considerable concern.

Ms. NORWOOD. On table A–2 of our release there are data on Vietnam-era veterans, and then on male nonveterans. Those data show an unemployment rate in July of 5.1 for the total group who are veterans, and a higher rate of 5.9 percent for male nonveterans.

Senator BENTSEN. It looks like we will have to see where the discrepancy is. These are not published figures, but they came from the Bureau of Labor Statistics.

Ms. NORWOOD. I would be glad to look into that. The question is, what is the group that is being described? You seem to refer to a post-Vietnam era group. I am not quite sure what the definition of that group is. That may be the problem. But we would be glad, certainly, if your staff could provide us with that information.

Senator BENTSEN. That covers the age group of 20–24.

Ms. NORWOOD. That is in the table of the release.

Senator BENTSEN. Those are the current veterans coming out now or in the last year.

Ms. NORWOOD. That is 11.4 percent for 20- to 24-year Vietnam-era veterans. It is possible that if one looks at a different age group that the numbers would be different.

Senator BENTSEN. Vietnam era veterans extend over some period of time.

Ms. NORWOOD. Yes; there are, of course, very few who are now 20 to 24 years old, as you can see from the release.

Senator BENTSEN. In June, employment rose by 700,000, according to the household survey, but only by 200,000 according to the establishment figures.

In July, it fell 400,000 according to the household survey, but it rose by 265,000 according to the survey of establishments.

How do we get these enormous discrepancies, and which is the more reliable? For those of us who are laymen, it is a little hard for us to understand.

Ms. NORWOOD. Senator, sometimes I feel that one of our functions is, in an educational sense, to let people really, fully understand that the statistics have not revealed truths, either.

Senator BENTSEN. I have learned that one.

Ms. NORWOOD. What we have here are two surveys which are very different in concept, and very different in terms of the people from whom the data are collected.

The household survey is a sample survey. It, at times, shows some volatility. It has certainly some of the finest statistical concepts in the world, and is generally recognized as one of the best labor-force surveys of households anywhere in the world.

The establishment survey is very large. It relates only to payroll because we collect the data from the actual payrolls. We ourselves have a great deal of difficulty sometimes in trying to rationalize the differences.

I think that all I can say is that these two surveys frequently do differ. However, I must admit that it is unusual when they differ in direction; yet, over a longer period of time, they do seem to show the same general picture.

As I have indicated in my statement, over the last year both the household survey and the establishment survey showed roughly the same increase in employment. Perhaps it is in a sense extremely useful for the Congress and the public to have two such numbers published by the Bureau of Labor Statistics so we can see that it is very difficult sometimes to interpret what is going on in the economy, and we really have to look at the data over much longer than a 1-month period in order to make really definitive judgments.

Senator BENTSEN. You don't know either?

Ms. NORWOOD. That is right.

Senator BENTSEN. Let me ask you about the increase in the unit labor cost of 7.8 percent in the private sector in the second quarter. At the same time, we had inflation of 11.4 percent.

That is a pretty substantial difference. Can you explain that to me?

Ms. NORWOOD. Not really. I think that clearly there are worrying signs in the productivity and unit labor cost area, without any question.

Unit labor cost, of course, is related very clearly to changes in output as well as to other factors. The inflation scene is, of course, very worrying. But I don't think we have any information that convinces us about casual relationships.

But these are certainly areas that bear close watching. There is no question about that.

Senator BENTSEN. We saw in the first quarter a very substantial increase in unit labor costs of 17.4 percent. A lot of that was brought

about by the coal strike. Can any of the 7.8 percent increase in the second quarter be attributed to special factors, or does that appear to be an underlying rate of inflation that we are facing?

Are there any major aberrations such as the coal strike—there are not any?

Ms. NORWOOD. No. Of course, there was a considerable change in unit labor costs in the second quarter from the first quarter. The first quarter was extremely high. The second quarter, at 7.8 percent was somewhat lower. We do have earnings figures going up, of course.

I don't know whether Mr. Layng may wish to comment, but I think I have nothing to say.

Mr. LAYNG. We were quite concerned about interpreting the first quarter figures.

I am also not aware of any unusual circumstances which pushed them up and the 7.8-percent rate is a little higher than the prewinter months. I have not reviewed the data recently, but with reference to the 7.8 and the inflation rate of 10.4 for the first 6 months, or 11.4 for the second quarter, one way you can interpret that is that unit nonlabor costs are increasing faster than unit labor costs.

So you have shifts in the rates of increase of unit labor costs and unit nonlabor costs. You look at unit labor costs, and, when prices are rising faster, it means that unit nonlabor costs are rising faster than unit labor costs. Whether that will continue is not clear.

Senator BENTSEN. We were talking about the impact of regulations on inflation. But there are other things, too. Property taxes went up 16 percent. Mortgage interest went up 23 percent.

Mr. LAYNG. Those would be in the nonlabor component.

Senator BENTSEN. That is what you are suggesting.

Mr. LAYNG. Profits, taxes, capital consumption.

Ms. NORWOOD. We also, of course, have to recognize that the very low growth in productivity is having an effect on unit labor cost changes because productivity increases offset rising hourly earnings in the determination of unit labor costs.

Senator BENTSEN. Let's talk about that without getting you into forecasting. Let us talk about some of the things that will influence productivity regardless of how it finally comes out.

As you increase production, and as you spread your fixed costs over more units of production, and your supervisory costs, and all of that, supposedly you increase productivity.

But the other side of that is, suppose we are using 84 percent of manufacturing capacity. The other 16 percent is the least efficient. That is brought on last, usually. So in that regard, you have a countervailing force, don't you, one that you are using less productive capacity, and then you lose some of your increased productivity. That has a tendency to balance out.

Ms. NORWOOD. That would vary considerably from sector to sector.

Senator JAVITS. I have one other thing I would like to ask you, Ms. Norwood.

There is a bill coming up which may not get anywhere this year called the Humphrey-Hawkins bill, and it uses the term, full employment. What is full employment? We have quite a controversy going on about this term. It used to be, when I was younger that 4-percent unemployment was considered to give us a rate of full employment.

In a country as big as this, people move, et cetera. I have heard many arguments about whether that figure should be fixed at some other number, say 5.5 percent. Economists argue that, because of the structural problems built into the economy, a 5.5 percent rate of unemployment more accurately indicates full employment.

As that term is analyzed by economists—it would make a world of difference because you are within sight of full employment. You are less than 10 percent off the mark.

Therefore, that goal is almost realized. Can you enlighten us from your work and from these figures; no prediction is required, just a professional opinion regarding the debate which is going on, and what we can learn about it from these figures.

Ms. NORWOOD. Senator Javits, as you quite rightly point out, there is a great deal of discussion going on, and the figures vary from somewhat below 4 percent, on the one side, to well over 5 percent or 6 percent, on the other.

The justification that is used, I think, by proponents of the one side of this argument is generally that we ought to look at what the case was some years ago when we had some sort of agreement about what was full employment, and then try to hold those things constant, and see what would be full employment if the same situation existed today, that was apparent then. For example, there is a good deal of discussion about the increased labor force participation of women. If you "corrected" for that increased labor force participation, and if you adjusted for the change in the number of young people coming into the labor market who are less experienced, less trained, and who therefore have higher unemployment rates, you could see what would happen.

I think that this kind of discussion is an extremely useful one in order for people to understand what goes into the basic policy judgments.

But the fact remains that we are faced with the structure of the labor force that exists today, and not a structure that existed many years ago. Those people who, like you, are in the position of having to make the policy judgment, I think, should certainly understand what are the effects or possible effects of some of the structural changes in the labor force, as well as, of course, the effects or possible effects of some of the welfare programs, unemployment insurance programs, so that you will be in a better position to make a judgment that is essentially based upon what is facing us today.

I sometimes feel concerned about this kind of discussion because it at times—not always, but at times—focuses on what should be today as if today were like yesterday.

But we are faced with the particular situation of today. I think that the great deal of work done in this area is extremely useful so that we can better understand this situation.

But nevertheless, we do have a larger number of teenagers; we do have a lot of women in the labor force today; we do have certain social insurance programs that the country has felt it wanted to have. Those certainly must be factored into any policy decision on what a full employment-unemployment rate is.

Senator JAVITS. Ms. Norwood, I think that makes sense to me. I believe that we are undergoing a review as to what full employment is, full employment being defined as that rate of employment which is

acceptable to society as representing a situation in which society performs credibly, effectively, and efficiently.

I believe that what you have just described is a contribution to what ultimately should be defined as our policy definitions of "What is full employment?"

We need to know what factors Senators and Congressmen should consider as the elements of a new definition of full employment.

Ms. NORWOOD. I am sure you are aware that the President has appointed a commission to review the concepts and the basic definitions of employment and unemployment statistics. That commission is now at work, and they are considering many of the kinds of questions you are raising.

I certainly would be glad to discuss this with the chairman, Mr. Levitan, to see if there is something he can give you.

Senator JAVITS. I am a member of that Commission myself. Thank you. A good definition of full employment that we could all agree on, that would be quite an achievement. I wish you well on it.

Senator SPARKMAN. Senator Bentzen, I apologize for being late. I went down to a meeting that the President had this morning relative to "Who is going to grow enough to feed the people in this country." I think it fits in with this.

But you are optimistic, aren't you?

Ms. NORWOOD. I am always optimistic.

Senator SPARKMAN. Good. So am I.

In fact, sometimes I think I am too much. But I think it is the best way to be.

I am sorry I wasn't here for your testimony. I have not had an opportunity to read your statement.

But with reference to employment, unemployment, job opportunities and so forth, do you see a good future? When I say future, I mean 1978, going into 1979.

Ms. NORWOOD. As you know, Senator, we try to explain what has been happening. I think it is very clear that over the past year, there has been considerable improvement in labor market conditions.

Unemployment has been reduced. Employment has grown. The economy has employed an additional 3½ million workers in the last year, which is really a phenomenal number.

I think that policies are being developed to try to see to it that that kind of job creation and reduction in unemployment continues. Time will tell. Whatever happens, the Bureau of Labor Statistics certainly will report on the facts.

Senator BENTSEN. Ms. Norwood, we appreciate very much your presentation, and the manner in which you make it all understandable for us all. The committee stands adjourned.

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

EMPLOYMENT-UNEMPLOYMENT

FRIDAY, OCTOBER 6, 1978

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

The committee met, pursuant to notice, at 10 a.m., in room 6226, Dirksen Senate Office Building, Hon. Lloyd Bentsen (vice chairman of the committee) presiding.

Present: Senators Bentsen and Sparkman.

Also present: John M. Albertine, William R. Buechner, M. Catherine Miller, and George R. Tyler, professional staff members; and Mark R. Policinski, minority professional staff member.

OPENING STATEMENT OF SENATOR BENTSEN, VICE CHAIRMAN

Senator BENTSEN. The hearing will come to order.

The news on unemployment today is really a mixed bag. Unemployment rose slightly, but so did employment.

Today's unemployment figures, however, really pale by comparison with the terrible news released yesterday on the Producer Price Index. The 11.4 percent annual rate means we can be back to double-digit inflation soon.

For years the common wisdom here in Washington seemed to be that the only way to keep our economy in the pink was to run the Government in the red. Well, America's consumers are paying the price today for that kind of thinking.

I don't think there should be any doubt left in anybody's mind that the rising cost of living today is the No. 1 problem our country faces. I am pleased to see that the President fully concurs with that one.

The inflation figures looked pretty good in July and August, and that 2-month respite may have lulled some people into complacency about the situation. But anyone who studied the underlying factors was not deceived.

Congress has to face up to the problem. We are going to have to keep cutting away at the deficit until the budget is balanced if we expect to hold down the rising cost of living.

It won't be easy. It was a real struggle in Congress to cut the deficit from the $60.2 billion that was estimated in the President's January budget to just under $39 billion. Try to imagine, just a few years ago, bragging about holding down the deficit to $39 billion. It seems like everything has been put under Federal control except the national debt and the budget.

Acting Commissioner Norwood, I know you will put today's unemployment figures in perspective for us. I hope, though, that you and your colleagues will give us some analysis of the inflation problem as well. We are all looking for the silver lining somewhere in the dark cloud called the Producer Price Index for September.

Please proceed, Ms. Norwood.

STATEMENT OF HON. JANET L. NORWOOD, ACTING COMMISSIONER, BUREAU OF LABOR STATISTICS, DEPARTMENT OF LABOR, ACCOMPANIED BY W. JOHN LAYNG, ASSISTANT COMMISSIONER, OFFICE OF PRICES AND LIVING CONDITIONS; AND ROBERT L. STEIN, ASSISTANT COMMISSIONER, OFFICE OF CURRENT EMPLOYMENT ANALYSIS

Ms. NORWOOD. Thank you, Senator. I would like, first, to introduce our employment expert, Mr. Stein, and our price expert, John Layng.

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

The Nation's unemployment rate was 6 percent in September. The rate has been at or close to the 6-percent level throughout most of 1978. Total employment, as measured by the household survey, rose over the month, returning to its June level.

However, employment in the establishment survey showed little change over the month. Payroll employment was about 100,000 above the June level. This contrasts with a job expansion of about 3 million during the preceding 9-month period from September to June. In September, the only significant change among the industry sectors was a decline in State and local government jobs. The average weekly hours of production of nonsupervisory workers, both in manufacturing and in the total private economy, remained at August levels and were 0.1 hour below the June levels.

The index of aggregate weekly hours in private nonagricultural industry was 120.5 in September, about the same as in June. Aggregate hours in manufacturing were up slightly from August, but were still below the levels reached late in the spring.

I would like to call the committee's attention to the fact that the establishment survey data included in our release this month have been revised to reflect more complete counts of employment—benchmarks—the new industry definitions used in the 1972 Standard Industrial Classification (SIC), and updated seasonal adjustment factors. This marks the first complete benchmark revision in 3 years and the first major industry reclassification since the 1957 SIC was introduced 17 years ago.

COMPARISONS FROM A YEAR AGO

During the past year—September to September—the Nation experienced unusually large employment gains in the nonagricultural sector of well over 3 million—3.5 million in the household survey, and 3.2 million in the establishment survey. Nearly all of this overall gain took place prior to the third quarter of 1978. The payroll survey has

shown stable employment since June in the goods-producing industries and slower growth than earlier in the year in the service-producing industries.

The unemployment figures also improved considerably over the year. Unemployment dropped sharply between September 1977 and February 1978, although since that time the rate has fluctuated around the 6-percent mark. There were about 650,000 fewer jobless persons in September 1978 than a year earlier; the employment-population ratio increased nearly 1.5 percentage points; the overall unemployment rate dropped from 6.8 to 6.0; and jobless rates were below those of a year ago for nearly all demographic and occupational groups in the labor force.

HISPANIC WORKERS

Recently the Bureau of Labor Statistics expanded its publication of data on Hispanic workers. Although the data are not yet available on a seasonally adjusted basis, quarterly data, which can be compared with data for the same quarter a year ago, are now available separately for persons of Mexican-American, Puerto Rican, and Cuban origin. The table uses these new data for the third quarters of 1978 and 1977 to compare the situation of Hispanic workers with that of white and black workers.

[The table referred to follows:]

	Unemployment rates		Employment-population ratios	
	III, 1977	III, 1978	III, 1977	III, 1978
Total Hispanic origin	9.5	9.2	56.9	57.8
Mexican origin	9.1	8.8	59.7	59.9
Cuban origin	6.8	6.4	59.7	64.2
Puerto Rican origin	15.4	15.0	42.8	44.9
Total, all groups	6.8	5.9	58.7	60.2
White	5.9	5.1	59.5	60.8
Black	14.5	12.5	52.0	54.7

Note: Figures not seasonally adjusted.

Ms. NORWOOD. The figures indicate that the unemployment rate for Hispanic workers is about midway between that for white workers and for black workers. Although the employment of Hispanics has increased since last year, there has been virtually no over-the-year improvement in unemployment among Hispanic workers. Within the Hispanic group, workers of Puerto Rican origin have especially high unemployment rates and low employment-population ratios.

PRICES

In the price area, the most recent information we have are the Producer Price Indexes for September, which were released yesterday. Prices of finished goods at the producer level rose 0.9 percent, as finished food prices at the producer level rebounded sharply. The increase of 1.7 percent in September almost erased the July and August declines. The acceleration in the price indexes for all three stages of processing was caused primarily by a sharp upturn in food prices.

In the nonfood area, prices continued to increase for a broad range of products at the finished and intermediate stages of production, and prices turned up for crude nonfood materials following August's decline. Crude nonfood material prices have increased 11 out of the last 12 months and are running 15 percent above a year ago. Some of these increases are being reflected in both nonfood intermediate and finished goods.

For the third quarter as a whole, prices of nonfood semifinished good increased at a rate of 7.3 percent, up from the second quarter rate of 6 percent. Prices of finished goods other than foods are running 7.6 percent above a year ago. This is a full percent above the 1977 increase and 2 percentage points above 1976's rate of 5.5 percent.

At the retail level, the most recent data available are for August, which showed the CPI to be running 7.9 percent above a year ago. Retail food prices were up 10.1 percent, other commodities 6.1 percent, and consumer services 8.7 percent.

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

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

UNEMPLOYMENT RATES 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 procedures used in 1976–77	Unemployed all multiplicative	Unemployed all additive	Year ahead	Concurrent		Stable		Total	Residual		
							1st 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	7.6	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	7.8	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	7.5	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	7.2	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	7.2	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	.2
May	5.5	6.1	6.1	6.1	6.0	6.1	6.0	6.1	6.2	6.2	6.1	6.1	6.2	.2
June	6.2	5.7	5.7	5.8	5.7	5.7	5.8	5.8	5.7	5.7	5.8	5.8	5.8	.1
July	6.3	6.2	6.2	6.2	6.2	6.2	6.1	6.1	6.1	6.1	6.2	6.1	6.2	.1
August	5.8	5.9	6.0	6.0	6.0	5.9	5.9	5.9	5.9	5.9	6.0	6.1	6.0	.2
September	5.7	6.0	6.0	6.0	6.1	6.0	5.9	5.9	5.8	5.9	6.1	6.1	6.0	.3
October														
November														
December														

See footnotes on following page.

EXPLANATION OF COLUMN HEADS

(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 yr 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 col. (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	July	101.2
February	112.6	August	97.6
March	106.7	September	96.6
April	96.5	October	92.6
May	90.1	November	95.3
June	106.2	December	93.

(3) Official procedures 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 yr 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 yr 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 ½ of the difference from the previous year—is then computed for each of the 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 procedure 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) Range 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.

Source: U.S. Department of Labor, Bureau of Labor Statistics, Oct. 6, 1978

[Press release No. 78–833, Bureau of Labor Statistics, Department of Labor, Washington, D.C., Oct. 6, 1978]

THE EMPLOYMENT SITUATION: SEPTEMBER 1978

Unemployment was virtually unchanged in September, the Bureau of Labor Statistics of the U.S. Department of Labor reported today. The Nation's overall unemployment rate was 6.0 percent, not much different from the 5.9 percent in August; the number of unemployed persons totaled 6 million in each month.

Total employment—as measured by the monthly survey of households—advanced by 290,000 in September to 94.9 million, whereas nonfarm payroll employment—as measured by the monthly survey of establishments—was about unchanged at 86.1 million. Although the two surveys often register different over-the-month movements, they tend to be more consistent over longer periods. Thus, the September employment levels in both the household and payroll surveys were little changed from June, and were up 3.5 and 3.2 million, respectively, over the year.

The establishment data included in this release reflect revisions based on March 1977 benchmarks, the conversion to the 1972 Standard Industrial Classification system, and new seasonal adjustment factors. (See the explanatory note on page 2419.)

Unemployment

The overall number of unemployed—6 million—and the jobless rate—6.0 percent—were virtually unchanged from August, continuing the pattern of narrow fluctuations around these levels since early in 1978. There has been a fairly substantial drop in unemployment over the past year, however.

The unemployment rate for adult women (6.0 percent) and adult men (4.0 percent) also were little changed from August, while the teenage rate posted an increase to 16.6 percent. Though still considerably below the year-ago level, teenage joblessness was up from the summer when their rate averaged 15.4 percent. Little change occurred in September for most other worker categories, including black and white workers, full- and part-time workers, and nearly all occupational and industry groups. (See table A–2.)

A decline in the number of unemployed who had lost their last job was countered by an increase among those reentering the labor force following a period of absence. The average (mean) duration of unemployment edged up by about one-half week in September to 11.6 weeks but was 2.3 weeks below the average duration of a year ago. Approximately one-half of the unemployed had been looking for work for 6 weeks or less. (See tables A–4 and A–5.)

Total employment and the labor force

The number of employed persons increased by 290,000 in September to 94.9 million. A substantial increase in the number of adult women with jobs accounted for the bulk of the increase. The only major demographic group that experienced a decline in employment was teenagers, as an unusually large number of specially created summer jobs ended coincident with the beginning of the new school year. Thus, teenage employment returned to the May level but still showed considerable improvement from a year earlier.

The proportion of the population that is employed was 58.7 percent in September, little changed from August but well above the year-ago level. (See table A–1.)

The civilian labor force was 100.9 million in September, up 320,000 from August and 2.9 million from a year ago (after adjustment; see box on table A–1). As with the employment changes, adult women accounted for most of the labor force increase, and, for the first time ever, more than half of their population were working or seeking work. The overall civilian labor force participation rate was 63.3 percent in September, back to the all-time high attained in June and July.

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 unemployed. These data are published on a quarterly basis.

TABLE A.—MAJOR INDICATORS OF LABOR MARKET ACTIVITY, SEASONALLY ADJUSTED

Selected categories	Quarterly averages					Monthly data, 1978		
	1977		1978					
	III	IV	I	II	III	July	August	September
HOUSEHOLD DATA								
Thousands of persons								
Civilian labor force	97,559	98,622	99,205	100,206	100,679	100,618	100,549	100,870
Total employment	90,823	92,069	93,050	94,244	94,625	94,425	94,581	94,868
Unemployment	6,736	6,554	6,155	5,962	6,054	6,193	5,968	6,002
Not in labor force	59,205	58,777	58,799	58,399	58,556	58,414	58,677	58,577
Discouraged workers	1,067	969	903	842	891	[1]	[1]	[1]
Percent of labor force								
Unemployment rates:								
All workers	6.9	6.6	6.2	5.9	6.0	6.2	5.9	6.0
Adult men	5.0	4.8	4.6	4.1	4.1	4.1	4.1	4.0
Adult women	7.0	6.8	5.9	6.1	6.2	6.5	6.1	6.0
Teenagers	17.6	16.7	16.9	15.9	16.2	16.3	15.6	16.6
White	6.1	5.8	5.4	5.1	5.2	5.3	5.2	5.3
Black and other	13.6	13.3	12.3	12.0	11.8	12.5	11.7	11.2
Full-time workers	6.5	6.2	5.7	5.4	5.6	5.7	5.5	5.5
ESTABLISHMENT DATA								
Thousands of jobs								
Nonfarm payroll employment	82,677	83,489	84,262	85,677	[2] 86,101	86,033	[2] 86,164	[2] 86,106
Goods-producing industries	24,417	24,583	24,766	25,376	[2] 25,465	25,501	[2] 25,453	[2] 25,442
Service-producing industries	58,260	58,906	59,495	60,302	[2] 60,636	60,532	[2] 60,711	[2] 60,664
Hours of work								
Average weekly hours:								
Total private nonfarm	35.9	36.0	35.7	36.0	[2] 35.8	35.9	[2] 35.8	[2] 35.8
Manufacturing	40.3	40.5	40.2	40.6	[2] 40.4	40.5	[2] 40.4	[2] 40.4
Manufacturing overtime	3.4	3.6	3.6	3.6	[2] 3.6	3.6	[2] 3.5	[2] 3.6

[1] Not available.
[2] Preliminary.

The number of discouraged workers averaged nearly 900,000 in the third quarter, little changed from the second quarter after having declined since the last quarter of 1977. As has been the case in the past, approximately 70 percent of this number cited job-market factors as the reason for their discouragement. (See table A–8.)

Industry payroll employment

Nonagricultural payroll employment, at 86.1 million, was essentially unchanged from August and was about on a par with June and July levels as well. Additions to payrolls in September occurred in 54 percent of the 172 industries that comprise the BLS diffusion index of private nonagricultural employment. Nonfarm jobs have risen markedly over the past year, however, posting an increase of 3.2 million. (See tables B–1 and B–6.)

There was comparatively little employment change in manufacturing between August and September. After posting substantial job gains in late 1977 and early 1978, factory employment growth has abated, as the job total has held about steady at 20.3 million over the last 6 months. Generally small gains in the durable goods industries during that period tended to be offset by equally small declines in nondurables. Over the past year, 535,000 jobs have been added to durable goods payrolls, whereas the nondurable goods industries have recorded job gains of only 35,000.

Employment in construction has also been about unchanged at 4.3 million since June, after having posted substantial gains during the first half of the year.

Likewise, growth in the service-producing sector has slowed considerably during the last 3 months. In September, the only movement of note occurred in State and local government where there was a decline of 85,000 employees, partially accounted for by a sizeable increase (23,000) in the number of persons on strike.

Hours

The average workweek for production or nonsupervisory workers on private nonagricultural payrolls was 35.8 hours in September; it has been at about this level since May. The manufacturing workweek, at 40.4 hours, was also unchanged over the month, while factory overtime edged up 0.1 hour to 3.6 hours; both have shown little movement over the last several months. (See table B–2.)

The index of aggregate weekly hours of production or nonsupervisory workers on private nonagricultural payrolls was little changed in September at 120.5 (1967=100). The overall index has increased by 3.6 percent from a year ago but has shown little movement since June. (See table B–5.)

Hours and weekly earnings

Average hourly earnings of production or nonsupervisory workers on private nonfarm payrolls advanced 0.5 percent in September and 8.3 percent from a year ago (seasonally adjusted). Average weekly earnings also increased 0.5 percent over the month. Since September 1977, weekly earnings have risen by 8.0 percent.

Before adjustment for seasonality, average hourly earnings rose a dime to $5.80, 45 cents above the level of last September. Average weekly earnings were $208.22, $1.88 above their August level and $15.08 higher than a year earlier. (See table B–3.)

Hourly earnings index

(The data usually presented in table B–4 and the analysis were not available in time for this release.)

Revisions in the establishment data

The establishment data published in the B tables of this release have been revised to conform to the industry definitions of the 1972 Standard Industrial Classification (SIC) Manual and to reflect employment benchmark levels (comprehensive counts of payroll employment) for March 1977. In addition, all seasonally-adjusted data have been revised, based on experience through May 1978. Because of these revisions, the data shown in the B tables are not comparable to those previously published. For a discussion of the effect of the SIC and benchmark revisions, see "BLS Establishment Estimates Revised to Reflect New Benchmark Levels and 1972 SIC," that will appear in the October issue of Employment and Earnings. Historical series of revised seasonally-adjusted data from the earliest dates of availability, together with the new seasonal factors for use in current adjustment, will also be included in this report.

Comparable historical data in available industry detail (not seasonally adjusted) for 1972 through June 1978 may be obtained on microfiche from the National Technical Information Service, U.S. Department of Commerce, 5285 Port Royal Road, Springfield, Virginia, 22161. When ordering please specify Employment and Earnings, United States, 1972–78, BLS, Bulletin 1312–11 (M). The price is $4.40 per set. The availability of additional historical data will be announced at a later date.

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 of 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 unemployment (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 May 1978.)

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 ob-

tained 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 mnoth'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 1977 levels.

One measure of the reliability of the employment estimates for individual industrial 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

TABLE A-1.—EMPLOYMENT STATUS OF THE NONINSTITUTIONAL POPULATION

[Numbers in thousands]

Employment status	Not seasonally adjusted			Seasonally adjusted					
	September 1977	August 1978	September 1978	September 1977	May 1978	June 1978	July 1978	August 1978	September 1978
TOTAL									
Total noninstitutional population [1]	159,114	161,348	161,570	159,114	160,713	160,928	161,178	161,348	161,570
Armed Forces [1]	2,131	2,122	2,123	2,131	2,113	2,098	2,116	2,112	2,123
Civilian noninstitutional population [1]	156,982	159,226	159,447	156,982	158,601	158,830	159,032	159,226	159,447
Civilian labor force	97,684	102,047	100,838	97,756	100,261	100,573	100,618	100,549	100,870
Participation rate	62.2	64.1	63.2	62.3	63.2	63.3	63.3	63.1	63.3
Employed	91,247	96,116	95,041	91,088	94,112	94,819	94,425	94,581	94,968
Employment-population ratio [2]	57.3	59.6	58.8	57.2	58.6	58.9	58.6	58.6	58.7
Agriculture	3,326	3,856	3,549	3,199	3,235	3,473	3,387	3,360	3,411
Nonagricultural industries	87,921	92,261	91,492	87,889	90,877	91,346	91,038	91,221	91,457
Unemployed	6,437	5,931	5,797	6,668	6,149	5,754	6,193	5,968	6,002
Unemployment rate	6.6	5.8	5.7	6.8	6.1	5.7	6.2	5.9	6.0
Not in labor force	59,299	57,179	58,609	59,226	58,340	58,257	58,414	58,677	58,577
Men, 20 yr and over									
Total noninstitutional population [1]	67,745	68,827	68,937	67,745	68,519	68,623	68,729	68,827	68,937
Civilian noninstitutional population [1]	66,056	67,127	67,236	66,056	66,845	66,947	67,039	67,127	67,236
Civilian labor force	52,528	53,903	53,584	52,366	53,414	53,522	53,391	53,306	53,387
Participation rate	79.5	80.3	79.7	79.3	79.9	79.9	79.6	79.4	79.4
Employed	50,374	51,887	51,709	49,888	51,182	51,433	51,213	51,135	51,229
Employment-population ratio [2]	74.4	75.4	75.0	73.6	74.7	75.0	74.5	74.3	74.3
Agriculture	2,406	2,525	2,512	2,320	2,328	2,437	2,420	2,358	2,422
Nonagricultural industries	47,969	49,362	49,197	47,568	48,854	48,996	48,793	48,777	48,807
Unemployed	2,154	2,015	1,875	2,478	2,232	2,089	2,178	2,171	2,158
Unemployment rate	4.1	3.7	3.5	4.7	4.2	3.9	4.1	4.1	4.0
Not in labor force	13,527	13,225	13,652	13,690	13,431	13,425	13,648	13,821	13,849
Women, 20 yr and over									
Total noninstitutional population [1]	74,543	75,753	75,873	74,543	75,412	75,527	75,643	75,753	75,873
Civilian noninstitutional population [1]	74,444	75,645	75,764	74,444	75,310	75,422	75,537	75,645	75,764
Civilian labor force	36,382	36,919	38,138	36,203	37,264	37,439	37,542	37,461	37,953
Participation rate	48.9	48.8	50.3	48.6	49.5	49.6	49.7	49.5	50.1

Employed	33,709	34,546	35,728	33,690	34,931	35,137	35,110	35,192	35,688
Employment-population ratio [2]	45.2	45.6	47.1	45.2	46.3	46.5	46.4	46.5	47.0
Agriculture	529	694	632	496	527	623	587	579	592
Nonagricultural industries	33,180	33,852	35,096	33,194	34,404	34,514	34,523	34,613	35,096
Unemployed	2,763	2,373	2,410	2,513	2,333	2,302	2,432	2,269	2,265
Unemployment rate	7.3	6.4	6.3	6.9	6.3	6.1	6.5	6.1	6.0
Not in labor force	38,062	38,726	37,626	38,241	38,046	37,983	37,995	38,184	37,811
Both sexes, 16–19 yr									
Total noninstitutional population [1]	16,825	16,768	16,760	16,825	16,782	16,779	16,776	16,768	16,760
Civilian noninstitutional population [1]	16,483	16,455	16,446	16,483	16,446	16,461	16,455	16,455	16,446
Civilian labor force	8,773	11,226	9,115	9,187	9,583	9,612	9,685	9,782	9,530
Participation rate	53.2	68.2	55.4	55.7	58.3	58.4	58.9	59.4	57.9
Employed	7,163	9,683	7,604	7,510	7,999	8,249	8,102	8,254	7,951
Employment-population ratio [2]	42.6	57.7	45.4	44.6	47.7	49.2	48.3	49.2	47.4
Agriculture	391	637	405	383	380	413	380	423	397
Nonagricultural industries	6,772	9,046	7,199	7,127	7,619	7,836	7,722	7,831	7,554
Unemployed	1,610	1,542	1,512	1,677	1,584	1,363	1,583	1,528	1,579
Unemployment rate	18.3	13.7	16.6	18.3	16.5	14.2	16.3	15.6	16.6
Not in labor force	7,710	5,229	7,331	7,296	6,863	6,849	6,770	6,673	6,916
WHITE									
Total noninstitutional population [1]	139,789	141,520	141,693	139,789	141,026	141,194	141,366	141,520	141,693
Civilian noninstitutional population [1]	138,046	139,817	139,990	138,046	139,317	139,503	139,660	139,817	139,990
Civilian labor force	86,382	89,773	88,803	86,407	88,209	88,623	88,521	88,672	88,813
Participation rate	62.6	64.2	63.4	62.6	63.3	63.5	63.4	63.4	63.4
Employed	81,394	85,256	84,325	81,203	83,590	84,270	83,862	84,042	84,141
Employment-population ratio [2]	58.2	60.2	59.5	58.1	59.3	59.7	59.3	59.3	59.4
Unemployed	4,988	4,517	4,478	5,204	4,619	4,353	4,659	4,630	4,672
Unemployment rate	5.8	5.0	5.0	6.0	5.2	4.9	5.3	5.2	5.3
Not in labor force	51,665	50,044	51,187	51,639	51,108	50,880	51,139	51,145	51,177
BLACK AND OTHER									
Total noninstitutional population [1]	19,325	91,828	19,876	19,325	19,687	19,734	19,782	19,828	19,876
Civilian noninstitutional population [1]	18,936	19,409	19,457	18,936	19,284	19,327	19,371	19,409	19,457
Civilian labor force	11,302	12,275	12,035	11,344	11,934	11,980	11,997	11,975	12,058
Participation rate	59.7	63.2	61.9	59.9	61.9	62.0	61.9	61.7	62.0
Employed	9,853	10,860	10,716	9,854	10,467	10,553	10,496	10,578	10,708
Employment-population ratio [2]	51.0	54.8	53.9	51.0	53.2	53.5	53.1	53.3	53.9
Unemployed	1,449	1,414	1,318	1,490	1,467	1,427	1,501	1,397	1,350
Unemployment rate	12.8	11.5	11.0	13.1	12.3	11.0	12.5	11.7	11.2
Not in labor force	7,634	7,134	7,422	7,592	7,350	7,347	7,374	7,434	7,399

[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).

Note: Household survey data for periods prior to January 1978 shown in tables A–1 through A–8 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.

TABLE A-2.—MAJOR UNEMPLOYMENT INDICATORS, SEASONALLY ADJUSTED

Selected categories	Number of unemployed persons (In thousands)		Unemployment rates					
	Sept. 1977	Sept. 1978	Sept. 1977	May 1978	June 1978	July 1978	Aug. 1978	Sept. 1978
CHARACTERISTICS								
Total, 16 yr and over	6,668	6,002	6.8	6.1	5.7	6.2	5.9	6.0
Men, 20 yr and over	2,478	2,158	4.7	4.2	3.9	4.1	4.1	4.0
Women, 20 yr and over	2,513	2,625	6.9	6.3	6.1	6.5	6.1	6.0
Both sexes, 16 to 19 yr	1,677	1,579	18.3	16.5	14.2	16.3	15.6	16.6
White, total	5,204	4,672	6.0	5.2	4.9	5.3	5.2	5.3
Men, 20 yr and over	1,975	1,741	4.2	3.6	3.4	3.6	3.6	3.7
Women, 20 yr and over	1,927	1,716	6.2	5.4	5.3	5.6	5.3	5.3
Both sexes, 16 to 19 yr	1,302	1,215	15.8	13.8	11.6	13.4	13.6	14.3
Black and other, total	1,490	1,350	13.1	12.3	11.9	12.5	11.7	11.2
Men, 20 yr and over	558	474	10.5	8.8	7.8	8.4	9.0	8.3
Women, 20 yr and over	558	523	11.2	10.9	11.3	11.6	10.4	9.9
Both sexes, 16 to 19 yr	364	353	37.4	38.4	37.1	37.0	32.4	34.6
Married men, spouse present	1,316	1,080	3.3	2.9	2.7	2.7	2.8	2.7
Married women, spouse present	1,444	1,306	6.4	5.9	5.6	5.6	5.8	5.6
Women who head families	454	382	10.0	9.3	8.8	10.1	8.2	7.9
Full-time workers	5,336	4,733	6.4	5.6	5.2	5.7	5.5	5.5
Part-time workers	1,407	1,317	9.7	9.2	8.8	8.8	8.6	8.8
Unemployed 15 weeks and over [1]	1,834	1,293	1.9	1.4	1.2	1.3	1.2	1.3
Labor force time lost [2]			7.4	6.6	6.4	6.8	6.6	6.5
OCCUPATION [3]								
White-collar workers	2,012	1,740	4.2	3.6	3.5	3.8	3.5	3.5
Professional and technical	425	384	3.0	2.4	2.4	2.5	2.6	2.7
Managers and administrators, except farm	247	230	2.5	2.0	1.8	2.2	1.8	2.2
Sales workers	308	268	5.1	4.4	4.4	4.4	4.2	4.4
Clerical workers	1,032	858	6.0	5.3	5.0	5.4	5.0	4.7
Blue-collar workers	2,575	2,393	7.8	6.6	6.5	6.9	7.0	7.0
Craft and kindred workers	651	624	5.1	4.3	4.2	4.0	4.4	4.7
Operatives, except transport	1,131	1,009	9.9	8.4	7.9	8.5	9.0	8.5
Transport equipment operatives	214	197	5.7	5.9	4.6	6.1	5.9	5.2
Nonfarm laborers	579	563	11.3	8.7	9.9	10.6	9.5	10.7
Service workers	1,077	1,024	7.9	7.6	7.2	7.5	7.1	7.4
Farm workers	133	119	4.7	3.6	3.0	3.8	3.3	4.0
INDUSTRY [3]								
Nonagricultural private wage and salary workers [4]	4,800	4,369	6.8	5.9	5.6	6.0	5.9	5.9
Construction	453	532	10.4	9.2	9.3	9.5	9.1	10.7
Manufacturing	1,521	1,230	7.0	5.6	5.6	5.6	5.7	5.5
Durable goods	819	655	6.4	5.0	4.8	5.1	5.5	5.0
Nondurable goods	702	575	7.9	6.4	6.7	6.4	5.9	6.3
Transportation and public utilities	245	195	4.8	3.8	3.7	4.1	3.8	3.6
Wholesale and retail trade	1,374	1,237	7.6	6.8	6.3	6.8	6.6	6.8
Finance and service industries	1,182	1,126	5.7	5.3	4.7	5.4	5.2	5.1
Government workers	651	611	4.1	4.1	4.0	4.1	3.6	3.8
Agricultural wage and salary workers	156	135	10.4	7.7	8.0	10.1	8.3	8.6
VETERAN STATUS								
Male Vietnam era veterans: [5]								
20 to 34 yr	483	302	7.4	4.0	4.3	5.1	6.3	4.9
20 to 24 yr	177	65	18.9	6.9	9.4	11.4	13.9	10.5
25 to 29 yr	174	157	6.1	5.5	5.3	6.4	7.3	7.3
30 to 34 yr	132	80	4.8	2.3	2.6	2.9	4.1	2.4
Male nonveterans:								
20 to 34 yr	1,137	976	7.1	5.9	5.5	5.9	5.8	5.8
20 to 24 yr	656	592	9.4	7.7	7.9	8.4	8.1	8.2
25 to 29 yr	295	245	5.9	4.8	3.8	4.4	4.8	4.2
30 to 34 yr	186	139	4.7	3.9	3.7	3.3	2.7	3.6

[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 Aug. 5, 1964, and May 7, 1975.

TABLE A-3.—SELECTED EMPLOYMENT INDICATORS

[In thousands]

Selected categories	Not seasonally adjusted		Seasonally adjusted					
	Sept. 1977	Sept. 1978	Sept. 1977	May 1978	June 1978	July 1978	Aug. 1978	Sept. 1978
CHARACTERISTICS								
Total employed, 16 yrs and over	91,247	95,041	91,088	94,112	94,819	94,425	94,581	94,868
Men	54,256	55,788	53,964	55,446	55,869	55,534	55,529	55,504
Women	36,991	39,253	37,124	38,666	38,950	38,891	39,052	39,364
Married men, spouse present	38,780	39,191	38,338	38,626	38,711	38,642	38,467	38,726
Married women, spouse present	21,423	22,419	21,185	21,694	21,718	21,766	21,667	22,175
OCCUPATION								
White-collar workers	45,361	47,299	45,493	46,895	47,209	47,192	47,236	47,455
Professional and technical	13,873	14,204	13,778	14,399	14,365	14,239	14,255	14,105
Managers and administrators, except farm	9,865	10,177	9,747	9,933	10,107	10,182	10,174	10,056
Sales workers	5,714	5,843	5,741	5,911	5,931	6,017	5,872	5,872
Clerical workers	15,909	17,074	16,227	16,652	16,806	16,754	16,935	17,422
Blue-collar workers	30,656	32,089	30,324	31,544	31,683	31,225	31,482	31,738
Craft and kindred workers	12,046	12,703	11,992	12,218	12,467	12,229	12,559	12,640
Operatives, except transport	10,415	11,007	10,239	10,846	11,006	10,841	10,702	10,823
Transport equipment operatives	3,562	3,606	3,533	3,534	3,512	3,452	3,404	3,577
Nonfarm laborers	4,633	4,773	4,560	4,946	4,698	4,703	4,817	4,698
Service workers	12,431	12,668	12,556	12,883	12,993	12,838	12,884	12,799
Farm workers	2,798	2,985	2,695	2,698	2,895	2,802	2,809	2,874
MAJOR INDUSTRY AND CLASS OF WORKER								
Agriculture:								
Wage and salary workers	1,443	1,555	1,339	1,434	1,482	1,364	1,423	1,442
Self-employed workers	1,596	1,680	1,572	1,573	1,669	1,652	1,617	1,655
Unpaid family workers	287	315	272	255	336	348	317	298
Nonagricultural industries:								
Wage and salary workers	81,364	84,854	81,363	84,049	84,513	84,016	84,406	84,842
Government	15,158	15,259	15,304	15,203	15,224	15,129	15,282	15,413
Private industries	66,205	69,595	66,059	68,846	69,289	68,887	69,124	69,429
Private households	1,406	1,373	1,403	1,393	1,368	1,394	1,369	1,370
Other industries	[1] 64,799	68,222	64,656	67,453	67,921	67,493	67,755	68,059
Self-employed workers	6,060	6,175	6,084	6,288	6,198	6,206	6,221	6,200
Unpaid family workers	497	463	505	520	468	496	440	471
PERSONS AT WORK[2]								
Nonagricultural industries	83,472	87,028	82,783	85,528	86,051	86,205	86,469	86,310
Full-time schedules	68,857	72,003	67,817	70,157	70,861	71,095	71,338	70,939
Part time for economic reasons	3,025	2,958	3,306	3,243	3,458	3,330	3,294	3,231
Usually work full time	1,155	1,217	1,244	1,211	1,433	1,385	1,391	1,311
Usually work part time	1,870	1,741	2,062	2,032	2,025	1,945	1,903	1,920
Part time for noneconomic reasons	11,590	12,067	11,660	12,128	11,732	11,780	11,837	12,140

[1] Corrected.

[2] 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					
	Sept. 1977	Sept. 1978	Sept. 1977	May 1978	June 1978	July 1978	Aug. 1978	Sept. 1978
DURATION								
Less than 5 weeks	3,101	3,104	2,784	2,932	2,727	3,025	2,822	2,786
5 to 14 weeks	1,793	1,606	2,152	1,803	1,916	1,854	1,988	1,928
15 weeks and over	1,543	1,087	1,834	1,358	1,231	1,292	1,215	1,293
15 to 26 weeks	691	528	908	680	651	665	631	687
27 weeks and over	852	558	926	678	580	627	584	606
Average (mean) duration, in weeks	13.1	10.8	14.0	12.1	12.0	11.8	11.2	11.6
Median duration, in weeks	5.5	4.7	6.9	5.2	5.8	5.9	6.0	5.9
PERCENT DISTRIBUTION								
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 5 weeks	48.2	53.6	41.1	48.1	46.4	49.0	46.8	46.4
5 to 14 weeks	27.9	27.7	31.8	29.6	32.6	30.0	33.0	32.1
15 weeks and over	24.0	18.7	27.1	22.3	21.0	20.9	20.2	21.5
15 to 26 weeks	10.7	9.1	13.4	11.2	11.1	10.8	10.5	11.4
27 weeks and over	13.2	9.6	13.7	11.1	9.9	10.2	9.7	10.1

TABLE A-5.—REASONS FOR UNEMPLOYMENT

[Numbers in thousands]

Reasons	Not seasonally adjusted		Seasonally adjusted					
	Sept. 1977	Sept. 1978	Sept. 1977	May 1978	June 1978	July 1978	Aug. 1798	Sept. 1978
NUMBER OF UNEMPLOYED								
Lost last job	2,518	1,975	3,055	2,577	2,340	2,552	2,553	2,397
On layoff	595	505	847	683	606	714	770	719
Other job losers	1,923	1,470	2,208	1,894	1,734	1,838	1,783	1,678
Left last job	1,001	982	869	819	849	869	841	852
Reentered labor force	2,010	2,062	1,879	1,772	1,760	1,883	1,733	1,927
Seeking first job	908	778	935	901	810	880	893	805
PERCENT DISTRIBUTION								
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Job losers	39.1	34.1	45.3	42.5	40.6	41.3	42.4	40.1
On layoff	9.2	8.7	12.6	11.3	10.5	11.5	12.8	12.0
Other job losers	29.9	25.4	32.8	31.2	30.1	29.7	29.6	28.1
Job leavers	15.5	16.9	12.9	13.5	14.7	14.1	14.0	14.2
Reentrants	31.2	35.6	27.9	29.2	30.6	30.4	28.8	32.2
New entrants	14.1	13.4	13.9	14.8	14.1	14.2	14.8	13.5
UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE								
Job losers	2.6	2.0	3.1	2.6	2.3	2.5	2.5	2.4
Job leavers	1.0	1.0	.9	.8	.8	.9	.8	.8
Reentrants	2.1	2.0	1.9	1.8	1.8	.19	1.7	1.9
New entrants	.9	.8	1.0	.9	.8	.9	.9	.8

TABLE A-6.—UNEMPLOYMENT BY SEX AND AGE, SEASONALLY ADJUSTED

Sex and age	Number of unemployed persons (in thousands)		Unemployment rates					
	Sept. 1977	Sept. 1978	Sept. 1977	May 1978	June 1978	July 1978	Aug. 1978	Sept. 1978
Total, 16 yr and over	6,668	6,002	6.8	6.1	5.7	6.2	5.9	6.0
16 to 19 yr	1,677	1,579	18.3	16.5	14.2	16.3	15.6	16.6
16 to 17 yr	771	779	19.8	19.3	16.7	20.1	18.9	19.2
18 to 19 yr	892	785	16.7	14.5	12.9	13.6	13.3	14.3
20 to 24 yr	1,553	1,400	10.7	9.0	9.2	9.9	9.0	9.3
25 yr and over	3,502	3,081	4.7	4.2	3.9	4.2	4.2	4.0
25 to 54 yr	2,887	2,572	4.8	4.5	4.1	4.4	4.4	4.2
55 yr and over	588	487	4.1	3.2	3.1	3.2	3.0	3.3
Men, 16 yr and over	3,354	2,961	5.9	5.1	4.7	5.1	5.0	5.1
16 to 19 yr	876	803	17.7	15.3	12.6	15.4	14.7	15.8
16 to 17 yr	408	416	19.2	18.4	16.1	18.8	17.7	19.1
18 to 19 yr	450	368	15.8	12.9	11.3	13.0	12.4	12.6
20 to 24 yr	819	692	10.4	7.9	8.1	8.9	8.7	8.6
25 yr and over	1,724	1,523	3.9	3.5	3.1	3.3	3.4	3.4
25 to 54 yr	1,360	1,241	3.8	3.6	3.2	3.3	3.5	3.4
55 yr and over	342	269	3.9	3.3	3.0	3.4	2.9	3.0
Women, 16 yr and over	3,314	3,041	8.2	7.5	7.2	7.7	7.2	7.2
16 to 19 yr	801	776	18.9	17.9	16.0	17.4	16.7	17.4
16 to 17 yr	363	363	20.6	20.3	17.4	21.6	20.3	19.3
18 to 19 yr	442	417	17.7	16.1	14.8	14.4	14.4	16.1
20 to 24 yr	734	708	11.0	10.3	10.4	11.0	9.2	10.1
25 yr and over	1,778	1,558	6.0	5.3	5.2	5.6	5.3	5.0
25 to 54 yr	1,527	1,331	6.4	5.8	5.6	6.0	5.8	5.3
55 yr and over	246	218	4.5	3.1	3.1	2.9	3.3	3.9

TABLE A-7.—RANGE OF UNEMPLOYMENT MEASURES BASED ON VARYING DEFINITIONS OF UNEMPLOYMENT AND THE LABOR FORCE, SEASONALLY ADJUSTED

[In percent]

Measures	Quarterly averages					Monthly data (1978)		
	1977		1978					
	III	IV	I	II	III	July	Aug.	Sept.
U-1—Persons unemployed 15 weeks or longer as a percent of the civilian labor force	1.9	1.9	1.6	1.3	1.3	1.3	1.2	1.3
U-2—Job losers as a percent of the civilian labor force	3.2	3.0	2.6	2.5	2.5	2.5	2.5	2.4
U-3—Unemployed persons 25 yr and over as a percent of the civilian labor force 25 yr and over	4.9	4.7	4.0	4.0	4.1	4.2	4.2	4.0
U-4—Unemployed full-time jobseekers as a percent of the full-time labor force	6.5	6.2	5.7	5.4	5.6	5.7	5.5	5.5
U-5—Total unemployed as a percent of the civilian labor force (official measure)	6.9	6.6	6.2	5.9	6.0	6.2	5.9	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	8.6	8.2	7.6	7.5	7.6	7.7	7.5	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	9.7	9.2	8.5	8.3	8.5	(1)	(1)	(1)

[1] Not available.

TABLE A-8.—PERSONS NOT IN THE LABOR FORCE BY SELECTED CHARACTERISTICS, QUARTERLY AVERAGES

[In thousands]

Characteristics	Not seasonally adjusted (III)		Seasonally adjusted					
			1977			1978		
	1977	1978	II	III	IV	I	II	III
Total not in labor force	58,074	57,394	58,941	59,205	58,777	58,799	58,399	58,556
Do not want a job now	52,625	52,276	53,263	53,213	53,207	53,789	53,294	52,724
Want a job now	5,448	5,117	5,739	5,936	5,581	5,448	5,281	5,526
Discouraged workers	1,096	905	1,062	1,067	969	903	842	891
Job-market factors [1]	734	627	739	747	630	621	537	646
Personal factors [2]	363	277	323	320	339	282	305	245
Men	385	319	310	360	306	352	298	301
Women	711	587	753	707	662	550	544	590
White	736	598	732	735	726	640	576	607
Black and other	360	306	298	329	248	274	249	288

[1] Job market factors included "could not find job" and "thinks no job availabe."
[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 FOR TEN LARGE STATES

[Numbers in thousands]

State and employment status	Not seasonally adjusted*	Seasonally adjusted					
	Sept. 1977	Aug. 1978	Sept. 1978	Sept. 1977	May 1978	June 1978	July 1978	Aug. 1978	Sept. 1978
CALIFORNIA									
Civilian noninstitutional population [1]	16,005	16,283	16,312	16,005	16,202	16,232	16,259	16,283	16,312
Civilian labor force	10,171	10,691	10,632	10,207	10,615	10,544	10,561	10,586	10,667
Employed	9,395	9,947	9,954	9,389	9,802	9,783	9,742	9,807	9,948
Unemployed	777	745	678	818	813	761	819	779	719
Unemployment rate	7.6	7.0	6.4	8.0	7.7	7.2	7.8	7.4	6.7
FLORIDA									
Civilian noninstitutional population [1]	6,398	6,585	6,605	6,398	6,533	6,552	6,569	6,585	6,605
Civilian labor force	3,575	3,713	3,807	(2)	(2)	(2)	(2)	(2)	(2)
Employed	3,299	3,468	3,518	(2)	(2)	(2)	(2)	(2)	(2)
Unemployed	276	245	290	(2)	(2)	(2)	(2)	(2)	(2)
Unemployment rate	7.7	6.6	7.6	(2)	(2)	(2)	(2)	(2)	(2)
ILLINOIS									
Civilian noninstitutional population [1]	8,173	8,230	8,236	8,173	8,212	8,219	8,224	8,230	8,236
Civilian labor force	5,241	5,427	5,335	5,261	5,347	5,321	5,289	5,377	5,353
Employed	4,936	5,102	5,063	4,933	4,969	5,044	4,975	5,052	5,060
Unemployed	305	325	272	328	378	277	314	325	293
Unemployment rate	5.8	6.0	5.1	6.2	7.1	5.2	5.9	6.0	5.5
MASSACHUSETTS									
Civilian noninstitutional population [1]	4,304	4,343	4,347	4,304	4,331	4,335	4,339	4,343	4,347
Civilian labor force	2,801	2,905	2,814	(2)	(2)	(2)	(2)	(2)	(2)
Employed	2,546	2,710	2,651	2,574	2,662	2,690	2,691	2,670	2,679
Unemployed	255	195	162	(2)	(2)	(2)	(2)	(2)	(2)
Unemployment rate	9.1	6.7	5.8	(2)	(2)	(2)	(2)	(2)	(2)
MICHIGAN									
Civilian noninstitutional population [1]	6,567	6,637	6,644	6,567	6,615	6,624	6,630	6,637	6,644
Civilian labor force	4,126	4,199	4,182	(2)	(2)	(2)	(2)	(2)	(2)
Employed	3,818	3,862	3,940	(2)	(2)	(2)	(2)	(2)	(2)
Unemployed	308	337	242	346	287	276	289	348	280
Unemployment rate	7.5	8.0	5.8	(2)	(2)	(2)	(2)	(2)	(2)
NEW JERSEY									
Civilian noninstitutional population [1]	5,424	5,473	5,478	5,424	5,458	5,464	5,468	5,473	5,478
Civilian labor force	3,395	3,502	3,526	3,412	3,363	3,374	3,385	3,418	3,544
Employed	3,084	3,266	3,275	3,091	3,101	3,128	3,127	3,177	3,282
Unemployed	311	236	252	321	262	246	258	241	262
Unemployment rate	9.2	6.7	7.1	9.4	7.8	7.3	7.6	7.1	7.4
NEW YORK									
Civilian noninstitutional population [1]	13,309	13,341	13,347	13,309	13,238	13,334	13,339	13,341	13,347
Civilian labor force	7,651	8,026	7,850	7,691	7,815	7,784	7,792	7,857	7,888
Employed	6,968	7,442	7,247	6,996	7,165	7,211	7,200	7,257	7,275
Unemployed	683	584	603	695	650	573	592	600	613
Unemployment rate	8.9	7.3	7.7	9.0	8.3	7.4	7.6	7.6	7.8
OHIO									
Civilian noninstitutional population [1]	7,794	7,849	7,856	7,794	7,832	7,838	7,844	7,849	7,856
Civilian labor force	4,874	5,012	5,031	4,881	4,883	4,875	4,930	4,891	5,038
Employed	4,579	4,751	4,758	4,569	4,603	4,634	4,654	4,627	4,748
Unemployed	295	261	273	312	280	241	276	264	290
Unemployment rate	6.1	5.2	5.4	6.4	5.7	4.9	5.6	5.4	5.8
PENNSYLVANIA									
Civilian noninstitutional population [1]	8,828	8,878	8,885	8,828	8,861	8,868	8,874	8,878	8,885
Civilian labor force	5,184	5,316	5,273	5,215	5,189	5,221	5,284	5,248	5,305
Employed	4,792	4,968	4,900	4,791	4,853	4,919	4,893	4,897	4,899
Unemployed	392	347	373	424	336	302	391	351	406
Unemployment rate	7.6	6.5	7.1	8.1	6.5	5.8	7.4	6.7	7.7
TEXAS									
Civilian noninstitutional population [1]	9,045	9,233	9,251	9,045	9,179	9,198	9,215	9,233	9,251
Civilian labor force	5,783	6,041	5,936	5,775	6,003	5,994	5,989	5,979	5,928
Employed	5,467	5,736	5,651	5,465	5,730	5,719	5,690	5,684	5,648
Unemployed	315	306	285	310	273	275	299	295	280
Unemployment rate	5.5	5.1	4.8	5.4	4.5	4.6	5.0	4.9	4.7

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

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

[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.

[In thousands]

Industry	Not seasonally adjusted				Seasonally adjusted					
	September 1977	July 1978	August 1978 [1]	September 1978 [1]	September 1977	May 1978	June 1978	July 1978	August 1978 [1]	September 1978 [1]
Total	83,452	85,925	86,155	86,618	82,973	85,618	85,996	86,033	86,164	86,106
Goods-producing	25,057	25,712	25,994	26,088	24,441	25,341	25,473	25,501	25,453	25,442
Mining	837	900	901	892	830	869	879	882	886	885
Construction	4,157	4,572	4,630	4,561	3,896	4,175	4,278	4,317	4,295	4,275
Manufacturing	20,063	20,240	20,463	20,635	19,715	20,297	20,316	20,302	20,272	20,282
Production workers	14,464	14,476	14,672	14,876	14,141	14,603	14,596	14,569	14,525	14,541
Durable goods	11,798	12,111	12,166	12,334	11,637	12,093	12,109	12,138	12,143	12,167
Production workers	8,475	8,648	8,687	8,864	8,330	8,685	8,683	8,694	8,692	8,708
Lumber and wood products	750.0	769.1	773.7	762.5	730	745	747	743	743	742
Furniture and fixtures	473.6	473.8	484.7	487.4	465	489	486	485	481	479
Stone, clay, and glass products	689.1	713.1	710.7	707.5	672	700	701	698	690	690
Primary metal industries	1,191.5	1,205.0	1,206.9	1,226.5	1,182	1,197	1,197	1,199	1,203	1,217
Fabricated metal products	1,604.0	1,634.5	1,648.3	1,670.4	1,580	1,652	1,645	1,643	1,643	1,646
Machinery, except electrical	2,210.5	2,331.3	2,335.3	2,362.5	2,204	2,311	2,332	2,345	2,354	2,355
Electric and electronic equipment	1,901.4	1,957.4	1,973.4	1,996.3	1,881	1,952	1,962	1,977	1,975	1,975
Transportation equipment	1,905.4	1,927.3	1,910.8	1,988.3	1,868	1,942	1,929	1,937	1,943	1,949
Instruments and related products	620.7	658.4	663.0	666.0	620	649	654	660	662	665
Miscellaneous manufacturing	451.9	441.2	459.4	466.6	435	456	456	451	449	449
Nondurable goods	8,265	8,129	8,297	8,301	8,078	8,204	8,207	8,164	8,129	8,115
Production workers	5,989	5,828	5,985	6,012	5,811	5,918	5,913	5,875	5,833	5,833
Food and kindred products	1,827.9	1,720.5	1,783.1	1,789.0	1,700	1,701	1,702	1,688	1,666	1,664
Tobacco manufacturers	79.3	67.4	73.9	76.9	72	75	76	73	68	69
Textile mill products	918.7	893.9	907.4	913.1	912	913	908	909	900	907
Apparel and other textile products	1,329.7	1,263.6	1,316.4	1,327.5	1,313	1,326	1,325	1,307	1,309	1,310
Paper and allied products	701.1	710.7	705.3	701.5	695	709	709	710	698	695
Printing and publishing	1,146.2	1,183.2	1,190.2	1,182.6	1,145	1,180	1,186	1,187	1,191	1,181
Chemicals and allied products	1,078.0	1,097.8	1,101.6	1,093.2	1,073	1,093	1,091	1,091	1,091	1,088
Petroleum and coal products	206.7	213.7	213.7	211.9	204	207	209	207	208	209
Rubber and miscellaneous products	727.3	740.0	750.4	756.1	714	747	749	749	746	742
Leather and leather products	249.8	238.4	254.8	249.4	250	253	252	243	252	250
Service-producing	58,395	60,213	60,161	60,530	58,532	60,277	60,523	60,532	60,711	60,664
Transportation and public utilities	4,779	4,856	4,868	4,905	4,727	4,847	4,881	4,827	4,844	4,852
Wholesale and retail trade	18,756	19,469	19,521	19,597	18,672	19,336	19,412	19,469	19,525	19,509
Wholesale trade	4,750	4,930	4,930	4,936	4,736	4,885	4,905	4,901	4,905	4,921
Retail trade	14,006	14,539	14,591	14,661	13,936	14,450	14,507	14,568	14,620	14,588
Finance, insurance, and real estate	4,491	4,746	4,758	4,728	4,487	4,637	4,670	4,690	4,711	4,723
Services	15,473	16,213	16,233	16,137	15,442	15,896	15,963	15,989	16,072	16,104
Government	14,896	14,929	14,781	15,163	15,204	15,562	15,597	15,557	15,559	15,476
Federal	2,717	2,815	2,793	2,758	2,725	2,753	2,772	2,765	2,765	2,766
State and local	12,179	12,114	11,988	12,405	12,479	12,809	12,825	12,792	12,794	12,710

[1] Preliminary.

Note: Establishment data shown in tables B–1 through B–6 have been revised to conform to the 72 tandard Industrial Classification and adjusted to March 1977 benchmark levels; consequently, they are not comparable with previously published data. For a discussion of the effect of these revisions, see "BLS Establishment Estimates Revised to Reflect New Benchmark Levels and 1972 SIC." Employment and Earnings, 1978, vol. 25, No. 10.

TABLE B-2.—AVERAGE WEEKLY HOURS OF PRODUCTION OR NONSUPERVISORY WORKERS,[1] ON PRIVATE NONAGRICULTURAL PAYROLLS, BY INDUSTRY

Industry	Not seasonally adjusted				Seasonally adjusted					
	September 1977	July 1978	August 1978[2]	September 1978[2]	September 1977	May 1978	June 1978	July 1978	August 1978[2]	September 1978[2]
Total, private	36.1	36.3	36.2	35.9	35.9	35.9	35.9	35.9	35.8	35.8
Mining	44.1	43.2	43.0	43.1	43.6	43.4	43.4	43.0	43.2	42.6
Construction	36.7	38.2	37.9	37.4	36.2	36.6	37.3	37.3	37.1	36.9
Manufacturing	40.7	40.3	40.4	40.7	40.3	40.4	40.5	40.5	40.4	40.4
Overtime hours	3.8	3.5	3.6	4.0	3.4	3.5	3.6	3.6	3.5	3.6
Durable goods	41.4	40.9	40.9	41.4	41.1	41.0	41.2	41.2	41.0	41.1
Overtime hours	4.0	3.7	3.8	4.2	3.6	3.7	3.7	3.8	3.7	3.8
Lumber and wood products	40.5	39.9	39.9	39.8	40.1	39.5	40.0	39.8	39.3	39.4
Furniture and fixtures	39.7	39.0	39.4	39.5	39.1	39.4	39.5	39.3	38.9	38.9
Stone, clay, and glass products	41.3	41.9	42.0	41.7	41.0	41.6	41.9	41.7	41.5	41.4
Primary metal industries	41.6	41.8	41.9	42.0	41.2	41.7	41.8	41.8	42.1	41.6
Fabricated metal products	41.2	40.5	40.9	41.2	40.9	41.1	41.0	41.0	40.9	40.9
Machinery, except electrical	41.9	41.5	41.7	42.3	41.7	42.1	42.3	42.2	41.9	42.1
Electric and electronic equipment	40.9	40.1	40.3	40.6	40.5	40.2	40.2	40.7	40.4	40.2
Transportation equipment	43.0	42.1	41.1	42.8	42.8	41.8	42.0	42.1	42.0	42.6
Instruments and related products	40.8	40.3	40.6	41.2	40.6	40.8	40.8	40.7	40.8	41.0
Miscellaneous manufacturing	39.1	38.4	38.7	39.0	38.9	38.8	38.8	38.8	38.8	38.8
Nondurable goods	39.6	39.5	39.6	39.7	39.3	39.5	39.4	39.4	39.4	39.3
Overtime hours	3.5	3.2	3.4	3.6	3.1	3.2	3.1	3.2	3.2	3.2
Food and kindred products	40.4	40.1	40.4	40.5	39.6	39.8	39.6	39.8	39.7	39.7
Tobacco manufacturers	38.9	36.2	37.3	38.2	38.3	38.7	39.6	38.6	37.5	37.6
Textile mill products	40.5	40.1	40.6	40.6	40.2	40.5	40.3	40.2	40.4	40.3
Apparel and other textile products	35.6	35.9	36.0	35.8	35.4	35.9	35.8	35.8	35.6	35.6
Paper and allied products	43.2	42.9	43.0	43.0	42.8	42.9	42.9	42.9	42.8	42.6
Printing and publishing	38.2	37.5	37.8	37.9	37.9	37.3	37.5	37.6	37.5	37.6
Chemicals and allied products	41.8	41.7	41.6	41.8	41.7	41.9	41.9	41.8	41.8	41.7
Petroleum and coal products	43.2	44.4	43.8	44.2	42.6	42.9	43.4	43.9	44.1	43.6
Rubber and misc. plastics products	41.0	40.6	40.9	41.4	40.7	41.1	41.1	40.9	40.9	41.1
Leather and leather products	36.9	37.5	37.5	37.1	37.1	37.6	37.4	37.2	37.3	37.3
Transportation and public utilities	39.9	40.0	40.3	40.1	39.8	40.2	40.1	39.6	39.9	40.0
Wholesale and retail trade	33.2	33.7	33.5	32.7	33.2	32.9	32.8	32.9	32.8	32.7
Wholesale trade	38.8	39.0	39.0	38.7	38.8	38.7	38.8	38.7	38.8	38.7
Retail trade	31.5	32.0	31.8	30.9	31.5	31.1	31.0	31.1	30.9	30.9
Finance, insurance, and real estate	36.3	36.7	36.6	36.4	36.4	36.3	36.5	36.6	36.5	36.5
Services	32.9	33.3	33.2	32.8	33.0	32.9	32.8	32.8	32.7	32.9

[1] Data relate to production workers in mining and manufacturing; to construction workers in construction; and to nonsupervisory workers in transportation and public utilities, wholesale and retail trade; finance, insurance, and real estate, and services. These groups account for approximately ⅘ of the total employment on private nonagricultural payrolls.

[2] Preliminary.

TABLE B-3.—AVERAGE HOURLY AND WEEKLY EARNINGS OF PRODUCTION OR NONSUPERVISORY WORKERS[1] ON PRIVATE NONAGRICULTURAL PAYROLLS, BY INDUSTRY

[In dollars]

Industry	Average hourly earnings				Average weekly earnings			
	September 1977	July 1978	August 1978[2]	September 1978[2]	September 1977	July 1978	August 1978[2]	September 1978[2]
Total private	$5.35	$5.69	$5.70	$5.80	$193.14	$206.55	$206.34	$208.22
Seasonally adjusted	5.31	5.71	5.72	5.75	190.63	204.99	204.78	205.85
Mining	7.13	7.82	7.79	7.99	314.43	337.82	334.97	344.37
Construction	8.26	8.63	8.71	8.84	303.14	329.67	330.11	330.62
Manufacturing	5.79	6.17	6.16	6.28	235.65	248.65	248.86	255.60
Durable goods	6.18	6.57	6.57	6.71	255.85	268.71	268.71	277.79
Lumber and wood products	5.24	5.71	5.67	5.71	212.22	227.83	226.23	227.26
Furniture and fixtures	4.43	4.68	4.72	4.76	175.87	182.52	185.97	188.02
Stone, clay, and glass products	5.91	6.37	6.39	6.44	244.08	266.90	268.38	268.55
Primary metal industries	7.64	8.19	8.28	8.38	317.82	342.34	346.93	351.96
Fabricated metal products	6.01	6.32	6.35	6.47	247.61	255.96	259.72	266.56
Machinery, except electrical	6.38	6.73	6.75	6.89	267.32	279.30	281.48	291.45
Electric and electronic equipment	5.51	5.83	5.87	5.95	225.36	233.78	236.56	241.57
Transportation equipment	7.37	7.84	7.79	8.04	316.91	330.06	320.17	344.11
Instruments and related products	5.37	5.70	5.75	5.81	219.10	229.71	233.45	239.37
Miscellaneous manufacturing	4.41	4.70	4.71	4.74	172.43	180.48	182.28	184.86
Nondurable goods	5.20	5.57	5.55	5.61	205.92	220.02	219.78	222.72
Food and kindred products	5.45	5.80	5.80	5.86	220.18	232.58	234.32	237.33
Tobacco manufacturers	5.53	6.58	6.28	6.09	215.12	238.20	234.24	232.65
Textile mill products	4.10	4.32	4.38	4.41	166.05	173.23	177.83	179.05
Apparel and other textile products	3.68	3.92	3.93	4.01	131.01	140.73	141.48	143.56
Paper and allied products	6.11	6.63	6.58	6.65	263.95	284.43	282.94	285.95
Printing and publishing	6.22	6.47	6.50	6.55	237.60	242.63	245.70	248.25
Chemicals and allied products	6.56	7.05	7.03	7.10	274.21	293.99	292.45	296.78
Petroleum and coal products	7.88	8.58	8.59	8.65	340.42	380.95	376.24	382.33
Rubber and miscellaneous plastics products	5.21	5.51	5.53	5.59	213.61	223.71	226.18	231.43
Leather and leather products	3.64	3.89	3.89	3.94	134.32	145.88	145.88	146.17
Transportation and public utilities	7.14	7.53	7.57	7.61	284.89	301.20	305.07	305.16
Wholesale and retail trade	4.34	4.66	4.66	4.72	144.09	157.04	156.11	154.34
Wholesale trade	5.47	5.91	5.91	5.98	212.24	230.49	230.49	231.43
Retail trade	3.90	4.19	4.18	4.23	122.85	134.08	132.92	130.71
Finance, insurance, and real estate	4.58	4.93	4.89	4.94	166.25	180.93	178.97	179.82
Services	4.71	4.95	4.94	5.04	154.96	164.84	164.01	165.31

[1] Data related to production workers in mining and manufacturing; to construction workers in construction; and to nonsupervisory workers in transportation and public utilities; wholesale and retail trade; finance, insurance and real estate; and services. These groups account for approximately ⅔ of the total employment on private nonagricultural payrolls.

[2] Preliminary.

(NOTE.—The data usually presented in table B–4 and the analysis were not available in time for this release.)

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								
	September	October	November	December	January	February	March	April	May	June	July	August[2]	September[2]
Total private	116.3	117.0	117.4	117.5	116.2	117.1	119.1	120.4	120.0	120.6	120.6	120.4	120.5
Goods producing	100.7	101.2	102.9	101.6	99.3	100.9	103.6	106.0	105.1	106.0	106.1	105.4	105.3
Mining	138.1	138.8	139.7	107.8	105.6	106.8	111.3	144.2	143.1	144.0	143.5	144.2	142.6
Construction	107.0	107.6	108.7	108.6	100.3	104.2	111.5	118.8	117.1	122.8	124.2	122.7	121.4
Manufacturing	98.2	98.8	99.5	100.2	98.9	100.1	102.0	102.5	101.6	101.7	101.6	101.0	101.2
Durable goods	99.4	100.1	100.8	101.7	100.5	101.9	103.9	104.2	103.5	103.8	104.0	103.6	103.9
Lumber and wood products	110.8	111.9	113.2	114.5	113.2	114.0	114.3	115.0	111.8	113.6	112.3	110.5	110.5
Furniture and fixtures	103.5	105.9	107.0	108.9	106.1	111.1	112.5	112.5	110.3	109.5	108.3	106.2	105.9
Stone, clay, and glass products	105.9	105.3	108.6	109.0	106.4	108.4	111.0	112.7	111.4	112.4	111.1	109.4	108.7
Primary metal industries	90.9	91.7	91.6	91.9	92.2	93.4	92.8	92.9	93.9	94.1	94.4	95.5	95.2
Fabricated metal products	97.7	99.2	100.1	101.1	99.4	101.4	102.9	103.4	103.3	102.4	102.0	101.5	101.8
Machinery, except electrical	103.2	104.6	105.1	106.2	104.6	107.1	109.4	110.1	109.5	111.3	112.1	111.3	111.9
Electric and electronic equipment	95.8	97.4	98.1	98.6	97.3	98.8	101.2	100.4	99.8	99.8	101.8	101.1	100.3
Transportation equipment	94.8	94.5	94.1	95.7	94.9	93.6	97.2	97.5	96.6	95.8	96.2	96.7	98.5
Instruments and related products	114.2	115.0	115.1	116.0	116.3	117.5	120.5	121.7	120.8	122.4	123.6	123.6	125.4
Miscellaneous manufacturing industry	95.9	96.5	97.7	99.0	97.4	99.0	102.0	102.6	101.5	101.4	99.8	99.5	99.8
Nondurable goods	96.6	96.8	97.6	97.9	96.5	97.4	99.2	99.9	98.9	98.7	98.1	97.2	97.2
Food and kindred products	93.8	92.5	94.3	94.6	94.5	94.7	96.2	96.4	94.6	94.0	93.6	91.7	92.0
Tobacco manufacturers	76.7	76.3	77.1	78.7	77.9	79.4	82.0	80.2	81.5	84.1	78.6	69.8	72.6
Textile mill products	91.8	92.9	93.7	93.0	92.6	92.5	93.7	93.4	92.6	91.8	91.5	91.0	91.7
Apparel and other textile products	89.3	89.9	90.8	91.1	85.6	90.1	91.6	93.2	91.9	91.4	90.1	89.9	90.0
Paper and allied products	99.0	98.8	93.6	99.6	98.7	99.1	101.6	102.4	101.9	101.9	101.9	99.0	98.4
Printing and publishing	96.6	97.0	96.9	96.7	96.7	96.9	99.3	99.1	98.2	98.6	99.1	99.0	97.9
Chemicals and allied products	104.2	104.0	104.0	104.5	104.4	104.8	106.0	106.5	106.9	106.9	106.6	106.0	105.5
Petroleum and coal products	115.8	117.6	117.3	119.8	119.9	119.0	121.3	122.1	118.4	120.4	121.2	122.6	122.1
Rubber and misc. plastics products	137.8	139.6	141.3	142.1	141.0	140.1	144.5	147.3	146.6	147.0	146.2	145.4	145.4
Leather and leather products	68.5	70.0	70.3	69.6	68.0	67.8	69.1	71.3	70.4	70.1	67.1	69.5	68.9
Service producing	127.1	128.0	128.1	128.5	127.9	128.4	129.8	130.5	130.5	130.7	130.7	130.8	131.0
Transportation and public utilities	106.1	105.9	107.2	106.9	107.0	107.7	109.1	108.7	109.0	109.4	106.5	107.6	107.9
Wholesale and retail trade	123.3	124.3	124.2	124.7	123.7	124.2	125.9	126.4	126.8	126.8	127.4	127.2	126.6
Wholesale trade	121.6	122.2	122.4	123.0	123.1	123.9	125.3	126.0	125.2	126.1	125.8	125.9	126.2
Retail trade	124.0	125.2	124.9	125.4	123.9	124.4	126.1	126.6	127.3	127.0	128.0	127.7	127.2
Finance, insurance, and real estate	132.3	133.2	133.6	133.9	134.3	135.1	135.4	137.5	136.2	137.9	139.0	139.2	139.6
Services	140.6	141.8	141.6	142.1	141.7	141.8	143.3	144.1	143.8	143.9	144.1	144.0	144.8

[1] Data related to production workers in mining and manufacturing; to construction workers in construction; and to nonsupervisory workers in transportation and public utilities; wholesale and retail trade; finance, insurance, and real estate; and services. These groups account for approximately ⅘ of the total employment on private nonagricultural payrolls.

[2] Preliminary.

TABLE B-6.—INDEXES OF DIFFUSION: PERCENT OF INDUSTRIES IN WHICH EMPLOYMENT[1] INCREASED

Year and month	Over 1-mo span	Over 3-mo span	Over 6-mo span	Over 12-mo span
1975:				
January	18.0	13.1	11.9	15.7
February	21.2	12.8	12.8	16.9
March	26.5	20.1	18.6	18.3
April	41.0	36.6	29.4	20.9
May	51.5	43.0	48.3	27.0
June	43.0	53.2	57.3	41.0
July	56.1	61.6	67.2	54.1
August	73.3	73.5	69.2	64.5
September	67.4	77.3	75.9	74.1
October	68.3	70.6	80.5	79.7
November	60.5	74.4	84.0	82.3
December	71.5	78.2	83.7	86.3
1976:				
January	78.2	85.8	87.2	85.2
February	72.4	84.9	85.8	84.0
March	69.5	81.4	82.0	85.2
April	70.1	72.4	75.6	78.8
May	58.1	67.2	68.3	82.6
June	57.8	65.1	71.2	79.9
July	58.4	57.8	63.1	78.5
August	49.1	64.0	65.1	77.6
September	64.8	53.8	66.3	80.2
October	47.1	65.1	73.3	80.8
November	67.4	64.2	78.8	80.8
December	66.6	81.4	81.4	82.6
1977:				
January	76.2	83.1	88.1	78.8
February	66.0	86.3	87.8	80.5
March	74.7	81.1	85.2	80.2
April	68.0	79.4	79.4	84.6
May	64.8	76.2	75.9	84.0
June	71.2	68.0	72.1	83.1
July	59.3	63.4	69.8	82.6
August	51.7	58.7	74.1	83.7
September	60.8	62.5	72.1	82.6
October	60.5	73.8	77.9	81.1
November	73.8	75.3	82.0	81.1
December	72.1	79.7	83.1	80.8
1978:				
January	69.8	80.2	85.5	80.5
February	70.3	80.2	79.9	[2] 79.4
March	70.1	75.9	77.9	[2] 77.3
April	62.8	67.4	68.9	----
May	56.4	63.7	[2] 64.5	----
June	67.2	62.5	[2] 54.7	----
July	[2] 54.9	[2] 54.1	----	----
August	[2] 53.2	[2] 48.3	----	----
September	[2] 53.5	----	----	----
October	----	----	----	----
November	----	----	----	----
December	----	----	----	----

[1] Number of employees, seasonally adjusted, on payrolls of 172 private nonagricultural industries.
[2] Preliminary.

Senator BENTSEN. Thank you. On the price increases, a lot has been said about food because it is such a visible item. At the same time that we have been talking about that, we have another item in the housing sector which accounts for over 40 percent of consumer expenditures and this sector has accelerated at an 11.5-percent annual rate for the 6 months ending in August.

Can you give us some kind of historical perspective on housing costs, for example, in the last 3 to 5 years and give us a better feel of what has happened? Have consumers ever experienced this kind of increase in the past in housing prices? Do you see any kind of moderation coming at all?

Ms. NORWOOD. There clearly appears to be over the last few years an increasing rate of inflation in the housing index. We had rates close

to 5.5 percent at the end of 1976, and at the end of 1977 they were up closer to 7.5 percent, and in September the over-the-year changes were close to 9 percent. So the index shows a steady rate of increase. This is, in part, due to changes in mortgage interest rates, to changes in construction materials, and other costs. We have no indication that any announced changes in prices have been made that we can look forward to.

Senator BENTSEN. You don't see any abatement? Over the last several months, in fact, there has been a continued acceleration. Do I understand your statement to say that?

Ms. NORWOOD. There has been a continuing acceleration in housing prices. Now, some of that, of course, Senator Bentsen, is in part because mortgage interest rates have been going up, and mortgage interest rates are included in the housing component of the Consumer Price Index. So some of the increase has been caused really by the increases in mortgage interest rates.

Senator BENTSEN. What inflationary impact do you see on the depreciation of the dollar in international markets? Do you have any numbers that can give us an idea as to how much of the inflationary impact comes from what we are now having to pay for imports?

Ms. NORWOOD. We do not. The Council on Wage and Price Stability, yesterday, I am sure you are aware, issued a report in which they looked at the prices of imports and of domestic products. They showed that the rate of price increase for imported foods was less than for domestic foods. They showed for imports in many other parts of the economy higher increases than for the domestically produced items.

Obviously with the devaluation of the dollar, one of the important effects would be increased prices for products imported into the country.

Senator BENTSEN. Do you get any feel about whether or not domestic prices on competitive products have gone up as much as the imported competing products have risen to make up the difference of the exchange ratio; for example, the yen against the dollar? Do you see the price of a Toyota increasing in this country more than the price of a domestic car?

I know we are getting price increases on both, but are they going up at an equivalent rate, or are our domestic producers taking advantage of this opportunity in order to recapture some of the market?

Ms. NORWOOD. That is a very interesting question, Senator. One of the issues, of course, is that as the dollar devalues, foreign exporters may choose to absorb some of the change in prices, and there has been some evidence that that is happening. In the case of automobiles, as you specifically mentioned, the Council on Wage and Price Stability report issued yesterday, compared some of the prices of small cars. They report—we in the Bureau do not have specific information of this kind—that there was an increase in the price of Japanese small cars, and that there was also an increase in American small cars that are competitive, but that the increases in American products are somewhat less than the increases for the imported products.

The Bureau of Labor Statistics is working on the development of an index for prices of imported cars.

Senator BENTSEN. Do you see any less inflation in those industries that have been jawboned in this country as compared to those where we have not seen that kind of intervention?

Do you have any statistics on those?

Ms. NORWOOD. We have very little information about the identification of the industries in which a great deal of jawboning has taken place, but we don't see any particular evidence at this date.

Senator BENTSEN. Several months ago, Ms. Norwood, you expressed the conclusion that it was premature to infer a change in the underlying strength of the labor market on the basis of the July data. You continued that it was possible, that subsequent data could reveal July was the beginning of a new trend.

Since you now have much more information, what is your present assessment of the labor market situation?

Ms. NORWOOD. I think, Senator, as I said in my statement, we have had considerable improvement in the unemployment situation over the first part of the year. I think the unemployment rate has been fluctuating around the 6-percent level over the last several months.

Following a decline in July, employment increased substantially between August and September, and has now returned to the June level of about 94.9 million.

Senator BENTSEN. One of the pieces of good news in the numbers that you have given us is the particular increase in employment by adult women that are seeking work. Can you tell us in what sectors has most of the growth in women workers occurred?

Ms. NORWOOD. The figure I think you are referring to is the 1-month change. I think it is a little dangerous to rely on a specific 1-month change. I think that the unemployment rate for women has been pretty much constant over several months. It is clear, of course, that a large proportion of women are in the service industries, which have been increasing over the year.

Senator BENTSEN. Can you get a feel for what is happening, and what sectors they have been moving into for a year or over a long period of time?

Ms. NORWOOD. In general over the year there has been an increase—in fact, over several years there has been an increase toward service industries—women who have come into the labor market have been available and moved into those industries. There are, of course, other occupations and industries that women are moving into, but I think the largest changes have been in the service industries.

Senator BENTSEN. I am also advised you are seeing a change in the percentage of women as compared to men who are students in the colleges. I am not sure just where the percentage stands now, but if there are not now more women in college than men, there soon will be on the basis of these trends. Do you know whether that observation is right?

Ms. NORWOOD. Yes; that is correct. There are certainly a larger proportion of women getting a college education now than ever before.

I am not sure, and perhaps Mr. Stein knows the exact proportion of women and men.

Mr. STEIN. No.

Ms. NORWOOD. But it is extremely high. I think that has an important implication for the future.

Senator BENTSEN. So do I and that is what I am probing for.

Ms. NORWOOD. People who have more education tend to have greater and longer labor force attachment. Therefore, one can expect that the labor force participation of these people will continue to rise as more people become educated.

Senator BENTSEN. I wish you would get me the numbers as to whether or not we now have more women than men in colleges.

Ms. NORWOOD. I believe that is true, Senator, but I will check it.

Senator BENTSEN. I mean even now.

Ms. NORWOOD. Yes.

Senator BENTSEN. I think what the demographic figures there are telling us is that something is leading to a profound change in family life in this country with women being much more actively employed and participating in the labor force and the obligations and responsibilities for rearing children becoming much more of a shared experience than it has been in the past.

I don't know quite how the couples are going to work all of that out, but I think we are seeing a very substantive change that is going to be taking place that has not yet been fully perceived.

Ms. NORWOOD. I think that is true. Of course, a lot of that change has already taken place. That participation of working women, particularly those in the child-bearing years, has increased enormously over the last decade and I think that as more of these women become educated, the probability is that the participation rates will continue very high. That, of course, also has implications, Senator, for productivity and other changes in the economy, because as the work force becomes more educated, there is a need, in some cases, perhaps in the future, to restructure jobs to provide greater job satisfaction for people who have skills that they would like to use in the labor market.

Senator BENTSEN. I also would like to understand something behind those numbers—well, I would like to relate that to the total number of women going to college. I want some information to let us know whether or not more men are dropping out or not going to college or overall there is a total of more students, but more women than men? Are men forsaking a college education and staying in crafts—that type of thing?

Ms. NORWOOD. We certainly can provide you with some statistics on what is happening, using the Office of Education materials for the record. I think it is clear that in terms of the labor market situation that the participation of women is increasing and there has, as you know, been a small but continuing secular decline in the participation rate of men.

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

DEGREE-CREDIT ENROLLMENT IN INSTITUTIONS OF HIGHER EDUCATION, BY SEX AND BY CONTROL OF INSTITUTION: UNITED STATES, FALL 1946 TO FALL 1976

Year	Total	Enrollment by sex		Enrollment by control of institution	
		Men	Women	Public	Private
1	2	3	4	5	6
1946	[1] 2,078,095	[1] 1,417,595	660,500	[2]	[2]
1947	2,338,226	1,659,249	678,977	1,152,377	1,185,849
1948	2,403,396	1,709,367	694,029	1,185,583	1,217,808
1949	2,444,900	1,721,572	723,328	1,207,151	1,237,749
1950	2,281,298	1,560,392	720,906	1,139,699	1,141,599
1951	2,101,962	1,390,740	711,222	1,037,938	1,064,024
1952	2,134,242	1,380,357	753,885	1,101,240	1,033,002
1953	2,231,054	1,422,598	808,456	1,185,876	1,045,178
1954	2,446,693	1,563,382	883,311	1,353,531	1,093,162
1955	2,653,034	1,733,184	919,850	1,476,282	1,176,752
1956	2,918,212	1,911,458	1,006,754	1,656,402	1,261,810
1957	3,036,938	1,985,026	1,051,850	1,752,669	1,284,269
1958	3,226,038	2,092,218	1,133,820	1,883,960	1,342,078
1959	3,364,861	2,153,565	1,211,296	1,972,457	1,392,404
1960	3,582,726	2,256,877	1,325,849	2,115,893	1,466,833
1961	3,860,643	2,408,601	1,452,042	2,328,912	1,531,731
1962	4,174,936	2,587,291	1,587,645	2,573,720	1,601,216
1963	4,494,626	2,772,562	1,722,064	2,848,454	1,646,172
1964	4,950,173	3,032,992	1,917,181	3,179,527	1,770,646
1965	5,526,325	3,374,603	2,151,722	3,624,442	1,901,883
1966 [1]	5,928,000	3,577,000	2,351,000	3,940,000	1,988,000
1967 [1]	6,406,000	3,822,000	2,584,000	4,360,000	2,046,000
1968	6,928,115	4,119,002	2,809,113	4,891,743	2,036,372
1969	7,484,073	4,419,147	3,064,926	5,414,934	2,069,139
1970	7,920,149	4,636,641	3,283,508	5,800,039	2,120,060
1971	8,116,103	4,717,098	3,399,005	6,013,934	2,102,169
1972	8,265,057	4,700,622	3,564,435	6,158,929	2,106,128
1973	8,518,150	4,770,789	3,747,361	6,388,619	2,129,531
1974	9,023,446	4,968,706	4,054,740	6,838,324	2,185,122
1975	9,731,431	5,320,975	4,410,456	7,425,772	2,305,659
1976 [1]	9,582,000	5,056,000	4,526,000	7,270,000	2,312,000

[1] Estimated.
[2] Data not available.

Note: Beginning in 1960, data are for 50 States and the District of Columbia; data for earlier years are for 48 States and the District of Columbia. Beginning in 1953, enrollment figures include extension students.

Sources: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. "Fall Enrollment in Higher Education," and estimates of the National Center for Education Statistics.

Senator BENTSEN. Now, in July of 1978 we had the largest number of teenagers employed that we have ever had, as I understand it. In September, a large part of the teenagers usually drop out of the labor force and return to school. However, this September the teenage jobless rate rose from 15.4 to 16.6 percent. The reason given for the increase was an unusually large number of jobs created at the beginning of the summer which concluded at the beginning of the school year.

Did these teenagers remain in the labor force?

Ms. NORWOOD. I think that is hard to say. Those numbers are large. They have been large. It is true that there were—I believe the figure is something like three-quarters of a million—jobs created for the summer and most of those jobs have now ended.

The unemployment rate is up, but it has been that high before. It is 16.6 and back in May the rate was that high and earlier in the year it was much higher.

Senator BENTSEN. Ms. Norwood, we discussed many times with you in this committee the high unemployment rate of black teenagers and

it has been a problem which has been a very difficult one to solve. We have tried many approaches and we are trying another one with our target employment tax credit in the Finance Committee.

In the first three quarters of the year, what has been the relative performance insofar as white teenagers and black teenagers as far as finding employment? Have we seen any gain in that situation?

Ms. NORWOOD. It is hard to predict what will happen to the high unemployment among black teenagers.

Mr. STEIN. Senator, I think we have seen a little improvement in black teenager unemployment in the last few months. It is still high, up about a third of those in the labor force and a couple of percentage points below where it had been. I guess we are a little bit uneasy about saying that it will improve partially because our figures on this group are a little bit shaky.

Ms. NORWOOD. I think, Senator, what the figures show and what the figures on the Hispanic workers show, which I included in my statement, is that there are still important groups in the labor force with very high unemployment rates and that programs that in some way are targeted toward conditions that these people suffer are needed.

Senator BENTSEN. Ms. Norwood, while I have everyone's attention, I would like to interrupt here for a commercial.

I understand that we have a publication on the public hearings before the National Commission on Employment and Unemployment Statistics. Volume 1 has been announced today. I am sure that is going to be a bestseller.

Now, when you are talking about productivity, in arriving at productivity figures in this country and other countries, do you count as productivity per worker or do you relate it to the entire population? How do you arrive at your numbers?

Ms. NORWOOD. Productivity, labor productivity, is a measure of the relationship of the output and the labor input.

Senator BENTSEN. I understand that, but do you use the labor input of the entire group of Americans or just those that are gainfully employed?

Ms. NORWOOD. Those people who are employed to produce the output.

Senator BENTSEN. Well, isn't there something else that ought to be involved in that, though? We are talking about productivity of a nation and we have a lot of people in things that do not relate to that measurement such as people's output that can't be measured directly, for example, rearing a family. If both the man and the woman are working in industry rather than rearing children or taking care of the home, for example, isn't the Nation from that standpoint of statistical measurement—and I am talking from that narrow viewpoint—being more productive and I am on dangerous ground here. I understand that, because certainly the role of the homemaker, be it the man or the woman, is a very meaningful one and very important one, but I want to understand the concept of overall productivity.

Ms. NORWOOD. I think I know what you are driving at. I think there are really two issues, it seems to me. One issue is "What do we measure, what can we measure accurately?" What we try to measure is the physical output that is produced and the labor input that goes into the production of that output.

Senator BENTSEN. I am trying to compare the productivity measurements of our system relative to one of the other systems of the world where both parents may be production workers, so to speak, and others may be taking care of the children. How would you try to measure the productive output of the two systems and how would they rate against each other?

Ms. NORWOOD. As I say, it is really a question of what it is we are measuring. Our measures look at the production output and the labor input, so that, if both parents are working in the automobile industry or some other industry, they are producing output and their labor input is measured. If, however, only one of the parents is working and the other one is at home either rearing the children or keeping house or doing volunteer work, which also is productive, of course, our system of measurement does not really take account of that. So that, when both husband and wife are in the labor force and are actually employed producing output, we show greater productivity, because we don't measure the productivity of the individual at home. We don't know how to. We take account of it, we recognize it.

In a sense, the problem is really—and there has been a large amount of literature on the whole question—"Can there be some kind of social concept of national accounts?" There are very difficult measurement problems there.

Senator BENTSEN. Are there any numbers that show the percentage of people in measurable employment as related to the total population in our country as compared to some other country?

Ms. NORWOOD. We certainly can provide that for the record. We have measures of the ratio of employment to population, and I know we have those for at least some other countries and can supply it for the record.

Senator BENTSEN. That is something that is changing in this country.

Ms. NORWOOD. Yes; changing in some other countries, too.

Senator BENTSEN. Of course. If we get the answer, we can see how we relate to other countries in the world and where we are heading.

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

EMPLOYMENT-POPULATION RATIOS, 8 COUNTRIES, 1977

	Employment as a percent of total population	Employment as a percent of civilian working age population
United States	41.8	57.9
Canada	41.8	56.5
Japan	46.3	61.2
France	39.8	[1] 53.7
Germany	39.8	[1] 50.9
Great Britain	43.1	[1] 57.8
Italy	36.7	[1] 48.4
Sweden	49.5	[1] 63.9

[1] Preliminary estimate.

Note: The foreign employment statistics have been adjusted for conformity with U.S. concepts. The adjusted employment and civilian working age population data have been adapted to the age at which compulsory schooling ends in each country and therefore refer to persons age 16 and over in the United States, France, Great Britain, and Sweden; 15 and over in Canada, Japan, and Germany; and 14 and over in Italy.

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

Senator BENTSEN. Senator Sparkman.

Senator SPARKMAN. Senator Bentsen, I have been reading the statement and press release and also listening. I think this is developing into something very interesting. Let me ask this general question.

I have not yet been able to digest thoroughly the situation of these teenagers who are unemployed and those reentering the labor force and it is rather important that they do not remain unemployed. I also am concerned about the changes in the Consumer Price Index. Has that been running very much according to form or to expectations? Have our expectations been pretty steady?

Ms. NORWOOD. As I indicated in my statement, the rates of price increase, both at the producer level and at the consumer level, have been increasing over the last couple of years.

Senator SPARKMAN. Is the economic situation, relating to inflation, just about on track for which President Carter had expressed a desire?

Ms. NORWOOD. I believe, Senator Sparkman, that the President has indicated publicly, and to the Congress, that he is quite worried about the increasing rate of inflation and that he plans to make some statements fairly soon about measures to try to contain the rising rates.

Senator SPARKMAN. It has been a matter of concern with him for some time, hasn't it?

Ms. NORWOOD. Yes, it has.

Senator SPARKMAN. Fighting unemployment and at the same time trying to hold down the rate of inflation and producing jobs, I suppose, is generally considered helping inflation. It is to some extent inflationary.

Ms. NORWOOD. Of course, there has always been a large debate about the tradeoffs between unemployment and inflation. I think, however, that in recent years economists have become quite perplexed about this relationship because it does not seem to be as direct as previously had been believed. In fact, some of the studies show that you don't really get a great deal of reduction in inflation by increasing unemployment. So I think this is an area that everybody is worried about, that a great deal of work is going on in, and it is not so clear cut as to what rate of unemployment relates to any particular rate of inflation.

Clearly, what we need is to reduce the rate of inflation and to reduce the rate of unemployment.

Senator SPARKMAN. Thank you, Ms. Norwood and Senator Bentsen.

Senator BENTSEN. Thank you. Of course, we have cut unemployment more than it has ever been in the past, so it is not as dramatic a concern as it was in prior years.

You have given us three sets of projections instead of one, three possible paths we can follow for the increase in the labor force. One of the assumptions you cited for these projections is, that the working age population will be increasing more slowly than it has in the past, but that factor will be mitigated somewhat I think, by inflation requiring both husbands and wives to take jobs.

Which of these three trendlines do you have most confidence in?

Ms. NORWOOD. Senator, the reason that we put out three sets of projections is because we wanted to try to emphasize to the public and to those people who use our projections that we did not have the

answers to all issues. It is very hard to project for a long period of time into the future.

Any projection is based upon assumptions. We have, in the past, I think it is quite clear, underestimated the changing position of women in the labor force. We felt that we had to start with a set of facts. One fact, of course, and a very important one, is that the number of young people who were born during the baby boom after World War II, have now grown up or are growing up, and in the future the teenage group will become smaller. This means that the group that we have always in the past felt had a stronger attachment to the labor force will be getting larger. That certainly is a fact.

The question of what will happen to the birth rate and what will happen to the labor force participation of women, of men, too—I think that is difficult to predict as is the participation of some of the demographic groups of the population which have had difficult labor market experience. It is very difficult to predict. For that reason we have put out three with a high, a low estimate, and median one.

Senator BENTSEN. Well, you ought to be at least a third right.

Ms. NORWOOD. One of the other things we are doing, Senator, that I think is quite important, is that when we make long-term projections of the economy, we are trying now, after the fact, to go back and look at how good or how bad our projections were. We have published for our economic growth program, our industry projections, one article some time ago looking at how well we did, and we are presently working on another article indicating how well or how badly we did.

Senator BENTSEN. Is that an interoffice memo?

Ms. NORWOOD. These are going to be published.

Senator BENTSEN. Are they?

Ms. NORWOOD. Yes.

Senator BENTSEN. Ms. Norwood, I have to chair another hearing and this has been very entertaining, but unless Senator Sparkman has any further questions, I thank you very much.

Ms. NORWOOD. Thank you.

Senator BENTSEN. The committee will stand adjourned.

[Whereupon, at 10:55 a.m., the committee adjourned, subject to the call of the Chair.]

EMPLOYMENT-UNEMPLOYMENT

FRIDAY, DECEMBER 8, 1978

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

The committee met, pursuant to notice, at 10:03 a.m., in room 6226, Dirksen Senate Office Building, Hon. Lloyd Bentsen (vice chairman of the committee) presiding.

Present: Senator Bentsen.

Also present: Louis C. Krauthoff II, assistant director; Richard F. Kaufman, assistant director-general counsel; John M. Albertine, L. Douglas Lee, Katie MacArthur, Paul B. Manchester, M. Catherine Miller, and Robert Ash Wallace, professional staff members; Mark Borchelt, administrative assistant; and Stephen J. Entin, minority professional staff member.

OPENING STATEMENT OF SENATOR BENTSEN, VICE CHAIRMAN

Senator BENTSEN. The hearing will come to order.

Ms. Norwood, on Wednesday Mr. Kahn was before us and he told us that we would have to wait a while for the good news on inflation. Today we understand from you that we are going to have to wait a while for the bad news on unemployment. For the next few months it seems that no news is good news.

The unemployment rate remained steady last month at 5.8 percent, and there was a substantial and heartening increase in employment.

Before you begin, Ms. Norwood, just let me make one observation which you can feel perfectly free to ignore. In regard to the critical economic issues of the day, it seems that we have had too much conventional wisdom and not nearly enough creative intellect. The conventional wisdom has embraced the notion of the inflation-unemployment see-saw. The conventional wisdom tells us that we must stagger through a recession to wring inflation out of the system. The conventional wisdom tells us that increased levels of unemployment are the inevitable price of economic stability.

We had four talented economists here this week and they disagreed on many things, but they all told us the best cure for inflation is recession. Well, perhaps they are right. Perhaps the laws of economics are as the laws of physics. But I am not so sure that we have to swallow a recession to salvage our economy. I am not so sure that we have to throw millions of Americans out of work to try to control inflation in this country of ours.

This is the first meeting that we have had since Commissioner Shiskin died. He testified almost monthly before the Joint Economic Committee during the 1970's. He was one of the country's foremost economic statisticians. From 1942 when he first started working in the Government, and especially during the period of 1973 when be became head of the Bureau of Labor Statistics, Mr. Shiskin worked unceasingly to improve our understanding of the very important field of economic statistics. And, Ms. Norwood, you are a very worthy acting successor. We are very pleased to have you this morning. We are looking forward to your statement.

Would you proceed, please.

STATEMENT OF HON. JANET L. NORWOOD, ACTING COMMISSIONER, BUREAU OF LABOR STATISTICS, DEPARTMENT OF LABOR, ACCOMPANIED BY ROBERT L. STEIN, ASSISTANT COMMISSIONER, OFFICE OF CURRENT EMPLOYMENT ANALYSIS; AND JOHN F. EARLY, CHIEF, DIVISION OF INDUSTRIAL PRICES AND PRICE INDEXES

Ms. NORWOOD. Thank you, sir.

First I would like to introduce Mr. Robert Stein on my right who is our unemployment expert—and employment expert as well. On my left is Mr. John Early, who is our expert on industrial prices.

I am glad to have this opportunity to offer the Joint Economic Committee a few brief comments to supplement our "Employment Situation" press release, issued this morning, and our "Producer Price Index" press release, issued yesterday morning.

Both employment and the labor force expanded vigorously in November, while the unemployment rate was unchanged at 5.8 percent.

After a period of rather sluggish job growth in the summer months, employment has expanded very rapidly in the past 2 months. From October to November, total employment as measured by the household survey, increased by more than a half a million. At the same time, the number of employees on nonfarm payrolls, as measured by the establishment survey, moved up by 470,000. The 2-month growth in both series has totaled nearly 900,000. The employment-population ratio in November surpassed 59 percent for the first time on record.

The Nation's unemployment rate was 5.8 percent in November, unchanged from October. This rate was almost a full percentage point lower than a year ago and 0.4 point below the first quarter 1978 average. The unemployment rates for most worker groups showed little or no change from October to November. Unemployment has not dropped significantly over the past 2 months, despite the upsurge in employment, because the civilian labor force also has expanded sharply. The labor force participation rate—that is, the percentage of the population 16 years and over who were either working or seeking work—was 63.6 in November, an alltime high.

The nearly 500,000 gain in payroll jobs in November reflected advances in both the goods-producing and service-producing industries. Manufacturing employment moved up by 160,000, while contract construction recorded a 40,000 gain. Job strength in these industries has

been pronounced for 2 consecutive months. In fact, employment gains in November were pervasive, occurring in every major industry group except the Federal Government. The BLS diffusion index, which reflects the percentage of 172 industries showing employment increases, was 80 in November compared with 70 in October. This index had been as low as 52 in August.

Hours of work also were up over the month, by 0.1 hour in the total private economy and 0.2 hour in manufacturing. The index of aggregate weekly hours of production or nonsupervisory workers in private nonfarm employment was 122.4 in November, 1 full percentage point higher than a month ago and up by 2 points from August after a 2-month lull.

CHANGE OVER THE YEAR

Virtually all major employment and unemployment indicators showed improvement from a year ago. Nonfarm employment, as measured by both the household and establishment survey, was about 3.5 million above a year ago. The unemployment rates for all civilian workers, and for virtually all worker groups, were below November 1977 levels. The overall rate was down from 6.7 to 5.8 percent, with most of the decline occurring in late 1977 and early 1978. The index of aggregate weekly hours—which reflects trends both in employment and the workweek—was up by 4.3 percent from a year earlier.

THE JOB SITUATION FOR YOUNG AND FOR BLACK WORKERS

The overall unemployment rate is, of course, an average for all the demographic groups in the labor force. The figures for specific groups reveal a large dispersion around the average. For example, the unemployment rate for teenagers in recent months has been averaging slightly over 16 percent, and that for black workers has ranged between 11 and 12 percent.

For the more than 1 million teenagers in the labor force who are black, the unemployment rate has been at about 35 percent. Their jobless rate in the fall of 1978 was 2.5 times that of white teenage workers and their employment-population ratio was only about half that of young whites.

For the first 2½ years after the 1975 recession trough, black workers in general showed less improvement than white workers in their employment status. In the past year, however, black workers have outpaced white workers in employment growth and unemployment rate declines, although unemployment for blacks remains considerably higher than for whites.

Senator BENTSEN. What change in unemployment policy has brought this about, Ms. Norwood? Can you correlate it to anything that the Government has done? Has there been any contribution from a change in the law or from training programs that would have increased the employment rate of the black teenager in contrast to the drop we have seen in the comparable white group?

Ms. NORWOOD. As you are, I am sure, aware, Secretary Marshall has put a great deal of emphasis on the youth employment program, and I think that the training and job creation efforts in that area may well be taking hold.

Senator BENTSEN. Now we have heard so many of the economists telling us that unemployment is going to go up and go up substantially because of the anticipated curtailment of some programs, and because of expected budget cuts.

Can you tell me what you think about it? Do you feel those predictions are wrong, or do you think they are right? What do you see in the way of underlying strength here in the employment situation that might moderate those predictions, or will the present situation not be able to withstand such changes?

Ms. NORWOOD. There has been a great deal of speculation, I know, about what curtailment in the budget may bring, Senator. I am, as you know, not prepared to speculate about what might happen. I am here today to try to give you our views on what actually has happened until now, and, as you can see from the first part of my statement on the employment situation, there has been very vigorous employment growth in the last month and over the last year.

Senator BENTSEN. Well, do you see anything in your present figures that could establish a trend toward the higher unemployment that is being predicted by some economists? I am not talking about projections now, I am asking you about current conditions and then we can try to extrapolate those conditions.

Ms. NORWOOD. I see nothing in our current figures to indicate that any reduction in business activity has yet taken place.

Senator BENTSEN. Do you see anything in those figures that show either underlying strength or weakness?

Ms. NORWOOD. I think that the employment situation report shows a very strong picture as of the month to which the data refer. There is, also, of course, a great deal of other evidence outside of the employment sphere which indicates that, as of the period of October and November, business activity continues to be very strong. Industrial production is up, new orders are up, and a great deal of the surrounding economic data indicate fairly vigorous business activity.

Senator BENTSEN. You have dealt at length with the question of the black teenager?

Ms. NORWOOD. Yes.

Senator BENTSEN. It remains a matter of great concern to us because there are such high unemployment rates for black teenagers.

But we have another very substantial minority in this country and that is the Mexican Americans who also share our concern.

How good are your numbers in identifying the Mexican-American group and the percentage of unemployment amongst their teenagers?

Ms. NORWOOD. The data for any particular subgroup of the population are obviously not as strong as for the population as a whole, nor as strong as we would like them to be. We do, however, have information on the Hispanic population and some of the groups within the Hispanic population. The Bureau of Labor Statistics has been working very dilengtly over the last year to try to expand the information that we have and the publication of it.

You will recall that, a few months ago in my statement before this committee, I did have some information about the Hispanic population, and the particular groups—the Puerto Rican group, the Cuban group and the Mexican Americans.

We would like to have more data, Senator.

Senator BENTSEN. They have been very concerned and I think rightfully so.

Ms. NORWOOD. Yes.

Senator BENTSEN. I would like to know the availability of numbers which show how the Hispanics are fitting into the economy, in other words what economic role they are playing in it. But do I understand from what you are saying that you are making a real effort in trying to amplify the data you have in order to get more extensive and accurate detail on their situation; is that correct?

Ms. NORWOOD. That is correct. I think we would like to have even more than we now have but we are trying our best to examine the numbers that we now have to try to expand their publication and the analysis of them.

I think that the various groups of our population are quite right in requesting more information because it is, after all, on the basis of information that policymakers develop policy.

The information we have on the employment experience of the Hispanic group of the population, I think, demonstrates that many of them have not had as happy an experience in the labor market as we would hope that they will have in the future.

Senator BENTSEN. Well, Ms. Norwood, I have interrupted your statement, but I have a very substantial population of Hispanics in my State and I have a deep concern about some of their problems and in turn, they have spoken to me many times about this particular issue. I wanted to see what is being done. I appreciate your comments.

You may proceed.

Ms. NORWOOD. I might just add, Senator, that I have just returned from a week in Lima, Peru, at the Inter-American Conference of Labor Ministers at which the whole problem of employment in the hemisphere and the movement of workers among countries received a great deal of attention.

Let me return to the part of my statement on prices.

Yesterday the Bureau also released data on producer prices for November. The Producer Price Index for Finished Goods rose 0.8 percent following advances of 0.9 percent in both October and September. Price increases for finished consumer foods slowed, but prices for finished nonfood items, on average, rose somewhat more than in October.

Price increases for food-related materials eased at both the crude and intermediate stages of processing. Nonfood crude and intermediate materials continued to have large price increases in November, although not quite so large as in October.

The price situation presents a mixed picture, with improvements in some areas and increasing inflation in others. This morning I would like to examine what has happened so far this year and place the most recent price changes in this perspective.

During the first 10 months of this year, the Consumer Price Index for all urban consumers increased at an annual rate of 9.5 percent. Producer prices for finished goods increased at an 8.9 percent annual rate during the first 11 months.

In both cases, rapid food price increases were a major factor in the overall rate; however, food price increases were much more pro-

nounced during the first 6 months of the year. Since June, consumer food price increases at the producer and the retail levels have risen at annual rates of about 5 percent, less than one-third the rates that prevailed during the first half of the year.

In general, food price trends at the producer level can be expected to affect retail food prices. However, weather and transportation disruptions are unpredictable. In addition, two other factors potentially threaten this improved food price picture—the small size of the cattle herds, and the strong export demand for grains.

Senator BENTSEN. Well, Ms. Norwood, let me interrupt there. The fact is that some of these things are just unpredictable factors on food prices and there are some very dramatic effects from the weather—in looking at the news this morning I saw that out along the west coast, and I looked at the Southern tier of the United States where you have a lot of your winter vegetables being raised, and I saw temperatures far below freezing. Now, those freezing temperatures can have an immediate effect, can they not, on winter vegetables, and consequently an immediate effect on prices at the supermarket for the housewife. She finds an increase in prices which just could not have been anticipated. Government policy doesn't have anything to do with it at all.

As we try to get cooperation with the administration's voluntary guidelines and we note some of the things that are not covered by the guidelines, is it not true that we could have total compliance with the guidelines by labor, by business, by the American people and still have an increase in inflation above the guidelines?

Let me give you a few examples. Let's look at vegetables. You don't have any guidelines in effect on the raw vegetable prices until you start with their processing. What about the OPEC nations who are going to be meeting next month? We have many forecasts that they may raise the price of oil by 10 percent and some of these countries want it higher than that.

How long is it going to take before those prices are reflected in the marketplace here and, thus, affecting inflation.

If you have a 10-percent increase in the price of imported oil from the OPEC countries, which will affect all other imported oil—and we are now up to about 50-percent dependency on foreign oil—what effect will it have on domestic inflation? Can you give me an estimate as to how those prices feed into our price indexes? That is, if we have a 10-percent price increase in the price of imported oil; what does that mean in terms of impact on inflation here in this country?

Ms. NORWOOD. If we were to assume a 10-percent increase in OPEC prices for oil, and we took only the direct effect of those price increases on the petroleum products that are actually priced in both the producer and the consumer indexes, we would have perhaps as much as 0.25 to 0.30 percent increase on the finished goods component of the Producer Price Index.

Senator BENTSEN. You say two-and-a-half to three?

Ms. NORWOOD. Tenths.

Senator BENTSEN. All right.

Ms. NORWOOD. And about a little over a 0.1-percent increase on the all items Consumer Price Index.

However, it is very important, I think, to know that these are merely the direct passthrough of price increases, and for——

Senator BENTSEN. That is right.

Ms. NORWOOD. And, of course, there would be an indirect effect which we cannot measure effectively.

Senator BENTSEN. So you would——

Ms. NORWOOD. I do have a statement on this Senator, which you might perhaps want to have for the record.

Senator BENTSEN I would be pleased to have it.

[The information referred to follows:]

EFFECTS OF OPEC PRICE INCREASES ON THE PPI AND CPI

If OPEC were to raise its crude petroleum prices, there would be four potential price effects: (1) a change in the price of imported crude petroleum, (2) a change in the price of domestic crude petroleum, (3) a change in the price of refined petroleum products and (4) a change in the price of other products which rely on petroleum as an energy source or as a basic raw material.

Since imported crude petroleum prices are not currently collected for the PPI, there will be no direct effect of the price increase on the PPI. However, the average price of all imported crude oil can have an effect on both domestic crude oil and refined petroleum products, which are priced for the PPI. The latest average imported crude oil price available from the Department of Energy (DOE) is for June 1978—$14.54 per barrel. By raising that price by various assumed OPEC price increases (5, 10, 15 and 20 percent), one can estimate the average price of imported crude oil under each assumption.

As already mentioned, an increase in imported crude oil prices may produce an indirect increase in price of domestic crude oil. Currently there are five categories of domestic crude oil: lower tier, upper tier, stripper-well, Alaska North Slope and Naval Petroleum Reserves. The stripper-well price is unregulated and tends to move in conjunction with imported crude prices. Consequently, unless there is a change in DOE policy, the price of striper-well oil can be assumed to rise one cent for every one cent rise in the price of imported oil. If one assumes that stripper-well oil continues to constitute 15 percent of domestic production, as it currently does in PPI calculations, then it is possible to estimate the impact of alternative OPEC price increases on the average of all domestic crude oil. estimate the impact of alternative OPEC price increases on the average of all

If one assumes that imported oil continues to constitute 40 percent of all crude oil consumed in the U.S., (curent year to date average) then one can estimate the average price of all crude oil consumed for each assumed OPEC increase. The consequent price increases for all crude oil are presented in the attached table.

If one takes the increase in the average price of all crude oil per barrel and divides it by the number of gallons per barrel (42), the result is the average price per gallon increase in the raw materials used to produce refined petroleum products. In order to use these numbers to estimate the price changes for refined petroleum products at both the producer and retail levels, it is necessary to make three important assumptions:

(1) that the increase in raw material prices is evenly spread among all refined products—thus, an increase of $1.00 per barrel would result in a 2.4 cent ($1.00/42=$0.024) per gallon increase in the prices for gasoline, fuel oil, jet fuel, lubricating oil and all other refined petroleum products;

(2) that there are no other changes in price arising from other cost factors such as labor cost, profit or retail mark-ups; and

(3) that consumers will pay the higher price without any change in the amount demanded.

The average price increase per gallon of refined petroleum product are given as the last row in the attached table for each assumed OPEC increase. These price increases were added to the average October 1978 prices for each refined product to produce the estimated price levels under the above assumptions.

The percent changes for prices in gasoline and Fuel Oil no. 2 calculated under the above procedure are presented in the attached table at both the producer (PPI) and consumer (CPI) levels. In addition to these two products, price

changes for all other refined petroleum products in the PPI were also calculated, except for greases and waxes which are not sold on a per-gallon basis. The effects of the refined products and domestic crude oil price changes on the Stage-of Processing Industrial PPI's are given in the table. The effects of the OPEC increases on the CPI All Items index include only the increases in gasoline and fuel oil; motor oil is not included.

It is important to note that the estimated effects on the PPI and CPI of various OPEC price increases include only the direct effects of higher prices for the specific crude and refined petroleum products. They do not include secondary effects such as those which increased fuel costs will have on goods and services and which increased feed stock prices will have on chemicals and plastics.

EFFECTS OF OPEC INCREASES IN CRUDE PETROLEUM PRICES ON THE PPI AND CPI, UNDER STATIC ASSUMPTIONS

	Assumed OPEC percent price increase			
	5	10	15	20
	Percent change			
Crude petroleum	3.0	6.0	9.1	12.1
Imported [1]	5.0	10.0	15.0	20.0
Domestic	1.1	2.1	3.2	4.3
Producer price index:				
Finished goods [2]	.13	.27	.41	.55
Gasoline	1.8	3.7	5.5	7.4
Fuel oil No. 2 [3]	2.2	4.3	6.6	8.70
Intermediate materials [2]	.12	.23	.34	.45
Crude materials	.11	.21	.32	.43
Domestic crude petroleum	1.1	2.1	3.2	4.3
Consumer Price Index:				
All items—U	.06	.13	.19	.26
Gasoline	1.3	2.5	3.8	5.0
Fuel oil No. 2	1.7	3.3	5.0	6.7
Change in average price per gallon of all refined products	$0.0084	$0.0165	$0.0253	$0.0337

[1] No prices for this item collected for the PPI.
[2] Includes effects of other refined petroleum products not shown separately.
[3] Portions of fuel oil No. 2 allocated to intermediate materials SOP.

Senator BENTSEN. Can you give me a feel for the multiplier effect at the gas pump that we would finally have? What would it mean per gallon if we had a 10-percent increase in the price of imported oil from the OPEC countries?

Now I drive up to that gas pump and already I have seen the price at $0.70 a gallon here.

Ms. NORWOOD. A 10-percent price increase would mean somewhere around a penny-and-a-half a gallon at retail.

Senator BENTSEN. Another cent-and-a-half.

Ms. NORWOOD. Yes, per gallon of gasoline.

Senator BENTSEN. Well, that should translate to a predictable amount; would that translate to about $1.5 billion?

Ms. NORWOOD. I don't know that.

Senator BENTSEN. Sure it does.

Ms. NORWOOD. I think it would——

Senator BENTSEN. You know how we can translate that? Every cent we add to the gasoline tax puts $1 billion in the Trust Fund. So a cent-and-a-half would be $1.5 billion.

Ms. NORWOOD. Yes. That's a lot of money.

Senator BENTSEN. Yes. It is rather like one of our former Senators used to say, the Senator from Illinois, "You take $1 billion here, and $1 billion there, and finally you are talking about real money." [Laughter.]

Go ahead, Ms. Norwood.

Ms. NORWOOD. Producer prices for finished goods other than food have risen at an annual rate of 8 percent since the beginning of the year. Among consumer durable goods, prices have been rising less than half as fast in recent months as during the first part of the year. On the other hand, consumer nondurables other than food registered price increases at an annual rate of only 5.3 percent during the first 9 months of the year, but have increased at more than twice that rate in the last 2 months.

During the first part of the year, refined petroleum products exercised a moderating influence, but, in recent months, gasoline and home heating oil have contributed to the acceleration.

Similar patterns also have occurred at the retail level. In addition, prices for purchased homes and used cars, which are not included in the producer price indexes, have both risen at annual rates of about 11 percent so far this year.

Service prices in the Consumer Price Index have risen at a fairly uniform annual rate of more than 10 percent so far this year. More than two-thirds of this rise resulted from increases in household services other than rent, especially mortgage interest costs.

Prices for capital equipment rose at a fairly steady 7.4 percent annual rates through October. The November monthly increase of 1 percent is the largest in over a year.

Prices for intermediate nonfood materials rose 0.8 percent in November. Although this is less than in October, it is still more than the average monthly increase during the first 9 months of the year. The increases have been fairly widely distributed among all intermediate materials.

Crude nonfood materials prices have risen at an annual rate of 15.6 percent so far this year. The last 2 months have exhibited even faster price increases than that, but since this is a very volatile series we cannot be sure if there has been any real change in underlying conditions. During the course of the year, prices of most crude nonfood materials increased substantially. In recent months, increases have been especially large for iron and steel scrap, nonferrous scrap, natural gas, and crude natural rubber.

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

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

UNEMPLOYMENT RATES BY ALTERNATE SEASONAL ADJUSTMENT METHODS

Month and year	Unadjusted rate	Official adjusted rate	Alternative procedures											
			Official procedures used in 1976–77	Unemployed all multiplicative	Unemployed all additive	Year ahead	Concurrent		Stable		Other aggregations (multiplicative)		Direct adjustment of rate	Range (cols. 2–13))
							1st computed	Revised	1967–73	1967–77	Total	Residual		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(11)	(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	6.7	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	7.6	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	7.6	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	7.5	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	7.2	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	7.2	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	6.3	6.7	6.7	6.7	6.8	6.9	6.8	6.7	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	.2
May	5.5	6.1	6.1	6.1	6.0	6.1	6.0	6.1	6.2	6.2	6.1	6.1	6.2	.2
June	6.2	5.7	5.7	5.8	5.7	5.7	5.8	5.9	5.7	5.7	5.8	5.8	5.8	.2
July	6.3	6.2	6.3	6.2	6.2	6.2	6.1	6.1	6.1	6.1	6.2	6.1	6.2	.1
August	5.8	5.9	6.0	6.0	6.0	5.9	5.9	5.9	5.9	5.9	6.0	6.1	6.0	.2
September	5.7	6.0	6.0	6.0	6.1	6.0	5.9	5.9	5.8	5.9	6.1	6.1	6.0	.3
October	5.4	5.8	5.9	5.9	6.0	5.8	5.8	5.8	5.7	5.8	5.8	5.9	5.8	.3
November	5.5	5.8	5.8	5.8	5.9	5.8	5.7	5.7	5.8	5.9	5.8	5.8	5.8	.2
December														

EXPLANATION OF COLUMN HEADS

(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 yr 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	July	101.2
February	112.6	August	97.6
March	106.7	September	96.6
April	96.5	October	92.6
May	90.1	November	95.3
June	106.2	December	93.6

(3) Official procedures 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 yr 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 yr 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 ½ 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 procedure 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) Range 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.

Source: U.S. Department of Labor, Bureau of Labor Statistics, Dec. 8 1978.

[Press release No. 78-1005, Bureau of Labor Statistics, Department of Labor, Washington, D.C., Dec. 8, 1978]

THE EMPLOYMENT SITUATION: NOVEMBER 1978

Employment rose sharply in November and unemployment was unchanged, the Bureau of Labor Statistics of the U.S. Department of Labor reported today. The Nation's overall unemployment rate was 5.8 percent, the same as in October but down slightly from the rates prevailing early this year.

Total employment—as measured by the monthly survey of households—advanced by 540,000 in November to 95.7 million. Over the past year, total employment has grown by 3.3 million.

Nonfarm payroll employment—as measured by the monthly survey of establishments—rose by 465,000 in November to 87.0 million. Payroll jobs have increased by 3.5 million from the year-ago level.

Unemployment

Both the unemployment rate of 5.8 percent and the number of unemployed persons, 5.9 million, were unchanged from October levels. The November rate was almost a full percentage point lower than a year earlier and 0.4 point below the first quarter 1978 average.

Unemployment rates for adult men (4.0 percent), adult women (5.8 percent), and teenagers (16.2 percent) were also little changed from October. Likewise, joblessness among black (11.8 percent) and white workers (5.0 percent) and most other groups showed little or no movement in November. However, virtually all worker categories have shared in the improvement over the past year. (See tables A-1 and A-2.)

The median duration of unemployment declined from 6.1 weeks in October—where it had held for several months—to 5.5 weeks in November. Median duration was 7 weeks in November 1977. (See table A-4.)

Total employment and the labor force

Total employment registered a strong gain in November, rising by 540,000 to 95.7 million. Nearly all of the over-the-month increase was among adult men, whose employment level had remained fairly steady since early summer. Over the year, total employment has risen by 3.3 million (after adjustment for changes in the survey introduced in January—see the box on table A-1), with adult women accounting for over half of the increase.

The employment-population ratio—the proportion of the total noninstitutional population that is employed—reached a record high of 59.1 percent, continuing a generally upward trend which has reflected to a great extent the increased jobholding among adult women and teenagers. (See table A-1.)

There was substantial growth in the civilian labor force in November, as it increased 580,000 to 101.6 million. The labor force has risen by 2.6 million (after adjustment) since last November, with adult women accounting for about 60 percent of this advance. The civilian labor force participation rate jumped to an all-time high of 63.6 percent in November, after holding at 63.3 percent during 4 of the prior 5 months. This percentage was 0.7 percentage point above the year-earlier level (as adjusted).

Industry payroll employment

Nonagricultural payroll employment rose by 465,000 in November to 87.0 million, the second consecutive month of substantial growth. Employment increased in 80 percent of the 172 industries that comprise the BLS diffusion index of private nonagricultural payroll employment. Nonfarm jobs have increased by 3.5 million over the past year. (See tables B-1 and B-6.)

Over-the-month employment gains were recorded in every major industry group. Manufacturing posted the largest advance for the second straight month, following 5 months of sluggishness. The November gain in factory employment (160,000) was split proportionately between the durable and nondurable goods industries. Within durable goods, employment rose in every industry, but the strength was once again concentrated in the major metals and metal-using industries, led by primary and fabricated metals and transportation equipment. In nondurables, food processing and printing and publishing registered the largest increases, but much of the latter resulted from striking workers returning to their jobs.

Elsewhere in the goods sector, construction jobs increased by 40,000 in November, the second month of employment growth following a pause late in the summer, and mining employment continued to expand with a pickup of 10,000.

TABLE A.—MAJOR INDICATORS OF LABOR MARKET ACTIVITY, SEASONALLY ADJUSTED

Selected categories	Quarterly averages					Monthly data, 1978		
	1977		1978					
	III	IV	I	II	III	September	October	November
HOUSEHOLD DATA								
Thousands of Persons								
Civilian labor force	97,559	98,622	99,204	100,206	100,679	100,870	101,062	101,647
Total employment	90,823	92,069	93,050	94,244	94,625	94,868	95,192	95,735
Unemployment	6,736	6,554	6,154	5,962	6,054	6,002	5,870	5,912
Not in labor force	59,205	58,777	58,800	58,399	58,556	58,577	58,645	58,269
Discouraged workers	1,067	969	903	842	891	(1)	(1)	(1)
Percent of Labor Force								
Unemployment rates:								
All workers	6.9	6.6	6.2	5.9	6.0	6.0	5.8	5.8
Adult men	5.0	4.8	4.6	4.1	4.1	4.0	4.0	4.0
Adult women	7.0	6.8	5.9	6.1	6.2	6.0	5.6	5.8
Teenagers	17.6	16.7	16.9	15.9	16.2	16.6	16.3	16.2
White	6.1	5.8	5.4	5.1	5.2	5.3	5.1	5.0
Black and other	13.6	13.3	12.3	12.0	11.8	11.2	11.4	11.8
Full-time workers	6.5	6.2	5.7	5.4	5.6	5.5	5.3	5.2
ESTABLISHMENT DATA								
Thousands of Jobs								
Nonfarm payroll employment	82,677	83,489	84,262	85,677	86,115	86,163	[2] 86,567	[2] 87,034
Goods-producing industries	24,417	24,583	24,766	25,376	25,478	25,471	[2] 25,664	[2] 25,878
Service-producing industries	58,260	58,906	59,495	60,302	60,637	60,692	[2] 60,903	[2] 61,156
Hours of Work								
Average weekly hours:								
Total private nonfarm	35.9	36.0	35.7	36.0	35.8	35.8	[2] 35.8	[2] 35.9
Manufacturing	40.3	40.5	40.2	40.6	40.4	40.4	[2] 40.4	[2] 40.6
Manufacturing overtime	3.4	3.6	3.6	3.6	3.5	3.6	[2] 3.6	[2] 3.7

[1] Not available.
[2] Preliminary.

In the service-producing sector, the largest employment increases occurred in services (95,000) and trade (65,000). The government increase (45,000) occurred entirely in the State and local jurisdictions. There was also continued growth in the other two industries in the sector—transportation and public utilities and finance, insurance, and real estate.

Hours

The average workweek for production or nonsupervisory workers on private nonagricultural payrolls edged up 0.1 hour to 35.9 hours in November. At 40.6 hours, the manufacturing workweek increased 0.2 hour, while factory overtime, at 3.7 hours, was up 0.1 hour over the month. Both the total private and manufacturing workweeks were little changed from year-earlier levels. (See table B–2.)

Substantial over-the-month employment growth, coupled with the small increase in hours, caused the index of aggregate hours of production or nonsupervisory workers on private nonagricultural payrolls to jump a full percentage point in November to 122.4 (1967=100). The index was 4.3 percent, higher than the year-earlier level. (See table B–5.)

Hourly and weekly earnings

Average hourly earnings of production or nonsupervisory workers on private nonagricultural payrolls increased 0.7 percent in November and 8.7 percent from a year ago (seasonaly adjusted). Average weekly earnings were up 1.0 percent over the month; weekly earnings have risen by 8.4 percent since November 1977.

Before adjustment for seasonality, average hourly earnings edged up by 1 cent to $5.87, 47 cents above last November; average weekly earnings were $210.15, 22 cents below their October level but $16.29 higher than a year earlier. (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 218.9 (1967=100) in November, 0.4 percent higher than in October. The index was 8.1 percent above November a year ago. During the 12-month period ended in October, the Hourly Earnings Index in dollars of constant purchasing power decreased 0.5 percent. (See table B–4.)

NOTE: 1978 seasonally-adjusted household data shown in tables A–1 through A–7 for periods prior to November may differ slightly from those previously published. These estimates are derived with new computer procedures which maintain more precision in calculations than did the procedures previously used.

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 ether 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 unemployment (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 general 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 different 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 actually amounts of revision due to benchmark adjustments are provided in tables J through O in the Explanatory Notes" of Employment and Earnings.

HOUSEHOLD DATA

TABLE A-1.—EMPLOYMENT STATUS OF THE NONINSTITUTIONAL POPULATION

[Numbers in thousands]

Employment status	Not seasonally adjusted			Seasonally adjusted					
	November 1977	October 1978	November 1978	November 1977	July 1978	August 1978	September 1978	October 1978	November 1978
TOTAL									
Total noninstitutional population [1]	159,522	161,829	162,033	159,522	161,148	161,348	161,570	161,829	162,033
Armed Forces [1]	2,132	2,122	2,117	2,132	2,116	2,122	2,123	2,122	2,117
Civilian noninstitutional population [1]	157,389	159,707	159,916	157,389	159,032	159,226	159,447	159,707	159,916
Civilian labor force	98,819	101,555	101,659	98,877	100,618	100,550	100,870	101,062	101,647
Participation rate	62.8	63.6	63.6	62.8	63.3	63.1	63.3	63.3	63.1
Employed	92,473	96,095	96,029	92,214	94,425	94,582	94,868	95,192	95,736
Employment-population ratio [2]	58.0	59.4	59.3	57.8	58.6	58.6	58.7	58.8	59.5
Agriculture	3,181	3,553	3,100	3,357	3,387	3,360	3,411	3,380	3,265
Nonagricultural industries	89,292	92,541	92,929	88,857	91,038	91,221	91,457	91,811	92,470
Unemployed	6,346	5,460	5,629	6,663	6,193	5,968	6,002	5,870	5,912
Unemployment rate	6.4	5.4	5.5	6.7	6.2	5.9	6.0	5.8	5.8
Not in labor force	58,570	58,152	58,258	58,512	58,414	58,677	58,577	58,645	58,269
MEN, 20 YEARS AND OVER									
Total noninstitutional population [1]	67,948	69,081	69,182	67,948	68,729	68,827	68,937	69,081	69,182
Civilian noninstitutional population [1]	66,257	67,382	67,486	66,257	67,039	67,127	67,236	67,382	67,486
Civilian labor force	52,890	53,788	53,924	52,971	53,391	53,306	53,387	53,559	35,993
Participation rate	79.8	79.8	79.9	79.9	79.6	79.4	79.4	79.5	80.0
Employed	50,578	51,889	51,955	50,459	51,213	51,134	51,229	51,396	51,853
Employment-population ratio [2]	74.4	75.1	75.1	74.3	74.5	74.3	74.3	74.4	75.0
Agriculture	2,283	2,462	2,277	2,330	2,420	2,358	2,422	2,361	2,323
Nonagricultural industries	48,295	49,428	49,678	48,129	48,793	48,777	48,807	49,036	49,529
Unemployed	2,312	1,899	1,969	2,512	2,178	2,171	2,158	2,163	2,140
Unemployment rate	4.4	3.5	3.7	4.7	4.1	4.1	4.0	4.0	4.0
Not in labor force	13,367	13,593	13,563	13,286	13,648	13,821	13,849	13,823	13,493
WOMEN, 20 YEARS AND OVER									
Total noninstitutional population [1]	74,768	75,998	76,110	74,768	75,643	75,753	75,873	75,998	76,110
Civilian noninstitutional population [1]	74,669	75,889	76,001	74,669	75,537	75,645	75,764	75,889	76,001
Civilian labor force	36,896	38,503	38,543	36,451	37,542	37,461	37,953	37,880	38,049
Participation rate	49.4	50.7	50.7	48.8	49.7	49.5	50.1	49.9	50.1
Employed	34,405	36,372	36,362	33,923	35,110	35,193	35,688	35,742	35,837
Employment-population ratio [2]	46.0	47.9	47.8	45.4	46.4	46.5	47.0	47.0	47.1
Agriculture	548	690	534	589	587	579	592	588	574
Nonagricultural industries	33,857	35,682	35,827	33,334	34,523	34,613	35,096	35,155	35,263
Unemployed	2,491	2,181	2,181	2,528	2,432	2,269	2,265	2,137	2,212
Unemployment rate	6.8	5.5	5.7	6.9	6.5	6.1	6.0	5.6	5.8
Not in labor force	37,772	37,387	37,458	38,218	37,995	38,184	37,811	38,009	37,952

BOTH SEXES, 16-19 YEARS									
Total noninstitutional population [1]	16,806	16,750	16,741	16,806	16,776	16,768	16,760	16,760	16,741
Civilian noninstitutional population [1]	16,463	16,436	16,429	16,463	16,455	16,455	16,446	16,436	16,429
Civilian labor force	9,033	9,264	9,192	9,455	9,685	9,782	9,530	9,623	9,605
Participation rate	54.9	56.4	55.9	57.4	58.9	59.5	57.9	58.5	58.5
Employed	7,490	7,834	7,712	7,832	8,102	8,254	7,951	8,053	8,045
Employment-population ratio [2]	44.6	46.8	46.1	46.6	48.3	49.2	47.4	48.1	48.1
Agriculture	350	402	289	438	380	423	397	432	367
Nonagricultural industries	7,140	7,432	7,424	7,394	7,722	7,831	7,554	7,621	7,678
Unemployed	1,543	1,431	1,479	1,623	1,583	1,538	1,579	1,570	1,560
Unemployment rate	17.1	15.4	16.1	17.2	16.3	15.6	16.6	16.3	16.2
Not in labor force	7,431	7,172	7,237	7,008	6,770	6,673	6,916	6,813	6,824
WHITE									
Total noninstitutional population [1]	140,095	141,873	142,031	140,095	141,366	141,520	141,693	141,873	142,031
Civilian noninstitutional population [1]	138,351	140,170	140,332	138,351	139,660	139,817	139,990	104,170	140,332
Civilian labor force	87,287	89,475	89,521	87,292	88,521	88,672	88,813	89,120	89,460
Participation rate	63.1	63.8	63.8	63.1	63.4	63.4	63.4	63.6	63.7
Employed	82,451	85,297	85,261	82,181	83,862	84,042	84,141	84,569	84,957
Employment-population ratio [2]	58.9	60.1	60.0	58.7	59.3	59.4	59.4	59.6	59.8
Unemployed	4,836	4,178	4,260	5,111	4,659	4,630	4,672	4,551	4,502
Unemployment rate	5.5	4.7	4.8	5.9	5.3	5.2	5.3	5.1	5.0
Not in labor force	51,064	50,696	50,811	51,059	51,139	51,145	51,177	51,050	50,872
BLACK AND OTHER									
Total noninstitutional population [1]	19,427	19,955	20,002	19,427	19,782	19,828	19,876	19,955	20,002
Civilian noninstitutional population [1]	19,038	19,536	19,585	19,038	19,371	19,409	19,457	19,536	19,585
Civilian labor force	11,532	12,080	12,137	11,551	11,998	11,976	12,057	12,078	12,144
Participation rate	60.6	61.8	62.0	60.7	61.9	61.7	62.0	61.8	62.0
Employed	10,022	10,798	10,768	9,966	10,496	10,578	10,707	10,705	10,705
Employment-population ratio [2]	51.6	54.1	53.8	51.3	53.1	53.3	53.9	53.6	53.5
Unemployed	1,510	1,283	1,369	1,585	1,502	1,398	1,350	1,373	1,438
Unemployment rate	13.1	10.6	11.3	13.7	12.5	11.7	11.2	11.4	11.8
Not in labor force	7,506	7,456	7,447	7,487	7,373	7,433	7,400	7,458	7,441

[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).

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.

TABLE A-2.—MAJOR UNEMPLOYMENT INDICATORS, SEASONALLY ADJUSTED

Selected categories	Number of unemployed persons (in thousands)		Unemployment rates					
	Nov. 1977	Nov. 1978	Nov. 1977	July 1978	Aug. 1978	Sept. 1978	Oct. 1978	Nov. 1978
CHARACTERISTICS								
Total, 16 yr and over	6,663	5,912	6.7	6.2	5.9	6.0	5.8	5.8
Men, 20 yr and over	2,512	2,140	4.7	4.1	4.1	4.0	4.0	4.0
Women, 20 yr and over	2,528	2,212	6.9	6.5	6.1	6.0	5.6	5.8
Both sexes, 16 to 19 yr	1,623	1,560	17.2	16.3	15.6	16.6	16.3	16.2
White, total	5,111	4,502	5.9	5.3	5.2	5.3	5.1	5.0
Men, 20 yr and over	1,965	1,638	4.1	3.6	3.6	3.7	3.6	3.4
Women, 20 yr and over	1,909	1,681	6.1	5.6	5.3	5.3	4.9	5.1
Both sexes, 16 to 19 yr	1,237	1,183	14.7	13.4	13.6	14.3	14.1	13.9
Black and other, total	1,585	1,438	13.7	12.5	11.7	11.2	11.4	11.8
Men, 20 yr and over	556	508	10.0	8.4	9.0	8.2	8.4	8.7
Women, 20 yr and over	630	541	12.6	11.6	10.4	9.9	10.1	10.3
Both sexes, 16 to 19 yr	399	389	39.0	37.0	32.4	34.6	34.3	36.2
Married men, spouse present	1,326	984	3.3	2.7	2.8	2.7	2.7	2.5
Married women, spouse present	1,472	1,327	6.5	5.6	5.8	5.6	5.3	5.6
Women who head families	426	378	9.3	10.1	8.2	7.9	7.6	7.7
Full-time workers	5,215	4,532	6.2	5.7	5.5	5.5	5.3	5.2
Part-time workers	1,430	1,361	9.6	8.8	8.6	8.8	9.1	9.0
Unemployed 15 weeks and over [1]	1,829	1,251	1.8	1.3	1.2	1.3	1.4	1.2
Labor force time lost [2]			7.3	6.8	6.6	6.5	6.3	6.3
OCCUPATION [3]								
White-collar workers	2,035	1,647	4.2	3.7	3.5	3.5	3.3	3.3
Professional and technical	416	368	2.9	2.5	2.6	2.7	2.9	2.5
Managers and administrators, except farm	307	231	3.0	2.2	1.8	2.2	1.8	2.2
Sales workers	298	202	4.9	4.4	4.2	4.4	4.2	3.2
Clerical workers	1,014	845	5.7	5.4	5.0	4.7	4.2	4.6
Blue-collar workers	2,535	2,262	7.6	6.9	7.0	7.0	6.9	6.6
Craft and kindred workers	661	533	5.2	4.0	4.4	4.7	5.0	4.0
Operatives, except transport	1,065	925	9.3	8.5	9.0	8.5	7.7	7.7
Transport equipment operatives	198	159	5.3	6.1	5.9	5.2	4.9	4.2
Nonfarm laborers	611	646	11.9	10.6	9.5	10.7	11.3	12.0
Service workers	1,060	1,041	7.8	7.5	7.1	7.4	7.1	7.4
Farm workers	120	94	4.1	3.8	3.3	4.0	4.7	3.3
INDUSTRY [3]								
Nonagricultural private wage and salary workers [4]	4,811	4,228	6.7	6.0	5.9	5.9	5.7	5.7
Construction	526	520	11.2	9.5	9.1	10.7	11.5	10.6
Manufacturing	1,408	1,195	6.5	5.6	5.7	5.5	5.3	5.3
Durable goods	761	647	6.0	5.1	5.5	5.0	4.8	4.8
Nondurable goods	647	548	7.2	6.4	5.9	6.3	6.0	5.9
Transportation and public utilities	241	186	4.7	4.1	3.8	3.6	3.6	3.4
Wholesale and retail trade	1,350	1,194	7.4	6.9	6.6	6.8	6.8	6.5
Finance and service industries	1,259	1,103	6.0	5.4	5.2	5.1	4.6	5.0
Government workers	697	624	4.3	4.1	3.6	3.8	4.0	3.9
Agricultural wage and salary workers	144	120	9.3	10.1	8.3	8.6	9.8	7.8
VETERAN STATUS								
Male Vietnam era veterans: [5]								
20 to 34 yr	438	303	6.8	5.1	6.3	4.9	5.1	5.0
20 to 24 yr	130	79	14.1	11.4	13.9	10.5	9.8	11.8
25 to 29 yr	173	138	6.4	6.4	7.3	7.3	6.9	6.6
30 to 34 yr	135	95	4.8	2.9	4.1	2.4	3.1	2.8
Male nonveterans:								
20 to 34 yr	1,111	1,005	6.9	5.9	5.8	5.8	5.9	5.9
20 to 24 yr	650	591	9.3	8.4	8.1	8.2	8.1	8.1
25 to 29 yr	283	269	5.5	4.4	4.8	4.2	4.5	4.5
30 to 34 yr	178	145	4.5	3.3	2.7	3.6	3.6	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 Aug. 5, 1974, and May 7, 1975.

TABLE A-3.—SELECTED EMPLOYMENT INDICATORS

[In thousands]

Selected categories	Not seasonally adjusted		Seasonally adjusted					
	Nov. 1977	Nov. 1978	Nov. 1977	July 1978	Aug. 1978	Sept. 1978	Oct. 1978	Nov. 1978
CHARACTERISTICS								
Total employed, 16 yrs and over	92,473	96,029	92,214	94,425	94,582	94,868	95,192	95,735
Men	54,590	55,976	54,745	55,534	55,529	55,504	55,702	56,134
Women	37,884	40,054	37,469	38,891	39,053	39,364	39,490	39,601
Married men, spouse present	38,716	39,136	38,531	38,642	38,467	38,726	38,748	38,941
Married women, spouse present	21,839	22,845	21,278	21,766	21,667	22,175	22,132	22,266
OCCUPATION								
White-collar workers	46,689	48,355	46,251	47,192	47,236	47,456	47,777	47,907
Professional and technical	14,224	14,642	13,918	14,239	14,255	14,105	14,333	14,327
Managers and administrators, except farm	9,995	10,148	9,894	10,182	10,174	10,056	9,948	10,048
Sales workers	5,786	6,174	5,804	6,017	5,872	5,872	5,959	6,193
Clerical workers	16,684	17,392	16,635	16,754	16,935	17,422	17,536	17,340
Blue-collar workers	30,554	32,110	30,603	31,225	31,483	31,738	31,864	32,157
Craft and kindred workers	12,100	12,650	12,116	12,229	12,559	12,640	12,502	12,663
Operatives, except transport	10,507	11,206	10,423	10,841	10,702	10,823	11,120	11,117
Transport equipment operatives	3,556	3,669	3,525	3,452	3,404	3,577	3,583	3,636
Nonfarm laborers	4,391	4,585	4,539	4,703	4,817	4,698	4,658	4,741
Service workers	12,557	12,978	12,590	12,838	12,884	12,800	12,920	13,018
Farm workers	2,674	2,586	2,809	2,803	2,809	2,875	2,833	2,713
MAJOR INDUSTRY AND CLASS OF WORKER								
Agriculture:								
Wage and salary workers	1,283	1,298	1,405	1,364	1,423	1,442	1,421	1,422
Self-employed workers	1,589	1,561	1,590	1,652	1,617	1,655	1,666	1,563
Unpaid family workers	310	241	368	348	317	298	323	286
Nonagricultural industries:								
Wage and salary workers	82,787	86,168	82,281	84,016	84,406	84,842	85,252	85,665
Government	15,576	15,604	15,415	15,129	15,283	15,413	15,421	15,450
Private industries	67,211	70,564	66,866	68,887	69,123	69,429	69,831	70,215
Private households	1,409	1,361	1,403	1,394	1,369	1,370	1,297	1,356
Other industries	65,802	69,203	65,463	67,493	67,754	68,059	68,534	68,860
Self-employed workers	6,062	6,341	6,082	6,206	6,221	6,200	6,271	6,360
Unpaid family workers	444	419	467	496	440	471	441	442
PERSONS AT WORK[1]								
Nonagricultural industries	85,823	89,170	83,347	86,205	86,469	86,310	86,441	86,557
Full-time schedules	69,713	72,797	68,240	71,095	71,338	70,939	71,192	71,230
Part time for economic reasons	3,083	2,977	3,285	3,330	3,294	3,231	3,207	3,171
Usually work full time	1,189	1,241	1,255	1,385	1,391	1,311	1,171	1,310
Usually work parttime	1,894	1,736	2,030	1,945	1,903	1,920	2,036	1,861
Part time for noneconomic reasons	13,027	13,396	11,822	11,780	11,837	12,140	12,042	12,156

[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					
	Nov. 1977	Nov. 1978	Nov. 1977	July 1978	Aug. 1978	Sept. 1978	Oct. 1978	Nov. 1978
DURATION								
Less than 5 weeks	2,781	2,757	2,851	3,025	2,822	2,786	2,709	2,825
5 to 14 weeks	1,997	1,800	2,037	1,854	1,988	1,928	1,824	1,837
15 weeks and over	1,568	1,072	1,829	1,292	1,215	1,293	1,370	1,251
15 to 26 weeks	768	601	936	665	631	687	763	724
27 weeks and over	800	472	893	627	584	606	607	527
Average (mean) duration, in weeks	13.3	10.9	13.7	11.8	11.2	11.6	11.8	11.2
Median duration, in weeks	6.6	5.2	7.0	5.9	6.0	5.9	6.1	5.5
PERCENT DISTRIBUTION								
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 5 weeks	43.8	49.0	42.4	49.0	46.8	46.4	45.9	47.8
5 to 14 weeks	31.5	32.0	30.3	30.0	33.0	32.1	30.9	31.1
15 weeks and over	24.7	19.0	27.2	20.9	20.2	21.5	23.2	21.2
15 to 26 weeks	12.1	10.7	13.9	10.8	10.5	11.4	12.9	12.2
27 weeks and over	12.6	8.4	13.3	10.2	9.7	10.1	10.3	8.9

TABLE A-5.—REASONS FOR UNEMPLOYMENT

[Numbers in thousands]

Reasons	Not seasonally adjusted		Seasonally adjusted					
	Nov. 1977	Nov. 1978	Nov. 1977	July 1978	Aug. 1978	Sept. 1978	Oct. 1978	Nov. 1978
NUMBER OF UNEMPLOYED								
Lost last job	2,733	2,236	2,969	2,552	2,553	2,397	2,538	2,428
On layoff	636	633	780	714	770	719	640	777
Other job losers	2,097	1,603	2,189	1,839	1,783	1,677	1,898	1,651
Left last job	890	822	881	869	841	852	799	814
Reentered labor force	1,889	1,770	1,891	1,883	1,733	1,927	1,710	1,772
Seeking first job	833	802	901	880	893	805	793	870
PERCENT OF DISTRIBUTION								
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Job losers	43.1	39.8	44.7	41.3	42.4	40.1	43.5	41.3
On layoff	10.0	11.3	11.7	11.5	12.8	12.0	11.0	13.2
Other job losers	33.1	28.5	33.0	29.7	29.6	28.0	32.5	28.1
Job leavers	14.0	14.6	13.3	14.0	14.0	14.3	13.7	13.8
Reentrants	29.8	31.4	28.5	30.4	28.8	32.2	29.3	30.1
New entrants	13.1	14.2	13.6	14.2	14.8	13.5	13.6	14.8
UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE								
Job losers	2.7	2.2	3.0	2.5	2.5	2.4	2.5	2.4
Job leavers	.9	.8	.9	.9	.8	.8	.8	.8
Reentrants	1.9	1.7	1.9	1.9	1.7	1.9	1.7	1.7
New entrants	.8	.8	.9	.9	.9	.8	.8	.9

TABLE A-6.—UNEMPLOYMENT BY SEX AND AGE, SEASONALLY ADJUSTED

Sex and age	Number of unemployed persons (in thousands)		Unemployment rates					
	Nov. 1977	Nov. 1978	Nov. 1977	July 1978	Aug. 1978	Sept. 1978	Oct. 1978	Nov. 1978
Total, 16 yr and over	6,663	5,912	6.7	6.2	5.9	6.0	5.8	5.8
16 to 19 yr	1,623	1,560	17.2	16.3	15.6	16.6	16.3	16.2
16 to 17 yr	756	767	19.0	20.1	18.9	19.2	19.0	19.0
18 to 19 yr	871	796	15.9	13.6	13.3	14.3	14.2	14.3
20 to 24 yr	1,519	1,375	10.4	9.9	9.0	9.3	8.7	9.1
25 yr and over	3,493	2,954	4.7	4.2	4.2	4.0	4.0	3.8
25 to 54 yr	2,909	2,530	4.8	4.4	4.4	4.2	4.2	4.0
55 yr and over	605	449	4.1	3.2	3.0	3.3	3.1	3.0
Men, 16 yr and over	3,352	2,950	5.8	5.1	5.0	5.1	5.1	5.0
16 to 19 yr	840	810	16.4	15.4	14.7	15.8	16.5	15.9
16 to 17 yr	403	431	18.2	18.8	17.7	19.1	20.2	19.9
18 to 19 yr	438	379	15.0	13.0	12.4	12.6	13.5	12.9
20 to 24 yr	777	700	9.8	8.9	8.7	8.6	8.6	8.6
25 yr and over	1,714	1,420	3.8	3.3	3.4	3.4	3.4	3.1
25 to 54 yr	1,392	1,201	3.9	3.3	3.5	3.4	3.5	3.3
55 yr and over	337	237	3.7	3.4	2.9	3.0	3.0	2.6
Women, 16 yr and over	3,311	2,962	8.1	7.7	7.2	7.2	6.7	7.0
16 to 19 yr	783	750	18.1	17.4	16.7	17.4	16.1	16.6
16 to 17 yr	353	336	20.1	21.6	20.3	19.3	17.7	18.0
18 to 19 yr	433	417	16.8	14.4	14.4	16.1	15.0	15.8
20 to 24 yr	742	675	11.1	11.0	9.2	10.1	8.7	9.8
25 yr and over	1,779	1,535	6.0	5.6	5.3	5.0	4.9	4.9
25 to 54 yr	1,517	1,329	6.3	6.0	5.8	5.3	5.3	5.2
55 yr and over	268	212	4.8	2.9	3.3	3.9	3.4	3.7

TABLE A-7.—RANGE OF UNEMPLOYMENT MEASURES BASED ON VARYING DEFINITIONS OF UNEMPLOYMENT AND THE LABOR FORCE, SEASONALLY ADJUSTED

[In percent]

Measures	Quarterly averages					Monthly data (1978)		
	1977		1978					
	III	IV	I	III	III	Sept.	Oct.	Nov.
U-1—Persons unemployed 15 weeks or longer as a percent of the civilian labor force	1.9	1.9	1.6	1.3	1.3	1.3	1.4	1.2
U-2—Job losers as a percent of the civilian labor force	3.2	3.0	2.6	2.5	2.5	2.4	2.5	2.4
U-3—Unemployed persons 25 yr and over as a percent of the civilian labor force 25 yr and over	4.9	4.7	4.0	4.0	4.1	4.0	4.0	3.8
U-4—Unemployed full-time jobseekers as a percent of the full-time labor force	6.5	6.2	5.7	5.4	5.6	5.5	5.3	5.2
U-5—Total unemployed as a percent of the civilian labor force (official measure)	6.9	6.6	6.2	5.9	6.0	6.0	5.8	5.8
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	8.6	8.2	7.6	7.5	7.6	7.5	7.3	7.2
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	9.7	9.2	8.5	8.3	8.5	(1)	(1)	(1)

[1] 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					
	Nov. 1977	Oct. 1978	Nov. 1978	Nov. 1977	July 1978	Aug. 1978	Sept. 1978	Oct. 1978	Nov. 1978
CALIFORNIA									
Civilian noninstitutional population [1]	16,062	16,344	16,372	16,062	16,259	16,283	16,312	16,344	16,372
Civilian labor force	10,331	10,639	10,619	10,355	10,561	10,586	10,667	10,642	10,644
Employed	9,510	10,007	9,977	9,529	9,742	9,807	9,948	9,950	9,996
Unemployed	821	633	642	826	819	779	719	692	648
Unemployment rate	7.9	5.9	6.0	8.0	7.8	7.4	6.7	6.5	6.1
FLORIDA									
Civilian noninstitutional population [1]	6,435	6,625	6,643	6,435	6,569	6,585	6,605	6,625	6,643
Civilian labor force	3,643	3,764	3,743	(2)	(2)	(2)	(2)	(2)	(2)
Employed	3,368	3,500	3,510	(2)	(2)	(2)	(2)	(2)	(2)
Unemployed	275	264	233	(2)	(2)	(2)	(2)	(2)	(2)
Unemployment rate	7.6	7.0	6.2	(2)	(2)	(2)	(2)	(2)	(2)
ILLINOIS									
Civilian noninstitutional population [1]	8,187	8,245	8,251	8,187	8,224	8,230	8,236	8,245	8,251
Civilian labor force	5,275	5,416	5,424	5,305	5,289	5,377	5,353	5,410	5,448
Employed	4,945	5,127	5,143	4,936	4,975	5,052	5,060	5,109	5,134
Unemployed	331	289	281	369	314	325	293	301	314
Unemployment rate	6.3	5.3	5.2	7.0	5.9	6.0	5.5	5.6	5.8
MASSACHUSETTS									
Civilian noninstitutional population [1]	4,313	4,353	4,357	4,313	4,339	4,343	4,347	4,353	4,357
Civilian labor force	2,800	2,805	2,843	(2)	(2)	(2)	(2)	(2)	(2)
Employed	2,606	2,684	2,694	2,591	2,691	2,670	2,679	2,660	2,679
Unemployed	194	121	149	(2)	(2)	(2)	(2)	(2)	(2)
Unemployment rate	6.9	4.3	5.2	(2)	(2)	(2)	(2)	(2)	(2)

See footnotes at end of table.

TABLE A-8.—EMPLOYMENT STATUS OF THE NONINSTITUTIONAL POPULATION FOR TEN LARGE STATES—Continued]

[Numbers in thousands]

State and employment status	Not seasonally adjusted *			Seasonally adjusted					
	Nov. 1977	Oct. 1978	Nov. 1978	Nov. 1977	July 1978	Aug. 1978	Sept. 1978	Oct. 1978	Nov. 1978
MICHIGAN									
Civilian noninstitutional population [1]	6,582	6,654	6,661	6,582	6,630	6,637	6,644	6,654	6,661
Civilian labor force	4,183	4,182	4,229	(2)	(2)	(2)	(2)	(2)	(2)
Employed	3,860	3,953	3,949	(2)	(2)	(2)	(2)	(2)	(2)
Unemployed	323	229	279	356	289	348	280	299	311
Unemployment rate	7.7	5.5	6.6	(2)	(2)	(2)	(2)	(2)	(2)
NEW JERSEY									
Civilian noninstitutional population [1]	5,435	5,485	5,490	5,435	5,468	5,473	5,478	5,485	5,490
Civilian labor force	3,420	3,538	3,592	3,441	3,385	3,418	3,544	3,563	3,613
Employed	3,149	3,318	3,373	3,141	3,127	3,177	3,282	3,317	3,365
Unemployed	271	220	220	300	258	241	262	246	248
Unemployment rate	7.9	6.2	6.1	8.7	7.6	7.1	7.4	6.9	6.9
NEW YORK									
Civilian noninstitutional population [1]	13,321	13,356	13,361	13,321	13,339	13,341	13,347	13,356	13,361
Civilian labor force	7,780	7,938	7,961	7,863	7,792	7,857	7,888	7,988	8,045
Employed	7,075	7,314	7,392	7,160	7,200	7,257	7,275	7,321	7,476
Unemployed	704	624	570	703	592	600	613	667	569
Unemployment rate	9.1	7.9	7.2	8.9	7.6	7.6	7.8	8.4	7.1
OHIO									
Civilian noninstitutional population [1]	7,807	7,863	7,869	7,807	7,844	7,849	7,856	7,863	7,869
Civilian labor force	4,910	5,086	5,088	4,921	4,930	4,891	5,038	5,084	5,099
Employed	4,612	4,846	4,838	4,598	4,654	4,627	4,748	4,814	4,824
Unemployed	298	241	250	323	276	264	290	270	275
Unemployment rate	6.1	4.7	4.9	6.6	5.6	5.4	5.8	5.3	5.4
PENNSYLVANIA									
Civilian noninstitutional population [1]	8,840	8,893	8,899	8,840	8,874	8,878	8,885	8,893	8,899
Civilian labor force	5,159	5,342	5,350	5,182	5,284	5,248	5,305	5,321	5,373
Employed	4,813	4,971	4,996	4,790	4,893	4,897	4,899	4,922	4,973
Unemployed	346	371	354	392	391	351	406	399	400
Unemployment rate	6.7	6.9	6.6	7.6	7.4	6.7	7.7	7.5	7.4
TEXAS									
Civilian noninstitutional population [1]	9,083	9,272	9,290	9,083	9,215	9,233	9,251	9,272	9,290
Civilian labor force	5,871	6,079	6,112	5,872	5,989	5,979	5,928	6,046	6,112
Employed	5,579	5,819	5,819	5,570	5,690	5,684	5,648	5,772	5,810
Unemployed	291	260	292	302	299	295	280	274	302
Unemployment rate	5.0	4.3	4.8	5.1	5.0	4.9	4.7	4.5	4.9

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

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

[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					
	November 1977	September 1978	October 1978 [1]	November 1978 [1]	November 1977	July 1978	August 1978	September 1978	October 1978 [1]	November 1978 [1]
Total	84,276	86,688	87,298	87,798	83,549	86,033	86,149	86,163	86,567	87,034
Goods-producing	24,880	26,131	26,156	26,162	24,617	25,501	25,463	25,471	25,664	25,878
Mining	841	894	898	905	840	882	887	887	894	904
Construction	4,062	4,586	4,598	4,529	3,928	4,317	4,298	4,298	4,338	4,380
Manufacturing	19,977	20,651	20,660	20,728	19,849	20,302	20,278	20,286	20,432	20,594
Production workers	14,387	14,877	14,880	14,950	14,263	14,569	14,532	14,536	14,657	14,821
Durable goods	11,816	12,345	12,408	12,473	11,746	12,138	12,146	12,166	12,302	12,398
Production workers	8,503	8,871	8,928	8,993	8,429	8,694	8,693	8,706	8,818	8,916
Lumber and wood products	741.3	764.5	760.7	755.4	745	743	743	744	748	759
Furniture and fixtures	480.9	488.7	491.4	491.8	475	485	481	480	484	486
Stone, clay, and glass products	687.9	708.8	712.0	712.7	680	698	692	692	699	704
Primary metal industries	1,174.0	1,223.3	1,220.1	1,233.6	1,180	1,199	1,205	1,214	1,220	1,240
Fabricated metal products	1,617.9	1,674.7	1,684.3	1,691.4	1,608	1,643	1,646	1,650	1,666	1,681
Machinery, except electrical	2,234.5	2,365.3	2,382.0	2,401.7	2,232	2,345	2,351	2,358	2,389	2,399
Electric and electronic equipment	1,922.3	1,994.0	2,006.0	2,018.0	1,903	1,977	1,975	1,972	1,986	1,998
Transportation equipment	1,878.8	1,993.1	2,011.7	2,026.3	1,860	1,937	1,941	1,943	1,992	2,006
Instruments and related products	625.6	662.9	665.1	672.0	623	660	661	662	663	669
Miscellaneous manufacturing	452.9	469.4	474.2	469.9	440	451	451	451	455	456
Nondurable goods	8,161	8,306	8,252	8,255	8,103	8,164	8,132	8,120	8,130	8,196
Production workers	5,884	6,006	5,952	5,957	5,834	5,875	5,839	5,830	5,839	5,905
Food and kindred products	1,709.4	1,790.4	1,734.9	1,707.0	1,693	1,688	1,670	1,665	1,667	1,690
Tobacco manufacturers	77.4	78.0	78.7	77.3	71	73	69	70	71	71
Textile mill products	920.6	913.6	911.9	912.5	918	909	903	907	908	910
Apparel and other textile products	1,333.7	1,325.8	1,327.4	1,327.9	1,318	1,307	1,309	1,309	1,308	1,312
Paper and allied products	697.0	702.9	697.1	705.8	693	710	698	697	693	702
Printing and publishing	1,155.4	1,179.5	1,184.1	1,202.6	1,152	1,187	1,188	1,178	1,181	1,199
Chemicals and allied products	1,073.9	1,093.8	1,092.7	1,095.2	1,073	1,091	1,089	1,088	1,089	1,094
Petroleum and coal products	205.4	211.8	212.2	211.6	205	207	209	209	210	211
Rubber and miscellaneous plastics products	733.0	758.2	763.1	767.5	726	749	746	744	752	760
Leather and leather products	255.3	252.2	250.1	247.5	254	243	251	253	251	247
Service-producing	59,396	60,557	61,142	61,636	58,932	60,532	60,686	60,692	60,903	61,156
Transportation and public utilities	4,760	4,908	4,950	4,971	4,736	4,827	4,846	4,855	4,920	4,946
Wholesale and retail trade	19,088	19,634	19,709	19,975	18,830	19,469	19,523	19,546	19,640	19,705
Wholesale trade	4,780	4,932	4,971	4,998	4,761	4,901	4,905	4,917	4,946	4,978
Retail trade	14,308	14,702	14,738	14,977	14,069	14,568	14,618	14,629	14,694	14,727
Finance, insurance, and real estate	4,521	4,724	4,732	4,745	4,535	4,690	4,707	4,719	4,737	4,759
Services	15,537	16,159	16,181	16,213	15,568	15,989	16,074	16,127	16,149	16,245
Government	15,490	15,132	15,570	15,732	15,263	15,557	15,536	15,445	15,457	15,501
Federal	2,716	2,744	2,753	2,756	2,727	2,765	2,765	2,752	2,767	2,767
State and local	12,774	12,388	12,817	12,976	12,536	12,792	12,771	12,693	12,690	12,734

[1] Preliminary.

Note: Establishment data shown in tables B-1 through B-6 have been revised to conform to the 1972 Standard Industrial Classification and adjusted to March 1977 benchmark levels; consequently, they are not comparable with data published prior to the October 6, 1978 release. For a discussion of the effect of these revisions, see "BLS Establishment Estimates Revised to Reflect New Benchmark Levels and 1972 SIC" Employment and Earnings, October 1978, vol. 25, No. 10.

TABLE B-2.—AVERAGE WEEKLY HOURS OF PRODUCTION OR NONSUPERVISORY WORKERS,[1] ON PRIVATE NONAGRICULTURAL PAYROLLS, BY INDUSTRY

Industry	Not seasonally adjusted				Seasonally adjusted					
	November 1977	September 1978	October 1978[2]	November 1978[2]	November 1977	July 1978	August 1978	September 1978	October 1978[2]	November 1978[2]
Total, private	35.9	36.0	35.9	35.8	36.0	35.9	35.8	35.8	35.8	35.9
Mining	44.2	43.5	43.8	43.3	43.7	43.0	43.6	43.0	43.1	42.8
Construction	36.1	37.5	37.9	36.5	36.4	37.3	37.1	37.0	36.9	36.8
Manufacturing	40.7	40.7	40.6	40.8	40.5	40.5	40.3	40.4	40.4	40.6
Overtime hours	3.8	3.9	3.8	3.8	3.6	3.6	3.4	3.6	3.6	3.7
Durable goods	41.4	41.4	41.3	41.5	41.2	41.2	41.0	41.1	41.2	41.3
Overtime hours	3.9	4.2	4.1	4.1	3.8	3.8	3.6	3.8	3.9	4.0
Lumber and wood products	39.8	40.0	40.3	39.8	40.0	39.8	39.3	39.6	40.0	40.0
Furniture and fixtures	39.8	39.4	39.5	39.4	39.5	39.3	39.0	38.8	38.9	39.1
Stone, clay and glass products	41.7	42.1	42.3	42.1	41.5	41.7	41.6	41.8	41.8	41.9
Primary metal industries	41.4	42.2	42.0	42.1	41.5	41.8	42.0	41.8	42.2	42.2
Fabricated metal products	41.3	41.2	41.0	41.3	41.0	41.0	40.9	40.9	40.8	41.0
Machinery, except electrical	42.2	42.1	42.0	42.5	41.9	42.2	41.8	41.9	42.0	42.2
Electric and electronic equipment	40.8	40.5	40.3	40.7	40.5	40.7	40.4	40.1	40.2	40.4
Transportation equipment	42.7	42.7	42.6	42.8	42.6	42.1	41.8	42.5	42.5	42.7
Instruments and related products	41.0	41.1	41.0	41.0	40.6	40.7	41.0	40.9	40.9	40.6
Miscellaneous manufacturing	39.4	39.2	39.1	39.3	38.9	38.8	39.0	39.0	38.8	38.8
Nondurable goods	39.7	39.8	39.5	39.7	39.5	39.4	39.3	39.4	39.3	39.5
Overtime hours	3.3	3.6	3.4	3.3	3.2	3.2	3.2	3.2	3.2	3.2
Food and kindred products	40.2	40.3	39.9	39.9	40.1	39.8	39.5	39.5	39.8	39.8
Tobacco manufacturers	39.7	38.5	37.7	38.4	38.5	38.6	37.7	37.9	36.9	37.2
Textile mill products	40.9	40.7	40.4	40.7	40.7	40.2	40.4	40.4	40.4	40.5
Apparel and other textile products	36.1	35.9	35.5	36.1	35.8	35.8	35.6	35.7	35.1	35.8
Paper and allied products	43.0	43.1	42.9	43.3	42.8	42.9	42.7	42.7	42.7	43.1
Printing and publishing	38.0	38.1	37.8	38.1	37.8	36.6	37.4	37.8	37.7	37.9
Chemicals and allied products	41.9	41.9	42.0	42.2	41.7	41.8	41.9	41.8	42.0	42.0
Petroleum and coal products	43.1	44.4	44.2	44.0	42.8	43.9	44.3	43.8	43.8	43.7
Rubber and misc. plastics products	41.1	41.3	41.3	41.5	40.8	40.9	40.9	41.0	41.0	41.2
Leather and leather products	37.8	37.0	36.8	36.7	37.4	37.2	37.1	37.2	36.8	36.5
Transportation and public utilities	40.2	40.2	40.1	40.1	40.2	39.6	39.9	40.1	40.1	40.1
Wholesale and retail trade	32.9	32.8	32.7	32.6	33.1	32.9	32.8	32.8	32.8	32.9
Wholesale trade	38.8	39.0	39.0	38.9	38.8	38.7	38.8	39.0	38.9	38.9
Retail trade	31.1	30.9	30.7	30.7	31.4	31.1	30.9	30.9	30.9	31.0
Finance, insurance, and real estate	36.4	36.4	36.6	36.3	36.4	36.6	36.5	36.5	36.6	36.3
Services	32.9	32.7	32.7	32.6	33.0	32.8	32.7	32.8	32.8	32.7

[1] Data relate to production workers in mining and manufacturing; to construction workers in construction; and to nonsupervisory workers in transportation and public utilities, wholesale and retail trade, finance, insurance and real estate; and services. These groups account for approximately ⅘ of the total employment on private nonagricultural payrolls.

[2] Preliminary.

TABLE B-3.—AVERAGE HOURLY AND WEEKLY EARNINGS OF PRODUCTION OR NONSUPERVISORY WORKERS[1] ON PRIVATE NONAGRICULTURAL PAYROLLS, BY INDUSTRY

[In dollars]

Industry	Average hourly earnings				Average weekly earnings			
	Nov. 1977	Sept. 1978	Oct. 1978[2]	Nov. 1978[2]	Nov. 1977	Sept. 1978	Oct. 1978[2]	Nov. 1978[2]
Total private	5.40	5.82	5.86	5.87	193.86	209.52	210.37	210.15
Seasonally adjusted	5.39	5.77	5.82	5.86	194.04	206.57	208.36	210.37
Mining	7.19	7.94	7.97	8.07	317.80	345.39	349.09	349.43
Construction	8.26	8.87	8.89	8.90	298.19	332.63	336.93	324.85
Manufacturing	5.85	6.28	6.33	6.37	238.10	255.60	257.00	259.90
Durable goods	6.25	6.71	6.76	6.81	258.75	277.79	279.19	282.62
Lumber and wood products	5.25	5.75	5.76	5.75	208.95	230.00	232.13	228.85
Furniture and fixtures	4.47	4.76	4.77	4.79	177.91	187.54	188.42	188.73
Stone, clay, and glass products	5.98	6.46	6.47	6.51	249.37	271.97	273.68	274.07
Primary metal industries	7.71	8.42	8.44	8.49	319.19	355.32	354.48	357.43
Fabricated metal products	6.08	6.45	6.48	6.53	251.10	265.74	265.68	269.69
Machinery, except electrical	6.46	6.88	6.96	7.01	272.61	289.65	292.32	297.93
Electric and electronic equipment	5.55	5.94	5.98	5.98	226.44	240.57	240.99	243.39
Transportation equipment	7.57	8.04	8.20	8.26	323.24	343.31	349.32	353.53
Instruments and related products	5.43	5.76	5.80	5.85	222.63	236.74	237.80	239.85
Miscellaneous manufacturing	4.47	4.74	4.77	4.83	176.12	185.81	186.51	189.82
Nondurable goods	5.24	5.62	5.64	5.68	208.03	223.68	222.78	225.50
Food and kindred products	5.53	5.87	5.88	5.96	222.31	236.56	234.61	237.80
Tobacco manufacturers	5.71	6.10	5.97	6.10	226.69	234.85	225.07	234.24
Textile mill products	4.12	4.42	4.42	4.45	168.51	179.89	178.57	181.12
Apparel and other textile products	3.71	3.99	4.02	4.03	133.93	143.24	142.71	145.48
Paper and allied products	6.17	6.68	6.68	6.74	265.31	287.91	286.57	291.84
Printing and publishing	6.26	6.58	6.57	6.60	237.88	250.70	248.35	251.46
Chemicals and allied products	6.66	7.13	7.18	7.22	279.05	298.75	301.56	304.68
Petroleum and coal products	7.91	8.67	8.67	8.71	340.92	384.95	383.21	383.24
Rubber and miscellaneous plastics products	5.25	5.58	5.66	5.70	215.78	230.45	233.76	236.55
Leather and leather products	3.68	3.92	3.93	3.98	138.37	145.04	144.62	146.07
Transportation and publications	7.25	7.71	7.73	7.72	291.45	309.94	309.97	309.57
Wholesale and retail trade	4.38	4.74	4.78	4.79	144.10	155.47	156.31	156.15
Wholesale trade	5.55	6.02	6.05	6.06	215.34	234.78	235.95	235.73
Retail trade	3.94	4.25	4.28	4.30	122.53	131.33	131.40	132.01
Finance, insurance, and real estate	4.63	4.97	5.03	5.02	168.53	180.91	184.10	182.23
Services	4.78	5.06	5.11	5.13	157.26	165.46	167.10	167.24

[1] Data relate to production workers in mining and manufacturing; to construction workers in construction; and to nonsupervisory workers in transportation and public utilities; wholesale and retail trade; finance, insurance, and real estate; and services. These groups account for approximately ⅘ of the total employment on private nonagricultural payrolls.
[2] Preliminary.

TABLE B-4.—HOURLY EARNINGS INDEX FOR PRODUCTION OR NONSUPERVISORY WORKERS[1] ON PRIVATE NONAGRICULTURAL PAYROLLS, BY INDUSTRY DIVISION, SEASONALLY ADJUSTED

[1976=100]

Industry	Nov. 1977	June 1978	July 1978	Aug. 1978	Sept. 1978	Oct. 1978[2]	Nov. 1978[2]	Percent change from— Nov. 1977 to Nov. 1978	Oct. 1978 to Nov. 1978
Total private nonfarm:									
Current dollars	202.4	212.3	214.1	214.6	216.2	217.9	218.9	8.1	0.4
Constant (1967) dollars	109.3	108.7	109.0	108.7	108.7	108.7	NA	[3]	[4]
Mining	221.2	239.8	244.3	244.5	247.1	249.8	250.0	13.1	.1
Contract construction	196.7	207.6	207.9	209.2	209.9	210.7	211.9	7.7	.6
Manufacturing	205.3	214.7	216.7	217.5	218.9	220.8	222.2	8.2	.6
Transportation and public utilities	220.2	229.6	230.4	231.2	233.3	234.2	234.7	6.6	.2
Wholesale and retail trade	194.6	205.2	207.6	208.3	209.9	211.4	212.5	9.2	.5
Finance, insurance, and real estate	185.4	194.6	196.9	196.0	198.2	199.9	200.6	8.2	.3
Services	202.6	211.5	213.2	202.9	214.8	217.1	217.7	7.5	.3

[1] Data relate to production workers in mining and manufacturing; to construction workers in construction; and to nonsupervisory workers in transportation and public utilities; wholesale and retail trade; finance, insurance, and real estate, and services. These groups account for approximately ⅘ of the total employment on private nonagricultural payrolls.
[2] Preliminary.
[3] Percent change was —0.5 from October 1977 to October 1978, the latest month available.
[4] Percent change was 0 from September 1978 to October 1978, the latest month available.
NA=Not available.

Note: All series are in current dollars except where indicated. The index excludes effects of 2 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

Industry division and group	1977		1978										
	November	December	January	February	March	April	May	June	July	August	September	October[2]	November[2]
Total private	117.4	117.5	116.2	117.1	119.1	120.4	120.0	120.6	120.6	120.4	120.8	121.4	122.4
Goods producing	102.0	101.6	99.3	100.9	103.6	106.0	105.1	106.0	106.1	105.4	105.5	106.5	107.9
Mining	139.7	107.8	105.6	106.8	111.3	144.2	143.1	144.0	143.5	145.7	144.4	145.8	146.5
Construction	108.7	108.6	100.3	104.2	111.5	118.8	117.1	122.8	124.2	122.8	122.6	123.7	124.5
Manufacturing	99.5	100.2	98.9	100.1	102.0	102.5	101.6	101.7	101.6	101.0	101.2	102.1	103.7
Durable goods	100.8	101.7	100.5	101.9	103.9	104.2	103.5	103.8	104.0	103.5	103.9	105.5	107.0
Lumber and wood products	113.2	114.5	113.2	114.0	114.3	115.0	111.8	113.6	112.3	110.7	111.6	113.6	114.8
Furniture and fixtures	107.0	108.9	106.1	111.1	112.5	112.5	110.3	109.5	108.3	106.4	106.2	107.2	108.3
Stone, clay, and glass products	108.6	109.0	106.4	108.4	111.0	112.7	111.4	112.4	111.1	109.8	110.1	111.4	112.8
Primary metal industries	91.6	91.9	92.2	93.4	92.8	92.9	93.9	94.1	94.4	95.3	95.5	97.1	99.2
Fabricated metal products	100.1	101.1	99.4	101.4	102.9	103.5	103.3	102.4	102.0	101.8	102.0	103.1	104.7
Machinery, except electrical	105.1	106.2	104.6	107.1	109.4	110.1	109.5	111.3	112.1	110.8	111.5	113.7	114.4
Electric and electronic equipment	98.1	98.6	97.3	98.8	101.2	100.4	99.8	99.8	101.8	101.1	100.1	101.1	102.6
Transportation equipment	94.1	95.7	94.9	93.7	97.2	97.5	96.6	95.8	96.2	96.1	97.7	100.3	102.5
Instruments and related products	115.1	116.0	116.3	117.5	120.5	121.7	120.8	122.4	123.6	123.9	123.9	123.9	125.7
Miscellaneous manufacturing industry	97.7	99.0	97.4	99.0	102.0	102.6	101.5	101.4	99.8	100.6	100.3	100.6	101.2
Nondurable goods	97.6	97.9	96.5	97.4	99.2	99.9	98.9	98.7	98.1	97.2	97.2	97.2	98.9
Food and kindred products	94.3	94.6	94.5	94.7	96.2	96.4	94.6	94.0	93.6	91.4	91.3	92.0	93.9
Tobacco manufacturers	77.1	78.7	77.9	79.4	82.0	80.2	81.5	84.1	78.6	71.5	74.5	73.8	74.4
Textile mill products	93.7	93.0	92.6	92.5	93.7	93.4	92.6	91.8	91.5	91.2	91.8	91.9	92.5
Apparel and other textile products	90.8	91.1	85.6	90.1	91.6	93.2	91.9	91.4	90.1	90.1	90.1	88.6	90.7
Paper and allied products	98.6	99.6	98.7	99.1	101.6	102.4	101.9	101.9	101.9	99.2	99.0	98.8	101.6
Printing and publishing	96.9	96.7	96.7	96.9	99.3	99.1	98.2	98.6	99.1	98.3	97.8	98.0	100.8
Chemicals and allied products	104.0	104.5	104.4	104.8	106.0	106.5	106.9	106.9	106.6	106.0	106.0	106.3	106.8
Petroleum and coal products	117.3	119.8	119.9	119.0	121.3	122.1	118.4	120.4	121.2	123.2	122.7	122.7	124.2
Rubber and misc. plastics products	141.3	142.1	141.0	140.1	144.5	147.3	146.6	147.0	146.2	145.4	145.0	147.0	150.3
Leather and leather products			68.0	67.8	69.1	71.3	70.4	70.1	67.1	69.1	69.6	68.3	66.1
Service producing	128.1	128.5	127.9	128.4	129.8	130.5	130.5	130.7	130.7	130.8	131.4	131.8	132.4
Transportation and public utilities	107.2	106.9	107.0	107.7	109.1	108.7	109.0	109.4	106.5	107.7	108.2	109.9	110.5
Wholesale and retail trade	124.2	124.7	123.7	124.2	125.9	126.4	126.8	126.8	127.4	127.2	127.5	127.9	128.8
Wholesale trade	122.4	123.0	123.1	123.9	125.3	126.0	125.2	126.1	125.7	126.1	127.1	127.2	128.3
Retail trade	124.9	125.4	123.9	124.4	126.1	126.6	127.3	127.0	128.0	127.7	127.7	128.1	129.0
Finance, insurance, and real estate	133.6	133.9	134.3	135.1	135.4	137.5	136.2	137.9	139.0	139.2	139.6	140.5	140.3
Services	141.6	142.1	141.7	141.8	143.3	144.1	143.8	143.9	144.1	144.1	145.1	144.7	145.1

[1] Data relate to production workers in mining and manufacturing; to construction workers in construction; and to nonsupervisory workers in transportation and public utilities; wholesale and retail trade; finance, insurance, and real estate; and services. These groups account for approximately ⅘ of the total employment on private nonagricultural payrolls.

[2] Preliminary.

TABLE B-6.—INDEXES OF DIFFUSION: PERCENT OF INDUSTRIES IN WHICH EMPLOYMENT[1] INCREASED

Year and month	Over 1-mo span	Over 3-mo span	Over 6-mo span	Over 12-mo span
1975:				
January	18.0	13.1	11.9	15.7
February	21.2	12.8	12.8	16.9
March	26.5	20.1	18.6	18.3
April	41.0	36.6	29.4	20.9
May	51.5	43.0	48.3	27.0
June	43.0	53.2	57.3	41.0
July	56.1	61.6	67.2	54.1
August	73.3	73.5	69.2	64.5
September	67.4	77.3	75.9	74.1
October	68.3	70.6	80.5	79.7
November	60.5	74.4	84.0	82.3
December	71.5	78.2	83.7	86.3
1976:				
January	78.2	85.8	87.2	85.2
February	72.4	84.9	85.8	84.0
March	69.5	81.4	82.0	85.2
April	70.1	72.4	75.6	78.8
May	58.1	67.2	68.3	82.6
June	57.8	65.1	71.2	79.9
July	58.4	57.8	63.1	78.5
August	49.1	64.0	65.1	77.6
September	64.8	53.8	66.3	80.2
October	47.1	65.1	73.3	80.8
November	67.4	64.2	78.8	80.8
December	66.6	81.4	81.4	82.6
1977:				
January	76.2	83.1	88.1	78.8
February	66.0	86.3	87.8	80.5
March	74.7	81.1	85.2	80.2
April	68.0	79.4	79.4	84.6
May	64.8	76.2	75.9	84.0
June	71.2	68.0	72.1	83.1
July	59.3	63.4	69.8	82.6
August	51.7	58.7	74.1	83.7
September	60.8	62.5	72.1	82.6
October	60.5	73.8	77.9	81.1
November	73.8	75.3	82.0	81.1
December	72.1	79.7	83.1	80.8
1978:				
January	69.8	80.2	85.5	80.5
February	70.3	80.2	79.9	79.1
March	70.1	75.9	77.9	77.6
April	62.8	67.4	68.9	[2] 77.6
May	56.4	63.7	67.7	[2] 79.4
June	67.2	62.5	59.6	----
July	54.9	57.0	[2] 59.9	----
August	51.7	49.7	[2] 70.9	----
September	57.6	[2] 58.7	----	----
October	[2] 70.3	[2] 76.5	----	----
November	[2] 79.9	----	----	----
December	----	----	----	----

[1] Number of employees, seasonally adjusted, on payrolls of 172 private nonagricultural industries.
[2] Preliminary.

Senator BENTSEN. Ms. Norwood, the American people have been getting a lot of bad economic news lately. Now, could you term this news which you have given us as good news?

Ms. NORWOOD. Senator, I believe that the labor market situation is quite good news. The very large increases in employment are certainly an indication that many of the people in this country have jobs.

The unemployment rate, at 5.8 percent, is considerably lower than it was a year or more ago. There are however, certainly many groups of the population who are in real difficulty. Of course 5.8 percent still is not the kind of unemployment rate that we would like to have.

As I have indicated in my statement, I believe that the price situation is somewhat different. I think that the slowdown in food price increases is certainly very encouraging, but as you yourself have pinpointed, food prices are subject to many, many influences over which we have little control.

The nonfood price increases are continuing at a much higher rate than I think any of us would feel comfortable with.

Senator BENTSEN. Well, these Producer Price Indexes that you released yesterday are a little better than prices were for October. But would you give me a little more in-depth analysis. Do you think that the averageAmerican worker-consumer-family can look forward to a continuing improvement in inflation as a result of this modest change that we have seen?

Ms. NORWOOD. I think that the combination of measures which the President has put in place hopefully will bring about some changes. The data for the Producer Price Indexes, which we issued yesterday, as well as the Consumer Price Index for the previous month, released the week earlier, clearly indicate that there are serious inflationary difficulties in this country.

Senator BENTSEN. Well, these statistics are somewhat abstract to the individual consumer. How do you translate their future performance with regard to the elderly couple on fixed incomes, or to the housewife who is trying to make a family budget? Can you get it into terms so that the average consumer can understand it better?

Ms. NORWOOD. Well, I think that there are perhaps two ways of doing that, Senator. One is that when we look at the rates of increase in wages, they seem to be, in general, very closely related to the rates of increase in inflation. Hence, real earnings are certainly not going up at all; and in fact, over the last year or so they have declined.

Senator BENTSEN. All right, take real earnings. Let us translate that into terms we all understand. Does that mean that they will only be able on average—even though they may have had a wage increase—to buy less at the market?

Ms. NORWOOD. When real earnings decline, I think that is true.

I think that what the change in real earnings shows is that wages are barely, and perhaps not quite, keeping up with the rate of inflation. I think that is one way of looking at it.

Another way of looking at it, of course, is to look at the prices that people face when they go into the grocery store or the department store or elsewhere. As you have indicated, there are some serious problems with a number of the increases that have taken place for items that many people use to a large extent. Bread, for example, at the producer level has gone up some 14 percent this year.

Senator BENTSEN. Let's get down to what we have seen so far in the guidelines now. This is the first full month that the guidelines have been in effect. Do you see any results from the guidelines? Do you see them moderating any prices?

Ms. NORWOOD. The guidelines were first announced on October 24. The Consumer Price Index data we have relate mostly to the period before that.

The Producer Price Index relates essentially to the second week of November. I think that one really has to wait for a longer period of time to be able to draw any conclusions from these data. As you know, the particular guidelines relate to individual companies and to individual products, and it is very difficult to track the exact relationship in any of our general indexes.

As the guidelines become applied and if successful, we would hope to see some general abatement in our group indexes. But I think it really is far too early to be able to expect even to see any change in the Producer Price Index since from October 24 to—What is the date of the week including the 12?

Mr. EARLY. The 13th.

Ms. NORWOOD. The week including the 13th of November—that is really a very short time.

Senator BENTSEN. You have seen the change in monetary policy and its effect on short-term rates, and monetary policy is beginning to affect long-term rates.

Ms. NORWOOD. Yes.

Senator BENTSEN. We are beginning to see what is happening to the availability of mortgage money. Do you have any information yet to tell us how this situation is affecting the young couple that is going out to buy their first house? Are they still trying to do it? Or do they find these monthly payments that have escalated to these high levels an economic barrier when they have to try to fund an 11 percent home mortgage?

Ms. NORWOOD. Yes, it is quite high.

Senator BENTSEN. Of course, it is. Have you seen the beginning of any effect?

Ms. NORWOOD. We certainly do not yet have any data which come after, or relate to a period after the strong monetary measures that were announced.

We would expect that several months would be required to reflect that.

Senator BENTSEN. All right. If history is prolog, let's go back to 1972, 1973, and 1974. At what point do you remember finding a marked curtailment in the purchase of homes as interest rates went up, and the monthly payment escalated? The rates we are witnessing today are the kinds of rates we saw happen at that time, in fact we are seeing rates that go above the historical experience in some cases.

Ms. NORWOOD. I think that one of the issues that really must be considered, Senator, in looking at the housing market, is the inflationary expectations that people have. There certainly has been evidence, especially in the last few years, that many people—not all, but certainly many people—do look at the purchase of a home as an investment in an asset, and in a period where inflationary expectations are high, you may well find people willing to extend themselves further than they would otherwise.

I think that one of the reasons that many of the measures that the administrattion has taken could be quite helpful is the basic psychology of inflationary expectation, which is really a very important element in our success or failure——

Senator BENTSEN. All right. Now you——

Ms. NORWOOD [continuing]. In handling that problem.

Senator BENTSEN. For these voluntary guidelines to work they obviously need the support of the people.

Ms. NORWOOD. Yes, sir.

Senator BENTSEN. And they have to feel those guidelines are equitable and that they are being fairly applied to them.

Ms. NORWOOD. Yes.

Senator BENTSEN. Now, we talked a while ago about the fact that we could have business comply, we could have labor complying with the guidelines, and the American people, and yet we could have the OPEC countries raise the price of oil by 10 percent, and we could have a freeze in the Imperial Valley of California affecting vegetables and we could have the interest rates on home mortgages go up to 10 and 11 percent. None of those are covered by the guidelines. Thus, we could have the CPI going up above the guidelines.

Now, what is going to be the effect on the American people when they see that happening, even when they are complying and they feel like they are left holding the bag?

Do you think they will support the guidelines if you get that kind of a situation?

Ms. NORWOOD. Well, I hope that we don't have that kind of a situation.

Senator BENTSEN. Well, but you do——

Ms. NORWOOD. Senator, I think you are painting a——

Senator BENTSEN. But we have to look at that as one of the possibilities, don't we?

Ms. NORWOOD. I think that the administration has attempted in setting forward the guidelines and policy, to deal with those aspects of inflation. That could be addressed through a variety of policies. As you know, there are several approaches to the problem. The guidelines policy is only one. It is an important one, and as you quite rightly point out, does not cover all aspects of the economy. It does deal with those parts of the inflationary picture which lend themselves or are susceptible to curtailment in this manner.

Senator BENTSEN. All right.

Ms. NORWOOD. There are other aspects of this. There are monetary policies, and anti-inflationary fiscal policies.

Senator BENTSEN. All right. But what percentage of the economy do those things that fall under the guidelines represent. What part of the cost of living index do they represent? What percentage is under the guidelines?

Ms. NORWOOD. I don't have that figure. I don't know. I understand that Mr. Kahn appeared before you a couple of days ago. I am sure that he is much more expert in this field than I.

Senator BENTSEN. But we came up with a lot more questions since he left, too. [Laughter.]

I thought you would have some statistical feel for what part of the package is under the guidelines.

Ms. NORWOOD. We have made no evaluation of that.

Senator BENTSEN. But don't you think that that is an important question? You know, if you have 10 percent under the guidelines then there is little that you can accomplish. If you have 90 percent under the guidelines, you have the thing pretty well under control if the guidelines work. If you have 50 percent, then it's up for grabs.

Ms. NORWOOD. Obviously, one could look at the relative importance of each of the components of, say, the Consumer Price Index and look at what——

Senator BENTSEN. I want the collective importance of the guidelines, however.

Ms. NORWOOD. And you would get a picture of it. The difficulty is I think it is too early for us—at least in the Bureau of Labor Statistics—to know exactly how the guidelines are going to be applied and which parts of the economy will be covered and which will not.

You quite rightly point out that things like home financing and taxes are not covered by the guidelines and they account for somewhere around 9 percent of the Consumer Price Index. That is an important point.

Some of the crude, or raw, fresh vegetables and other food products also account—I am not sure for how much of the index, but certainly for an important part of it.

On the other hand, there are many, many purchases of commodities which are extremely important as they relate to the index.

Senator BENTSEN. Well, Ms. Norwood, I would like by our next meeting a little better handle on it by then.

Ms. NORWOOD. All right.

Senator BENTSEN. So we can talk about what percentage of factors in the cost of living come under the guidelines, or at least have a reasonable approximation of them. I think that would be helpful to us to see how much input, percentage-wise, the guidelines are supposed to have if they fully work.

Ms. NORWOOD. We would be glad to try to provide that.

Senator BENTSEN. When you give me a 9-percent figure, as you have, I think you ought to be able to come up with——

Ms. NORWOOD. That figure was only one part of it.

Senator BENTSEN. That is right.

Ms. NORWOOD. The commodities less food component, for example, if you took food out, in other words—and of course all food is not exempt—but if you just look at commodities without food you have something like 40 percent of the index.

Senator BENTSEN. On another subject, one of the interesting figures I think is the fact that overall government employment is shown only to be slightly up over a year ago.

I am told that none of this is taking place in the Federal Government but instead is in the State and local jobs. Can you give me some kind of a historic perspective on this slower growth? Has this been a trend? What has happened over the last 3 or 4 years? Do you see this finally topping out, leveling off?

Ms. NORWOOD. I would like Mr. Stein to answer that.

Mr. STEIN. All right.

Senator BENTSEN. Yes, Mr. Stein.

Mr. STEIN. Senator Bentsen, the Federal Government has not really shown any particular employment trend for some time, at least for 8 or 10 years.

Senator BENTSEN. Hasn't shown any trend?

Mr. STEIN. No; it has been pretty flat.

Senator BENTSEN. Well, that's a trend.

Mr. STEIN. The increase that we have seen in Government employment has been entirely at State and local levels. That had been going up quite strongly until this year. Earlier this year we had seen a flattening out of State and local government employment as well. Now in this particular month we had an increase of about 40,000 in our

preliminary data and that surprised us a little bit, because it has been slowing down the past few years.

Senator BENTSEN. That is at State and local government.

Mr. STEIN. State and local government; yes, sir.

Senator BENTSEN. Could part of that hiring of people come from some of the Federal employment programs by way of funds that have been funneled down to the State and local government? Could that be part of CETA, for example?

Mr. STEIN. The CETA employees, yes, could be included but I don't think that we can actually isolate a number.

Ms. NORWOOD. The CETA employees would certainly be included in general employment numbers, but I think the important thing to understand is that the Government programs should not affect the employment change from the previous month because I don't believe that there was very much of a change in the number of CETA jobs created. So one would have to look at that in terms of the long-term difference.

Senator BENTSEN. Well, this is——

Ms. NORWOOD. And this change we are reporting today is a change from the previous month. That would not have been affected.

Senator BENTSEN. Well, a survey is being done now to try to find the correlation between the Federal Government's mandates and what change they bring about on the part of State and local government.

Ms. NORWOOD. Yes.

Senator BENTSEN. In the way of an increase in employees and efforts and programs.

Ms. NORWOOD. Yes; we try to do that every month, Senator. It is a difficult thing to do because it cannot be done fully from the survey data since many of the individuals who are employed in those programs do not know where the funding comes from. So we attempt to meld the survey data with the administrative data.

Senator BENTSEN. Ms. Norwood, one of my concerns, and a very major one, has been the decrease in productivity, rather a decrease in the rate of increase in productivity; compared to what we find in other countries. I understand our productivity is at the 1-percent level for this year. I have seen two figures, one just above that, and one just below that. Both of them are of little encouragement.

Then I am told that the Japanese productivity figure will be somewhere between a 7- and 8-percent increase in productivity.

If you accept the administration's forecast of a moderation in the still high rate of inflation, in the 6- to 6.5-percent range, and a 3- to 3.5-percent overall rate of growth next year, how do you think that will affect productivity growth?

Ms. NORWOOD. I think it is very difficult to answer questions about productivity. The productivity really for the year 1978 is very, very low, as you have indicated.

The only real gains that we have been getting have been in the manufacturing sector and in other sectors there has really been a decline.

It is really hard to guess what will happen to productivity next year. There are so many elements that have to be put together in this picture.

Mr. Mark, our productivity expert is here, but he seems to have nothing to add to that as we sit here. Perhaps he does though.

Senator BENTSEN. All right.

Mr. MARK. I think the only thing that I would like to add is that the critical element in the projection of productivity growth over the next year is what happens to output and if the output changes on the order of 3 percent, the figure that you mentioned, this would be somewhat lower than we would like to have it. The only encouraging thing—and it's hard to interpret it as an encouraging thing—is that in certain sectors the sharp growth in employment which has been taking place in relation to the output growth might fall off. This year the sharp increases in employment did contribute to the small increases in productivity that we had.

Now, it is conceivable that if the employment growth does not continue at the rate that it has been, with the 3-percent gains in output, we would probably have a somewhat more optimistic change in productivity for next year than we are currently having.

Senator BENTSEN. Thank you very much.

In getting compliance with these guidelines, the administration has stated that on wage guidelines that it was ready to withstand some strikes by employees if that is what was necessary to bring compliance with the guidelines.

Now, I understand in your numbers that people out on strike are not counted among the unemployed. Your first major unions that are coming up for negotiation of their contracts are, I believe, the oil workers. They will be one of the very major unions. Suppose they go out on strike? Obviously that shuts down some other industries that are related to it, and results in the layoffs of other employees.

How soon do you feel that effect, normally judging from what you have seen in the past; and what kind of effect would such a strike have on the unemployment figures?

Ms. NORWOOD. I think the biggest effect in that kind of a scenario would be in the decline in output and, therefore, to some extent on the productivity figures.

In the employment area, it tends to take some time off this kind of activity to result in real layoffs. We had some evidence, I think, in the survey that the Bureau of Labor Statistics did during the coal strike when there were a lot of estimates around about the very, very large effects on employment which would result from the lack of coal delivery because of the strike. Our survey found that there was far less employment effect than most people anticipated.

I think each situation is different, however, and I would certainly not want to generalize from those particular survey results. But I think it is clear that a good deal of time exists before people are actually laid off so I think some time would occur before that would take place.

Senator BENTSEN. There may be a major difference between coal and oil, however.

Ms. NORWOOD. Yes, certainly.

Senator BENTSEN. Industry can just stockpile coal at a greater rate.

Ms. NORWOOD. That is right.

Senator BENTSEN. But there is a limitation with regard to storage tanks. I would question that you have the ability to expand storage as far as you can for coal, and that you would have a faster direct result, therefore, if you had a strike among your oil workers.

Ms. NORWOOD. It certainly may occur. I just really have no way of knowing that at this point.

Senator BENTSEN. Mr. Norwood, we have covered a range of subjects within your expertise and we are very appreciative of having your testimony before us this morning.

With that, I think we will close the hearings and look forward to being with you at the next meeting.

Ms. NORWOOD. Thank you very much.

[Whereupon, at 10:55 a.m., the committee adjourned, subject to the call of the Chair.]

EMPLOYMENT-UNEMPLOYMENT

FRIDAY, JANUARY 12, 1979

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

The committee met, pursuant to notice, at 10 a.m., in room 6226, Dirksen Senate Office Building, Hon. Richard Bolling (chairman of the committee) presiding.

Present: Representative Bolling and Senator Proxmire.

Also present: John R. Stark, executive director; Louis C. Krauthoff II, assistant director; Richard F. Kaufman, assistant director-general counsel; L. Douglas Lee, Katie MacArthur, and M. Catherine Miller, professional staff members; and Mark Borchelt, administrative assistant.

OPENING STATEMENT OF REPRESENTATIVE BOLLING, CHAIRMAN

Representative BOLLING. The committee will be in order.

I am delighted to welcome once again Ms. Norwood from the Bureau of Labor Statistics to discuss the unemployment situation and recent price developments.

In addition, Mrs. Courtenay Slater will be here in a short time to share with us her best judgment on the fourth quarter economic developments.

The way we will proceed this morning is, Ms. Norwood will present her statement as she wishes, and then we will ask her questions. When Mrs. Slater arrives, we will ask her for her statement, and then we will ask both of you questions.

While in December the unemployment rate edged up slightly, the fourth quarter average of 5.6 percent represented a substantial improvement since the fourth quarter of 1977's average of 6.6 percent. Unemployment for most workers' groups improved except for teenagers and female heads of families.

But the real success story, of course, is the enormous employment gains—3 million additional jobs in 1978 alone. So far, our economy has seemed immune to forecasters predicting a slowdown in economic growth.

With regard to inflation, the story is not one of success but one of distress as the economic gains enjoyed by business and consumers are being offset by recurring price increases. Producer prices for finished goods are up 9.1 percent over a year ago, and these are the goods sold directly to retailers. Consumer finished goods prices are now up even higher, 9.5 percent over 1977 and finished goods prices are up a startling 11.9 percent for the same period.

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Sometimes situations must get worse before they can get better, and I hope, Ms. Norwood, that your testimony will indicate we have already hit bottom and we have nowhere to go but up.

We will be happy to hear from you.

STATEMENT OF HON. JANET L. NORWOOD, ACTING COMMISSIONER, BUREAU OF LABOR STATISTICS, DEPARTMENT OF LABOR, ACCOMPANIED BY ROBERT L. STEIN, ASSISTANT COMMISSIONER, OFFICE OF CURRENT EMPLOYMENT ANALYSIS; AND JOHN F. EARLY, CHIEF, DIVISION OF INDUSTRIAL PRICES AND PRICE INDEXES

Ms. NORWOOD. Thank you, Mr. Chairman.

I have with me this morning, on my right, Mr. Robert Stein who is an employment expert, and Mr. John Early on my left who is the expert in the producer price area.

I am glad to have this opportunity to offer the Joint Economic Committee a few brief comments to supplement our "Employment Situation" press release, issued this morning at 9 a.m., and our "Producer Price Index" press release, issued yesterday morning.

Before I begin my review of the employment situation, I would like to point out that the seasonally adjusted data from the household survey are based on new seasonal factors which have been revised or updated to reflect data through December 1978. This is our normal procedure at the end of each calendar year, but this year we were able to accomplish the updating a month earlier than in previous years, mainly because of improvements in our computer systems. The actual procedures used in calculating the seasonally adjusted series for December and revising the data for earlier months were the same as those used in earlier years.

The unemployment rate for December was 5.9 percent, about the same as the 5.8 percent in November. Employment according to the household survey changed a little between November and December following 2 months of unusually large gains. The employment-population ratio remained at its alltime high of 59.1 percent.

When measured by the established survey, however, the number of employees on nonfarm payrolls continued to move upward in December. Although manufacturing and construction showed strong job gains for the third consecutive month, the overall increase in payroll employment was less than the monthly gains recorded in October and November. Average weekly hours of work in the total private economy were unchanged. The next of aggregate weekly hours of production or nonsupervisory workers in private nonfarm employment, which reflects trends both in employment and the workweek, was 122.5 in December, up slightly from a month earlier. The BLS diffusion index reflects the percentage of 172 industries showing employment increases. This index was 76 percent in December, compared to 81 percent in November. Both months were unusually high.

The unemployment rate for all civilian workers—5.9 percent in December—has been virtually the same for the past 5 months. Jobless rates have also been fairly stable in recent months for major demographic groups, including men, women, and teenagers, and for black and white workers.

CHANGE OVER THE YEAR

The highlight of the Nation's job situation in 1978 was the strong increase in employment. Employment, as measured by the household survey, increased by about three million; nonfarm payroll employment, as measured by the establishment survey, showed an even greater expansion of about 3½ million above a year ago. The unemployment rates for most worker groups, except teenagers, were below year-ago levels; 1978 also brought a decline in the number of "discouraged workers," persons who want jobs but do not actively seek them because they believe none are available. The number of discouraged workers dropped by 200,000 to about 750,000 in the fourth quarter of 1978. The decline was mainly among women, who continued to find paid employment in record numbers.

In 1978, the civilian labor force exceeded the 100 million mark for the first time. The labor force grew by 2.8 million, almost as much as the strong expansion in 1977. All major demographic groups contributed to the 1977–78 increase. Nevertheless, almost 6 out of every 10 workers entering the labor force last year were women, and blacks entered the labor force in greater proportion than their share of the total population.

PRODUCER PRICES

Yesterday, the Bureau also released the producer price indexes for December. The index for total finished goods rose 0.8 percent in December, about the same as in each of the last 3 months. This brought the increase for the year to 9.1 percent.

Finished consumer food prices rose 0.9 percent in December. Although this was somewhat more than in November, it was still considerably less than the 1.7 percent increases in September and October and much less than the rate prevailing in the first half of the year. Prices for crude foodstuffs decline 0.2 percent, following 3 months of sharp increases.

Among durable consumer goods, prices rose 0.5 percent; this was the fourth month of moderate price change in these goods and contrasts sharply with the average monthly increase of 1.1 percent during the first 8 months of 1978. On the other hand, the index for consumer nondurable goods posted an increase of about 1 percent for the third consecutive month. Gasoline and fuel oil prices have been major contributors to this acceleration.

At earlier stages of processing, price rises for intermediate nonfood materials slowed to 0.5 percent, mostly due to lower construction material prices. Crude nonfood materials prices rose 1.3 percent, somewhat less than last month, but about the same as during most of 1978.

EFFECT OF OPEC INCREASE

A few weeks ago, OPEC announced an increase of 14.5 percent in crude petroleum prices to take place in four stages over the coming year. The announced increase was larger than had generally been anticipated and has generated concern about the effect of the increase on prices in the United States. A number of estimates of the impact of the OPEC change on the BLS price indexes have been reported in the press, and several methods have been used in their calculation.

The Bureau staff has reviewed the situation with some care, and I believe it would be useful to review this work briefly with you.

The price effect of the OPEC increase may be looked at in three different ways. In each case, different assumptions are made, additional factors are included, and the estimates of the effect on the price indexes are different. In all cases, the estimates compared a situation including the announced OPEC increase to one without any OPEC increase. In addition, all assume that there are no changes in Government policies as a result of the OPEC action and that there are no supply disruptions.

(1) The first approach is to calculate what may be termed the "direct static" effect. This calculation considers the impact of the OPEC crude oil increases only on the refined petroleum products directly priced for the BLS indexes. In calculating this effect, we have assumed that the refiners pass through all of the dollar and cents increase in the cost of crude petroleum to all refined products and do not apply their normal percentage profit mark up to that increased element of cost. At the next stages of distribution, however, the wholesalers and the retailers are assumed to have charged their normal percentage profit on the increased cost from the refiners, except for gasoline where controls prevent it. Calculated in this manner, the "direct static" effect on the CPI is an increase of approximately 0.2 percent.

(2) The second method of estimating the effect of the OPEC increase may be called the total materials cost approach. In addition to the refined petroleum products, this calculation counts the price increase in all goods and services which use crude petroleum or its derivatives in the production process. Thus, the increases caused by the OPEC price change in the cost of energy used in manufacturing, in the cost of raw materials for petroleum-based plastics and fibers, and in fuel costs of transportation services, for example, are encompassed in these calculations.

This method relies on the 1973 relationships between inputs and outputs of the industries in the U.S. economy, the latest year for which we have these data, and on our ability to match up these industries with the categories of our price indexes. It should be understood, of course, that the very large price increases in petroleum since 1973 may have altered these relationships. Using the same general assumptions about pass-through of materials costs and mark up as described in the first method, the total materials cost method shows an increases of approximately 0.3 percent on the CPI.

(3) The third approach, which we call the total dynamic effect, is the broadest of the three. It relies on large-scale econometric models which make statistical estimates of relationships among economic variables based on recent historical experience and make no a priori assumptions about cost pass through or about changes in profit margins. In addition, these models estimate the impact of price increases on wages and then estimate the effect wage increases in turn have on subsequent prices. Other effects on demand and production are also included. To the extent that higher oil prices may reduce the level of economic activity which in turn reduces the pressure on prices, these models also include any price-slowing effects that may be present. Unlike the first two methods, these models are also able to estimate the price change for different time periods.

Although the Bureau of Labor Statistics does not develop estimates of this kind, we have reviewed the results of others who use this approach. Data Resources, Inc. (DRI) and Chase Econometric Associates, Inc., regularly publish econometric forecasts of the economy, and both concerns have published estimates of the effect of OPEC price increases. The DRI forecast estimates an increase of 0.4 percent between the fourth quarter of 1978 and the fourth quarter of 1979. Chase Econometric Associates, Inc. estimates an increase of 0.5 percent for the same period. While both organizations have also estimated the total ultimate impact of the OPEC action, we have not reported those results here because they include the effects of additional OPEC price increases which Chase and DRI have assumed will occur in 1980.

In order to provide the committee with an estimate based on an additional model, the BLS asked Joel Popkin & Co. to provide the Bureau with an estimate of the effect of the OPEC increase on the BLS indexes. Mr. Popkin, using his stage-of-process model of the U.S. economy designed especially for price analysis, estimates a total CPI increase of 0.3 percent resulting from the OPEC increase—0.2 percent in 1979.

The attached table summarizes the results of all these estimates on both the CPI and the PPI. The range of these estimates demonstrates the difficulty of specifying the magnitude of the effect of the OPEC increase on the BLS indexes with much precision.

As you can see from the table, the range from the fourth quarter of 1978 to the fourth quarter of 1979 on CPI seems to be from 0.2 to 0.5 percent. As I said, the range of these estimates demonstrates the difficulty of specifying the magnitude of the effect of the OPEC increase on the BLS indexes with much precision.

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

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

SELECTED ESTIMATES OF 1979 PRICE EFFECT ARISING FROM THE OPEC CRUDE OIL PRICE INCREASE OF 14.5 PERCENT ANNOUNCED IN DECEMBER 1978

Type of effect and source	Percent change	
	Total	1978 IV to 1979 IV
Effect on the CPI-U, all items:		
Direct static:[1] BLS	0.2	----
Total materials cost:[2] BLS	.3	----
Total dynamic:[3] Popkin[4]	.3	0.2
Total dynamic:[3] DRI[5]	NA	.4
Total dynamic:[3] Chase[6]	NA	.6
Effect on the PPI, finished goods:		
Direct static:[1] BLS	.5	----
Total materials cost:[2] BLS	.6	----
Total dynamic:[3] Popkin[4]	.6	.5
Total dynamic:[3] DRI[5]	NA	.6
Total dynamic:[3] Chase[6]	NA	.7

[1] Impact only on refined petroleum products directly priced for BLS indexes.
[2] Includes direct static plus price increase in all goods and services which use crude petroleum or its derivatives in production process, based on BLS input-output data.
[3] Based on macroeconometric models of U.S. economy.
[4] Joel Popkin and Co., Jan. 8, 1979.
[5] Data Resources Inc., Dec. 27, 1978.
[6] Chase Econometric Associates, Inc., Dec. 21, 1978.

Note: The assumption is made that there are no changes in Government policy as a result of the OPEC action and that there are no supply disruptions.

NA=Not available due to use of different assumptions.

Ranking of industries by intensity of use of refined petroleum and petroleum products [1]

(*Direct and indirect use based on the 1973 input-output table*)

Rank and industry	*Total use per $100 of production* [2]
1. Industrial organic and inorganic chemicals	22.8
2. Plastic materials and synthetic rubber	14.1
3. Agriculture chemicals	10.3
4. Miscellaneous chemical products	7.8
5. New highway construction	7.6
6. Paints and allied products	7.1
7. Air transportation	6.4
8. Food and feed grains	6.2
9. Synthetic fibers	6.0
10. Cleaning and toilet preparations	5.0
11. Cotton	4.4
12. Plastic products	4.3
13. All other new construction	4.2
14. Stone and clay mining and quarrying	4.1
15. Forestry, and fishing products	4.1
16. Oil and gas well drilling and exploration	3.7
17. Truck transportation	3.4
18. Maintenance and repair construction	3.4
19. Floor coverings	3.4
20. Miscellaneous textile goods	3.4
21. Miscellaneous stone and clay products	3.3
22. Tires and inner tubes	3.3
23. Miscellaneous rubber products	3.3
24. Railroad transportation	3.0
25. Dairy and poultry products	3.0

[1] This excludes the petroleum refining and related products industry.
[2] Values are in 1972 dollars.

Note: This table is based on BLS input-output data for 1973. The listing, therefore, assumes that changes in the interindustry relationships since 1973 would not materially modify the relative ranking of these industries.

UNEMPLOYMENT RATES BY ALTERNATE SEASONAL ADJUSTMENT METHODS

Month and year	Unadjusted rate	Official adjusted rate	Alternative procedures									
			Official procedures used in 1976–77	Unemployed all multiplicative	Unemployed all additive	Year ahead	Stable		Other aggregations (multiplicative)		Direct adjustment of rate	Range (cols. 2–11)
							1967–73	1967–78	Total	Residual		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1977												
January	8.3	7.4	7.4	7.4	7.5	7.3	7.5	7.5	7.4	7.4	7.5	0.2
February	8.5	7.5	7.5	7.5	7.6	7.5	7.6	7.6	7.6	7.6	7.6	.1
March	7.9	7.4	7.4	7.4	7.4	7.3	7.5	7.5	7.4	7.4	7.4	.2
April	6.9	7.2	7.2	7.2	7.2	7.0	7.1	7.1	7.2	7.2	7.2	.2
May	6.4	7.1	7.1	7.1	7.0	6.9	7.1	7.1	7.2	7.1	7.2	.3
June	7.5	7.2	7.2	7.1	7.2	7.1	7.0	7.1	7.2	7.1	7.1	.2
July	7.0	6.9	6.9	6.9	6.9	6.9	6.8	6.9	6.9	6.9	7.0	.2
August	6.8	7.0	7.0	7.0	7.0	7.1	6.9	6.9	7.0	7.0	7.0	.2
September	6.6	6.8	6.8	6.8	6.8	6.9	6.7	6.7	6.8	6.9	6.9	.2
October	6.3	6.8	6.8	6.8	6.9	7.0	6.8	6.8	6.8	6.9	6.8	.2
November	6.4	6.7	6.7	6.7	6.7	6.9	6.8	6.8	6.7	6.7	6.7	.2
December	6.0	6.3	6.3	6.2	6.3	6.4	6.5	6.4	6.2	6.3	6.2	.3
1978												
January	7.0	6.3	6.3	6.3	6.3	6.3	6.4	6.4	6.3	6.1	6.3	.3
February	6.9	6.1	6.1	6.1	6.1	6.1	6.2	6.1	6.1	6.0	6.2	.2
March	6.6	6.2	6.2	6.2	6.1	6.2	6.3	6.2	6.2	6.1	6.2	.2
April	5.8	6.1	6.1	6.1	6.1	6.0	6.0	6.0	6.0	6.1	6.0	.1
May	5.5	6.1	6.1	6.2	6.1	6.1	6.2	6.2	6.2	6.2	6.2	.1
June	6.2	5.9	5.9	5.9	5.9	5.7	5.7	5.8	5.9	5.8	5.9	.2
July	6.3	6.1	6.2	6.2	6.2	6.2	6.1	6.1	6.2	6.2	6.3	.2
August	5.8	5.9	5.9	5.9	6.0	5.9	5.9	5.9	5.9	6.0	5.9	.1
September	5.7	5.9	5.9	5.9	6.0	6.0	5.8	5.9	5.9	6.0	5.9	.2
October	5.4	5.8	5.8	5.8	5.9	5.8	5.7	5.8	5.8	5.9	5.8	.2
November	5.5	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.7	5.8	5.7	.1
Decemer	5.6	5.9	5.9	5.9	5.9	6.0	6.1	6.0	5.8	6.0	5.8	.3

See footnotes on following page.

EXPLANATION OF COLUMN HEADS

(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 yr 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. (4)–(7). 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 1978 are:

January	111.1	July	102.2
February	112.0	August	98.5
March	106.7	September	97.3
April	94.6	October	93.1
May	89.5	November	95.7
June	105.6	December	95.5

(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 yr of age 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 basic unemployed age-sex groups—males and females, 16–19 and 20 yr 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 ½ of the difference from the previous year—is then computed for each of the components, and the rate is calculated. The rates shown are first calculated and are not subject to revision.

(7) 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.

(8) Stable seasonals (January 1967–December 1978). Follows the same procedures as used in col. 7, except that the unweighted average is based on seasonal-irregular ratios for the 1967–78 period.

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

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

(11) Direct adjustment. Unemployment adjusted directly.

(12) Averages of cols. 2–10.

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. The seasonally adjusted data appearing in cols. 2, 3, 4, 5, 8, 9, 10 and 11 have been revised to incorporate data through December 1978.

Source: U.S. Department of Labor, Bureau of Labor Statistics, Jan. 12, 1979.

[Press release No. 79-27, Bureau of Labor Statistics, Department of Labor, Washington, D.C., Jan. 12, 1979]

THE EMPLOYMENT SITUATION: DECEMBER 1978

Total employment and unemployment in December remained close to their November levels, the Bureau of Labor Statistics of the U.S. Department of Labor reported today. The overall unemployment rate was 5.9 percent, not much different from November, but lower than the rates prevailing in early 1978.

Total employment—as measured by the monthly survey of households—was 95.9 million in December. Over the past year, total employment has risen by 3 million.

In contrast, nonfarm payroll employment—as measured by the monthly survey of establishments—continued to expand in December, rising by 250,000 to 87.3 million. Over the year, nonfarm payroll jobs have increased by 3.6 million.

Unemployment

Both the total number of persons unemployed in December—6 million—and the overall unemployment rate—5.9 percent—were little changed from a month earlier. Among the major demographic groups, the unemployment rates for adult men (4.1 percent), adult women (5.8 percent), and teenagers (16.5 percent) were little changed from November. Likewise, joblessness among whites and blacks and in most other worker categories showed little or no change. However, virtually all worker groups have shown some improvement since December 1977, with a few notable exceptions, including teenagers and women who had families. (See table A-2.)

The median duration of unemployment in December was 5.6 weeks, not much different from the November level. Median duration was more than a week shorter than a year earlier, a reflection of reductions in long-term unemployment as well as an increase in short duration joblessness of less than 5 weeks. (See table A-4.)

Total employment and the labor force

Total employment was little changed in December at 95.9 million, following a gain of half a million in the prior month. Over the past year, employment has risen by 3.0 million (after adjustment for changes in the survey introduced in January 1978—see box on table A-1). Reflecting this expansion, the employment-population ratio—the proportion of the total noninstitutional population that is employed—has increased substantially to a record 59.1 percent. The civilian labor force edged up slightly over the month to 101.9 million in December, also has expanded substantially over the year. (See table A-1.)

Over-the-year developments

The highlight of the Nation's job situation in 1978 was the strong increase in employment. Gains were pervasive throughout the economy, occurring in every major nonfarm industry and among all major worker groups. This marked the third consecutive year of sharp expansion in employment. Most of the over-the-year increase resulted from an expansion of full-time jobs.

The jobless rate declined in 1978, though more gradually than during the prior 2½ years. From 6.6 percent in late 1977, the rate moved to 6.2 percent in the first quarter, was 6 percent during the middle two quarters, and then edged down to 5.8 percent in the final quarter. Declines were registered among both black and white workers and for adult men and women, while the rate for teenagers was about unchanged. Teenagers continued to comprise a growing proportion of the unemployed, as more than 1 of every 4 unemployed persons was under 20 years of age.

The 2.8-million expansion in the labor force over the course of 1978 was only slightly less than the growth in the prior year. Adult women increased their numbers in the labor force by nearly 1.7 million from the fourth quarter of 1977, adult men by almost 1 million, and teenagers by 200,000 (despite a slightly declining population). The overall labor force participation rate rose substantially over the year to a new high of 63.5 percent in the fourth quarter of 1978. An unprecedented 50 percent of adult women and nearly 60 percent of teenagers were in the labor force; the rate for adult men was about unchanged at close to 80 percent.

TABLE A.—MAJOR INDICATORS OF LABOR MARKET ACTIVITY, SEASONALLY ADJUSTED

Selected categories	Quarterly averages					Monthly data, 1978		
	1977	1978						
	IV	I	II	III	IV	October	November	December
HOUSEHOLD DATA								
Thousands of persons								
Civilian labor force	98,538	99,263	100,127	100,753	101,524	101,077	101,628	101,867
Total employment	92,046	93,084	94,099	94,726	95,616	95,241	95,751	95,855
Unemployment	6,492	6,179	6,082	6,027	5,908	5,836	5,877	6,012
Not in labor force	58,861	58,741	58,478	58,482	58,398	58,630	58,288	58,275
Discouraged workers	970	914	851	853	760	[1]	[1]	[1]
Percent of labor force								
Unemployment rates:								
All workers	6.6	6.2	6.0	6.0	5.8	5.8	5.8	5.9
Adult men	4.7	4.5	4.2	4.1	4.0	4.0	3.9	4.1
Adult women	6.7	6.0	6.1	6.1	5.8	5.6	5.8	5.8
Teenagers	16.6	16.9	16.1	16.1	16.3	16.2	16.2	16.5
White	5.7	5.4	5.2	5.2	5.1	5.1	5.0	5.2
Black and other	13.2	12.4	12.1	11.7	11.5	11.3	11.7	11.5
Full-time workers	6.1	5.7	5.5	5.5	5.2	5.2	5.2	5.3
ESTABLISHMENT DATA								
Thousands of jobs								
Nonfarm payroll employment	83,489	84,262	85,677	86,115	[2] 86,954	86,573	[2] 87,020	[2] 87,270
Goods-producing industries	24,583	24,766	25,376	25,478	[2] 25,860	25,670	[2] 25,870	[2] 26,039
Service-producing industries	58,906	59,495	60,302	60,637	[2] 61,095	60,903	[2] 61,150	[2] 61,231
Hours of work								
Average weekly hours:								
Total private nonfarm	36.0	35.7	36.0	35.8	[2] 35.8	35.9	[2] 35.8	[2] 35.8
Manufacturing	40.5	40.2	40.6	40.4	[2] 40.6	40.5	[2] 40.7	[2] 40.6
Manufacturing overtime	3.6	3.6	3.6	3.5	[2] 3.7	3.6	[2] 3.6	[2] 3.8

[1] Not available.
[2] Preliminary.

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 unemployed. These data are published on a quarterly basis.

Following a quarter of no change, the number of discouraged workers resumed the downward trend that began in late 1977, falling almost 100,000 to 760,000 during the fourth quarter. As usual, about two-thirds of this total indicated job-market factors as the reasons for not seeking work. (See table A–8.)

Industry payroll employment

Nonagricultural payroll employment increased by 250,000 in December to 87.3 million, as employment advanced in 76 percent of the 172 industries that comprise the BLS diffusion index of private nonagricultural payroll employment. Nonfarm jobs have risen by 3.6 million over the past year. (See tables B–1 and B–6.)

Over-the-month employment gains were posted in most of the major industry groups. The largest increase, for the third consecutive month, was in manufacturing (125,000). About two-thirds of the gain in factory employment occurred in the durable goods industries. Within the durable goods, most of the strength was, once again, in the major metals and metal-using industries, led by machinery, transportation equipment, and fabricated metals. Employment increases in nondurables occurred primarily in food processing and printing and publishing. Elsewhere in the goods sector, sizable growth was registered in construction jobs (45,000), while mining employment was unchanged.

In the service-producing sector, the largest increases occurred in services (35,000), State and local government (25,000), wholesale trade (20,000), and transportation and public utilities (20,000). There was also growth in finance, insurance, and real estate.

The only industry in the service-producing sector where employment declined was retail trade, as retailers apparently added fewer than usual extra workers for the Christmas season. Employment growth in retail trade has been generally strong throughout the year.

Hours

The average workweek for production or nonsupervisory workers on private nonagricultural payrolls was 35.8 hours in December, unchanged from November and about in line with levels prevailing over the past year. The manufacturing workweek inched down 0.1 hour to 40.6 hours in December, but factory overtime, at 3.8 hours, increased by 0.2 hours. (See table B–2.)

The index of aggregate weekly hours of production or nonsupervisory workers on private nonagricultural payrolls was 122.5 (1967=100) in December, 0.2 point above the November index. The overall index has increased by 4.3 percent from a year ago. (See table B–5.)

Hourly and weekly earnings

Average hourly earnings of production or nonsupervisory workers on private nonagricultural payrolls increased 0.7 percent in December and 9.1 percent from a year ago (seasonally adjusted). Average weekly earnings were also up 0.7 percent over the month; weekly earnings have risen by 8.8 percent since December 1977.

Before adjustment for seasonally, average hourly earnings rose 3 cents to $5.90, 50 cents above last December; average weekly earnings were $212.40, $2.25 above November and $16.92 higher than a year earlier. (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 220.2 (1967=100) in December, 0.5 percent higher than in November. The index was 8.2 percent above December a year ago. During the 12-month period ended in November, the Hourly Earnings Index in dollars of constant purchasing power declined 0.6 percent. (See table B–4.)

Note on seasonal adjustment

Once each year, the Bureau of Labor Statistics recalculates the seasonal-adjustment factors for unemployment and other labor force series derived from the Current Population Survey (household survey). The purpose of the revision is to incorporate the experience of the previous year. As a result of the updating of the factors, seasonally-adjusted data for the past 5 years are subject to revision.

The table below contains the seasonally-adjusted overall unemployment rates for the past 12 months as originally published and as revised by incorporation of 1978 data and the recomputation of the seasonal factors. The revised data are identical to the data originally published for 7 of the 12 months and differ by 0.1 percentage point in the other 5 months. The revisions, of course, do not affect the 1978 annual average rate, which is 6 percent.

Revised data for the entire 1974-78 revision period for nearly 500 labor force series, a description of the current seasonal-adjustment procedures, and seasonal-adjustment factors to be used to calculate the overall unemployment rate during 1979 will be published in the February 1979 issue of Employment and Earnings. Revised seasonally adjusted quarterly data for selected labor force series will be issued in the "Laobr Force Developments" release of fourth quarter 1978 data on January 18 and in the January 1979 issue of Employment and Earnings. Historical data (monthly and quarterly) from the time of inception of the various series may be obtained from the Bureau upon request. (Contact Gloria Green, 202–523–1944.)

REVISED SEASONALLY-ADJUSTED UNEMPLOYMENT RATES IN 1978

Month	As previously published	As revised
January	6.3	6.3
February	6.1	6.1
March	6.2	6.2
April	6.0	6.1
May	6.1	6.1
June	5.7	5.8
July	6.2	6.1
August	5.9	5.9
September	6.0	5.9
October	5.8	5.8
November	5.8	5.8
December	[1] 6.0	5.9

[1] Not published.

EXPLANATORY NOTE

This release presents an 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.

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 unemployment (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 May 1978.)

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 form 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 approximation 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 surveys 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 1977 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

TABLE A-1.—EMPLOYMENT STATUS OF THE NONINSTITUTIONAL POPULATION

[Numbers in thousands]

Employment status	Not seasonally adjusted			Seasonally adjusted					
	December 1977	November 1978	December 1978	December 1977	August 1978	September 1978	October 1978	November 1978	December 1978
TOTAL									
Total noninstitutional population [1]	159,736	162,033	162,250	159,736	161,348	161,570	161,829	162,033	162,250
Armed Forces [1]	2,129	2,117	2,108	2,129	2,122	2,123	2,122	2,117	2,108
Civilian noninstitutional population [1]	157,608	159,916	160,142	157,608	159,226	159,447	159,707	159,916	160,142
Civilian labor force	98,503	101,659	101,632	98,748	100,663	100,974	101,077	101,628	101,867
Participation rate	62.5	63.6	63.5	62.7	63.2	63.3	63.3	63.6	63.6
Employed	92,623	96,029	95,906	92,561	94,723	95,010	95,241	95,751	95,855
Employment-population ratio [2]	58.0	59.3	59.1	57.9	58.7	58.8	58.9	59.1	59.1
Agriculture	2,914	3,100	2,990	3,304	3,351	3,406	3,374	3,275	3,387
Nonagricultural industries	89,710	92,929	92,916	89,257	91,372	91,604	91,867	92,476	92,468
Unemployed	5,880	5,629	5,725	6,187	5,940	5,964	5,836	5,877	6,012
Unemployment rate	6.0	5.5	5.6	6.3	5.9	5.9	5.8	5.8	5.9
Not in labor force	59,105	58,258	58,510	58,860	58,563	58,473	58,630	58,288	58,275
Men, 20 years and over									
Total noninstitutional population [1]	68,052	69,182	69,288	68,052	68,827	68,937	69,081	69,182	69,288
Civilian noninstitutional population [1]	66,364	67,486	67,600	66,364	67,127	67,236	67,382	67,486	67,600
Civilian labor force	52,921	53,924	53,935	53,001	53,396	53,459	53,593	53,938	54,033
Participation rate	79.7	79.9	79.8	79.9	79.5	79.5	79.5	79.9	79.9
Employed	50,514	51,955	51,713	50,614	51,215	51,287	51,448	51,825	51,838
Employment-population ratio [2]	74.2	75.1	74.6	74.4	74.4	74.4	74.5	74.9	74.8
Agriculture	2,192	2,277	2,250	2,339	2,357	2,409	2,363	2,337	2,403
Nonagricultural industries	48,322	49,678	49,463	48,275	48,858	48,878	49,085	49,488	49,435
Unemployed	2,407	1,969	2,221	2,387	2,181	2,172	2,145	2,113	2,195
Unemployment rate	4.5	3.7	4.1	4.5	4.1	4.1	4.0	3.9	4.1
Not in labor force	13,443	13,563	13,665	13,363	13,731	13,777	13,789	13,548	13,567
Women, 20 years and over									
Total noninstitutional population [1]	74,883	76,110	76,227	74,883	75,753	75,873	75,998	76,110	76,227
Civilian noninstitutional population [1]	74,783	76,001	76,119	74,783	75,645	75,764	75,889	76,001	76,119
Civilian labor force	36,708	38,543	38,514	36,428	37,543	37,921	37,860	38,095	38,217
Participation rate	49.1	50.7	50.6	48.7	49.6	50.1	49.9	50.1	50.2
Employed	34,530	36,362	36,457	34,066	35,312	35,691	35,726	35,887	35,990
Employment-population ratio [2]	46.1	47.8	47.8	45.5	46.6	47.0	47.0	47.2	47.2
Agriculture	436	534	479	540	581	597	587	571	591
Nonagricultural industries	34,094	35,827	35,978	33,526	34,731	35,094	35,139	35,316	35,399
Unemployed	2,179	2,181	2,057	2,362	2,231	2,230	2,134	2,208	2,227
Unemployment rate	5.9	5.7	5.3	6.5	5.9	5.9	5.6	5.8	5.8
Not in labor force	38,075	37,458	37,605	38,355	38,102	37,843	38,029	37,906	37,902

Both sexes, 16–19 years									
Total noninstitutional population [1]	16,802	16,741	16,734	16,802	16,768	16,760	16,750	16,741	16,734
Civilian noninstitutional population [1]	16,460	16,429	16,422	16,460	16,455	16,446	16,436	16,429	16,422
Civilian labor force	8,873	9,192	9,183	9,319	9,724	9,594	9,624	9,595	9,617
Participation rate	53.9	55.9	55.9	56.6	59.1	58.3	58.6	58.4	58.6
Employed	7,580	7,712	7,736	7,881	8,196	8,032	8,067	8,039	8,027
Employment-population ratio [2]	45.1	46.1	46.2	46.9	48.9	47.9	48.2	48.0	48.0
Agriculture	286	289	262	425	413	400	424	367	393
Nonagricultural industries	7,293	7,424	7,475	7,456	7,783	7,632	7,643	7,672	7,634
Unemployed	1,294	1,479	1,447	1,438	1,528	1,562	1,557	1,556	1,590
Unemployment rate	14.6	16.1	15.8	15.4	15.7	16.3	16.2	16.2	16.5
Not in labor force	7,587	7,237	7,239	7,141	6,731	6,852	6,812	6,834	6,805
WHITE									
Total noninstitutional population [1]	140,264	142,031	142,198	140,264	141,520	141,693	141,873	142,031	142,198
Civilian noninstitutional population [1]	138,523	140,332	140,507	138,523	139,817	139,990	140,170	140,332	140,507
Civilian labor force	86,879	89,521	89,556	87,065	88,655	88,862	89,067	89,468	89,747
Participation rate	62.7	63.8	63.7	62.9	63.4	63.5	63.5	63.8	63.9
Employed	82,375	85,261	85,133	82,350	84,060	84,250	84,565	85,013	85,125
Employment-population ratio [2]	58.7	60.0	59.9	58.7	59.4	59.5	59.6	59.9	59.9
Unemployed	4,505	4,260	4,422	4,715	4,595	4,612	4,502	4,455	4,622
Unemployment rate	5.2	4.8	4.9	5.4	5.2	5.2	5.1	5.0	5.2
Not in labor force	51,644	50,811	50,951	51,458	51,162	51,128	51,103	50,864	50,760
BLACK and OTHER									
Total noninstitutional population [1]	19,473	20,002	20,051	19,473	19,828	19,876	19,955	20,002	20,051
Civilian noninstitutional population [1]	19,084	19,585	19,635	19,084	19,409	19,457	19,536	19,585	19,635
Civilian labor force	11,624	12,137	12,076	11,708	11,994	12,084	12,122	12,163	12,153
Participation rate	60.9	62.0	61.5	61.3	61.8	62.1	62.0	62.1	61.9
Employed	10,249	10,768	10,773	10,237	10,616	10,721	10,749	10,746	10,758
Employment-population ratio [2]	52.6	53.8	53.7	52.6	53.5	53.9	53.9	53.7	53.7
Unemployed	1,375	1,369	1,303	1,471	1,378	1,363	1,373	1,417	1,395
Unemployment rate	11.8	11.3	10.8	12.6	11.5	11.3	11.3	11.7	11.5
Not in labor force	7,460	7,447	7,559	7,376	7,415	7,373	7,414	7,422	7,482

[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).

Note: Household survey data for periods prior to January 1978 shown in tables A–1 through A–8 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.

TABLE A–2.—MAJOR UNEMPLOYMENT INDICATORS, SEASONALLY ADJUSTED

Selected categories	Number of unemployed persons (in thousands)		Unemployment rates					
	Dec. 1977	Dec. 1978	Dec. 1977	Aug. 1978	Sept. 1978	Oct. 1978	Nov. 1978	Dec. 1978
CHARACTERISTICS								
Total, 16 yr and over	6,187	6,012	6.3	5.9	5.9	5.8	5.8	5.9
Men, 20 yr and over	2,397	2,195	4.5	4.1	4.1	4.0	3.9	4.1
Women, 20 yr and over	2,362	2,227	6.5	5.9	5.9	5.6	5.8	5.8
Both sexes, 16 to 19 yr	1,438	1,590	15.4	15.7	16.3	16.2	16.2	16.5
White, total	4,715	4,622	5.4	5.2	5.2	5.1	5.0	5.2
Men, 20 yr and over	1,882	1,710	4.0	3.6	3.6	3.5	3.4	3.5
Women, 20 yr and over	1,787	1,694	5.7	5.2	5.2	4.9	5.0	5.1
Both sexes, 16 to 19 yr	1,046	1,218	13.6	13.7	14.1	14.0	13.8	14.2
Black and other, total	1,471	1,395	11.6	11.5	11.3	11.3	11.7	11.5
Men, 20 yr and over	504	491	8.9	8.7	8.2	8.3	8.3	8.4
Women, 20 yr and over	574	533	11.4	10.3	10.0	10.1	10.3	10.2
Both sexes, 16 to 19 yr	393	371	38.3	32.5	34.9	34.5	36.5	34.9
Married men, spouse present	1,236	1,010	3.1	2.8	2.6	2.6	2.4	2.5
Married women, spouse present	1,386	1,327	6.1	5.6	5.5	5.3	5.5	5.6
Women who head families	360	376	7.8	8.0	8.0	7.5	7.7	7.7
Full-time workers	4,869	4,597	5.8	5.4	5.4	5.2	5.2	5.3
Part-time workers	1,294	1,403	8.8	8.7	8.8	9.0	8.9	9.2
Unemployed 15 weeks and over [1]	1,648	1,208	1.7	1.2	1.3	1.3	1.2	1.2
Labor force time lost [2]			6.9	6.5	6.4	6.2	6.2	6.2
OCCUPATION [3]								
White-collar workers	1,882	1,718	3.9	3.5	3.5	3.3	3.2	3.5
Professional and technical	393	452	2.7	2.6	2.6	2.8	2.4	3.0
Managers and administrators, except farm	254	203	2.5	1.9	2.2	1.8	2.2	1.9
Sales workers	289	229	4.7	4.1	4.3	4.1	3.1	3.6
Clerical workers	946	834	5.4	4.9	4.7	4.2	4.5	4.6
Blue-collar workers	2,341	2,330	7.0	6.9	6.8	6.8	6.4	6.8
Craft and kindred workers	654	625	5.1	4.5	4.7	4.9	4.0	4.7
Operatives, except transport	923	905	8.1	8.8	8.1	7.6	7.5	7.7
Transport equipment operatives	208	203	5.5	5.6	5.2	4.8	4.2	5.3
Nonfarm laborers	556	597	10.7	9.7	10.5	11.0	11.6	11.0
Service workers	1,048	1,086	7.7	7.1	7.4	7.1	7.4	7.7
Farm workers	119	99	4.1	3.6	3.9	4.6	3.2	3.4
INDUSTRY [3]								
Nonagricultural private wage and salary workers [4]	4,427	4,358	6.2	5.8	5.8	5.6	5.6	5.8
Construction	495	603	10.7	9.4	10.6	11.2	10.8	12.1
Manufacturing	1,224	1,146	5.6	5.6	5.3	5.1	5.1	5.0
Durable goods	710	591	5.5	5.4	4.8	4.6	4.6	4.4
Nondurable goods	514	555	5.7	5.8	6.1	6.0	5.8	6.7
Transportation and public utilities	235	178	4.6	3.8	3.6	3.4	3.3	3.0
Wholesale and retail trade	1,312	1,270	7.2	6.5	6.7	6.7	6.5	6.3
Finance and service industries	1,129	1,132	5.4	5.2	5.1	4.6	5.0	5.8
Government workers	670	636	4.2	3.6	3.9	3.9	3.9	4.1
Agricultural wage and salary workers	146	124	9.5	8.7	8.7	9.5	7.9	7.0
VETERAN STATUS								
Male Vietnam era veterans: [5]								
20 to 34 yr	343	333	5.4	6.1	4.8	4.8	4.8	5.5
20 to 24 yr	85	98	11.4	13.8	10.3	9.3	11.5	16.6
25 to 29 yr	149	125	6.0	7.1	7.0	6.7	6.3	6.0
30 to 34 yr	109	110	3.5	3.9	2.4	2.8	2.7	3.2
Male nonveterans:								
20 to 34 yr	1,127	1,006	6.8	5.7	5.8	5.8	5.8	5.8
20 to 24 yr	679	583	9.4	8.2	8.2	8.1	8.0	8.0
25 to 29 yr	281	302	5.2	4.5	4.2	4.4	4.5	5.0
30 to 34 yr	167	121	4.4	2.8	3.5	3.4	3.5	3.1

[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 Aug. 5, 1974, and May 7, 1975.

TABLE A-3.—SELECTED EMPLOYMENT INDICATORS

[In thousands]

Selected categories	Not seasonally adjusted		Seasonally adjusted					
	Dec. 1977	Dec. 1978	Dec. 1977	Aug. 1978	Sept. 1978	Oct. 1978	Nov. 1978	Dec. 1978
CHARACTERISTICS								
Total employed, 16 yr and over	92,623	95,906	92,561	94,723	95,010	95,241	95,751	95,855
Men	54,524	55,688	54,922	55,580	55,594	55,754	56,096	56,072
Women	38,099	40,239	37,639	39,143	39,416	39,487	39,655	39,783
Married men, spouse present	38,655	39,024	38,653	38,534	38,782	38,806	38,944	39,039
Married women, spouse present	21,892	22,784	21,412	21,737	22,133	22,194	22,274	22,297
OCCUPATION								
White-collar workers	46,981	48,852	46,205	47,325	47,550	47,713	47,888	48,040
Professional and technical	14,179	14,870	13,947	14,246	14,182	14,307	14,297	14,629
Managers and administrators, except farm	9,982	10,298	9,913	10,160	10,062	9,968	10,030	10,217
Sales workers	6,039	6,337	5,814	5,892	5,898	5,986	6,192	6,092
Clerical workers	16,780	17,356	16,531	17,007	17,408	17,452	17,369	17,102
Blue-collar workers	30,600	31,654	30,880	31,506	31,891	31,986	32,202	31,862
Craft and kindred workers	12,208	12,597	12,215	12,557	12,628	12,556	12,646	12,610
Operatives, except transport	10,441	10,863	10,459	10,741	10,981	11,178	11,177	10,887
Transport equipment operatives	3,539	3,617	3,556	3,429	3,573	3,581	3,640	3,640
Nonfarm laborers	4,413	4,577	4,650	4,779	4,709	4,671	4,739	4,825
Service workers	12,616	12,942	12,650	12,866	12,754	12,951	13,009	13,007
Farm workers	2,426	2,459	2,789	2,794	2,855	2,821	2,739	2,826
MAJOR INDUSTRY AND CLASS OF WORKER								
Agriculture:								
Wage and salary workers	1,147	1,226	1,384	1,423	1,442	1,423	1,424	1,478
Self-employed workers	1,516	1,534	1,603	1,611	1,648	1,638	1,563	1,625
Unpaid family workers	250	231	345	319	307	323	293	318
Nonagricultural industries:								
Wage and salary workers	83,109	85,984	82,646	84,508	84,786	85,363	85,578	85,579
Government	15,592	15,572	15,368	15,275	15,336	15,387	15,373	15,360
Private industries	67,517	70,411	67,278	69,233	69,450	69,976	70,205	70,219
Private households	1,454	1,338	1,429	1,368	1,361	1,315	1,335	1,316
Other industries	66,063	69,073	65,849	67,865	68,089	68,661	68,870	68,903
Self-employed workers	6,177	6,506	6,187	6,219	6,224	6,314	6,370	6,515
Unpaid family workers	424	427	455	449	470	453	455	460
PERSONS AT WORK[1]								
Nonagricultural industries	86,112	89,715	83,556	86,350	86,329	86,511	86,653	87,046
Full-time schedules	70,212	73,533	68,542	71,205	71,085	71,318	71,394	71,787
Part time for economic reasons	3,008	2,868	3,208	3,298	3,203	3,164	3,131	3,058
Usually work full time	1,214	1,173	1,246	1,350	1,283	1,167	1,279	1,209
Usually work part time	1,794	1,695	1,962	1,948	1,920	1,997	1,852	1,849
Part time for noneconomic reasons	12,892	13,314	11,806	11,847	12,041	12,029	12,128	12,201

[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					
	Dec. 1977	Dec. 1978	Dec. 1977	Aug. 1978	Sept. 1978	Oct. 1978	Nov. 1978	Dec. 1978
DURATION								
Less than 5 weeks	2,361	2,553	2,645	2,795	2,783	2,719	2,833	2,876
5 to 14 weeks	1,951	2,015	1,913	1,895	1,861	1,789	1,774	1,979
15 weeks and over	1,568	1,157	1,648	1,234	1,268	1,317	1,196	1,208
15 to 26 weeks	791	706	813	625	663	732	685	726
27 weeks and over	777	451	835	609	605	585	511	482
Average (mean) duration, in weeks	14.1	11.0	13.7	11.4	11.5	11.8	11.0	10.7
Median duration, in weeks	7.4	6.1	6.8	6.0	5.9	5.9	5.4	5.6
PERCENT DISTRIBUTION								
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 5 weeks	40.2	44.6	42.6	47.2	47.1	46.7	48.8	47.4
5 to 14 weeks	33.2	35.2	30.8	32.0	31.5	30.7	30.6	32.6
15 weeks and over	26.7	20.2	26.6	20.8	21.4	22.6	20.6	19.9
15 to 26 weeks	13.5	12.3	13.1	10.6	11.2	12.6	11.8	12.0
27 weeks and over	13.2	7.9	13.5	10.3	10.2	10.0	8.8	7.9

TABLE A-5.—REASONS FOR UNEMPLOYMENT

[Numbers in thousands]

Reasons	Not seasonally adjusted		Seasonally adjusted					
	Dec. 1977	Dec. 1978	Dec. 1977	Aug. 1978	Sept. 1978	Oct. 1978	Nov. 1978	Dec. 1978
NUMBER OF UNEMPLOYED								
Lost last job	2,749	2,504	2,681	2,459	2,362	2,456	2,372	2,442
On layoff	737	760	691	700	683	644	746	715
Other job losers	2,012	1,744	1,990	1,759	1,679	1,812	1,626	1,727
Left last job	809	827	852	840	849	812	825	871
Reentered labor force	1,642	1,716	1,857	1,743	1,930	1,721	1,754	1,937
Seeking first job	679	678	827	875	816	825	872	826
PERCENT OF DISTRIBUTION								
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Job losers	46.7	43.8	43.1	41.6	39.7	42.2	40.7	40.2
On layoff	12.5	13.3	11.1	11.8	11.5	11.1	12.8	11.8
Other job losers	34.2	30.5	32.0	29.7	28.2	31.2	27.9	28.4
Job leavers	13.8	14.5	13.7	14.2	14.3	14.0	14.2	14.3
Reentrants	27.9	30.0	29.9	29.5	32.4	29.6	30.1	31.9
New entrants	11.5	11.8	13.3	14.8	13.7	14.2	15.0	13.6
UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE								
Job losers	2.7	2.4	2.7	2.4	2.3	2.4	2.3	2.4
Job leavers	.8	.8	.9	.8	.8	.8	.8	.9
Reentrants	1.7	1.7	1.9	1.7	1.9	1.7	1.7	1.9
New entrants	.7	.7	.8	.9	.8	.8	.9	.8

TABLE A-6.—UNEMPLOYMENT BY SEX AND AGE, SEASONALLY ADJUSTED

Sex and age	Number of unemployed persons (in thousands)		Unemployment rates					
	Dec. 1977	Dec. 1978	Dec. 1977	Aug. 1978	Sept. 1978	Oct. 1978	Nov. 1978	Dec. 1978
Total, 16 years and over	6,187	6,012	6.3	5.9	5.9	5.8	5.8	5.9
16 to 19 yr	1,438	1,590	15.4	15.7	16.3	16.2	16.2	16.5
16 to 17 yr	698	834	17.8	18.6	19.2	19.2	19.3	20.2
18 to 19 yr	740	759	13.7	13.5	14.0	14.0	14.0	13.8
20 to 24 yr	1,483	1,406	10.1	9.0	9.3	8.6	9.0	9.3
25 yr and over	3,257	3,015	4.4	4.1	4.0	3.9	3.8	3.9
26 to 54 yr	2,715	2,615	4.5	4.3	4.1	4.2	4.0	4.2
55 yr and over	561	424	3.9	3.0	3.3	3.0	2.9	2.9
Men, 16 yr and over	3,146	3,044	5.4	5.0	5.1	5.1	5.0	5.1
16 to 19 yr	579	849	15.0	14.8	15.5	16.1	15.9	16.7
16 to 17 yr	360	455	16.6	17.7	19.1	19.9	20.1	20.7
18 to 19 yr	396	391	13.7	12.5	12.6	13.2	12.7	13.6
20 to 24 yr	766	730	9.6	8.8	8.6	8.5	8.5	8.9
25 yr and over	1,618	1,469	3.6	3.3	3.3	3.3	3.1	3.2
25 to 54 yr	1,302	1,249	3.6	3.5	3.4	3.4	3.2	3.4
55 yr and over	326	235	3.6	2.9	3.0	2.8	2.5	2.6
Women, 16 yr and over	3,041	2,968	7.5	7.1	7.1	6.8	6.9	6.9
16 to 19 yr	679	741	16.0	16.8	17.1	16.3	16.5	16.3
16 to 17 yr	338	379	19.2	19.7	19.4	18.4	18.3	19.6
18 to 19 yr	344	368	13.7	14.6	15.6	14.8	15.5	14.1
20 to 24 yr	717	676	10.7	9.2	10.1	8.7	9.6	9.7
25 yr and over	1,639	1,546	5.5	5.2	4.9	4.9	4.9	5.0
25 to 54 yr	1,413	1,366	5.8	5.6	5.2	5.2	5.2	5.3
55 yr and over	235	189	4.3	3.2	3.8	3.3	3.5	3.3

TABLE A-7.—RANGE OF UNEMPLOYMENT MEASURES BASED ON VARYING DEFINITIONS OF UNEMPLOYMENT AND THE LABOR FORCE, SEASONALLY ADJUSTED

[In percent]

Measures	Quarterly averages					Monthly data (1978)		
	1977	1978						
	(IV)	I	II	III	IV	Oct.	Nov.	Dec.
U-1—Persons unemployed 15 weeks or longer as a percent of the civilian labor force	1.8	1.6	1.4	1.3	1.2	1.3	1.2	1.2
U-2—Job losers as a percent of the civilian labor force	2.9	2.6	2.5	2.4	2.4	2.4	2.3	2.4
U-3—Unemployed persons 25 yr and over as a percent of the civilian labor force 25 yr and over	4.6	4.1	4.1	4.1	3.9	3.9	3.8	3.9
U-4—Unemployed full-time jobseekers as a percent of the full-time labor force	6.1	5.7	5.5	5.5	5.2	5.2	5.2	5.3
U-5—Total unemployed as a percent of the civilian labor force (official measure)	6.6	6.2	6.0	6.0	5.8	5.8	5.8	5.9
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	8.1	7.7	7.6	7.5	7.2	7.2	7.2	7.2
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	9.1	8.6	8.4	8.4	8.0	(1)	(1)	(1)

[1] Not available.

TABLE A-8.—PERSONS NOT IN THE LABOR FORCE BY SELECTED CHARACTERISTICS, QUARTERLY AVERAGES

[In thousands]

Characteristics	Not seasonally adjusted (IV)		Seasonally adjusted					
			1977		1978			
	1977	1978	III	IV	I	II	III	IV
Total not in labor force	58,808	58,307	59,157	58,861	58,741	58,478	58,482	58,398
Do not want a job now	53,498	53,297	53,244	53,108	53,747	53,252	52,745	53,110
Want a job now	5,312	5,009	5,884	5,561	5,428	5,260	5,486	5,239
Discouraged workers	934	729	1,028	970	914	851	853	760
Job-market factors[1]	605	469	719	630	635	541	620	485
Personal factors[2]	330	260	309	340	279	310	232	275
Men	279	249	350	309	344	305	291	275
Women	655	480	677	661	570	546	561	485
White	686	512	720	712	647	584	591	531
Black and other	248	218	319	253	273	253	277	232

[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 FOR THE 10 LARGEST STATES

[Numbers in thousands]

State and employment status	Not seasonally adjusted*			Seasonally adjusted					
	Dec. 1977	Nov. 1978	Dec. 1978	Dec. 1977	Aug. 1978	Sept. 1978	Oct. 1978	Nov. 1978	Dec. 1978
CALIFORNIA									
Civilian noninstitutional population [1]	16,090	16,372	16,400	16,090	16,283	16,312	16,344	16,372	16,400
Civilian labor force	10,320	10,619	10,712	10,317	10,586	10,667	10,642	10,644	10,709
Employed	9,606	9,977	10,039	9,602	9,807	9,948	9,950	9,996	10,035
Unemployed	714	642	673	715	779	719	692	648	674
Unemployment rate	6.9	6.0	6.3	6.9	7.4	6.7	6.5	6.1	6.3
FLORIDA									
Civilian noninstitutional population [1]	6,453	6,643	6,661	6,453	6,585	6,605	6,625	6,643	6,661
Civilian labor force	3,639	3,743	3,723	(2)	(2)	(2)	(2)	(2)	(2)
Employed	3,388	3,510	3,486	(2)	(2)	(2)	(2)	(2)	(2)
Unemployed	251	233	237	(2)	(2)	(2)	(2)	(2)	(2)
Unemployment rate	6.9	6.2	6.4	(2)	(2)	(2)	(2)	(2)	(2)
ILLINOIS									
Civilian noninstitutional population [1]	8,194	8,251	8,258	8,194	8,230	8,236	8,245	8,251	8,258
Civilian labor force	5,256	5,424	5,380	5,276	5,377	5,353	5,410	5,448	5,402
Employed	4,964	5,143	5,072	4,945	5,052	5,060	5,109	5,134	5,053
Unemployed	292	281	308	331	325	293	301	314	349
Unemployment rate	5.6	5.2	5.7	6.3	6.0	5.5	5.6	5.8	6.5
MASSACHUSETTS									
Civilian noninstitutional population [1]	4,317	4,357	4,361	4,317	4,343	4,347	4,353	4,357	4,361
Civilian labor force	2,789	2,843	2,849	(2)	(2)	(2)	(2)	(2)	(2)
Employed	2,626	2,694	2,686	2,613	2,670	2,679	2,660	2,579	2,674
Unemployed	164	149	163	(2)	(2)	(2)	(2)	(2)	(2)
Unemployment rate	5.9	5.2	5.7	(2)	(2)	(2)	(2)	(2)	(2)
MICHIGAN									
Civilian noninstitutional population [1]	6,590	6,661	6,668	5,590	6,637	6,644	6,654	6,661	6,668
Civilian labor force	4,139	4,229	4,272	(2)	(2)	(2)	(2)	(2)	(2)
Employed	3,848	3,949	3,984	(2)	(2)	(2)	(2)	(2)	(2)
Unemployed	291	279	288	319	348	280	299	311	315
Unemployment rate	7.0	6.6	6.7	(2)	(2)	(2)	(2)	(2)	(2)
NEW JERSEY									
Civilian noninstitutional population [1]	5,440	5,490	5,496	5,440	5,473	5,478	5,485	5,490	5,496
Civilian labor force	3,450	3,592	3,574	3,487	3,418	3,544	3,563	3,613	3,610
Employed	3,212	3,373	3,327	3,226	3,177	3,282	3,317	3,365	3,341
Unemployed	239	220	247	261	241	262	246	248	269
Unemployment rate	6.9	6.1	6.9	7.5	7.1	7.4	6.9	6.9	7.5
NEW YORK									
Civilian noninstitutional population [1]	13,326	13,361	13,367	13,326	12,341	13,347	13,356	31,361	13,367
Civilian labor force	7,785	7,961	8,029	7,906	7,857	7,888	7,988	8,045	8,146
Employed	7,153	7,392	7,498	7,246	7,257	7,275	7,321	7,476	7,591
Unemployed	631	570	531	660	600	613	667	569	555
Unemployment rate	8.1	7.2	6.6	8.3	7.6	7.8	8.4	7.1	6.8
OHIO									
Civilian noninstitutional population [1]	7,814	7,869	7,876	7,814	7,849	7,856	7,863	7,869	7,876
Civilian labor force	4,798	5,088	5,062	4,842	4,891	5,038	5,084	5,099	5,107
Employed	4,556	4,838	4,818	4,580	4,627	4,748	4,814	4,824	8,442
Unemployed	242	250	245	262	264	290	270	275	265
Unemployment rate	5.0	4.9	4.8	5.4	5.4	5.8	5.3	5.4	5.2
PENNSYLVANIA									
Civilian noninstitutional population [1]	8,847	8,899	8,905	8,847	8,878	8,885	8,893	8,899	3,905
Civilian labor force	5,209	5,350	5,364	5,207	5,248	5,305	5,321	5,373	5,361
Employed	4,829	4,996	5,043	4,800	4,897	4,899	4,922	4,973	5,012
Unemployed	380	354	321	407	351	406	399	400	349
Unemployment rate	7.3	6.6	6.0	7.8	6.7	7.7	7.5	7.4	6.5
TEXAS									
Civlian noninstitutiional population [1]	9,101	9,290	9,309	9,101	9,233	9,251	9,272	9,290	9,039
Civilian labor force	5,893	6,112	6,017	5,932	5,979	5,928	6,046	9,112	6,143
Employed	5,617	5,819	5,823	5,625	5,684	5,648	5,772	5,810	5,831
Unemployed	276	292	234	307	295	280	274	302	317
Unemployment rate	4.7	4.8	4.7	5.2	4.9	4.7	4.5	4.9	5.2

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

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

[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. Data appearing in this table have not been reseasonally adjusted.

TABLE B-1.—EMPLOYEES ON NONAGRICULTURAL PAYROLLS BY INDUSTRY

[In thousands]

Industry	Not seasonally adjusted				Seasonally adjusted					
	December 1977	October 1978	November 1978[1]	December 1978[1]	December 1977	August 1978	September 1978	October 1978	November 1978[1]	December 1978[1]
Total	84,464	87,303	87,779	88,043	83,719	86,149	86,163	86,573	87,020	87,270
Goods-producing	24,568	26,161	26,150	25,976	24,626	25,463	25,471	25,670	25,870	26,039
Mining	682	897	903	896	687	887	887	893	902	902
Construction	3,896	4,601	4,516	4,347	3,955	4,298	4,298	4,341	4,358	4,413
Manufacturing	19,990	20,663	20,731	20,733	19,984	20,278	20,286	20,436	20,600	20,724
Production workers	14,378	14,878	14,935	14,937	14,375	14,532	14,536	14,655	14,803	14,930
Durable goods	11,877	12,411	12,482	12,518	11,851	12,146	12,166	12,305	12,409	12,490
Production workers	8,540	8,926	8,987	9,016	8,515	8,693	8,706	8,816	8,908	8,990
Lumber and wood products	743.0	761.1	755.0	752.2	756	743	744	748	759	765
Furniture and fixtures	484.2	491.4	492.8	493.2	481	481	480	484	487	490
Stone, clay, and glass products	678.0	709.6	709.6	698.9	685	692	692	696	701	706
Primary metal industries	1,175.5	1,220.3	1,230.1	1,238.0	1,180	1,205	1,214	1,220	1,236	1,243
Fabricated metal products	1,620.4	1,684.9	1,694.7	1,703.5	1,617	1,646	1,650	1,667	1,685	1,700
Machinery, except electrical	2,264.0	2,383.6	2,406.1	2,436.2	2,251	2,351	2,358	2,391	2,404	2,422
Electric and electronic equipment	1,925.1	2,006.8	2,018.7	2,019.8	1,912	1,975	1,972	1,987	1,999	2,006
Transportation equipment	1,916.1	2,010.7	2,029.0	2,046.1	1,895	1,941	1,943	1,991	2,009	2,024
Instruments and related products	629.7	666.6	674.4	677.8	628	661	662	665	672	676
Miscellaneous manufacturing	440.5	475.5	471.2	452.1	446	451	451	456	457	458
Nondurable goods	8,113	8,252	8,249	8,215	8,133	8,132	8,120	8,131	8,191	8,234
Production workers	5,838	5,952	5,948	5,919	5,860	5,839	5,830	5,839	5,895	5,940
Food and kindred products	1,680.0	1,735.6	1,709.0	1,689.4	1,700	1,670	1,665	1,667	1,692	1,710
Tobacco manufacturers	78.4	78.6	76.8	75.3	74	69	70	71	71	71
Textile mill products	916.5	910.4	912.3	910.5	917	903	907	907	910	911
Apparel and other textile products	1,313.6	1,326.1	1,323.3	1,307.8	1,320	1,309	1,309	1,307	1,308	1,314
Paper and allied products	697.5	695.7	704.1	701.6	697	698	697	692	700	701
Printing and publishing	1,165.4	1,188.1	1,201.9	1,217.7	1,156	1,188	1,178	1,185	1,198	1,208
Chemicals and allied products	1,072.9	1,091.9	1,094.7	1,091.2	1,076	1,089	1,088	1,089	1,094	1,094
Petroleum and coal products	203.5	212.0	210.7	208.6	206	209	209	210	210	211
Rubber and miscellaneous plastics products	732.9	762.9	767.5	766.2	734	746	744	752	760	767
Leather and leather products	252.2	250.4	249.0	246.2	253	251	253	251	248	247
Service-producing	59,896	61,142	61,629	62,067	59,093	60,686	60,692	60,903	61,150	61,231
Transportation and public utilities	4,773	4,952	4,970	4,990	4,749	4,846	4,855	4,922	4,945	4,965
Wholesale and retail trade	19,568	19,701	19,967	20,378	18,911	19,523	19,546	19,632	19,697	19,687
Wholesale trade	4,797	4,970	4,987	5,004	4,783	4,905	4,917	4,945	4,967	4,989
Retail trade	14,771	14,731	14,980	15,374	14,128	14,618	14,629	14,687	14,730	14,698
Finance, insurance, and real estate	4,533	4,732	4,761	4,774	4,547	4,707	4,719	4,737	4,775	4,788
Services	15,540	16,201	16,228	16,215	15,618	16,074	16,127	16,169	16,261	16,296
Government	15,482	15,558	15,703	15,710	15,268	15,536	15,445	15,443	15,472	15,495
Federal	2,724	2,746	2,746	2,755	2,723	2,765	2,752	2,760	2,757	2,757
State and local	12,758	12,810	12,957	12,955	12,545	12,771	12,693	12,683	12,715	12,738

[1] Preliminary.

Note: Establishment data shown in tables B-1 through B-6 have been revised to conform to the 1972 Standard Industrial Classification and adjusted to March 1977 benchmark levels, consequently, they are not comparable with data published prior to the October 6, 1978 release. For a discussion of the effect of these revisions, see "BLS Establishment Estimates Revised to Reflect New Benchmark Levels and 1972 SIC" Employment and Earnings, October 1978, vol. 25, No. 10.

TABLE B-2.—AVERAGE WEEKLY HOURS OF PRODUCTION OR NONSUPERVISORY WORKERS,[1] ON PRIVATE NONAGRICULTURAL PAYROLLS, BY INDUSTRY

[In thousands]

Industry	Not seasonally adjusted				Seasonally adjusted					
	December 1977	October 1978	November 1978[2]	December 1978[2]	December 1977	August 1978	September 1978	October 1978	November 1978[2]	December 1978[2]
Total private	36.2	35.9	35.8	36.0	35.9	35.8	35.8	35.9	35.8	35.88
Mining	42.7	43.7	43.7	43.8	42.9	43.6	43.0	43.0	43.2	44.0
Construction	36.1	37.9	36.4	38.8	36.2	37.1	37.0	36.9	36.7	36.9
Manufacturing	41.1	40.6	40.9	41.2	40.5	40.3	40.4	40.5	40.7	40.6
Overtime hours	3.7	3.8	3.8	3.9	3.6	3.4	3.6	3.6	3.6	3.8
Durable goods	42.0	41.3	41.6	42.1	41.2	41.0	41.1	41.2	41.4	41.3
Overtime hours	4.0	4.1	4.1	4.3	3.8	3.6	3.8	3.9	4.0	4.1
Lumber and wood products	40.0	40.4	39.8	39.7	40.0	39.3	39.6	40.1	40.0	39.7
Furniture and fixtures	40.5	39.6	39.5	40.2	39.6	39.0	38.8	39.0	39.2	39.3
Stone, clay, and glass products	41.5	42.3	42.2	42.2	41.3	41.6	41.8	41.8	42.0	42.0
Primary metal industries	41.9	41.9	42.4	42.6	41.6	42.0	41.8	42.1	42.5	42.3
Fabricated metal products	42.0	41.0	41.3	42.0	41.2	40.9	40.9	40.8	41.0	41.2
Machinery, except electrical	43.0	42.0	42.5	43.2	41.9	41.8	41.9	42.0	42.2	42.1
Electric and electronic equipment	41.3	40.4	40.7	41.1	40.5	40.4	40.1	40.3	40.4	40.3
Transportation equipment	44.0	42.7	43.0	43.9	42.4	41.8	42.5	42.6	42.9	42.3
Instruments and related products	41.3	41.0	41.2	41.7	40.5	41.0	40.9	40.9	40.8	40.9
Miscellaneous manufacturing	39.1	39.1	39.3	39.8	38.6	39.0	39.0	38.8	38.8	39.1
Nondurable goods	39.9	39.5	39.8	39.9	39.4	39.3	39.4	39.3	39.5	39.5
Overtime hours	3.3	3.4	3.3	3.4	3.3	3.2	3.2	3.2	3.2	3.4
Food and kindred products	40.3	40.0	40.0	40.1	39.9	39.5	39.5	39.9	39.9	39.7
Tobacco manufacturers	38.7	37.5	38.6	38.7	38.0	37.7	37.9	36.7	37.4	38.0
Textile mill products	40.9	40.3	40.6	40.8	40.5	40.4	40.4	40.3	40.4	40.4
Apparel and other textile products	36.1	35.6	36.0	36.0	35.9	35.6	35.7	35.2	35.7	35.8
Paper and allied products	43.6	42.8	43.3	43.5	42.9	42.7	42.7	42.6	43.1	42.8
Printing and publishing	38.2	37.8	38.0	38.3	37.6	37.4	37.8	37.7	37.8	37.7
Chemicals and allied products	42.2	41.9	42.2	42.2	41.7	41.9	41.8	41.9	42.0	41.7
Petroleum and coal products	43.5	44.3	44.0	43.8	43.4	44.3	43.8	43.9	43.7	43.7
Rubber and misc. plastics products	41.3	41.3	41.5	42.2	40.6	40.9	41.0	41.0	41.2	41.5
Leather and leather products	37.4	37.1	37.1	37.1	37.0	37.1	37.2	37.1	36.9	36.7
Transportation and public utilities	40.2	40.1	40.0	40.2	40.0	39.9	40.1	40.1	40.0	40.0
Wholesale and retail trade	33.4	32.7	32.6	33.0	33.1	32.8	32.8	32.9	32.8	32.7
Wholesale trade	39.0	39.0	38.9	39.1	38.8	38.8	39.0	38.9	38.9	38.9
Retail trade	31.7	30.8	30.6	31.1	31.4	30.9	30.9	31.0	30.9	30.8
Finance, insurance, and real estate	36.4	36.6	36.3	36.3	36.4	36.5	36.5	36.6	36.3	36.3
Services	33.0	32.7	32.6	32.6	33.0	32.7	32.8	32.8	32.7	32.6

[1] Data relate to production workers in mining and manufacturing; to construction workers in construction; and to nonsupervisory workers in transportation and public utilities; wholesale and retail trade; finance, insurance, and real estate; and services. These groups account for approximately ⅘ of the total employment on private nonagricultural payrolls.

[2] Preliminary.

TABLE B-3.—AVERAGE HOURLY AND WEEKLY EARNINGS OF PRODUCTION OR NONSUPERVISORY WORKERS[1] ON PRIVATE NONAGRICULTURAL PAYROLLS, BY INDUSTRY

[In dollars]

Industry	Average hourly earnings				Average weekly earnings			
	Dec. 1977	Oct. 1978	Nov. 1978[2]	Dec. 1978[2]	Dec. 1977	Oct. 1978	Nov. 1978[2]	Dec. 1978[2]
Total private	5.40	5.86	5.87	5.90	195.48	210.37	210.15	212.40
Seasonally adjusted	5.41	5.82	5.86	5.90	194.22	208.94	209.79	211.22
Mining	6.77	7.97	8.04	8.05	289.08	348.29	351.35	352.59
Construction	8.29	8.88	8.69	8.94	299.27	336.55	323.60	328.99
Manufacturing	5.92	6.32	6.37	6.45	243.31	256.59	260.53	265.74
Durable goods	6.33	6.76	6.81	6.89	265.86	279.19	283.30	290.07
Lumber and wood products	5.27	5.77	5.73	5.73	210.80	233.11	228.05	227.48
Furniture and fixtures	4.51	4.78	4.79	4.84	182.66	189.29	189.21	194.57
Stone, clay, and glass products	6.00	6.48	6.51	6.52	249.00	274.10	274.72	275.14
Primary metal industries	7.76	8.42	8.51	8.55	325.14	352.80	360.82	364.23
Fabricated metal products	6.12	6.49	6.54	6.61	257.04	266.09	270.10	277.62
Machinery, except electrical	6.54	6.94	7.00	7.08	281.22	291.48	297.50	305.86
Electric and electronic equipment	5.65	5.96	5.98	6.07	233.35	240.78	243.39	249.48
Transportation equipment	7.67	8.21	8.26	8.36	337.48	350.57	355.16	367.00
Instruments and related products	5.51	5.79	5.83	5.93	227.56	237.39	240.20	247.28
Miscellaneous manufacturing	4.54	4.77	4.80	4.88	177.51	186.51	188.64	193.25
Nondurable goods	5.30	5.64	5.69	5.75	211.47	222.78	226.46	229.43
Food and kindred products	5.60	5.89	5.98	6.03	225.68	235.60	239.20	241.80
Tobacco manufacturers	5.80	5.99	6.18	6.38	224.46	224.63	238.55	246.91
Textile mill products	4.14	4.42	4.45	4.48	169.33	178.13	180.67	162.78
Apparel and other textile products	3.76	4.01	4.04	4.07	135.74	142.76	145.44	146.52
Paper and allied products	6.24	6.68	6.75	6.81	272.06	285.90	292.28	296.24
Printing and publishing	6.27	6.58	6.62	6.67	239.51	248.72	251.56	255.46
Chemicals and allied products	6.72	7.19	7.21	7.25	283.58	301.26	304.26	205.95
Petroleum and coal products	8.00	8.67	8.73	8.86	348.00	384.08	384.12	388.07
Rubber and miscellaneous plastics products	5.29	5.66	5.70	5.80	218.48	233.76	236.55	244.76
Leather and leather products	3.69	3.94	3.98	4.00	138.01	146.17	147.66	148.40
Transportation and public utilities	7.29	7.72	7.73	7.78	293.06	309.57	309.20	312.76
Wholesale and retail trade	4.38	4.78	4.80	4.79	146.29	156.31	156.48	158.07
Wholesale trade	5.61	6.06	6.08	6.13	218.79	236.34	236.51	239.68
Retail trade	3.93	4.28	4.30	4.29	124.58	131.82	131.58	133.42
Finance, insurance, and real estate	4.67	5.02	5.03	5.05	169.99	183.74	182.59	183.32
Services	4.80	5.12	5.13	5.16	158.40	167.42	167.24	168.22

[1] Data relate to production workers in mining and manufacturing; to construction workers in construction; and to nonsupervisory workers in transportation and public utilities; wholesale and retail trade; finance, insurance, and real estate; and services. These groups account for approximately ⅘ of the total employment on private nonagricultural payrolls.
[2] Preliminary.

TABLE B-4.—HOURLY EARNINGS INDEX FOR PRODUCTION OR NONSUPERVISORY WORKERS[1] ON PRIVATE NONAGRICULTURAL PAYROLLS BY INDUSTRY DIVISION, SEASONALLY ADJUSTED

Industry	Dec. 1977	July 1978	Aug. 1978	Sept. 1978	Oct. 1978	Nov. 1978[2]	Dec. 1978[2]	Percent change from— Dec. 1977 to Dec. 1978	Nov. 1978 to Dec. 1978
Total private nonfarm:									
Current dollars	203.5	214.1	214.6	216.2	218.0	219.0	220.2	8.2	0.5
Constant (1967) dollars	109.4	109.0	108.7	108.7	108.8	108.7	NA	(3)	(4)
Mining	217.7	244.3	244.5	247.1	249.7	249.7	249.1	14.4	—.2
Construction	197.4	207.9	209.2	209.9	210.6	211.7	213.2	8.0	.7
Manufacturing	206.5	216.7	217.5	218.9	220.8	222.2	223.3	8.2	.5
Transportation and public utilities	222.1	230.4	231.2	233.3	234.0	234.8	237.1	6.7	1.0
Wholesale and retail trade	195.9	207.6	208.3	209.9	211.6	212.8	213.9	9.2	.5
Finance, insurance, and real estate	186.0	196.9	196.0	198.2	199.8	200.9	201.1	8.2	.1
Services	203.5	213.2	212.9	214.8	217.5	217.7	218.9	7.6	.5

[1] Data relate to production workers in mining and manufacturing; to construction workers in construction; and to nonsupervisory workers in transportation and public utilities; wholesale and retail trade; finance, insurance, and real estate; and services. These groups account for approximately 4/5 of the total employment on private nonagricultural payrolls.
[2] Preliminary.
[3] Percent change was —0.6 from November 1977 to November 1978, the latest month available.
[4] Percent change was —0.1 from October 1978 to November 1978, the latest month available.

Note: All series are in current dollars except where indicated. The index excludes effects of 2 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 production 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

Industry division and group	1977	1978											
	December	January	February	March	April	May	June	July	August	September	October	November[2]	December[2]
Total private	117.5	116.2	117.1	119.1	120.4	120.0	120.6	120.6	120.4	120.8	121.6	122.3	122.5
Goods producing	101.6	99.3	100.9	103.6	106.0	105.1	106.0	106.1	105.4	105.5	106.5	107.9	108.7
Mining	107.8	105.6	106.8	111.3	144.2	143.1	144.0	143.5	145.7	144.4	145.2	147.8	149.9
Construction	108.6	100.3	104.2	111.5	118.8	117.1	122.8	124.2	122.8	122.6	123.8	123.9	125.7
Manufacturing	100.2	98.9	100.1	102.0	102.5	101.6	101.7	101.6	101.0	101.2	102.1	103.7	104.3
Durable goods	101.7	100.5	101.9	103.9	104.2	103.5	103.8	104.0	103.5	103.9	105.5	107.1	107.8
Lumber and wood products	114.5	113.2	114.0	114.3	115.0	111.8	113.6	112.3	110.7	111.6	113.9	114.8	115.0
Furniture and fixtures	108.9	106.1	111.1	112.5	112.5	110.3	109.5	108.3	106.4	106.2	107.5	108.6	109.7
Stone, clay, and glass products	109.0	106.4	108.4	111.0	112.7	111.4	112.4	111.1	109.8	110.1	110.8	112.7	113.3
Primary metal industries	91.9	92.2	93.4	92.8	92.9	93.9	94.1	94.4	95.3	95.5	96.9	99.5	99.9
Fabricated metal products	101.1	99.4	101.4	102.9	103.5	103.3	102.4	102.0	101.8	102.0	103.1	104.8	106.4
Machinery, except electrical	106.2	104.6	107.1	109.4	110.1	109.5	111.3	112.1	110.8	111.5	113.6	114.4	115.3
Electric and electronic equipment	98.6	97.3	98.8	101.2	100.4	99.8	99.8	101.8	101.1	100.1	101.4	102.4	102.8
Transportation equipment	95.7	94.9	93.7	97.2	97.5	96.6	95.8	96.2	96.1	97.7	100.4	102.8	102.7
Instruments and related products	116.0	116.3	117.5	120.5	121.7	120.8	122.4	123.6	123.9	123.9	124.5	126.0	127.8
Miscellaneous manufacturing industry	99.0	97.4	99.0	102.0	102.6	101.5	101.4	99.8	100.6	100.3	100.9	101.5	102.6
Nondurable goods	97.9	96.5	97.4	99.2	99.9	98.9	98.7	98.1	97.2	97.2	97.2	98.7	99.3
Food and kindred products	94.6	94.5	94.7	96.2	96.4	94.6	94.0	93.6	91.4	91.3	92.2	94.3	95.3
Tobacco manufacturers	78.7	77.9	79.4	82.0	80.2	81.5	84.1	78.6	71.5	74.5	73.5	73.5	76.1
Textile mill products	93.0	92.6	92.5	93.7	93.4	92.6	91.8	91.5	91.2	91.8	91.6	92.3	92.3
Apparel and other textile products	91.1	85.6	90.1	91.6	93.2	91.9	91.4	90.1	90.1	90.1	88.7	90.1	90.5
Paper and allied products	99.6	98.7	99.1	101.6	102.4	101.9	101.9	101.9	99.2	99.0	98.2	100.9	100.7
Printing and publishing	96.7	96.7	96.9	99.3	99.1	98.2	98.6	99.1	98.3	97.8	98.5	100.2	101.4
Chemicals and allied products	104.5	104.4	104.8	106.0	106.5	106.9	106.9	106.6	106.0	106.0	106.2	106.8	106.6
Petroleum and coal products	119.8	119.9	119.0	121.3	122.1	118.4	120.4	121.2	123.2	122.7	123.0	123.3	126.0
Rubber and miscellaneous plastics products	142.1	141.0	140.1	144.5	147.3	146.6	147.0	146.2	145.4	145.0	147.0	150.0	152.9
Leather and leather products		68.0	67.8	69.1	71.3	70.4	70.1	67.1	69.1	69.6	68.8	67.5	66.5
Service producing	128.5	127.9	128.4	129.8	130.5	130.5	130.7	130.7	130.8	131.4	132.0	132.3	132.2
Transportation and public utilities	106.9	107.0	107.7	109.1	108.7	109.0	109.4	106.5	107.7	108.2	109.9	110.2	110.6
Wholesale and retail trade	124.7	123.7	124.2	125.9	126.4	126.8	126.8	127.4	127.2	127.5	128.2	128.4	127.0
Wholesale trade	123.0	123.1	123.9	125.3	126.0	125.2	126.1	125.7	126.1	127.1	127.4	128.0	128.2
Retail trade	125.4	123.9	124.4	126.1	126.6	127.3	127.0	128.0	127.7	127.7	128.5	128.5	127.7
Finance, insurance, and real estate	133.9	134.3	135.1	135.4	137.5	136.2	137.9	139.0	139.2	139.6	140.5	140.6	141.0
Services	142.1	141.7	141.8	143.3	144.1	143.8	143.9	144.1	144.1	145.1	145.0	145.5	145.5

[1] Data relate to production workers in mining and manufacturing to construction workers in construction; and to nonsupervisory workers in transportation and public utilities; wholesale and retail trade; finance, insurance, and real estate; and services. These groups account for approximately ⅘ of the total employment on private nonagricultural payrolls.

[2] Preliminary.

TABLE B-6.—INDEXES OF DIFFUSION: PERCENT OF INDUSTRIES IN WHICH EMPLOYMENT[1] INCREASED

Year and month	Over 1-mo span	Over 3-mo span	Over 6-mo span	Over 12-mo span
1975:				
January	18.0	13.1	11.9	15.7
February	21.2	12.8	12.8	16.9
March	26.5	20.1	18.6	18.3
April	41.0	36.6	29.4	20.9
May	51.5	43.0	48.3	27.0
June	43.0	53.2	57.3	41.0
July	56.1	61.6	67.2	54.1
August	73.3	73.5	69.2	64.5
September	67.4	77.3	75.9	74.1
October	68.3	70.6	80.5	79.7
November	60.5	74.4	84.0	82.3
December	71.5	78.2	83.7	86.3
1976:				
January	78.2	85.8	87.2	85.2
February	72.4	84.9	85.8	84.0
March	69.5	81.4	82.0	85.2
April	70.1	72.4	75.6	78.8
May	58.1	67.2	68.3	82.6
June	57.8	65.1	71.2	79.9
July	58.4	57.8	63.1	78.5
August	49.1	64.0	65.1	77.6
September	64.8	53.8	66.3	80.2
October	47.1	65.1	73.3	80.8
November	67.4	64.2	78.8	80.8
December	66.6	81.4	81.4	82.6
1977:				
January	76.2	83.1	88.1	78.8
February	66.0	86.3	87.8	80.5
March	74.7	81.1	85.2	80.2
April	68.0	79.4	79.4	84.6
May	64.8	76.2	75.9	84.0
June	71.2	68.0	72.1	83.1
July	59.3	63.4	69.8	82.6
August	51.7	58.7	74.1	83.7
September	60.8	62.5	72.1	82.6
October	60.5	73.8	77.9	81.1
November	73.8	75.3	82.0	81.1
December	72.1	79.7	83.1	80.8
1978:				
January	69.8	80.2	85.5	80.5
February	70.3	80.2	79.9	79.1
March	70.1	75.9	77.9	77.6
April	62.8	67.4	68.9	78.5
May	56.4	63.7	67.7	[2] 79.9
June	67.2	62.5	59.6	[2] 79.4
July	54.9	57.0	61.3	----
August	51.7	49.7	[2] 72.4	----
September	57.6	58.7	[2] 75-9	----
October	70.6	[2] 76.5	----	----
November	[2] 80.8	[2] 82.6	----	----
December	[2] 75.6	----	----	----

[1] Number of employees, seasonally adjusted, on payrolls of 172 private nonagricultural industries.
[2] Preliminary.

Representative BOLLING. Thank you very much, Ms. Norwood, for a very excellent statement. If you don't mind, I think I will change the procedure that I announced, since Mrs. Slater is here. I will ask her to come to the stand to testify. Then, we will ask you both questions.

We are glad to have you with us, Mrs. Slater. You may proceed as you wish.

STATEMENT OF COURTENAY M. SLATER, CHIEF ECONOMIST, DEPARTMENT OF COMMERCE, ACCOMPANIED BY THEODORE TORDA, SENIOR ECONOMIST, OFFICE OF ECONOMIC AFFAIRS

Mrs. SLATER. I am pleased to be here this morning. I am accompanied by my colleague at the Department of Commerce, Theodore Torda, a senior economist in the Office of Economic Affairs. We have been asked to discuss the performance of the economy in the fourth quarter as best we can and to review 1978.

As you know, preliminary estimates of fourth-quarter 1978 GNP will not be available for another week. They will be available on January 19. Therefore, my comments this morning reflect my own assessment of what is likely to have happened in the fourth quarter based on the limited data now available.

Expressed in constant dollars, GNP grew fairly strongly in 1978, probably about 4 percent when measured from the fourth quarter of 1977 to the fourth quarter of 1978. This growth was accompanied by a substantial increase in employment and almost a full percentage point reduction in the unemployment rate over the same period. Employment growth last year considerably exceeded our expectations. This good news was offset, unfortunately, by what can only be described as a dismal performance of productivity, with virtually no increase in output per hour in the private business sector during last year. This in turn put upward pressure on unit labor costs and that, together with several other factors, caused prices to rise more rapidly in 1978 than had been expected.

The quarterly pattern of economic activity last year, as you will remember, varied quite a bit. In the first quarter, we had the very bad weather and coal strike causing real output to drop slightly.

The second-quarter output rebounded and then slowed to a 2.6-percent rate in the third quarter. It has, however, picked up substantially in the fourth quarter. The annual rate of real GNP growth in the fourth quarter presently appears to have been about 5 percent. As best we can determine, this pickup in economic growth during the fourth quarter came largely from renewed strength in consumer spending and from an improvement in net exports of goods and services. Real business fixed investment rose more than in the third quarter, although this is not to say that an even stronger performance in this sector would not have been desirable. Total Government purchases rose more slowly than in the third quarter, and residential construction and inventory accumulation each may have actually declined a bit in real terms.

The fourth quarter's overall rate of inflation is likely to be a little higher than the third quarter's increase. This was largely due to the resumption of food price increases and to the Federal pay raise which, as you probably know, always shows up in the fourth quarter. It is not seasonally adjusted and smoothed over the year. That single factor adds about one-half percentage point to the fourth quarter inflation rate as measured in the GNP accounts.

I would like to review briefly some of the highlights of some important economic developments during 1978.

Inflation, as I have indicated, was seriously underestimated last year. During the 12 months ending in December, consumer prices rose by about 9 percent, we think. We don't have the December figures. That is the general range of price increases for the year, compared to a projection last January of around 6 percent. High inflation and a continued large U.S. merchandise trade deficit contributed to a marked decline in the value of the dollar against certain foreign currencies. This led last fall to the President's new anti-inflation program and the joint measures taken by the Federal Reserve and the Treasury to support the dollar.

Personal consumption expenditures, in real terms, rose about 3½ percent during last year. That compares to the somewhat stronger 4.8 percent during 1977.

Outlays for motor vehicles and parts, and for food, posted little real increase in 1978. In the case of motor vehicles, this represented a continuation of the high sales level established in 1977. Last year was certainly a good year for motor vehicle sales, but it was not much of an increase over 1977.

The lack of increase in real outlays for food could have been related to the strong rise in food prices, which tends to induce a shift toward the purchase of lower quality food items. That is, people are still eating, we presume, about as much in 1978 as they did in 1977, but probably because of price increases, they were buying more hamburger and beans and less steak.

Real per capita disposable income appears to have advanced in 1978 at less than half the rate of 1977. Consumer spending was, therefore, sustained not only by strong employment growth but by heavy use of installment credit. Toward yearend, personal saving declined to a low level relative to disposable income.

Real business fixed investment continued to grow at a fairly high rate—about 8½ percent—over the four quarters of 1978. That number perhaps is confusing because there was a different one in the newspaper this morning, but we are presenting these percent changes as measured from the fourth quarter of 1977 to the fourth quarter of 1978, and they are shown that way on the table at the back of my prepared statement. We think this is a better way to understand what happened to the economy during the year than the figures that are more typically presented which show the increase in the average performance from one year to the next.

Dividing real business fixed investment into structures as opposed to producers' durable equipment, as it is broken down in the GNP accounts, one sees the percent increase in nonresidential structures exceeded the gain in producers' durable equipment. This is in contrast to earlier in the recovery when firms seemed to be reluctant to undertake investment in construction, and it may perhaps be a measure of increased business confidence, but we have no real way of determining that.

Real inventory investment rose during the first half of 1978 and then subsided during the second half. For the year as a whole, inventory accumulation added little to overall economic growth. At yearend, stocks appeared to be in good balance with the rate of real final business sales.

Residential construction was maintained at a high level during 1978 as new housing starts just about matched the previous year's level. This, of course, was one of the pleasant surprises of 1978. We did maintain a high level of activity in the residential construction sector and did not see the decline that most people had anticipated.

We do feel, however, that there are some emerging signs in the last few months of some softening in residential construction, and real outlays for the fourth quarter probably dipped a few percentage points below the year-earlier level.

Exports of goods and services, in constant dollars, began to recover early in 1978 from the depressed level of late 1977 which was related to the dock strike. During the remainder of 1978, growth in the real volume of exports far exceeded the rise in imports. This partly reflected the decline in the value of the dollar against currencies of some of our major trading partners, which has made our exports more competitive in world markets.

Government purchases—Federal, State, and local—of goods and services, in constant dollars, rose by less than half as much over the four quarters of 1978 as during 1977. Federal Government purchases at yearend were little changed from the level of late 1977. That is, there was no real growth of Federal purchases during 1978. State and local government purchases rose a bit less in 1978 than in 1977.

Corporate profits from current production—that is, profits including inventory valuation and capital consumption adjustments—were sharply depressed in the first quarter of 1978, again reflecting bad weather, but then recovered substantially during the remainder of the year. Although preliminary estimates of the fourth quarter's corporate profits will not be available until March, my rough guess places the fourth quarter's level some 15 to 20 percent above the year-earlier level. Partly because of inflation, before-tax book profits appear to have risen even more over the same period.

This completes my summary of some of the highlights of 1978 as best we know them at the moment. As I have indicated, the strength of the economy was demonstrated by the growth of output and the strong growth of employment. However, the lack of productivity gains were and continue to be areas of considerable concern.

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

[The prepared statement of Mrs. Slater follows:]

PREPARED STATEMENT OF COURTENAY M. SLATER

The 1978 Gross National Product

I am pleased to be here this morning to discuss the performance of the economy in the fourth quarter and to review last year's key developments.

Preliminary estimates of fourth quarter 1978 Gross National Product (GNP) will not be available until January 19. My comments this morning reflect my own assessment of what is likely to have happened in the fourth quarter based on the limited data that are now available.

Expressed in constant dollars, GNP grew fairly strongly in 1978, probably about 4 percent when measured from the fourth quarter of 1977 to the fourth quarter of 1978. This growth was accompanied by a substantial increase in employment and almost a full percentage point reduction in the unemployment rate over the same period. Employment growth last year considerably exceeded our expectations. The offset to this good news, unfortunately, was a dismal performance of productivity—virtually no increase in output per hour in the private business sector during 1978. This in turn put upward pressure on unit labor costs. For that and other reasons prices rose more rapidly in 1978 than had been expected.

The quarterly pattern of economic activity varied widely last year. Real GNP dropped slightly in the first quarter largely due to unusually bad weather and the coal strike. In the second juarter, total output rebounded at an 8.7 percent annual rate. Growth slowed to a 2.6-percent rate in the third quarter, but has picked up substantially in the fourth quarter. The annual rate of real GNP growth in the fourth quarter presently appears to have been about 5 percent.

Indications are that this pickup in economic growth during the fourth quarter came largely from renewed strength in consumer spending and from

an improvement in net exports of goods and services. Real business fixed investment rose more than in the third quarter, although this is not to say that an even stronger performance in this sector would not have been desirable. Total Government purchases rose more slowly than in the third quarter, and residential construction and inventory accumulation each may have declined a bit. The fourth quarter's overall rate of inflation is likely to be a little higher than the third quarter's increase. This largely reflects the resumption of food price increases and the Federal pay rase, which itself adds about one half of a percentage point to the fourth quarter's price rise.

Now I would like to discuss briefly some important economic developments of last year, including the performance of major components of GNP.

As I have indicated, inflation in 1978 was seriously underestimated. During the 12 months ending in December 1978, consumer prices rose by about 9 percent, compared to a projection last January of around 6 percent. High inflation and a continued large U.S. merchandise trade deficit contributed to a marked decline in the value of the dollar against certain foreign currencies. This led last fall to the President's new anti-inflation program and the joint measures taken by the Federal Reserve and the Treasury to support the dollar.

Personal consumption expenditures, in contrast dollars, rose about 3½ percent from the fourth quarter of 1977 to the fourth quarter of 1978, compared to 4.8 percent during 1977. Outlays for motor vehicles and parts, and for food, posted little real increase during 1978. In the case of motor vehicles, this represented a continuation of the high sales level established in 1977. The lack of increase in real outlays for food could have been related to the strong rise in food prices, which tends to induce a shift toward lower quality food items. Real per capita disposable income appears to have advanced in 1978 at less than half the rate of 1977. Consumer spending was sustained last year not only by strong employment growth but also by heavy use of installment credit. Toward yearend, personal saving seems to have declined to an unusually low level relative to disposable income.

Real business fixed investment continued to grow at a fairly high rate—about 8½ percent—over the four quarters of 1978. The percent increase in nonresidential structures substantially exceeded the gain in producers' durable equipment. This stands in contrast to the experience earlier in the recovery, when firms seemed to be reluctant to undertake investment in structures.

Real inventory investment rose during the first half of 1978 and then subsided during the second half. For the year as a whole, inventory accumulation added little to overall economic growth. At yearend, stocks appeared to be in good balance with the rate of real final business sales.

Residential construction was maintained at a high level during 1978 as new housing starts just about matched the previous year's level. Late in the year, however, some signs of softening in residential construction began to emerge. In the fourth quarter, real outlays for residential construction probably dipped a few percentage points below the year-earlier level.

Exports of goods and services, in constant dollars, began to recover early in 1978 from the depressed level of late 1977 occasioned by the dock strike. During the remainder of 1978, growth in the real volume of exports far exceeded the rise in imports. This partly reflected the decline in the value of the dollar against currencies of some of our major trading partners, which has made our exports more competitive in world markets.

Government purchases of goods and services, in constant dollars, rose by less than half as much over the four quarters of 1978 as during 1977. Federal Government purchases at yearend were little changed from the level of late 1977. State and local government purchases rose a bit less during 1978 than in 1977.

Corporate profits from current production (that is profits including inventory valuation and capital consumption adjustments) were sharply depressed in the first quarter of 1978 but then recovered substantially during the remainder of the year. Although preliminary estimates of the fourth quarter's corporate profits will not be available until March, my rough guess places the fourth quarter's level some 15 to 20 percent above the year-earlier level. Partly because of inflation, before-tax book profits appear to have risen even more over the same period.

This completes my review of some important aspects of economic performance in 1978 as best we know them at present. As I have indicated, the strength of our economy was demonstrated by the growth of output and the very strong growth of employment. However, the acceleration of inflation and the lack of productivity growth were—and continue to be—areas of concern. I will be pleased to answer any questions you may have.

CHANGES IN GNP AND MAJOR COMPONENTS (IN 1972 DOLLARS) [1]

[In percent]

	4 quarters ending with 4th quarter of—	
	1977	1978
GNP	5.5	4.0
Final sales	4.9	4.0
Personal consumption expenditures	4.8	3.5
Nonresidential fixed investment	9.1	8.4
Residential investment	15.3	−3.0
Exports of goods and services	−1.3	18.8
Imports of goods and services	10.3	10.0
Government purchases	5.1	1.8
Federal	6.3	−1.0
State and local	4.3	3.5
Addenda:		
Real disposable personal income	5.4	2.9
Real per capital disposable income	4.6	2.1
GNP price deflator	6.1	8.4

[1] 4th quarter 1978 estimated.

Representative BOLLING. Thank you very much.

Senator Proxmire.

Senator PROXMIRE. This is a remarkable stability we have, Ms. Norwood, in the unemployment index, and it has been remarkable over the year, hasn't it? So, there has been an improvement in the employment picture.

Ms. NORWOOD. Yes; it has been extraordinary.

Senator PROXMIRE. I can't recall a year in the last 20 that we have had this increase. You say 3.6 million jobs, nonfarm payroll jobs, increased during the year. Is that a record?

Ms. NORWOOD. We can check that out. We have had perhaps some other large increases, but I think you are quite right, Senator that this is an extraordinary figure, and it is, of course, accompanied by an extraordinary increase in the labor force.

Senator PROXMIRE. It goes right through this past month when you have the 250,000-job increase in the nonfarm payroll area.

Ms. NORWOOD. Yes, sir.

Senator PROXMIRE. That, of course, is very encouraging to us. but, at the same time, you say it goes along with an increase in the labor force, so we have no improvement and no deterioration in the unemployment figure.

I look at the fourth quarter of 1977 compared to the fourth quarter of 1978, as we have that now, and this is a good time to look back. We see that in every category with one exception there were sharp improvements in unemployment for adult men, adult women, blacks and other minority groups—there was a drop in every case. Is that not correct?

Ms. NORWOOD. Yes.

Senator PROXMIRE. But no significant improvement in the teenage category. At least, I would construe that as being no improvement, from 16.6 to 16.3, which is almost statistically insignificant.

Ms. NORWOOD. That is right.

Senator PROXMIRE. Is there an explanation for that?

Ms. NORWOOD. I don't have any, Senator.

As you know, the unemployment rate of teenagers has been a matter of very real concern. There have been a number of programs that attempt to deal with this. Of course, there has been an increase in the proportion of young people who are in the labor force.

Senator PROXMIRE. I was going to ask about that. Is this primarily because you have had a big influx, a relatively big influx, of teenagers into the market?

I have noticed in some of the high schools in my State a surprisingly higher percentage of the juniors and seniors are working. They are part of the work force. I was told by one principal that 75 percent of his juniors and seniors are working. Isn't that something fairly new in our experience?

Ms. NORWOOD. I think it is certainly clear that the labor force participation rate and the unemployment population ratio for teenagers fourth quarter to fourth quarter are up. I think that growing teenage participation is a development which has been going on for some years, as teenagers and other young people are taking a fuller part in the country activities.

Senator PROXMIRE. I am told we have an appalling figure of 13 percent of our 17-year-olds are functionally illiterate. Is there any indication of the relationship between functional illiteracy and unemployment?

Ms. NORWOOD. I don't know. I would expect that that is something that ought to be looked into, but I am not aware of the data.

Representative BOLLING. I want to be sure I understand your labor force participation rate. You have two figures. In the release we have from your office, it shows a 63.6 percent which is a new high labor force participation rate, and then in your own statement you say that 59.1 percent is the employment-population ratio. I take it that is because that includes the unemployed.

Ms. NORWOOD. That is right; the participation rate includes the unemployed.

Senator PROXMIRE. In other words, they are both either at record highs or are very close to record highs.

Ms. NORWOOD. That is correct.

Senator PROXMIRE. This is a remarkably high unemployment rate for such a high level of participation, is it not?

Usually when you have the participation rate going up, people go in the labor force, because the jobs are available.

Ms. NORWOOD. There has been a large increase in jobs.

Senator PROXMIRE. But we still have a 5.9-percent historically high level of unemployment, do we not?

Ms. NORWOOD. About 6 million are unemployed, so that is high.

Senator PROXMIRE. This is the second month in which you have a very, very high diffusion index. That is the proportion of industries which are increasing employment, 76 percent, I think you said, which is remarkable at this stage, is it not?

Ms. NORWOOD. That is right.

Senator PROXMITE. That indicates this is not simply trade and commerce. It is manufacturing, too, which seems to be hiring throughout the economy.

That is a development that seems to me to be a rather remarkable development in the economic expansion and one would suggest that the economy is very strong.

Ms. NORWOOD. I think all of the data, the data that Mrs. Slater was referring to, and many of our data, certainly indicate a high level of economic activity. There is no question about that.

Senator PROXMIRE. How much of that increase is part-time workers?

Ms. NORWOOD. Of the 3.1 million increase in nonfarm employment from a year earlier, about 400,000 was in part-time jobs.

Senator PROXMIRE. An interesting report here also is that you have sizable growth in construction jobs. That is a little hard to understand in view of the fact that there seems to have been a dropoff recently in residential construction. Is that more than compensated for by the increase in commercial and manufacturing construction?

Ms. NORWOOD. Perhaps Mrs. Slater might want to answer that. I am not aware that there has been a really strong dropoff in construction. I think the talk is more about stability.

Mrs. SLATER. There has been no dropoff in housing starts or the level of construction activity that we perceive in the data. We do look at advance indicators and see some emerging weakness there ahead of us.

We have also seen commercial and industrial construction growing rather strongly. Construction employment would include commercial and industrial construction as well as residential which probably explains that.

Senator PROXMIRE. It is surprising the one area where you highlight a dropoff is in the retail credit area. I would assume that that is an area that would be a growing one since manufacturing seems to be increasing and retail trade is not, and the long-term trend is the other way.

Ms. NORWOOD. That is true, and I will say that that is perplexing. The retail trade figures do seem to show considerable strength particularly in automobile sales, and less strength in the other parts of the retail trade sector. Those are the Census Bureau retail sales figures released yesterday.

On the other hand, I think it is important to recognize that in actual terms there was an increase in jobs in the retail trade sector. It was just less than is usual for this time of the year. So, it is a "seasonably adjusted slowdown."

Senator PROXMIRE. In spite of this good job picture, there seems to be a contradiction as far as the manufacturing workweek figures. Is that because there are more part-time jobs? Presumably it would have to be, because it says the workweek inched down a tenth of an hour.

Ms. NORWOOD. Overtime hours were up.

Senator PROXMIRE. That is the other surprising thing. Overtime hours are up and yet the workweek is down. Normally, when the overtime hours are up, the workweek is up. Normally, that is a component of the workweek, is it not?

Ms. NORWOOD. That is true.

The other interesting element of this, I think, is that many of the increases shown in the establishment survey are in manufacturing.

They are fairly widespread through the various manufacturing industries, both durable and nondurable. Of course, in the second and third quarters, manufacturing also was the area where we had fairly strong productivity growth.

Senator PROXMIRE. Could this be because some of the firms are not having a 40-hour week but are having a 35- or 36-hour week?

Ms. NORWOOD. Of course, there have been some changes in the workweek, but I am not aware of any marked change that would explain this situation.

Senator PROXMIRE. Then, we have in spite of all this good news, unemployment, and then you have another contradictory element—the hourly earnings index in constant purchasing power declining by 0.6 percent which is significant. I suppose the explanation for that is that it is primarily inflation but, under those circumstances, in order to induce more people to come into the work force, you have to pay them a little bit better and things don't always work that way.

Ms. NORWOOD. You are quite right. Wages have been increasing somewhat above the 8-percent level over the year and prices have been increasing at a faster pace. There are some, of course, who argue that inflationary pressures also bring people into the labor force, creating multiearner families in order to maintain their economic status. However, this is certainly not a full explanation for the large increase in the labor force in my view.

Senator PROXMIRE. Mrs. Slater, I notice in your prepared statement you explain part of the sustained demand in the economy, in spite of the fact that the real income is dropping for wage earners, is due to the fact that more people are working and also that people are going into debt a little more.

Mrs. SLATER. Yes, sir.

Senator PROXMIRE. How long can this continue?

Mrs. SLATER. We would not suppose that it would continue much longer in this sense. The personal savings rate, which is a way of summing up both savings and debt, which is a negative saving, is now at a quite low level by any historical standard and we would not expect it to drop further. In fact, we would expect it to go up in the first quarter. That is partly because we have a tax cut coming into effect in the first quarter and as peoples' incomes go up, they don't spend all of their tax cut right away. It is partly transitory, but even beyond that, we would expect some small rise in the personal saving rate this year as compared to last year, which in essence means some reduction in the relative extent to which people rely on credit purchases, and that would result in some slowdwn in the consumer area.

Senator PROXMIRE. You might have slower growth all right this year as you say, but unemployment may continue to fall or employment may continue to rise because of low productivity. It is kind of an ironic situation.

This past year, as I recall, the New York Times had a list of what happened to the forecasters' estimates for 1978. Those who made forecasts at the end of 1977 consistently overestimated the rate of unemployment and I think, almost unanimously, underestimated inflation. But they came out pretty close on the growth factor. They were able to do that because productivity was so low that these things balanced out.

Why can't we expect the same kind of trend to continue? What is there that is going to improve productivity in the coming months and in the coming year that is going to change the situation? Couldn't we have another year somewhat like 1978 of substantial improvement in jobs with low growth and poor productivity performance with still a high level of inflation?

Mrs. SLATER. We could. This perhaps is the greatest area of uncertainty in forecasting at the present time. Your summary of what happened last year is cogent. Output rose about as much as total hours worked. By definition, this translates into lack of productivity gain. We don't know why that was. It was a departure from historical averages. We don't know if it was a temporary departure or if there is some new factor in the economy that would imply we would continue to have that type of relationship.

So, it is possible that we can continue to have that type of situation with low productivity gains, and that does intensify inflationary pressures.

It is also possible that people have added very rapidly to their payrolls, and now they find they have plenty, if not more, people than they need on the payrolls, and we will see the correction to this, and we will see high productivity gains.

Senator PROXMIRE. You might get improvement in unemployment with people entering the labor force. There was an extraordinary increase last year. You might not have as good an increase in jobs but counterbalanced by a lesser increase in the labor force.

Ms. Norwood, I notice you said 6 out of 10 have been women.

Ms. NORWOOD. Every year we think the rate of labor force growth for women is quite extraordinary, but it has been going on for several years.

Senator PROXMIRE. As I understand it, back in 1950 one woman in four who had a school-age child between 6 and 16 was in the labor force, and now more than half of the women with school-age children are in the labor force. Eighty percent of the men are in the labor force. How long this is likely to continue, I don't think anybody could say, but you may have a situation where as high a proportion of women will be in the labor force as men.

Ms. NORWOOD. There have been some interesting developments there. More than half of the families have more than one earner.

Senator PROXMIRE. That includes children, too?

Ms. NORWOOD. Yes; families with and without children.

In addition, when you look at the labor force participation rates for women even by particular age groups, you find extraordinary changes in just those parts of those age categories which in previous years had been low. As you know, the Bureau of Labor Statistics does release each year a projection of the labor force. In each case, we have found that we have not sufficiently paid attention to the continuing nature of this change. So, it is a very difficult thing to estimate. My view is that labor force participation increases are going to continue.

Senator PROXMIRE. Let me ask you a question on prices. If I were a reporter writing a story on your statement, I would be awfully puzzled as to how to reflect the OPEC price increases. You have made a fine presentation and you have covered the waterfront, but I don't know

what your bottom line is. Maybe there isn't a bottom line. You say you have a static effect, a total materials cost effect, one by Popkin and the effect on the CPI. You vary from 0.02 to 0.07 percent. Are we saying, "Just pay your money and take your choice?"

There is a bottom line here. What is likely to be the effect at the gasoline pump.

Ms. NORWOOD. Senator, I felt it would be a public service for us to try to put this in the broad context of trying to figure out how the estimates are made and what the various assumptions are.

Clearly what we have called the total dynamic effect is the broadest of them all and does take into account interactions in the economy but, as you can see, depending upon the particular model used and the interaction of the price sector of the model with the other parts of the model, you can get very different answers.

I think it is clear that in the case of the PPI, the range is somewhat narrower. In the case of the Consumer Price Index, which is the one that everybody seems to be most interested in, the estimates show, I think, that although we have made a lot of progress in restructuring the Producer Price Index and trying to trace prices through various stages of the economy, it is really very difficult to follow price changes through the economy. Of course, most of them are in the 0.02 to 0.04 range. The Chase estimate is a little bit higher.

Senator PROXMIRE. Did you give an estimate of the price-per-gallon increase?

Ms. NORWOOD. On gasoline alone, assuming no other changes in decontrol or anything else, it is in the neighborhood of 2½ cents a gallon.

Senator PROXMIRE. 2½ cents a gallon?

Ms. NORWOOD. Yes.

Senator PROXMIRE. Mrs. Slater, in your prepared statement, you commented that inflation in 1978 was seriously underestimated. The First National Bank of Chicago reported in their survey people expected a 10 percent rate of inflation over the following 12 months. That compares to an expected rate of 6 percent the year before and 8 percent last April, and they are expecting something more serious.

The question is, Do you think people are changing their behavior to accommodate the faster rates of inflation? Have expectations about price behavior been more cynical because of recent price increases, and what would this mean for the success of the administration's guidelines?

Mrs. SLATER. As you noted, most peoples' predictions for 1978 were off rather badly, So I think it would be surprising if the public did not become a bit more cynical about the value of those predictions.

As to whether people are modifying their own behavior, that is very difficult to determine. We have had strong retail sales in the last 3 months. Some part of those sales have represented people buying on credit. The savings rate has gone down.

You can hypothesize that some part of that may be buying ahead—we can't prove it.

Senator PROXMIRE. The big consumer area is housing. This is one area where many people feel they can have a hedge against inflation. Despite the prohibitively high rates of interest, now exceeding 10

percent for mortgages, as you pointed out, housing starts, permits, and so forth continue at a much higher rate than anyone would have anticipated, with punitive interest rates. Whereas a few years ago the theory was that during inflation people were following a policy of retrenching, not investing, and not buying because they wanted to be sure they had enough cash to meet their urgent needs. Now it seems they may be using a psychology that could be pretty serious, of spending what they have, going into debt, feeling that it is the only way they can stay ahead of inflation.

Mrs. SLATER. I think there can be little doubt that the housing market to some extent has been supported by people willing to make the investment in housing because they feel the value of the housing is going to rise.

I would like to say, however, that I think those people who are expecting 10-percent inflation this year—and one can understand why they feel that way—are wrong. I am reasonably confident the inflation rate will be considerably less than that, and I would hope people would make their plans on inflation going down and not up. We do have an anti-inflation program in place, and we feel confident it can help.

Senator PROXMIRE. I would like Ms. Norwood's comments as well as Mrs. Slater's. There is another troubling development. A recent article on the last two recessions indicates that there is evidence which sharply contradicts the common view. This article goes on to point out that this development combined with the drop in productivity growth has led to acceleration in the unit labor costs in the last two recessions. Instead of labor costs going down, they have gone up.

Do you believe this represents a new pattern and, if so, how will economic slowdown which will result in the President's restrictive budget help to fight inflation, and would it lead to higher unemployment and higher inflation?

Ms. Norwood.

Ms. NORWOOD. It certainly is true that unit labor costs are an important factor in prices. There is no question about that. The guidelines that have been developed by the Council of Wage and Price Stability are clearly an attempt to look at both sides of the equation. Looking at the price guidelines, one finds they are somewhat different from the wage guidelines but, nevertheless, they are an attempt to really control the continuing increase in unit labor costs. If that program is successful, together with some of the other elements of the budget and other things, I think that there could be a considerable change.

I think that what really is happening is the realization that you can't always get at many of these problems through macroeconomic policies or by changing fiscal or economic initiatives. It is a very much more difficult problem than that.

Perhaps Mrs. Slater may have something more to add.

Senator PROXMIRE. Mrs. Slater, if we can't follow macroeconomic policies, what policies can we follow with rising unit labor costs?

Mrs. SLATER. It certainly does have an important role to play. You are correct that——

Senator PROXMIRE. Let me give you the figure which I think are pretty appalling: pre-1969 average compensation per hour percentage change, four quarters after recession peak, pre-1969, 2 percent; 1969

to 1972, 7 percent; 1973 to 1975, which was the last recession, 10.8 percent. Meanwhile, output was down, of course, sharply in 1971–75 compared to pre-1969–70 averages. It was 4 percent in pre-1970. The average was 14.8 percent in the last recession. Was there something peculiar about that?

Mrs. SLATER. It is important to make a distinction between unit labor costs.

Senator PROXMIRE. Perhaps I went over those figures too fast. Compensation per hour went up and output went down, and that meant unit labor costs went up even more. Every element contributing to the labor costs was perverse.

Mrs. SLATER. Unit labor costs tend to go up in recessions not down. This is where the role of macroeconomics comes into the picture. It is not so simple, but the role is to sustain a growing economy, but one that is not growing so rapidly that it puts upward pressures on prices. Within that context, growing but not too rapidly, we have to have other kinds of policies, and that is why we put into place wage-price standards, and that is why we are working very intensely on other cost elements of inflation such as regulatory policy.

We also, of course, have exogenous factors that complicate control of prices—the effect of rising import prices, and so forth. Policy should be a combination of appropriate macroeconomic policy and wage-price standards and other long-term efforts to get at the structural cost elements in the economy.

Senator PROXMIRE. Mr. Hoadley, the economist for the Bank of America had a very interesting observation. He said we have a two-tiered economy, where we have the northeastern part of the country where there is serious unemployment and the Sun Belt which is going full blast and has low unemployment and that a national macroeconomic policy that stresses restraint would be appropriate for the Sun Belt area but very inappropriate for the northeastern part, and you need to recognize that and adopt policies that would adjust to it.

What opinion do you have on that, Mrs. Slater?

Mrs. SLATER. I thought that was a very perceptive observation. That obviously does not remove the need for national macroeconomic policy. We are a Nation, and we do have a policy and we do have a budget, and it does affect the national economy. But Mr. Hoadley's comments highlight a need for supplementing that with policies that can be directed to areas where there are problems. Sometimes those are problems of too rapid development, and this may be the case in States where there are a lot of energy development activities. Probably more typically in the present situation, there are areas which are depressed that are not sharing the national prosperity and, of course, we have been struggling for several years now to develop kinds of policies which can be focused and targeted where needed.

The Joint Economic Committee for the last 10 years at least has been recommending, for example, countercyclical fiscal assistance which could be tied to both local and national conditions of unemployment and eventually we got a program like that enacted. I would not say that it is perfect, but it is the kind of thing to look at.

We have had public service employment programs with funds allocated to meet the severity of needs of the country. It would seem to me

that that is the kind of policy we would need to continue to pursue and refine.

Senator PROXMIRE. There is another development that raises serious question of whether this policy of restraint is going to work in holding down inflation. The theory is that we are pressing against at least some of our facilities; that they are being overutilized, and we have that kind of inflationary pressure. Yet, the capacity utilization figure has declined to 83 percent in September. The pre-recession peak was 86 percent in mid-1973, and that decline seems inconsistent with the claim that the economy is experiencing severe demand pressure and that some kind of policy to hold down that demand would help in coping with inflation. After all, if you have the facilities available and you have 5.9 percent unemployment, where is the need for restraining the economy?

Mrs. SLATER. I do not know who has been claiming we have severe demand pressures, but it is not me. My impression is that capacity utilization has been rising, however.

Senator PROXMIRE. It has been, but apparently it has been going down.

Mrs. SLATER. I think it is on an upward trend, but it may have gone down for one month. We have several measures of utilization of capacity. The Bureau of Economic Analysis index went down and the Federal Reserve measures went up in the same month. I don't know who is right, but I would think the general trend has been modestly up. We are below the capacity—utilization—levels of 1973–74, and we have a more balanced situation between primary and advanced processing. We did have serious imbalances in 1973 and 1974. We do have high level demand in the construction sector. We have had some shortages, perhaps some strong demand for certain construction materials which has put price pressures on those materials. I think we want to be careful because inflation is such a problem that we do not get into bottleneck situations and, therefore, I think the objective should be to keep the economy growing but not growing so fast that we ran up against the bottleneck situations either in terms of labor or capacity, and that is treading a very fine line. It would not be easy to do, but that is what we have to consider.

Representative BOLLING. Put rather crudely, everything that happens in the economy is sustained by an increase in purchasing power related also to expenditure. That is a terribly crude way to put it. Unless the consumer is buying, nothing very much is being sold.

Now, an element of that, obviously, is the increase in employed people. You mentioned all of these things. Another element is credit and a willingness on the part of people to save less in effect. I guess the major elements of credit that count the most are consumer credit and housing credits.

Is there any way to say what the relationship is, what the proportions are in this past year of what has been sustained—the engine that keeps the GNP rising?

I am well aware there are a great many more things involved, but I can't find any good explanation in the micro approach to the problem, and I am trying to see if I can't raise the level to the point where we are looking at what might be happening and, if it were happening, it would then lead us to some other things that might convince us that we did not know what we were doing.

I am going to get to them, but even given the crudity of my question, I would be interested in your answers.

Mrs. SLATER. I think one can point to several things I hope that are relevant to the question, "What kept the economy going?" One has been the growth of employment, of real wages. Real income per worker did not go up very much last year, but because more people had jobs, real income per person, real disposable income per capita did rise. It did not rise as much as the year before, and that is part of what kept the economy going.

As you noted, the other was the willingness to reduce savings and take on more debt. There is another factor that should be stressed which is we are not an island unto ourselves, and what is happening with the rest of the world can have a very large effect on our GNP growth.

During the course of 1978 we experienced very rapid growth of our exports. Our foreign trade deficit for 1978 was very large, but if you look at what happened during the year we have been moving from a very, very large deficit in the first quarter to a substantially smaller deficit in the fourth quarter. Part of that is because we have been producing more goods for export, and that means jobs and prosperity at home and trade balance. We can look forward to continued export growth next year. It will be a strong sector in the economy.

Does that get it?

Representative BOLLING. That is helpful. Each of those components is marginal, as everything else is, and if you did not have each of the gains the economy would be perceived to be in a very considerable amount of trouble.

We have had three things. I have left out the international aspect on purpose to oversimplify it. We have had three things that have sustained the kind of growth and the kind of employment that virtually nobody predicted—international impact, growth in exports, growth in the use of credit, a crude way of putting it but not inaccurate, growth in employment.

I doubt very, very seriously if anybody was doing a very good job of predicting how we got to the end result at the beginning of the year. I am not being critical of anyone including the Joint Economic Committee. I am just suggesting that somehow we missed the general, overall impact to a very considerable degree. Is that fair?

Mrs. SLATER. I guess I would argue with respect to the growth in real output and the economy, I don't think the predictions were so terribly far off. It may not have been accurate to the last percentage point, but we did have a strong gain. Perhaps productivity was overestimated and unemployment was underestimated.

Representative BOLLING. That is exactly the point.

This is ignorance, and I am perfectly willing to confess it. I want you to cure my ignorance. I have a very strong feeling we don't know anything about the incidence of inflation. I am not just going on the recent articles in the papers and roundabout, but I don't think we really know accurately in anything that I can find who gets slugged by it and how. One side generally says the poor and the other side generally says the rich, and both are acting today as if they knew they were the victim.

But I am really curious to know if you feel that we have the information, the raw information so that we know when we deal with a range

of various social programs, I guess all of which I have supported at one time or another. Do we have any idea whether they are aimed at the right target? Do we know about the incidence of inflation?

Mrs. SLATER. I think the first thing we know about the incident of inflation is that it is highly random. It is not a matter of our not knowing. That is just the way it is. It is simply not possible to make categorical statements that inflation affects the poor more than the rich or the old more than the young, and so forth. It is a random effect. It would depend on, for instance, if one bought a house 10 years ago or if one bought it today. I had no trouble when I bought my house 10 years ago. If I needed to buy a house today, I don't know if I could afford it. Maybe someone who buys a house today who is in my same salary category would be hurt a great deal.

Representative BOLLING. That in effect begs the question, and I don't mean on purpose, but the Congress for better or for worse acts in very short timespans both as to the time of action and the time that the action is going to cover, and if the targets change rapidly, you have illustrated one that did change rather rapidly, then shouldn't there be a much greater consciousness on the part of the policymakers at all levels that the program that would seem so good a year ago even or maybe even 2 years ago might not be much use this time?

May it not have become infinitely more complicated than we thought when we were fighting for rather simple programs that were designed to raise employment and designed to get that rise in employment in particular areas?

Could it not have become a much more difficult situation for essentially the same reasons that you describe?

Mrs. SLATER. I think the problem of managing the economy and determining what is the right economic policy is very complicated, particularly with reference to the type of situation we are in today. To some extent, we are victims of success. If you are in a very desperate economic situation, you usually know which way you need to move to do something about it. When we were in the depth of recession in early 1975, we knew we had to stimulate the economy and bring unemployment down. Now we are treading a much narrower line with much narrower margins, and we have to find out how to solve one problem without losing ground in other areas that we perhaps have already solved. So, it is a much more complicated situation.

Representative BOLLING. You can't get away from the politics of it. Proposition 13 has been grossly oversimplified, and it does not even interest me as a cause, but the fact that Government has become so confusing to the average person in the field does interest me. You see time after time where the same Government gives two answers to the same person on a particular set of facts dealing with a variety of these programs, and you also see the chaos that exists in cities where there is an attempt made to help a particular area in a city or even the whole city is almost incredible. It is at the point where there is a substantial increase in employment just to follow Federal programs. I have never been one who has been afraid of Federal programs or have I been against them, but the fact of the matter is what is going on in the country is a perception that Government has so many programs—not just the Federal Government—but the Federal Government, the State governments, the county governments, the city governments all

mashed up together through revenue sharing, which I am happy to say I have always thought was a disaster, but it is all mashed up together and they can't figure out who is responsible, and that has something to do with the need, I think, for being able to be more precise.

You know and I know that there are some programs that the Congress has passed in its wisdom that have trigger mechanisms that are within the statistical error, and I think we still have them. It must be some form of, not insanity, but "unsanity"—lack of wisdom at least.

Let me try another one and see where I get on it.

I don't think we really know about the incidence of inflation, and I think Courtenay's depiction of it is fair. I don't think it completely overrides my own.

What do we know about the effect of unemployment on what I call for lack of a better phrase extended family—in other words, more than just the man, wife and child or no child. You indicated the enormous change is taking place in a relatively few years with regard to more than one person being employed in that particular unit. But what I am trying to figure out—I am not interested in getting into trouble with the hardship index and all the rest of it, but I am interested in that, too—but what I am interested in is maybe as we look at the society and use our really very excellent series, we are missing some kind of a social change that is of monumental importance. It may be that not only have women started going into the labor force for specific reasons, but teenagers have. That may be very much a psychological motivation, more so than financial, and this is a gross oversimplification, but it may all be a response to the limitations that are imposed by a variety of things including inflation.

Now, what do we really know, if there is such a thing as an extended family, I mean something like in the country you will have as a unit, not necessarily on a farm more than a man, wife, children, family. You will have an extended family which is mutually supportive, and I suspect you have it in the ghetto, too. In fact, I know you have. What do we know about that kind of thing?

Ms. Norwood. I think Mr. Chairman, you are raising some extremely interesting points. When you speak of the extended family, we get into the question of what is a family. Most of the statistics tend to define the family in terms of the household. There are differences between a family and a household. The extended family, most people believe, was much more prevalent in the past than it is today. We have no specific information on that. So, it is a little bit hard to look at.

In terms of the social effects of unemployment, which is a subject in which we are extremely interested, and of inflation, I think perhaps there are a few other things that can be said. First of all, in terms of the impact of inflation, I think basically what people are doing, as you say, is to look at the poor and those on fixed incomes and then look at those who are better off. What we really need to do is to look on the one hand at income and earnings taking account of the indexation which occurs for pensions and for earnings. Then we need to look at the assets and the improvement in the asset situation of people in terms of the family. We know, as we indicated before, that there are many more families now than in the past who have more than one earner, maybe some of them having a husband, wife, and some children working.

We also know we have some 8 million families which are headed by women with no husbands present, most of whom have no other earner in the family and a very large proportion of whom are clearly living in poverty.

There have been a number of studies done on the social effect in terms of the financial effect of unemployment. There are those who feel we are understating unemployment, and there are those who feel we are overstating unemployment. I think it is extremely important to analyze these data in relation to each other; that is, the income information and the employment status information ought to be looked at together, and, for that reason, the Bureau of Labor Statistics has begun the collection of earnings data on a regular quarterly basis which will be tied very specifically to the labor force status of the individuals and will also be related to the family insofar as we can define the family status through the survey.

So, we do look to some improvement in the data base within the next few months.

Representative BOLLING. The reason I raise the question is the obvious, that I am very disturbed by the possible result of this coming Congress which may, with a very broad ax, cut a great many programs. I think that that political response comes from a legitimate criticism of government. I don't think it is a response that is basically merely grudging tax payments. What I am beginning to suspect, and really I am not beginning, but I have felt it from my own experience in my own district for a very long time, and I am beginning to suspect generally that we have not demonstrated our ability to be more precise in our implementation of what I would still call macroeconomic policies plus the microeconomic attempts to deal with structural problems.

You will remember at some point in time, I was the chairman of a subcommittee of this committee on economic statistics. I am raising the question that I have been raising for some 15 or 20 years. Are we putting enough resources into finding out what we need to know in order to make policy?

I know what your answer would be. Obviously, we aren't ever, but even though the Congress has a new set of responsibilities, relatively, I am very much disturbed about our ability to realistically come to grips in our programs with the solution to the problems that are there. I am finally convinced it is based on ignorance, not intentional ignorance, just an inability to put together the necessary information as the society grows infinitely more complex. I think the thing that has happened is that in the last 30 years this society has become socially more aware and in its social organization infinitely more complex than when, for example, I started out on the Joint Economic Committee in the early 1950's. I raise the questions not to talk about generalities, but I think they are legitimate difficulties that we are not facing even intellectually.

In any event, I thank you very much for your patience and your testimony, and, as usual, you have both done a very good job.

With that, the committee stands adjourned.

[Whereupon, at 11:27 a.m., the committee adjourned, subject to the call of the Chair.]

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