

EMPLOYMENT-UNEMPLOYMENT

819

HEARINGS
BEFORE THE
JOINT ECONOMIC COMMITTEE
CONGRESS OF THE UNITED STATES
NINETY-FOURTH CONGRESS
SECOND SESSION

PART 8

AUGUST 6, SEPTEMBER 3, NOVEMBER 5, AND
DECEMBER 3, 1976

[Hearing day for October 1976, of this series, was not held]

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EMPLOYMENT-UNEMPLOYMENT

FRIDAY, AUGUST 6, 1976

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

The committee met, pursuant to notice, at 11:05 a.m., in room 1202, Dirksen Senate Office Building, Hon. Hubert H. Humphrey (chairman of the committee) presiding.

Present: Senators Humphrey and Proxmire; and Representative Brown of Michigan.

Also present: William R. Buechner, G. Thomas Cator, Lucy A. Falcone, Robert D. Hamrin, L. Douglas Lee, and Ralph L. Schlosstein, professional staff members; Charles H. Bradford and M. Catherine Miller, minority professional staff members.

OPENING STATEMENT OF CHAIRMAN HUMPHREY

Chairman HUMPHREY. Mr. Shiskin, we welcome you back and are happy that you have recovered; I hope you are feeling good. I know I express the view of every member here on how pleased we are to see you back and in good shape.

Mr. SHISKIN. Thank you, I am feeling fine.

Chairman HUMPHREY. This morning is apt to be interrupted by a vote. I held up, I thought we would have a vote over there 10 minutes ago; they are still arguing a bit. So, you bear with us if we have to run out of here. We will work it out together because we have sufficient members here so we can sort of sit in for one another.

Today the Joint Economic Committee, as it has of course over the years, holds its monthly hearing on the employment and unemployment situation—we are now looking at the month of July.

We are faced this morning with what I would have to call disappointing and disheartening news. After several months of decline at the end of 1975 and the beginning of 1976 the unemployment rate is again on the up-trend. The increase in the unemployment rate in July to 7.8 percent follows an increase in June of 7.5, and in May, the lowest, 7.3.

I am particularly concerned this morning because this increase in unemployment does not seem to be at all out of line with other mounting evidence that the economic recovery has slowed down somewhat, and for many of us to an unsatisfactory pace. Now, that is arguable, but at least there is evidence of some slowdown.

The preliminary GNP data recently released showed that the real growth slowed from a 9 percent rate in the first quarter of this year to only 4.4 percent in the second quarter. Slowdowns in industrial production increased, and a leveling off of housing starts in recent

months also confirm a slackening in the pace of recovery. It does not appear that the increases in June and July can be attributed in any way to seasonal adjustment factors. First, the slowdown in GNP growth during the second quarter to the figure of 4.4 percent would, according to Okun's law, make a further decline in unemployment unlikely. Second, the initial claims for unemployment insurance have been rising for the last 5 months. Now, initial claims usually move in the same direction as the overall unemployment rate with a 1- or 2-month lead or lag at times; there is always some lag there that is evidenced.

I intend to ask you about the possibility of seasonal adjustment problems this month, and also about whether the alternative methods of seasonal adjustment, which you prepare, yield a picture of a worsening unemployment situation.

In the face of the disappointing second quarter GNP results and the recent increases in unemployment, I cannot help but be concerned about the slow-growth policy which seems to be embraced—not only here in the United States, but as I mentioned at other occasions, the OECD meetings. Both the administration's announcement at the Puerto Rico Conference on world economic conditions, and the OECD report issued yesterday, advocate more restrictive economic policies for the United States, while we are still more than 10 percent below our potential level of GNP, and with unemployment on the rise.

I suggest that the President and his economic advisers take a new look at the economic statistics.

As I said earlier, Mr. Shiskin, we are very pleased to have you back, and we look forward to visiting with you this morning.

The point I also should like to make is that the preliminary information I have indicates that in the month of June adult male unemployment went up; in the month of July adult female unemployment has gone up, and head-of-household unemployment is going up. So, it is a rather substantive type of unemployment that gets right at the well-being of the American economy and the American family.

There are some figures here in your report this morning about black teenage unemployment, there was a rather sharp decline. I would like to question those. I just came back from the National Urban League conference in Boston. I think you should know that the National Urban League Conference in Boston after their national survey, into which they put a considerable amount of money and talent, showed black teenage unemployment at 64 percent. Now, that is their publication, and the National Urban League is not given to flamboyant statements.

They also, of course, placed adult black unemployment considerably higher than the official figures.

But, whatever the facts are, to have a rate of employment amongst black teenagers that dropped in 1 month from 40 percent down to 34 percent is a rather remarkable change in evidence, or statistical information. I would like to have some explanation of that because there just does not seem to be any. If adult unemployment is going up, and black teenage unemployment has no work background, or job rating, it just doesn't seem possible, unless they have been absorbed this month by the summer youth program, the summer youth employment program, and I hope that is the case.

Mr. Shiskin, would you like to make some comments and help us along here?

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

Mr. SHISKIN. Well, thank you very much, Mr. Chairman and members of the committee, I am delighted to be back. As you know, I got a "bug" recently and it laid me low for several months, but I feel I have recovered.

Except for two points, Senator Humphrey, the comments on the Urban League, and also one other one which I will mention in 1 minute, I would pretty much agree with what you said.

The other one is, you didn't say anything about employment.

Chairman HUMPHREY. I meant to say that, that the employment figures have gone up.

Mr. SHISKIN. They have gone up very substantially. I think it is very important for us to understand how we have a situation where sharply rising employment and increases in unemployment are taking place at the same time; it is very important to understand that for policy purposes.

My statement is a little longer than usual because I have anticipated some of your questions, particularly the one on seasonal adjustment.

Chairman HUMPHREY. Let me say something very quickly, and then I want you to go on with your statement. I regret that I did not mention that the total amount of employment has gone up. But there is an increase in the work force, the population increases, the number that come into the work force because of age have increased. The only problem that you have here is, does the economy absorb the increased number in the work force on the one hand—whatever that number may be—and at the same time cut into the reservoir of the unemployed.

There is a constant increase in the number of people that work, simply because there is a constant increase in our population. And then there are variables in terms of those that come into the work force. There is a larger number of people coming into maturity right now.

Mr. SHISKIN. Well, let me read my statement, if it is OK with you, sir; it is a little longer than usual, and I apologize for that, but we do have those troublesome problems and I tried to anticipate your questions on them.

Chairman HUMPHREY. Please.

Mr. SHISKIN. Mr. Chairman, as usual, let me say again, I have with me, Mr. Stein, who tells me everything I need to know about unemployment; and Mr. Layng, who tells me everything I need to know about prices. They will support me by answering questions I cannot answer.

I am pleased to be here this morning to discuss with you the data on the employment situation released this morning at 10 a.m. by the Bureau of Labor Statistics.

The expansion which started after the cyclical trough in March 1975 continued through July, the 16th month. Both total employment and nonagricultural employment rose after a decline last month. Total employment rose more than 400,000 in July; since March 1975, the trough month for this measure, the employment total was up 3.8 million, an average of 237,000 per month.

Let me call to your attention the fact that the rise in July was substantially greater than the average rise during the earlier months of this recovery.

Nonagricultural payroll employment rose 221,000, and we don't count here the increase in strike activity during the month because people on strike are not included on payrolls. The payroll total has risen by 2.8 million, an average of 214,000 per month. However, the average workweek held about steady, as did aggregate hours. Moreover, unemployment rose for the second straight month. Overall, then, it would appear that the pace of labor market activity during the past few months has slowed somewhat. And that, sir, is about what you said.

The economy is now in the zone between recovery and expansion, the phase of the business cycle which begins after the previous peak level has been exceeded. Total employment, nonagricultural employment and GNP are all above previous peak levels. Other major measures of total economic activity lag a little; for example, retail sales and industrial production are slightly below their previous peaks. And unemployment is at an unprecedented high level. Such diversity is typical during cyclical expansions, because all economic indicators do not move in perfect tandem.

Thus far the rate of recovery has been about average. Through the first 5 quarters, real GNP has risen by an average of 6.8 percent. This is higher than the average rise during the first 5 quarters of the 1961-62 and the 1970-71 recoveries, but smaller than during the first 5 quarters of previous post-World War II recoveries.

I have added a new table here, sir, the last table. It shows the changes in GNP—table 6—during previous recovery periods. And the point that this table makes is that it is normal to have very erratic quarter-to-quarter changes in real GNP during economic expansion. You know, during this recovery we have had consecutive quarterly rates of 5.6, 11.4, 3.3, 9.2, and 4.4. That is not unusual: if you look at the earlier recoveries you will see that they also move like a roller-coaster. If you look at the averages—and the best are the middle set of means and mean deviations—you will see that the average for this expansion is smaller than the rises in 1949-50, 1954-55, and 1958-59, but larger than in the two previous recessions.

This table also shows that the common experience is for expansions to slow down after the initial spurt, which, as you know, was very large because of the inventory rebound. So, I commend this table to your attention, it is an illuminating table.

I want to be sure there is no misunderstanding of my view on unemployment. So, what I say is, in sharp contrast to the performance of most other economic indicators—the unemployment rate rose for the second straight month in July. After declining from 8.9 percent in May 1975 to 7.3 percent in May 1976, it has risen one-half point in just

2 months. The recent rise in unemployment has encompassed adult men as well as adult women.

The civilian labor force has experienced a very rapid rise during this recovery, particularly in July when it rose by 700,000, as the rate of labor participation reached a new all-time high of 61.9 percent.

Chairman HUMPHREY. Dr. Shiskin, could you tell us why you think that has happened?

Mr. SHISKIN. I do in the next two paragraphs. In sort of a mechanical sense I explain it.

Chairman HUMPHREY. Thank you very much.

Mr. SHISKIN. I can follow through on that later, if you wish. In fact, I hope you will make me do it.

In the 16 subsequent months since the trough of the 1973-75 recession, tentatively designated as March 1975, the labor force has risen by 3.8 percent—3.5 million—greater than any comparable postwar recovery period. Obviously, the unemployment rate has been affected by the exceptionally rapid growth of the labor force.

Most of the recent labor force growth has occurred among adult women. In the last month, the female labor force increased by 290,000, and the male labor force grew by 240,000. In the last year, however, the female labor force rose by 1.4 million and the male labor force by 600,000. Adult women—and that is by way of answering the question you just asked me, Senator Humphrey—adult women now account for 36 percent of the labor force, compared with 33 percent a decade ago and 29 percent two decades ago. Adult men account for 54 percent of the labor force today compared to 64 percent 20 years ago. That is a very dramatic change. Incidentally, I don't have it in the statement, but the percentage a decade ago, 20 years ago for teenagers was 6.5 percent of the labor force, now it is 9.5 percent.

The recent rapid increase in the labor force explains in part why unemployment has been rising at the same time that employment has been increasing. You know, we are constantly asked this question, how can they both increase, and that is the answer. I have further information on that, if you wish to have it.

Five months ago I began presenting to this committee seven different, reasonable definitions of unemployment, ranging from the most restrictive, identified as U-1, to the most inclusive, identified as U-7. The official rate is identified as U-5, and has the important advantage that all persons counted under this definition meet the market test of actively seeking work. It is noteworthy that the unemployment rates for all of these categories have risen since May. The data and the definitions are shown in table 3.

In view of the widespread discussion of our method of seasonal adjustment, I thought it would be useful to describe the BLS practice in making current seasonal adjustment of unemployment statistics.

Every month the unemployment figures are seasonally adjusted by the Bureau of Labor Statistics to remove the effects of normal seasonal variations and to bring out the underlying cyclical trends. There are many different methods of seasonal adjustment and they usually give somewhat different results.

We point up the uncertainty that is attached to these official estimates by providing to the Joint Economic Committee each month 10

different unemployment rates obtained by alternate seasonal adjustment methods in addition to the official rate. That is table 1.

There are some analysts who believe still other methods than those presented would yield better results. For example, early this year some analysts were recommending the use of last year's factors instead of the updated ones. I would like to make a comment on that, Senator Proxmire. You recall earlier this year you were questioning me very intensively because the unemployment rate that we were publishing was dropping faster than the unemployment rate that was yielded by the factors for last years. This went on for 2 months. I hope you recall that series of questions.

Let me say that again. You were questioning me about the unemployment rate shown officially, which was dropping faster than the rate would have dropped if we had used the 1975 factors. For that reason you were questioning the validity of our adjustment.

I said at that time that next summer the very opposite will take place because seasonal factors average out for the year. That is exactly what has happened. The unemployment rate for the last 2 months, shown by the official method, is 7.5 and 7.8. But if we had used last year's factors, the rates would have been 7.4 for June and 7.6 for this month. So, you see, there are certain things we can predict with accuracy.

You remember last year we quite accurately predicted a big drop in unemployment in June. Similarly we knew that the official rate, which was dropping more rapidly at the beginning of the year, would be dropping less rapidly this summer, and that is exactly what the figures show.

Senator PROXMIRE. Are you talking about changing the statistical method, or are you talking about putting in the 1975 figures?

Mr. SHISKIN. What we did in the beginning of the year was to update by using the 1975 experience; and that is what you called into question.

Senator PROXMIRE. By using the 1975 experience we get what you gave us this morning, an increase from 7.5 to 7.8; absent that you would have gone from 7.4 to 7.6.

Mr. SHISKIN. Yes; and you know, the point I am making is that we knew this relationship would hold; but I of course, was not anticipating the rise in unemployment. We knew this relationship would hold, and I pointed that out to you, just as last year we pointed out that there would be a very big drop in June. There are certain things we know about seasonal behavior, and I just want to call that to your attention.

More recently there have been recommendations to use constant seasonal factors derived as averages of the past 9 years or so. These methods both show an increase in the rate for July to about the same level as the official rate. In the table showing 10 different seasonal adjustments, there are several methods that yield the same rate as the official method and others that show lower rates. The range of differences in table 1 is exceptionally small in July, only .2. This is smaller than any range earlier in 1976 and in 1975. This is the last column of table 1 which shows the range; it is very small this month. This suggests that the official July estimate is more reliable than most.

The method used by the BLS, the X-11, is based on a massive re-

search study conducted over many years, mostly at the Bureau of the Census, X-11 is the most common method in use today and is used by analysts all over the world. X-11 offers many options to the users; for example, an additive or multiplicative approach may be used, or different weights and periods for computing the final seasonal factors can be selected. At present, the BLS uses the most recent 9 years for most of the computations, but in the last stage of calculations of the current year's factor the 4 most recent years are used, with the most recent 3 years of each given a weight of 28.3 percent, and the 4th year a weight of 15.1 percent. Extreme values are systematically eliminated from the calculations so that data for "abnormal" years, like perhaps 1975, do not unduly affect the final seasonal factors. I might say, parenthetically, and some members of your staff may have been following this sufficiently closely to understand this, we looked back recently and saw that six of the 1975 factors were either eliminated completely or reduced in weight. So, 1975 had relatively little impact on the seasonal factors. The X-11 method looks for "outliers" and either eliminates them or reduces their weight. Much of the discussion today arises from differences of opinion about the selection of the weights.

At the end of each year BLS reviews the studies and proposals that have been made during the year and revises and updates the seasonal factors for the year ahead. Once a new set of factors is adopted, however, it is made public and used for the year ahead. We do not consider it good policy or statistical practice to change these factors as the year progresses.

Accordingly, the BLS is now using for the official seasonally adjusted data the factors adopted at the beginning of the year. I hope you will all listen carefully to this next sentence. It is possible that other methods may give better results for current months, but such a judgment must be deferred at least until after the full year's data are in. This will be done by the BLS at the beginning of 1977, as is the routine practice every year.

Now, let me summarize my views very quickly and succinctly on the economic situation. In summary, the economy continued to expand in July. However, this favorable trend was accompanied by new rises in unemployment, as the labor force continued to grow rapidly.

We will now try to answer your questions, sir. Thank you.

[The tables referred to, together with the press release follow:]

TABLE 1.—UNEMPLOYMENT RATE BY ALTERNATE SEASONAL ADJUSTMENT METHODS 1

Month	Unadjusted rate	Official adjusted rate	Alternative age-sex procedures		Other aggregations (all multiplicative)					Direct adjustments					Range (cols. 2-14)
			All multiplicative	All additive	Duration	Full-time, part-time	Reasons	Occupation	Industry	Rate	Level	Residual	Composite No. 1	Composite No. 2	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
1975:															
January.....	9.0	7.9	8.0	8.3	8.1	7.9	7.8	7.9	7.8	8.1	8.1	8.0	8.0	8.0	0.6
February.....	9.1	8.0	8.1	8.4	7.9	8.0	7.8	7.8	8.0	8.0	8.1	8.4	8.0	8.0	.6
March.....	9.1	8.5	8.5	8.7	8.4	8.4	8.3	8.4	8.4	8.5	8.5	8.7	8.5	8.4	.4
April.....	8.6	8.6	8.7	8.6	8.5	8.6	8.6	8.7	8.7	8.8	8.8	8.7	8.6	8.6	.3
May.....	8.3	8.9	9.0	8.7	8.8	8.8	9.0	9.1	9.0	9.3	9.2	8.7	8.8	8.9	.6
June.....	9.1	8.7	8.6	8.7	8.6	8.7	8.7	8.6	8.7	8.2	8.2	8.5	8.6	8.6	.5
July.....	8.7	8.7	8.6	8.6	8.6	8.7	8.8	8.6	8.6	8.5	8.4	8.5	8.7	8.6	.4
August.....	8.2	8.5	8.5	8.4	8.7	8.5	8.7	8.7	8.6	8.5	8.5	8.4	8.6	8.6	.3
September.....	8.1	8.6	8.6	8.4	8.8	8.6	8.8	8.6	8.5	8.5	8.5	8.4	8.6	8.6	.4
October.....	7.8	8.6	8.7	8.4	8.8	8.7	8.7	8.5	8.6	8.5	8.6	8.4	8.6	8.6	.4
November.....	7.8	8.5	8.5	8.2	8.7	8.6	8.6	8.4	8.5	8.5	8.5	8.5	8.5	8.5	.5
December.....	7.8	8.3	8.4	8.2	8.5	8.3	8.2	8.3	8.4	8.5	8.4	8.2	8.3	8.3	.3
1976:															
January.....	8.8	7.8	7.8	8.2	8.1	7.8	7.7	7.8	7.8	7.9	7.9	8.2	7.9	7.9	.5
February.....	8.7	7.6	7.7	7.9	7.6	7.6	7.5	7.6	7.7	7.7	7.7	7.6	7.6	7.6	.4
March.....	8.1	7.5	7.5	7.7	7.3	7.5	7.4	7.5	7.5	7.6	7.5	7.7	7.5	7.5	.4
April.....	7.4	7.5	7.5	7.4	7.3	7.5	7.5	7.6	7.6	7.6	7.5	7.5	7.5	7.5	.3
May.....	6.7	7.3	7.3	7.1	7.2	7.2	7.4	7.4	7.4	7.4	7.5	7.2	7.3	7.3	.4
June.....	8.0	7.5	7.4	7.5	7.5	7.5	7.5	7.4	7.4	7.2	7.2	7.4	7.5	7.5	.3
July.....	7.8	7.8	7.7	7.7	7.7	7.8	7.8	7.7	7.7	7.6	7.6	7.7	7.7	7.7	.2

¹ An explanation of cols. 1 to 14 follows:

- (1) Unemployment not seasonally adjusted.
- (2) Official rate. This is the published seasonally adjusted rate. Each of four unemployed age-sex components—males and females, 16-19 and 20 yr and over—is independently adjusted. The teenage unemployment components are adjusted using the additive procedure of the X-11 method, while adults are adjusted using the X-11 multiplicative option. 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 are as follows:

January	113.1
February	113.7
March	108.1
April	99.4
May	93.4
June	104.5
July	99.5
August	96.0
September	94.7
October	89.8
November	91.4
December	93.4

- (3) Multiplicative rate. 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.

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

(5) Duration. Unemployment total is aggregated from 3 independently adjusted unemployment by duration groups (0-4, 5-14, 15+).

(6) Full-time and part-time. Unemployment total is aggregated from 6 independently seasonally adjusted unemployment groups, by whether the unemployed are seeking full-time or part-time work for men 20 plus, women 20 plus, and teenagers.

(7) Reasons. Unemployment total is aggregated from 4 independently seasonally adjusted unemployment levels by reasons for unemployment—job losers, job leavers, new entrants, and reentrants.

(8) Occupation. Unemployment total is aggregated from independently seasonally adjusted unemployment by the occupation of the last job held. There are 13 unemployed components—12 major occupations plus new entrants to the labor force (no previous work experience).

(9) Industry. Unemployment total is aggregated from 12 independently adjusted industry and class-of-worker categories, plus new entrants to the labor force.

(10) Unemployment rate adjusted directly.

(11) Unemployment and labor force levels adjusted directly.

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

(13) Average of (2), (5), (6), (7), and (12).

(14) Average of (2), (5), (6), (7), (8), (9), and (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.

TABLE 2.—EMPLOYMENT-POPULATION RATIOS

Category	Annual averages		Seasonally adjusted estimates								
	1974	1975	Jan. 1974 (cyclical high month)	Mar. 1975 (cyclical low month)	Quarterly averages—				Current months		
					III 1975	IV, 1975	I, 1976	II, 1976	May 1976	June 1976	July 1976
Total, all workers.....	57.8	56.0	58.3	55.9	56.1	56.0	56.5	57.0	57.1	56.9	57.1
Adult males.....	77.9	74.9	79.0	74.9	74.9	74.5	74.8	75.3	75.5	75.0	75.1
Adult females.....	42.7	42.3	42.4	42.0	42.5	42.5	43.1	43.5	43.5	43.7	43.8
Teenagers.....	46.1	43.3	47.5	43.2	43.3	43.0	43.8	44.8	45.3	44.2	45.1

Source: U.S. Department of Labor, Bureau of Labor Statistics, Aug. 6, 1976.

TABLE 3.—RANGE OF UNEMPLOYMENT INDICATORS REFLECTING VALUE JUDGMENTS ABOUT SIGNIFICANCE OF UNEMPLOYMENT (PERCENT)

U-1 through U-7	Annual averages		Seasonally adjusted estimates								
	1974	1975	October 1973 (cyclical low month)	May 1975 (cyclical high month)	Quarterly averages				Current months		
					III 1975	IV 1975	I 1976	II 1976	May 1976	June 1976	July 1976
U-1—Persons unemployed 15 weeks or longer as a percent of total civilian labor force.....	1.0	2.7	0.9	2.7	3.1	3.1	2.7	2.2	2.1	2.3	2.4
U-2—Job losers as a percent of civilian labor force.....	2.4	4.7	1.7	5.1	5.0	4.6	3.7	3.7	3.7	3.8	4.0
U-3—Unemployed household heads as a percent of the household head labor force.....	3.3	5.8	2.7	6.1	5.9	5.9	5.0	4.9	4.8	5.1	5.4
U-4—Unemployed full-time job seekers as a percent of the full-time labor force (including those employed part time for economic reasons).....	5.1	8.1	4.1	8.5	8.3	8.2	7.1	7.0	6.8	7.4	7.3
U-5—Total unemployed as a percent of civilian labor force (official measure).....	5.6	8.5	4.7	8.9	8.6	8.5	7.6	7.4	7.3	7.5	7.8
U-6—Total full-time job seekers plus half part-time job seekers plus half total on part time for economic reasons as a percent of civilian labor force less half part-time labor force.....	6.9	10.3	5.9	10.9	10.4	10.3	9.3	9.1	8.9	9.2	9.3
U-7—Total full-time job seekers plus half part-time job seekers plus half total on part time for economic reasons plus discouraged workers as a percent of civilian labor force plus discouraged workers less half of part-time labor force.....	7.7	11.5	6.6	12.0	11.6	11.3	10.3	10.0	(²)	(²)	(²)

¹ Uses discouraged worker figure for quarter which includes applicable month.

² Not available.

Note: The numerators and denominators (in thousands) for the second quarter 1976 rates are as follows: U-1, 2,083/94,546; U-2, 3,528/94,546; U-3, 2,643/53,819; U-4, 5,632/80,176; U-5, 7,014/94,546; U-6, 7,942/87,594; U-7, 8,847/88,499.

Source: U.S. Department of Labor, Bureau of Labor Statistics, Aug. 6, 1976.

TABLE 4.—MEASURES OF PROGRESS TOWARD PREVIOUS CYCLICAL PEAK LEVEL DURING CURRENT ECONOMIC RECOVERY

Series (with latest month available) (1)	Percent decline during 1973-75 recession (2)	Percent of recession decline recovered, through date (3)	Percent of previous peak level (4)	Percent change from trough (5)
I. Leading indicators:				
Leading index, trend adjusted (June).....	-22.4	94.5	98.8	+27.3
Average workweek (July) ¹	-4.4	66.7	98.5	+3.1
New orders, 1967 dollars (June) ¹	-28.8	66.3	90.3	+26.8
Contracts and orders, 1967 dollars (June) ¹	-29.6	22.7	77.1	+9.6
Housing starts (June) ¹	-58.6	31.3	59.8	+44.3
Stock prices (July).....	-43.4	72.3	88.0	+55.4
Corporate profits after taxes, 1972 dollars (1st quarter, 1976, rev.).....	-38.6	65.0	86.5	+40.9
II. Coincident indicators:				
Nonagricultural payroll employment (July).....	-3.2	111.7	100.4	+3.6
Aggregate hours, nonagricultural establishments (June).....	-5.0	70.6	98.5	+3.7
Unemployment level (July) ²	+98.3	20.2	178.5	-10.0
GNP, 1972 dollars (2d quarter, 1976, prel.).....	-6.6	121.0	101.4	+8.5
Personal income less transfer payments, 1967 dollars (June).....	-6.3	97.8	99.9	+6.6
Industrial production (June).....	-15.1	91.5	98.7	+16.3
Retail sales, 1967 dollars (June) ¹	-10.0	85.9	98.6	+9.5

¹ 3-mo averages have been used for the calculations for this series; for example, the averages of the specific trough month, the previous and following months were compared with the average for the latest 3 mo available to obtain the entries in cols. (3)-(5). For other series single months have been used.

² The unemployment series tends to move counter to movements in general business activity; that is, the unemployment level tends to rise during recessions and decline during expansions. Col. 3 shows the percent of the increase in unemployment that has been offset.

TABLE 5.—MEASURES OF PROGRESS TOWARD PREVIOUS CYCLICAL PEAK LEVEL AT CORRESPONDING STAGE OF 1958-59 ECONOMIC RECOVERY

Series (1)	Percent decline during 1957-58 recession (2)	Percent of recession decline recovered (3)	Percent of previous peak level (4)	Percent change from trough (5)
Nonagricultural payroll employment.....	-4.3	122.6	101.0	+5.6
Unemployment level ¹	+102.4	50.7	150.5	-25.7
GNP, 1972 dollars.....	-3.2	213.1	103.7	+7.1

¹ The unemployment series tends to move counter to movements in general business activity; that is, the unemployment level tends to rise during recessions and decline during expansions. Col. 3 shows the percent of the increase in unemployment that has been offset.

TABLE 6.—REAL GNP DURING POST-WORLD WAR II EXPANSIONS

[Quarter-to-quarter percentage changes at annual rates]

Quarter from trough	Expansions					
	1949-50	1954-55	1958-59	1961-62	1970-71	1975-76
1.....	3.7	5.9	2.9	2.6	9.2	5.6
2.....	-3.3	7.8	10.0	6.9	3.0	11.4
3.....	19.4	10.0	10.8	5.3	2.8	3.3
4.....	11.1	6.1	5.0	10.0	3.5	9.2
5.....	13.8	6.0	9.1	5.9	7.6	4.4
6.....	9.4	4.1	-4.2	5.3	7.9	-----
7.....	5.7	-1.7	4.3	3.0	5.3	-----
8.....	7.9	2.1	8.2	.7	8.4	-----
Mean rate of change in real GNP for 8 quarters after trough.....	8.5	5.0	5.8	5.0	6.0	NA
Mean deviation.....	5.0	2.7	3.8	2.1	2.3	NA
Mean rate of change in real GNP for 5 quarters after trough.....	8.9	7.2	7.6	6.1	5.2	6.8
Mean deviation.....	7.0	1.4	2.9	1.8	2.5	2.8
Mean rate of change in real GNP for 6 to 8 quarters trough.....	7.7	1.5	2.8	3.0	7.2	NA

NA—Not available.

News

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THE EMPLOYMENT SITUATION: JULY 1976

Both unemployment and employment rose in July, as the labor force expanded sharply, it was reported today by the Bureau of Labor Statistics of the U. S. Department of Labor. The unemployment rate increased for the second straight month, moving from 7.3 percent in May to 7.8 percent in July.

Total employment--as measured by the monthly survey of households--rose by more than 400,000 to a new high of 87.9 million. This continued the comparatively brisk pace of employment growth that has totaled 3.8 million since the March 1975 recession low.

Nonagricultural payroll employment--as measured by the monthly survey of establishments--rose by 220,000 in July and probably would have risen even more except for increased strike activity during the month. Payroll jobs were up by 2.8 million from the June 1975 low for this series.

Unemployment

The number of unemployed persons increased by 280,000 in July, following a similar rise in the prior month. This brought the jobless total to 7.4 million. The rate of unemployment for all workers was 7.8 percent, up from 7.5 percent in June and 7.3 percent in May. (See tables A-1.)

Most of the July increase was among adult women, whose unemployment level was up by 180,000. This brought their rate of unemployment to 7.6 percent from 7.1 percent in June. Adult male joblessness showed little change in July after rising in the preceding month. At 6.1 percent, their unemployment rate was at its highest point since last December. By contrast, the incidence of unemployment among teenagers has remained stable for several months. (See table A-2.)

The unemployment rate for white workers rose in July to 7.1 percent, with increases among both adult men and women. Among black workers, the only sizeable change was a

decrease for teenagers, whose rate declined in July from 40.3 to 34.1 percent. The overall jobless rate of 12.9 percent for black workers has shown little change thus far in 1976.

Unemployment among household heads increased for the second month in a row, to 5.4 percent, with most of the July rise occurring among female heads. There were no substantial movements in unemployment among the major occupations and industries during July, but jobless rates were generally higher than in the prior month.

Table A. Highlights of the employment situation (seasonally adjusted data)

Selected categories	Quarterly averages					Monthly data		
	1975			1976		1976		
	II	III	IV	I	II	May	June	July
	(Thousands of persons)							
Civilian labor force	92,531	93,134	93,153	93,553	94,546	94,557	94,643	95,333
Total employment	84,443	85,138	85,241	86,402	87,532	87,697	87,500	87,907
Adult men	47,286	47,551	47,540	47,998	48,504	48,596	48,391	48,535
Adult women	30,129	30,537	30,665	31,234	31,677	31,664	31,845	31,958
Teenagers	7,029	7,050	7,036	7,169	7,351	7,437	7,264	7,414
Unemployment	8,087	7,997	7,912	7,151	7,014	6,860	7,143	7,426
	(Percent of labor force)							
Unemployment rates:								
All workers	8.7	8.6	8.5	7.6	7.4	7.3	7.5	7.8
Adult men	7.0	7.0	7.0	5.7	5.7	5.6	6.0	6.1
Adult women	8.4	7.9	7.9	7.4	7.1	6.8	7.1	7.6
Teenagers	20.2	20.2	19.5	19.4	18.7	18.5	18.4	18.1
White	8.0	7.9	7.8	6.9	6.7	6.6	6.8	7.1
Black and other	14.1	14.1	14.0	13.1	12.8	12.2	13.3	12.9
Household heads	6.0	5.9	5.9	5.0	4.9	4.8	5.1	5.4
Married men	5.5	5.4	5.1	4.1	4.1	4.0	4.4	4.5
Full-time workers	8.4	8.3	8.2	7.1	7.0	6.8	7.4	7.3
	(Weeks)							
Average duration of unemployment	13.8	15.6	16.5	16.3	15.8	15.0	16.9	15.8
	(Thousands of persons)							
Nonfarm payroll employment	76,438	77,004	77,642	78,392	78,929 _f	78,923	78,900 _p	79,121 _p
Goods-producing industries	22,300	22,414	22,690	22,943	23,113 _f	23,123	23,073 _p	23,081 _p
Service-producing industries	54,138	54,590	54,952	55,450	55,815 _f	55,800	55,827 _p	56,040 _p
	(Hours of work)							
Average weekly hours:								
Total private nonfarm	35.9	36.1	36.3	36.4	36.1 _f	36.2	36.1 _p	36.2 _p
Manufacturing	39.1	39.6	40.0	40.3	39.9 _f	40.2	40.2 _p	40.1 _p
Manufacturing overtime	2.4	2.7	2.9	3.1	2.9 _f	3.2	3.1 _p	3.1 _p
	(1967=100)							
Hourly Earnings Index, private nonfarm:								
In current dollars	170.7	174.3	177.8	180.6	183.5 _f	183.7	184.5 _p	185.6 _p
In constant dollars	107.0	107.1	107.5	107.9	108.4 _f	108.5	108.5 _p	N.A.

p* preliminary.

N.A., not available.

Following erratic movements in May and June, the average duration of unemployment was 15.8 weeks in July, about equal to the levels which prevailed during March and April. While the number unemployed less than 5 weeks rose, there was a decline among the very long-term unemployed, those out of work 27 weeks or more. (See table A-4.)

Total Employment and the Labor Force

There was a strong increase in employment in July, following a small decline in the previous month. The 410,000 rise brought the total to 87.9 million, 3.8 million above the March 1975 trough. Most of the increase over the month was among adult men, whose employment had declined in June. Their employment level was up 260,000 to 52.5 million, about the same level as in April and May. Although the July change was small, women's employment continued on a generally upward course. (See table A-1.)

The civilian labor force grew substantially in July, as the numbers of adult men, adult women, and teenagers all increased. At 95.3 million, the civilian labor force was nearly 700,000 above June's level and 2.3 million larger than a year earlier. As a result of this growth, the civilian labor force participation rate for all workers rose to a new high in July of 61.9 percent.

Industry Payroll Employment

Nonagricultural payroll employment increased by 220,000 in July to 79.1 million, seasonally adjusted, after having been about unchanged since April. The payroll job count has grown by nearly 2.8 million since its June 1975 recession low. Over-the-month employment gains occurred in 60 percent of the industries that comprise the BLS diffusion index of nonagricultural payroll employment. (See tables B-1 and B-6.)

The largest over-the-month advance occurred in State and local government, where 90,000 employees were added to payrolls. This followed 3 months of little or no growth. Employment gains also took place in retail trade (60,000) and services (45,000). There would have been an even greater increase in the latter industry were it not for a strike among hospital workers.

Employment in manufacturing was unchanged in July, as generally small movements in durables and nondurables tended to offset each other. Since the July low of last year, factory employment has risen by 850,000, with two-thirds of the growth occurring in the

durable goods industries.

At 3.4 million, the job count in contract construction was unchanged from July a year ago and was some 700,000 below the peak attained in early 1974.

Hours

The average workweek for all production or nonsupervisory workers on private nonfarm payrolls was 36.2 hours in July, seasonally adjusted, remaining in the narrow 36.1-36.2 hour range that has held since March. (See table B-2.) The workweek was slightly above the recession low but had been as high as 36.5 hours last winter.

The manufacturing workweek edged down 0.1 hour to 40.1 hours in July, while overtime hours held steady at 3.1 hours. These indicators, however, were 1.3 and 0.8 hours, respectively, above early 1975 recession lows.

The index of aggregate hours of private nonagricultural production or nonsupervisory employees was unchanged over the month at 110.5 (1967=100) in July. It has shown relatively little change since January, after rising fairly steadily from its 1975 low point. The manufacturing index was down slightly over the month to 93.8, also little different from the first of the year. (See table B-5.)

Hourly and Weekly Earnings

Average hourly earnings of production or nonsupervisory workers on private nonagricultural payrolls rose 0.4 percent from the June level (seasonally adjusted) and 7.0 percent over the last 12 months. Average weekly earnings advanced 0.7 percent over the month and 7.6 percent from last July.

Before adjustment for seasonality, average hourly earnings were \$4.85, up 1 cent from June. Since July 1975, they have increased by 32 cents. Weekly earnings averaged \$177.51 in July, up \$1.33 from June and \$12.62 over the year. (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 185.6 (1967=100) in July, 0.6 percent higher than in June. The index was 7.3 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 1.1 percent. (See table B-4.)

This release presents and analyzes statistics from two major surveys. Data on labor force, total employment, and unemployment are derived from the sample survey of households conducted and tabulated by the Bureau of the Census for the Bureau of Labor Statistics. Statistics on payroll employment, hours, and earnings are collected by State agencies from payroll records of employers and are tabulated by the Bureau of Labor Statistics. Unless otherwise indicated, data for both series relate to the week of the specified month containing the 12th day. A description of the two surveys appears in the BLS publication *Employment and Earnings*.

HOUSEHOLD DATA

HOUSEHOLD DATA

Table A-1. Employment status of the noninstitutional population

(Numbers in thousands)

Employment status	Not seasonally adjusted				Seasonally adjusted				
	July 1975	June 1976	July 1976	July 1975	Har. 1976	Apr. 1976	May 1976	June 1976	July 1976
TOTAL									
Total noninstitutional population ¹	151,585	155,925	156,142	153,585	155,325	155,516	155,711	155,925	156,142
Total labor force	97,146	98,251	99,325	95,249	95,866	96,583	96,699	96,780	97,473
Participation rate	63.2	63.0	63.6	62.0	61.7	62.1	62.1	62.1	62.4
Civilian noninstitutional population ¹	151,399	151,788	154,002	151,399	153,178	153,371	153,370	153,788	154,002
Civilian labor force	94,859	96,114	97,195	93,083	93,719	94,439	94,557	94,643	95,333
Participation rate	62.7	62.5	63.1	61.5	61.2	61.6	61.6	61.5	61.9
Employed	86,650	88,460	89,608	84,467	86,692	87,399	87,697	87,500	87,907
Agriculture	4,090	3,780	3,931	3,439	3,179	3,417	3,329	3,294	3,341
Nonagricultural industries	82,560	84,680	85,677	81,028	83,513	83,982	84,368	84,206	84,566
Unemployed	8,209	7,655	7,577	8,096	7,027	7,040	6,860	7,143	7,426
Unemployment rate	8.7	8.0	7.8	8.7	7.5	7.5	7.3	7.5	7.8
Not in labor force	56,540	57,674	56,817	58,336	59,459	58,932	59,013	59,145	58,669
Males, 20 years and over									
Total noninstitutional population ¹	65,128	66,182	66,279	65,128	65,920	66,002	66,087	66,182	66,279
Total labor force	53,157	53,541	53,760	52,848	52,623	53,010	53,144	53,144	53,387
Participation rate	81.6	80.9	81.1	81.1	79.8	80.3	80.4	80.3	80.5
Civilian noninstitutional population ¹	63,403	64,492	64,586	63,403	64,230	64,311	64,398	64,492	64,586
Civilian labor force	51,432	51,851	52,068	51,123	50,934	51,319	51,455	51,454	51,696
Participation rate	81.1	80.4	80.6	80.6	79.3	79.8	79.9	79.8	80.0
Employed	48,061	48,871	49,143	47,481	48,081	48,524	48,596	48,391	48,535
Agriculture	2,591	2,588	2,596	2,443	2,301	2,405	2,427	2,430	2,449
Nonagricultural industries	45,470	46,283	46,547	45,038	45,780	46,119	46,169	45,961	46,086
Unemployed	3,371	2,980	2,925	3,642	2,853	2,795	2,859	3,063	3,159
Unemployment rate	6.6	5.7	5.6	7.1	5.6	5.4	5.6	6.0	6.1
Not in labor force	11,971	12,641	12,518	12,280	13,296	12,992	12,943	13,038	12,892
Females, 20 years and over									
Civilian noninstitutional population ¹	71,729	72,857	72,966	71,729	72,561	72,653	72,753	72,857	72,966
Civilian labor force	32,350	33,857	33,769	33,097	33,865	34,019	33,972	34,290	34,581
Participation rate	45.1	46.5	46.3	46.1	46.7	46.8	46.7	47.1	47.4
Employed	29,688	31,429	31,126	30,453	31,398	31,523	31,664	31,845	31,958
Agriculture	675	596	632	521	462	540	473	479	488
Nonagricultural industries	29,013	30,833	30,494	29,932	30,936	30,983	31,191	31,366	31,470
Unemployed	2,662	2,428	2,643	2,644	2,467	2,496	2,308	2,445	2,625
Unemployment rate	8.2	7.2	7.8	8.0	7.3	7.3	6.8	7.1	7.6
Not in labor force	39,379	39,000	39,196	38,632	38,696	38,634	38,781	38,567	38,383
Both sexes, 16-19 years									
Civilian noninstitutional population ¹	16,267	16,439	16,450	16,267	16,387	16,407	16,419	16,439	16,450
Civilian labor force	11,078	10,407	11,348	8,843	8,920	9,101	9,130	8,899	9,056
Participation rate	68.1	63.3	69.0	54.4	54.4	55.5	55.6	54.1	55.1
Employed	8,901	8,160	9,339	7,033	7,213	7,352	7,417	7,264	7,414
Agriculture	824	596	704	475	436	472	428	385	404
Nonagricultural industries	8,077	7,564	8,635	6,558	6,777	6,880	7,008	6,879	7,010
Unemployed	2,176	2,247	2,008	1,810	1,707	1,749	1,693	1,635	1,642
Unemployment rate	19.6	21.6	17.7	20.5	19.1	19.2	18.5	18.4	18.1
Not in labor force	5,189	6,032	5,102	7,424	7,467	7,306	7,289	7,540	7,394
WHITE									
Civilian noninstitutional population ¹	133,579	135,473	135,643	133,579	134,987	135,141	135,296	135,473	135,643
Civilian labor force	83,889	85,005	85,850	82,520	82,961	83,451	83,642	83,805	84,359
Participation rate	62.8	62.7	63.3	61.8	61.5	61.8	61.8	61.9	62.2
Employed	77,270	78,987	79,856	75,831	77,282	77,867	78,087	78,120	78,341
Unemployed	6,619	6,018	5,993	6,689	5,679	5,584	5,555	5,685	6,018
Unemployment rate	7.9	7.1	7.0	8.1	6.8	6.7	6.6	6.8	7.1
Not in labor force	49,690	50,468	49,793	51,059	52,026	51,690	51,654	51,668	51,284
BLACK AND OTHER									
Civilian noninstitutional population ¹	17,820	18,315	18,359	17,820	18,191	18,230	18,273	18,315	18,359
Civilian labor force	10,970	11,110	11,335	10,503	10,748	10,901	10,838	10,826	10,867
Participation rate	61.6	60.7	61.7	58.9	59.1	59.8	59.3	59.1	59.2
Employed	9,380	9,473	9,752	9,093	9,407	9,488	9,511	9,382	9,466
Unemployed	1,590	1,637	1,584	1,410	1,341	1,412	1,327	1,444	1,401
Unemployment rate	16.5	14.7	14.0	13.4	12.5	13.0	12.2	13.3	12.9
Not in labor force	6,850	7,205	7,024	7,317	7,443	7,329	7,435	7,489	7,492

¹ Seasonal variations are not present in the population figures; therefore, identical numbers appear in the unadjusted and seasonally adjusted columns.

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Table A-2. Major unemployment indicators, seasonally adjusted

Selected categories	Number of unemployed persons (In thousands)		Unemployment rates					
	July 1975	July 1976	July 1975	Dec. 1976	Apr. 1976	May 1976	June 1976	July 1976
Total, 16 years and over	8,096	7,426	8.7	7.5	7.5	7.1	7.5	7.8
Males, 20 years and over	1,662	1,159	7.1	5.6	5.6	5.6	6.0	6.1
Females, 20 years and over	2,664	2,625	8.0	7.3	7.3	6.8	7.1	7.6
Both sexes, 16-19 years	1,810	1,662	20.5	19.1	19.2	18.5	18.4	18.1
White, total	6,689	6,018	8.1	6.8	6.7	6.6	6.8	7.1
Males, 20 years and over	1,057	2,422	6.	5.1	4.9	5.1	5.4	5.7
Females, 20 years and over	2,155	2,069	7.5	6.8	6.7	6.2	6.5	6.9
Both sexes, 16-19 years	1,477	1,327	18.6	17.2	16.6	16.3	16.1	16.3
Black and other, total	1,410	1,401	13.4	12.5	13.0	12.2	13.3	12.9
Males, 20 years and over	608	551	11.6	10.1	10.0	9.2	10.7	10.3
Females, 20 years and over	474	518	11.0	10.1	10.9	10.4	11.3	11.7
Both sexes, 16-19 years	328	310	35.3	35.9	39.2	38.5	40.3	34.1
Household heads, total	1,261	2,411	6.1	5.0	4.8	4.8	5.1	5.4
Males	2,621	2,311	5.8	6.5	6.5	6.6	6.8	6.9
With relatives	2,193	1,813	5.4	6.0	3.9	4.0	6.3	6.5
Without relatives	428	418	9.5	8.8	9.3	8.1	8.9	8.6
Females	660	659	3.8	7.3	6.8	6.3	6.7	7.7
With relatives	410	414	10.1	9.6	9.3	8.6	9.2	10.0
Without relatives	230	245	5.4	5.4	6.7	4.1	6.4	5.5
Married men, spouse present	2,206	1,786	5.5	6.1	3.9	4.0	4.4	4.5
Full-time workers	6,653	5,902	8.5	7.0	7.0	6.8	7.4	7.3
Part-time workers	1,396	1,537	9.9	10.3	10.7	10.2	9.0	10.7
Unemployed 15 weeks and over ¹	2,954	2,317	3.2	2.4	2.2	2.1	2.3	2.4
Labor force time lost ²	--	--	8.9	8.2	8.2	8.1	7.7	7.9
OCCUPATION³								
White-collar workers	2,144	2,193	4.8	4.6	4.8	4.6	4.4	4.8
Professional and technical	468	431	3.5	3.5	3.6	3.2	2.9	3.1
Managers and administrators, except farm	266	329	3.0	2.9	2.8	3.2	3.1	3.5
Sales workers	301	309	5.1	5.0	6.0	4.8	5.1	5.4
Clerical workers	1,109	1,124	6.8	6.1	7.0	6.6	6.1	6.7
Blue-collar workers	3,887	3,098	12.3	9.1	9.0	9.0	9.3	9.6
Craft and kindred workers	1,132	907	4.3	6.7	7.0	6.2	7.3	7.4
Operatives	1,969	1,527	13.4	9.8	9.3	9.5	9.8	10.1
Nonfarm laborers	786	664	16.0	12.9	13.2	14.0	12.7	13.2
Service workers	1,073	1,125	8.4	8.6	8.1	8.1	8.6	8.5
Farm workers	92	136	3.0	5.0	4.8	5.0	4.1	4.5
INDUSTRY³								
Nonagricultural private wage and salary workers ⁴	6,298	5,504	9.4	7.7	7.6	7.6	7.8	8.0
Construction	914	790	20.4	16.0	15.3	14.1	13.0	12.7
Manufacturing	2,400	1,656	11.5	7.1	7.6	7.3	7.6	7.8
Durable goods	1,494	924	12.1	7.4	7.7	7.4	7.5	7.3
Nondurable goods	906	727	10.6	7.1	7.6	7.3	7.7	8.4
Transportation and public utilities	268	245	5.6	6.5	6.1	5.3	5.2	5.2
Wholesale and retail trade	1,429	1,499	8.4	8.7	8.1	8.1	8.2	8.5
Finance and service industries	1,235	1,271	6.5	6.1	6.2	6.4	6.3	6.4
Government workers	635	712	4.1	6.5	5.0	4.8	4.2	4.5
Agricultural wage and salary workers	137	184	9.3	11.8	11.6	13.1	10.9	12.4
VETERAN STATUS								
Males, Vietnamera veterans⁵:								
20 to 34 years	587	511	9.7	7.0	6.7	7.3	8.8	8.4
20 to 24 years	185	190	18.3	15.6	14.7	14.7	19.6	20.0
25 to 29 years	250	210	6.5	6.7	6.7	6.6	7.9	6.8
30 to 34 years	152	111	6.8	4.8	3.7	5.1	5.5	5.7
Males, nonveterans:								
20 to 34 years	1,520	1,323	10.6	8.3	7.9	7.9	7.8	8.7
20 to 24 years	923	729	14.4	11.8	10.8	10.9	10.5	10.9
25 to 29 years	370	403	8.8	6.0	6.0	6.0	6.4	8.3
30 to 34 years	227	191	6.1	6.9	5.0	4.8	4.9	5.3

¹ Unemployment rate calculated as a percent of civilian labor force.² Adequate 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 Vietnamera veterans are those who served between August 5, 1964, and April 30, 1975.

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Table A-3. Selected employment indicators

Selected categories	Not seasonally adjusted		Seasonally adjusted					
	July 1975	July 1976	July 1975	Mar. 1976	Apr. 1976	May 1976	June 1976	July 1976
Total employed, 16 years and over	86,650	89,608	84,967	86,692	87,344	87,697	87,500	87,907
Males	53,000	54,264	51,280	51,964	52,490	52,554	52,243	52,501
Females	33,650	35,344	33,687	34,728	34,854	35,143	35,257	35,406
Household heads	50,291	51,156	50,191	50,789	51,165	51,200	51,163	51,054
Married men, spouse present	38,072	38,261	37,966	38,087	38,205	38,215	38,090	38,167
Married women, spouse present	18,845	19,624	19,584	20,001	20,071	20,280	20,337	20,399
OCCUPATION								
White-collar workers	62,110	63,179	62,405	63,458	63,433	63,792	63,763	63,681
Professional and technical	12,362	12,712	12,937	13,204	13,004	13,262	13,439	13,297
Managers and administrators, except farm	8,861	9,298	8,725	9,300	9,187	9,700	9,257	9,179
Sales workers	5,607	5,473	5,567	5,398	5,488	5,562	5,552	5,435
Clerical workers	15,299	15,695	15,176	15,556	15,554	15,768	15,555	15,500
Blue-collar workers	24,100	26,634	27,802	28,545	29,110	29,115	29,166	29,279
Craft and kindred workers	11,610	11,816	10,977	11,030	11,161	11,269	11,238	11,372
Operatives	12,827	13,679	12,584	11,191	11,508	13,516	13,690	13,530
Nonfarm laborers	4,863	5,139	4,141	4,324	4,461	4,133	4,238	4,372
Service workers	11,881	12,416	11,661	11,781	11,858	11,981	12,028	12,185
Farm workers	3,360	3,379	3,023	2,712	2,922	2,833	2,802	2,878
MAJOR INDUSTRY AND CLASS OF WORKER								
Agriculture:								
Wage and salary workers	1,718	1,665	1,362	1,117	1,388	1,296	1,294	1,301
Self-employed workers	1,829	1,905	1,717	1,568	1,661	1,672	1,670	1,695
Unpaid family workers	563	461	600	284	394	359	361	340
Nonagricultural industries:								
Wage and salary workers	76,330	79,425	75,363	77,376	77,814	78,134	78,098	78,390
Private households	1,367	1,453	1,320	1,308	1,351	1,294	1,415	1,436
Government	14,228	14,478	14,751	14,490	14,796	14,850	14,894	14,988
Other	60,735	63,494	59,270	61,088	61,687	61,990	61,789	61,966
Self-employed workers	5,803	5,807	5,645	5,594	5,608	5,778	5,657	5,669
Unpaid family workers	427	445	415	464	463	460	451	432
PERSONS AT WORK¹								
Nonagricultural industries	70,508	74,347	75,187	78,167	77,413	79,056	79,497	79,189
Full-time schedules	58,203	62,257	61,015	64,328	63,708	66,947	64,860	65,259
Part time for economic reasons	4,053	3,803	3,277	3,266	3,248	3,382	3,080	3,012
Usually work full time	1,443	1,191	1,526	1,270	1,362	1,457	1,307	1,259
Usually work part time	2,610	2,612	1,751	2,036	1,906	1,925	1,773	1,753
Part time for noneconomic reasons	8,252	8,287	10,875	10,573	10,457	10,727	11,557	10,918

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

Weeks of unemployment	Not seasonally adjusted		Seasonally adjusted					
	July 1975	July 1976	July 1975	Mar. 1976	Apr. 1976	May 1976	June 1976	July 1976
Less than 5 weeks	2,981	3,066	2,868	2,609	2,479	2,855	2,618	2,951
5 to 14 weeks	2,536	2,601	2,141	1,905	1,883	1,947	2,261	2,028
15 weeks and over	2,692	2,111	2,956	2,294	2,035	1,998	2,215	2,117
15 to 26 weeks	1,220	805	1,600	903	669	810	914	1,116
27 weeks and over	1,472	1,306	1,356	1,391	1,366	1,168	1,301	1,201
Average (mean) duration, in weeks	14.2	14.9	15.1	15.8	15.7	15.0	16.9	15.8
PERCENT DISTRIBUTION								
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 5 weeks	36.3	40.5	36.0	38.3	43.2	42.0	36.9	40.4
5 to 14 weeks	10.9	31.7	26.9	28.0	27.3	28.6	31.9	27.8
15 weeks and over	32.8	27.4	37.1	33.7	29.5	29.4	31.2	31.8
15 to 26 weeks	14.9	10.6	20.1	13.3	9.7	12.2	12.9	15.3
27 weeks and over	17.9	17.2	17.0	20.4	19.8	17.2	18.3	16.5

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Table A-5. Reasons for unemployment

Reason	Not seasonally adjusted		Seasonally adjusted					
			July	Mar.	Apr.	May	June	July
	1975	1976	1975	1976	1976	1976	1976	1976
NUMBER OF UNEMPLOYED								
Lost last job	4,302	3,505	4,715	3,502	3,499	3,461	3,623	3,043
Left last job	845	1,000	815	760	831	881	882	964
Reentered labor force	1,895	1,945	1,808	1,857	1,833	1,781	1,795	1,856
Seeking first job	1,168	1,128	835	853	894	856	805	795
PERCENT DISTRIBUTION								
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Job losers	52.4	46.3	57.7	50.2	49.6	49.6	51.0	51.5
Job leavers	10.3	13.2	10.0	10.9	11.8	12.6	12.4	12.9
Reentrants	23.1	25.7	22.1	26.6	26.0	25.5	25.3	24.9
New entrants	14.2	14.9	10.2	12.2	12.7	12.3	11.3	10.7
UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE								
Job losers	4.5	3.6	5.1	3.7	3.7	3.7	3.8	4.0
Job leavers .....	.9	1.0	.9	.8	.9	.9	.9	1.0
Reentrants	2.0	2.0	1.9	2.0	1.9	1.9	1.9	1.9
New entrants	1.2	1.2	.9	.9	.9	.9	.9	.8

Table A-6. Unemployment by sex and age

Sex and age	Not seasonally adjusted			Seasonally adjusted unemployment rates					
	Thousands of persons		Percent looking for full-time work	July 1975	Mar. 1976	Apr. 1976	May 1976	June 1976	July 1976
	July 1975	July 1976							
Total, 16 years and over	8,209	7,577	82.4	8.7	7.5	7.5	7.3	7.5	7.8
16 to 19 years	2,176	2,008	67.2	20.5	19.1	19.2	18.5	18.4	18.1
16 to 17 years	1,026	1,028	54.3	21.5	20.0	20.8	21.9	21.5	20.8
18 to 19 years	1,150	981	80.7	19.4	18.6	18.2	16.4	15.6	15.9
20 to 24 years	1,942	1,656	90.2	13.7	12.1	11.8	11.1	11.4	11.2
25 years and over	4,090	3,912	87.0	6.3	5.1	5.1	5.0	5.5	5.9
25 to 54 years	3,461	3,287	89.2	6.7	5.2	5.3	5.3	5.7	6.1
55 years and over	629	625	75.0	4.8	4.8	4.6	4.2	4.7	4.8
Males, 16 years and over	4,579	4,014	86.6	8.3	6.8	6.7	6.8	7.0	7.2
16 to 19 years	1,208	1,089	67.7	21.1	19.3	20.1	19.4	18.5	18.4
16 to 17 years	600	575	55.7	22.4	20.8	21.5	23.1	21.3	21.0
18 to 19 years	608	514	81.1	19.8	18.4	19.1	16.9	15.9	16.4
20 to 24 years	1,112	917	93.1	14.9	12.0	11.2	11.3	11.7	11.9
25 years and over	2,259	2,008	93.8	5.8	4.5	4.5	4.4	5.0	5.1
25 to 54 years	1,899	1,684	96.2	6.1	4.3	4.6	4.5	5.1	5.4
55 years and over	359	323	81.7	4.5	5.0	4.4	4.4	4.8	4.2
Females, 16 years and over	3,631	3,563	77.7	9.3	8.6	8.5	8.0	8.3	8.7
16 to 19 years	969	920	66.6	19.7	18.9	18.1	17.5	18.2	17.8
16 to 17 years	427	453	52.5	20.3	19.1	19.9	20.5	21.6	20.7
18 to 19 years	542	467	80.3	18.8	18.8	17.1	15.9	15.3	15.3
20 to 24 years	831	739	86.5	12.2	12.2	12.6	10.8	11.0	10.4
25 years and over	1,831	1,904	79.7	7.1	6.2	6.1	6.0	6.3	7.1
25 to 54 years	1,562	1,602	82.0	7.5	6.5	6.5	6.4	6.7	7.3
55 years and over	269	302	67.9	5.2	4.5	4.9	4.0	4.5	5.8

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

Industry	Not seasonally adjusted				Seasonally adjusted					
	July 1975	May 1976	June 1976 ^P	July 1976 ^P	July 1975	Mar. 1976	Apr. 1976	May 1976	June 1976 ^P	July 1976 ^P
TOTAL	76 439	79 115	79 760	78 817	76 679	78 630	78 963	78 923	78 900	79 121
GOODS-PRODUCING	22, 370	23, 033	23, 415	23, 179	22, 222	23, 013	23, 144	23, 123	23, 073	23, 081
MINING	758	775	796	806	743	770	772	773	780	790
CONTRACT CONSTRUCTION	3, 605	3, 386	3, 516	3, 568	3, 395	3, 366	3, 399	3, 386	3, 355	3, 360
MANUFACTURING	18, 007	18, 872	19, 103	18, 805	18, 084	18, 877	18, 973	18, 964	18, 938	18, 931
<i>Production workers</i>	12, 744	13, 571	13, 764	13, 452	12, 840	13, 577	13, 668	13, 656	13, 620	13, 599
DURABLE GOODS	10, 425	11, 034	11, 165	10, 938	10, 465	10, 937	11, 000	11, 046	11, 050	11, 024
<i>Production workers</i>	7, 301	7, 890	7, 998	7, 761	7, 348	7, 795	7, 858	7, 900	7, 894	7, 858
Ordnance and accessories	172. 0	157. 9	157. 4	155. 9	172	161	161	161	158	156
Lumber and wood products	573. 9	600. 1	624. 1	623. 5	557	596	597	600	603	605
Furniture and fixtures	432. 7	490. 9	494. 6	481. 5	441	487	492	495	491	491
Stone, clay, and glass products	615. 1	628. 0	640. 7	641. 8	604	616	624	626	627	630
Primary metal industries	1, 138. 3	1, 194. 5	1, 214. 9	1, 205. 8	1, 134	1, 173	1, 181	1, 187	1, 197	1, 201
Fabricated metal products	1, 286. 2	1, 385. 1	1, 401. 0	1, 364. 1	1, 298	1, 381	1, 389	1, 391	1, 389	1, 376
Machinery, except electrical	2, 005. 0	2, 063. 7	2, 079. 1	2, 056. 4	2, 017	2, 049	2, 054	2, 064	2, 063	2, 069
Electrical equipment	1, 702. 0	1, 822. 3	1, 841. 7	1, 808. 0	1, 712	1, 818	1, 828	1, 833	1, 833	1, 819
Transportation equipment	1, 623. 2	1, 755. 2	1, 762. 3	1, 676. 2	1, 645	1, 726	1, 739	1, 748	1, 748	1, 743
Instruments and related products	481. 3	510. 6	517. 2	510. 6	482	505	510	512	514	512
Miscellaneous manufacturing	395. 5	425. 6	431. 5	414. 1	403	425	425	429	427	422
NONDURABLE GOODS	7, 582	7, 838	7, 938	7, 867	7, 619	7, 940	7, 973	7, 918	7, 888	7, 907
<i>Production workers</i>	5, 443	5, 681	5, 766	5, 691	5, 492	5, 782	5, 810	5, 756	5, 726	5, 741
Food and kindred products	1, 703. 4	1, 652. 0	1, 698. 4	1, 752. 0	1, 668	1, 695	1, 707	1, 712	1, 707	1, 716
Tobacco manufactures	72. 0	67. 7	67. 8	70. 6	79	75	75	75	75	77
Textile mill products	884. 7	971. 9	979. 8	967. 9	897	964	972	973	967	982
Apparel and other textile products	1, 191. 4	1, 318. 8	1, 329. 6	1, 255. 9	1, 245	1, 322	1, 317	1, 315	1, 314	1, 312
Paper and allied products	632. 9	672. 3	680. 0	671. 3	633	671	674	678	672	671
Printing and publishing	1, 065. 2	1, 076. 1	1, 075. 7	1, 067. 0	1, 068	1, 075	1, 077	1, 079	1, 074	1, 070
Chemicals and allied products	1, 006. 8	1, 028. 0	1, 038. 0	1, 038. 9	999	1, 030	1, 033	1, 031	1, 029	1, 031
Petroleum and coal products	204. 6	202. 8	205. 6	207. 3	199	204	204	203	202	202
Rubber and plastics products, nec.	571. 0	568. 7	580. 1	569. 0	575	627	634	573	573	573
Leather and leather products	249. 8	280. 0	283. 0	267. 0	256	277	280	279	275	273
SERVICE-PRODUCING	54, 069	56, 082	56, 345	55, 638	54, 457	55, 617	55, 819	55, 800	55, 827	56, 040
TRANSPORTATION AND PUBLIC UTILITIES	4, 504	4, 494	4, 541	4, 536	4, 464	4, 498	4, 510	4, 498	4, 487	4, 496
WHOLESALE AND RETAIL TRADE	16, 936	17, 405	17, 544	17, 468	16, 984	17, 386	17, 444	17, 439	17, 452	17, 518
WHOLESALE TRADE	4, 190	4, 228	4, 280	4, 290	4, 161	4, 236	4, 255	4, 262	4, 254	4, 260
RETAIL TRADE	12, 746	13, 177	13, 264	13, 178	12, 823	13, 150	13, 189	13, 177	13, 198	13, 258
FINANCE, INSURANCE, AND REAL ESTATE	4, 266	4, 278	4, 347	4, 370	4, 203	4, 276	4, 293	4, 278	4, 300	4, 305
SERVICES	14, 144	14, 616	14, 745	14, 734	13, 990	14, 422	14, 498	14, 514	14, 527	14, 574
GOVERNMENT	14, 219	15, 289	15, 168	14, 530	14, 816	15, 035	15, 074	15, 071	15, 061	15, 147
FEDERAL	2, 800	2, 735	2, 758	2, 773	2, 745	2, 732	2, 730	2, 727	2, 725	2, 719
STATE AND LOCAL	11, 419	12, 554	12, 410	11, 757	12, 071	12, 303	12, 344	12, 344	12, 336	12, 428

^Ppreliminary.

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Table B-2. Average weekly hours of production or nonsupervisory workers¹ on private nonagricultural payrolls, by industry

Industry	Not seasonally adjusted				Seasonally adjusted					
	July 1975	May 1976	June 1976P	July 1976P	July 1975	Mar. 1976	Apr. 1976	May 1976	June 1976P	July 1976P
TOTAL PRIVATE	36.4	36.1	36.4	36.6	36.0	36.2	36.1	36.2	36.1	36.2
MINING	42.3	42.5	42.7	42.6	42.1	42.8	42.6	42.5	42.2	42.4
CONTRACT CONSTRUCTION	37.3	37.2	37.9	37.7	36.2	35.9	37.5	37.2	37.1	36.6
MANUFACTURING	39.2	40.2	40.4	39.9	39.4	40.2	39.4	40.2	40.2	40.1
Overtime hours	2.5	3.1	3.2	3.0	2.6	3.2	2.5	3.2	3.1	3.1
DURABLE GOODS	39.5	40.9	41.0	40.3	39.8	40.6	39.7	40.9	40.7	40.6
Overtime hours	2.4	3.3	3.3	3.1	2.5	3.1	2.5	3.3	3.2	3.2
Ordnance and accessories	39.7	40.7	41.2	40.7	40.1	40.8	39.6	40.8	41.1	41.1
Lumber and wood products	39.0	40.4	40.7	39.3	39.1	39.9	40.0	40.1	39.9	39.4
Furniture and fixtures	37.5	38.6	38.9	38.5	37.8	39.0	38.4	38.9	38.5	38.8
Stone, clay, and glass products	40.8	41.5	41.7	41.5	40.6	40.7	41.0	41.3	41.2	41.3
Primary metal industries	39.5	40.9	41.4	41.2	39.7	40.5	40.4	40.9	41.2	41.4
Fabricated metal products	39.3	41.0	41.2	40.4	39.5	40.9	39.6	40.9	40.8	40.6
Machinery, except electrical	39.9	41.0	41.2	40.8	40.5	41.0	40.2	41.1	41.1	41.4
Electrical equipment	38.9	40.2	40.2	39.4	39.5	40.1	39.2	40.2	40.0	40.0
Transportation equipment	40.7	42.5	42.6	41.1	40.7	42.1	40.6	42.2	42.2	41.1
Instruments and related products	39.2	40.7	40.6	40.4	39.7	40.5	39.6	40.8	40.6	40.9
Miscellaneous manufacturing	37.6	38.7	38.7	38.2	38.1	38.8	38.0	38.7	38.6	38.5
NONDURABLE GOODS	38.9	39.4	39.5	39.3	38.8	39.5	38.7	39.5	39.3	39.2
Overtime hours	2.8	3.0	3.0	3.0	2.8	3.2	2.6	3.1	2.9	3.0
Food and kindred products	40.5	40.0	40.4	40.6	40.1	40.2	40.0	40.2	40.2	40.2
Tobacco manufactures	34.7	38.1	38.4	34.1	35.4	39.3	39.0	38.4	38.6	34.8
Textile mill products	39.4	40.5	40.7	40.2	39.6	40.7	39.0	40.7	40.3	40.4
Apparel and other textile products	35.3	35.8	36.0	35.5	35.2	36.2	34.9	35.9	36.0	35.4
Paper and allied products	41.6	42.5	42.7	42.3	41.6	42.5	41.8	42.8	42.6	42.3
Printing and publishing	36.7	37.5	37.5	37.6	36.7	37.4	37.1	37.5	37.4	37.6
Chemicals and allied products	40.8	41.6	41.5	41.5	40.9	41.5	41.5	41.6	41.3	41.6
Petroleum and coal products	41.8	42.2	42.4	42.6	41.3	42.4	42.2	42.2	42.1	42.1
Rubber and plastics products, nec.	39.6	40.5	40.6	40.1	40.0	41.0	39.4	40.7	40.4	40.5
Leather and leather products	38.2	38.4	37.9	37.5	37.8	38.6	37.5	38.1	37.2	37.1
TRANSPORTATION AND PUBLIC UTILITIES	39.9	39.5	39.7	40.1	39.4	39.9	40.0	39.6	39.5	39.6
WHOLESALE AND RETAIL TRADE	34.5	33.5	33.9	34.5	33.6	33.7	33.9	33.8	33.6	33.6
WHOLESALE TRADE	38.7	38.8	38.9	39.0	38.5	38.7	38.9	38.9	38.7	38.8
RETAIL TRADE	33.3	31.9	32.4	33.1	32.2	32.2	32.5	32.3	32.0	32.0
FINANCE, INSURANCE, AND REAL ESTATE	36.4	36.7	36.5	36.7	36.3	36.5	36.6	36.8	36.5	36.6
SERVICES	34.3	33.4	33.6	34.0	33.7	33.5	33.5	33.7	33.4	33.4

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

ESTABLISHMENT DATA

ESTABLISHMENT DATA

Table B-3. Average hourly and weekly earnings of production or nonsupervisory workers¹ on private nonagricultural payrolls, by industry

Industry	Average hourly earnings				Average weekly earnings			
	July 1975	May 1976	June 1976 ^P	July 1976 ^P	July 1975	May 1976	June 1976 ^P	July 1976 ^P
TOTAL PRIVATE.....	\$4.53	\$4.82	\$4.84	\$4.85	\$164.89	\$174.00	\$176.18	\$177.51
Seasonally adjusted.....	4.54	4.83	4.84	4.86	163.44	174.85	174.72	175.93
MINING.....	5.88	6.35	6.32	6.36	248.72	269.88	269.86	270.94
CONTRACT CONSTRUCTION.....	7.24	7.61	7.61	7.67	270.05	283.09	288.42	289.16
MANUFACTURING.....	4.61	5.12	5.15	5.17	188.55	205.82	208.06	206.28
DURABLE GOODS.....	5.13	5.49	5.52	5.52	202.64	224.54	226.32	222.46
Ordnance and accessories.....	5.22	5.64	5.63	5.67	207.23	229.55	231.96	230.77
Lumber and wood products.....	4.31	4.61	4.75	4.71	168.09	186.24	193.33	185.10
Furniture and fixtures.....	3.74	3.93	3.95	3.95	140.25	151.70	153.66	152.08
Stone, clay, and glass products.....	4.93	5.26	5.29	5.34	201.14	218.29	220.59	221.61
Primary metal industries.....	6.11	6.73	6.77	6.77	241.35	275.26	280.28	278.92
Fabricated metal products.....	5.04	5.40	5.43	5.40	198.07	221.40	223.72	218.16
Machinery, except electrical.....	5.33	5.69	5.71	5.74	212.67	233.29	235.25	234.19
Electrical equipment.....	4.61	4.82	4.83	4.88	179.33	193.76	194.17	192.27
Transportation equipment.....	6.00	6.48	6.52	6.47	244.20	275.40	277.75	265.92
Instruments and related products.....	4.56	4.81	4.82	4.87	178.75	195.77	195.69	196.75
Miscellaneous manufacturing.....	3.79	3.99	3.99	3.99	143.26	154.41	154.41	152.42
NONDURABLE GOODS.....	4.36	4.59	4.62	4.68	169.60	180.85	182.49	183.92
Food and kindred products.....	4.55	4.90	4.93	4.96	184.28	196.00	199.17	201.38
Tobacco manufactures.....	4.62	5.13	5.23	5.07	160.31	195.45	200.83	172.89
Textile mill products.....	3.34	3.57	3.59	3.69	131.60	144.59	146.11	148.34
Apparel and other textile products.....	3.16	3.38	3.40	3.36	111.55	121.00	122.40	119.28
Paper and allied products.....	5.05	5.31	5.38	5.48	210.08	225.68	229.73	231.80
Printing and publishing.....	5.41	5.66	5.65	5.67	198.55	212.25	211.88	213.19
Chemicals and allied products.....	5.42	5.79	5.83	5.91	221.14	240.86	241.95	245.27
Petroleum and coal products.....	6.51	7.11	7.12	7.15	272.12	300.04	301.89	304.59
Rubber and plastics products, nec.....	4.42	4.36	4.37	4.40	175.01	176.58	177.42	176.44
Leather and leather products.....	3.22	3.42	3.43	3.41	123.00	131.33	130.00	127.88
TRANSPORTATION AND PUBLIC UTILITIES.....	5.89	6.39	6.44	6.44	235.01	252.41	255.67	258.24
WHOLESALE AND RETAIL TRADE.....	3.73	3.95	3.95	3.99	128.69	132.33	133.91	137.66
WHOLESALE TRADE.....	4.88	5.15	5.14	5.16	188.86	199.82	199.95	201.24
RETAIL TRADE.....	3.33	3.52	3.53	3.58	110.89	112.29	114.37	118.50
FINANCE, INSURANCE, AND REAL ESTATE.....	4.13	4.36	4.34	4.40	150.33	160.01	158.41	161.48
SERVICES.....	4.03	4.34	4.32	4.31	138.23	144.96	145.15	146.54

¹ See footnote 1, table B-2.

P-preliminary.

ESTABLISHMENT DATA

ESTABLISHMENT DATA

Table B-4. Hourly earnings index for production or nonsupervisory workers¹ on private nonagricultural payrolls, by industry division, seasonally adjusted

1967=100

Industry	July 1975	Feb. 1976	Mar. 1976	Apr. 1976	May 1976	June P 1976	July P 1976	Percent change from	
								July 1975- July 1976	June 1976- July 1976
TOTAL PRIVATE NONFARM:									
Current dollars	173.1	180.8	181.4	182.2	183.7	184.5	185.6	7.3	0.6
Constant (1967) dollars	106.7	108.1	108.2	108.3	108.5	108.5	N.A.	(2)	(3)
MINING	184.0	193.6	194.8	195.9	197.6	198.8	198.4	7.8	.3
CONTRACT CONSTRUCTION	177.4	180.1	183.4	183.2	185.1	186.3	187.6	5.7	.7
MANUFACTURING	172.2	179.8	180.7	181.8	182.4	183.5	184.7	7.3	.7
TRANSPORTATION AND PUBLIC UTILITIES	182.0	192.1	194.8	195.5	198.5	200.0	199.2	9.5	-4
WHOLESALE AND RETAIL TRADE	168.3	174.4	174.9	175.7	177.3	177.3	179.8	6.8	1.4
FINANCE, INSURANCE, AND REAL ESTATE	161.5	168.3	168.3	169.0	170.4	170.2	172.2	6.6	1.2
SERVICES	175.8	185.4	185.2	186.5	188.2	188.7	188.6	7.3	-1

¹ See footnote 1, table B-2.² Percent change was 1.1 from June 1975 to June 1976, the latest month available.³ Percent change was -0.1 from May 1976 to June 1976, the latest month available.

N.A. = not available.

P=preliminary.

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

Table B-5. Indexes of aggregate weekly hours of production or nonsupervisory workers¹ on private nonagricultural payrolls, by industry, seasonally adjusted

1967=100

Industry division and group	1975						1976						
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June ²	July ³
TOTAL	106.2	107.4	107.9	108.4	108.8	109.3	110.3	110.5	110.2	110.7	111.2	110.5	110.5
GOODS-PRODUCING	89.3	91.2	92.4	92.7	92.9	94.3	95.5	95.2	94.8	94.5	96.0	95.4	95.0
MINING	118.8	118.6	119.9	125.0	124.7	125.7	125.2	124.4	124.8	124.9	124.4	125.0	127.5
CONTRACT CONSTRUCTION	96.2	98.3	98.6	97.3	97.7	98.8	100.3	98.3	98.4	98.8	97.8	96.7	95.9
MANUFACTURING	87.1	89.0	90.3	90.8	90.9	92.5	93.7	93.6	94.0	92.7	94.7	94.2	93.8
DURABLE GOODS	84.9	86.7	87.7	87.8	88.1	90.0	91.3	91.3	92.0	91.0	93.6	93.4	92.7
Ordnance and accessories	44.7	43.7	43.0	42.9	40.8	41.5	41.6	40.9	41.0	40.3	41.0	40.7	40.2
Lumber and wood products	86.7	88.8	90.1	92.1	90.8	93.4	97.0	96.4	95.2	95.8	96.4	96.2	95.3
Furniture and fixtures	88.7	92.6	97.4	97.9	99.2	101.0	101.5	103.1	102.8	102.5	104.8	102.5	103.0
Stone, clay, and glass products	93.1	94.5	95.7	95.7	96.2	97.1	97.6	96.7	95.7	98.0	99.1	99.1	99.9
Primary metal industries	80.0	81.7	83.5	81.9	82.3	83.6	84.1	84.9	85.3	85.8	87.4	88.9	89.9
Fabricated metal products	86.7	90.9	92.0	92.8	92.7	94.6	95.7	96.6	97.3	95.0	98.3	97.8	96.0
Machinery, except electrical	90.4	91.0	91.8	91.9	92.0	92.5	93.4	93.2	93.3	91.6	94.3	94.0	94.3
Electrical equipment and supplies	81.6	84.3	84.9	85.8	85.5	87.5	89.0	89.2	90.3	89.2	91.9	91.5	90.3
Transportation equipment	82.0	82.9	82.2	81.5	83.1	87.3	89.0	88.2	90.8	88.5	92.3	92.3	89.3
Instruments and related products	98.1	97.2	99.4	100.8	101.7	103.4	105.0	105.2	106.1	105.7	109.9	109.4	110.9
Miscellaneous manufacturing, ind.	87.7	89.0	91.4	91.3	90.8	91.7	94.4	94.3	95.1	92.9	95.7	94.9	92.9
NONDURABLE GOODS	90.2	92.4	94.1	95.1	95.0	96.2	97.1	96.9	96.9	95.3	96.2	95.4	95.3
Food and kindred products	93.4	96.1	96.9	96.5	95.1	95.4	96.9	97.3	95.5	95.9	96.7	96.3	96.9
Tobacco manufactures	80.8	85.8	88.1	85.6	93.4	87.4	90.6	88.8	85.4	84.9	81.6	82.7	79.4
Textile mill products	88.5	93.0	96.4	98.1	98.0	99.1	99.7	99.0	98.6	95.2	99.5	97.7	99.6
Apparel and other textile products	84.6	85.3	87.8	90.0	90.1	92.1	93.1	91.8	92.6	88.9	91.2	91.4	89.6
Paper and allied products	87.6	89.6	91.3	92.0	92.6	94.7	95.2	95.8	95.9	95.0	97.9	96.5	95.4
Printing and publishing	90.9	92.4	91.9	91.8	92.4	93.5	93.4	92.5	92.7	92.1	93.4	92.5	92.7
Chemicals and allied products	91.0	91.5	95.1	97.4	97.6	99.1	98.5	99.4	99.1	99.5	99.5	98.5	99.2
Petroleum and coal products	107.2	107.3	108.9	110.2	111.6	111.1	113.8	114.3	114.4	114.8	113.9	112.8	111.9
Rubber and plastics products, nec.	106.9	110.6	113.0	114.7	113.5	116.2	118.8	119.3	121.8	118.5	107.8	106.8	107.0
Leather and leather products	71.4	72.1	74.9	77.2	77.2	78.1	79.3	78.9	79.9	78.3	79.2	76.4	75.5
SERVICE-PRODUCING	118.0	118.7	118.7	119.3	119.8	119.7	120.6	121.0	120.9	121.9	121.7	120.9	121.3
TRANSPORTATION AND PUBLIC UTILITIES	100.3	100.5	101.1	101.2	101.5	101.7	101.5	102.7	102.5	102.9	101.4	101.0	101.4
WHOLESALE AND RETAIL TRADE	114.0	114.6	114.6	115.1	115.2	115.5	116.8	116.8	116.8	118.2	117.7	116.8	117.3
WHOLESALE TRADE	110.8	111.0	111.3	112.0	111.5	112.3	113.4	113.6	113.2	114.3	114.5	113.7	114.2
RETAIL TRADE	115.2	115.9	115.8	116.2	116.6	116.6	118.1	118.0	118.1	119.7	118.9	117.9	118.5
FINANCE, INSURANCE, AND REAL ESTATE	122.3	122.9	123.5	123.7	125.1	124.5	125.1	125.8	125.5	126.1	126.2	126.0	126.5
SERVICES	130.4	131.4	131.1	132.0	133.1	132.3	133.3	133.9	133.7	134.3	135.3	134.2	134.3

¹ See footnote 1, table B-2.

P=preliminary.

ESTABLISHMENT DATA

ESTABLISHMENT DATA

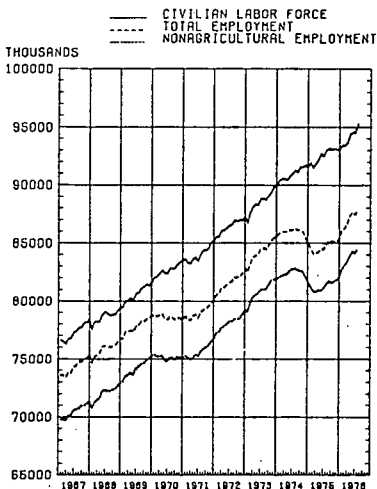
Table B-6. Indexes of diffusion: Percent of industries in which employment¹ increased

Year and month	Over 1-month span	Over 3-month span	Over 6-month span	Over 12-month span
1973				
January	76.7	84.0		
February	75.0	83.7	81.7	81.1
March	73.8	76.2	79.4	80.8
April	62.5	71.5	74.7	82.6
May	59.9	70.3	72.1	81.4
June	68.0	63.1	66.6	79.7
July	55.8	66.9	72.1	75.6
August	63.1	64.8	72.7	73.5
September	61.6	74.7	73.0	69.2
October	72.7	75.9	75.6	66.0
November	75.0	76.5	70.3	66.6
December	66.6	70.1	66.0	64.2
1974				
January	59.3	62.8	60.8	63.4
February	53.6	51.8	55.2	59.6
March	46.5	48.0	49.7	55.2
April	-47.1	48.3	48.5	50.3
May	55.2	51.7	49.7	40.1
June	53.2	52.6	45.6	28.2
July	52.3	45.1	37.2	27.0
August	45.9	39.2	31.1	22.4
September	36.0	40.4	23.3	20.9
October	37.8	28.8	17.7	18.6
November	20.1	21.5	17.2	16.6
December	18.6	13.4	13.1	14.0
1975				
January	18.6	12.5	13.4	16.6
February	16.6	13.7	13.1	17.4
March	25.0	19.2	16.3	17.4
April	40.4	35.8	27.9	20.9
May	53.8	40.4	40.1	25.9
June	40.4	48.5	60.8	40.4
July	55.2	55.8	67.4	50.3
August	73.5	80.2	67.4	62.5
September	81.7	81.4	76.5	71.2
October	64.8	70.3	79.4	75.9
November	54.7	68.9	82.0	79.1
December	66.6	72.7	75.6	80.5p
1976				
January	75.0	78.8	80.2	79.9p
February	70.1	81.7	77.9	
March	70.9	78.8	74.1p	
April	75.3	77.3	70.3p	
May	66.3	65.7p		
June	42.4p	55.5p		
July	58.7p			
August				
September				
October				
November				
December				

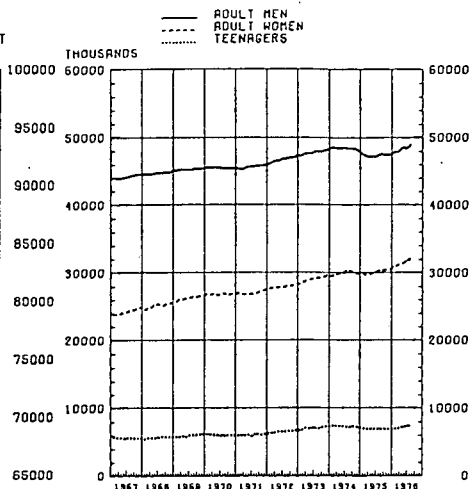
¹ Number of employees, seasonally adjusted, on payrolls of 172 private nonagricultural industries.
p = preliminary.

LABOR FORCE, EMPLOYMENT, UNEMPLOYMENT
HOUSEHOLD DATA - SEASONALLY ADJUSTED

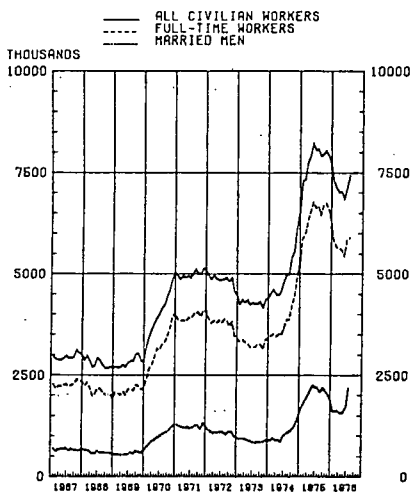
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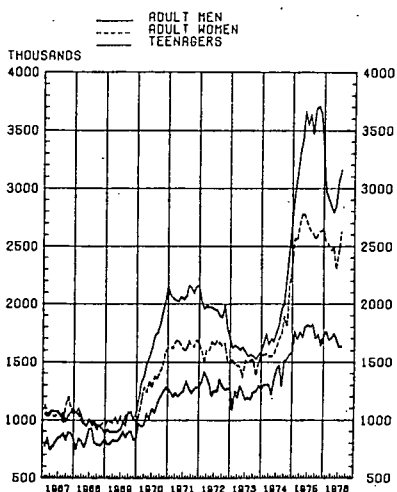
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3. UNEMPLOYMENT

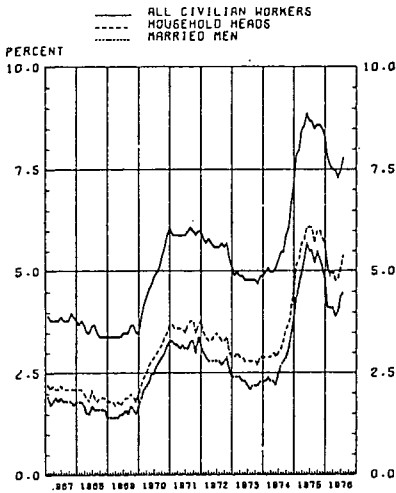


4. UNEMPLOYMENT

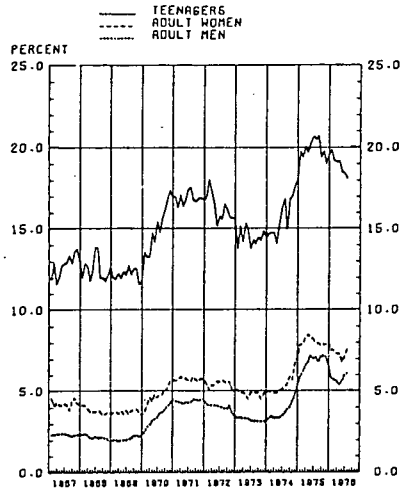


UNEMPLOYMENT RATES
HOUSEHOLD DATA - SEASONALLY ADJUSTED

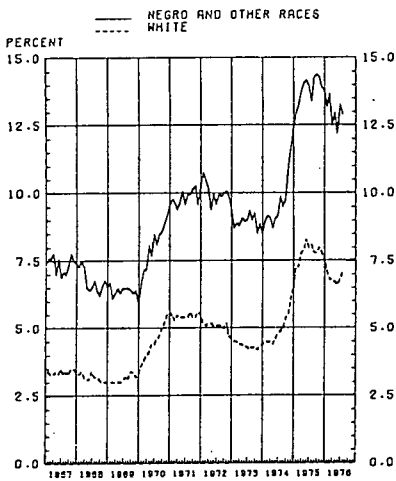
5. UNEMPLOYMENT RATES



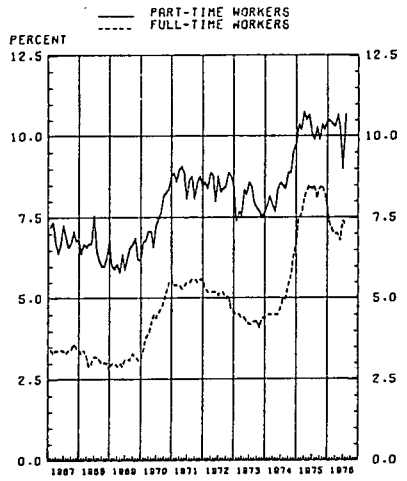
6. UNEMPLOYMENT RATES



7. UNEMPLOYMENT RATES

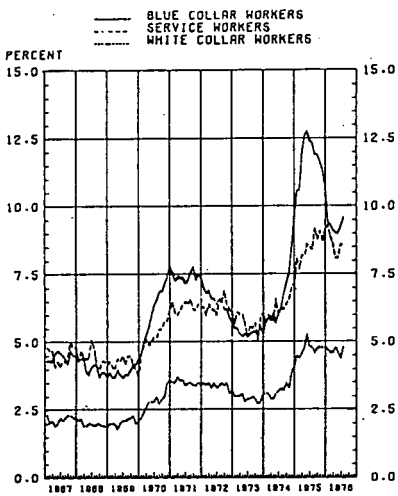


8. UNEMPLOYMENT RATES

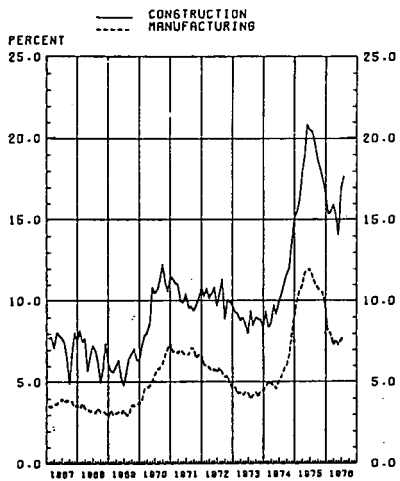


UNEMPLOYMENT
HOUSEHOLD DATA - SEASONALLY ADJUSTED

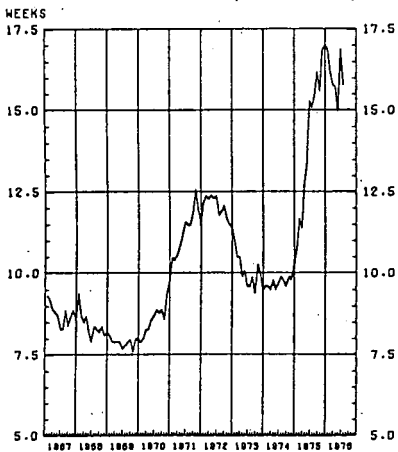
9. UNEMPLOYMENT RATES



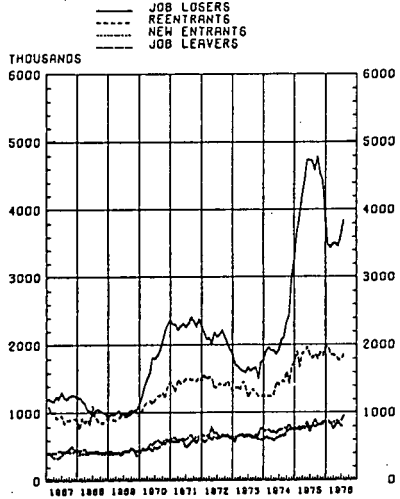
10. UNEMPLOYMENT RATES



11. AVERAGE DURATION OF UNEMPLOYMENT



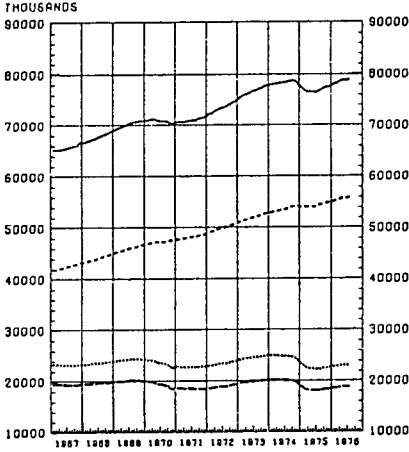
12. UNEMPLOYMENT BY REASON



NONAGRICULTURAL EMPLOYMENT AND HOURS
ESTABLISHMENT DATA - SEASONALLY ADJUSTED

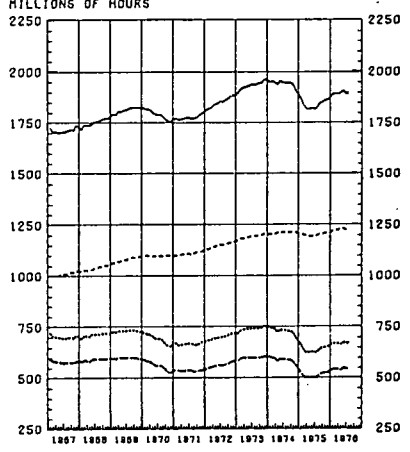
13. EMPLOYMENT

— TOTAL NONAGRICULTURAL
- - - SERVICE-PRODUCING
- · - · - GOODS-PRODUCING
- - - - - MANUFACTURING



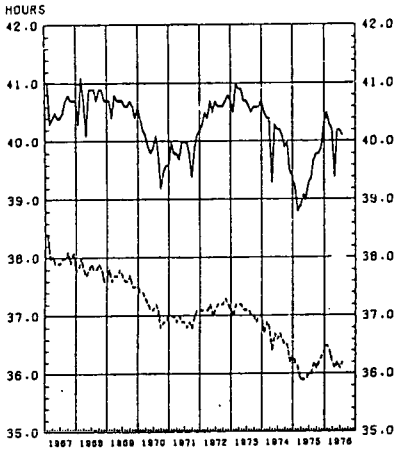
14. HOURS

— TOTAL PRIVATE NONAGRICULTURAL
- - - PRIVATE SERVICE-PRODUCING
- · - · - GOODS-PRODUCING
- - - - - MANUFACTURING

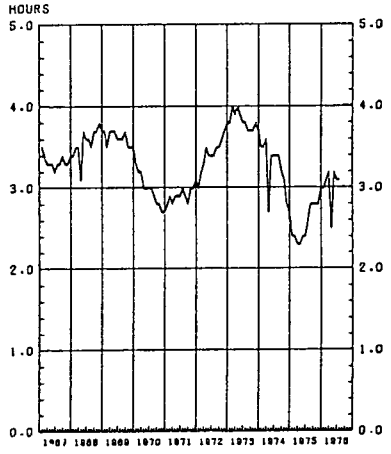


15. AVERAGE WEEKLY HOURS

— MANUFACTURING
- - - TOTAL PRIVATE



16. AVERAGE WEEKLY OVERTIME HOURS
IN MANUFACTURING



NOTE: Charts 14 and 15 relate to production or nonsupervisory workers; chart 16 relates to production workers. Data for the 2 most recent months are preliminary in charts 13-16.

Senator PROXMIRE. Thank you very much, Mr. Shiskin. We are especially grateful for your expert analysis on seasonal problems, which have been so difficult for us.

But of course this overall picture of yours is a bad one. Any time unemployment increases as much as it has in the last month, it is very bad news for the economy, not only psychologically, but just plain bad news.

What concerns me particularly is that we have had, No. 1, no improvement. We call this a recovery, we call this an expansion, whatever you want to call it. There has been no improvement in unemployment, really, since March of 1976, and maybe February 1976. The latest figures you have here are March of 1976, 7.5, April, 7.5, May 7.3, June 7.5, steady; now it has broken out to 7.8 percent. Now, that is the highest level in a long, long time. In how long, 10 months?

Mr. SHISKIN. Since January.

Senator PROXMIRE. Since January. Well, this is some kind of a recovery as far as unemployed people are concerned, when their unemployment is not improving, in fact is increasing.

Furthermore, as you point out, the distribution of unemployment is spread pretty much throughout the economy, it is not like we just have one bad sector, automobiles or construction, whatever; it is bad everywhere.

There has been an increase in job losers. We also have average weekly hours of work, which is an index of a pick-up not improving. So the recovery which the conventional wisdom indicated was proceeding, and some people thought it was healthy for it not to proceed too fast, they thought it was proceeding at a very good rate, seems to be interrupted here.

Now, I realize there has been an enormous increase in the participation rate, it has broken all records. More people are looking for work in relationship to the total population than ever before, and that is certainly a factor.

But, is there any other explanation you can give us for this situation? It seems to contradict what we all expected.

Mr. SHISKIN. Well, I think there is no doubt that the economy slowed down compared to the early months of the recovery. This is evident in many of our figures, not only the unemployment figures, it shows up in various other data that we have, including real GNP.

I think that is a very common phenomenon, as can be seen from table 6, that is, an economic expansion usually slows down after an initial burst of activity which usually lasts about a year or so. The spurt is associated with an inventory rebound, and then there is a slow-down.

Senator PROXMIRE. Can you recall a recovery period in which we had increases this substantial, proportionately, in the course of the recovery, or at this stage of the recovery?

Mr. SHISKIN. No, sir. The unemployment we have is very unusual, and I believe that there are two parallel trends developing in the economy. One is that we have an average expansion that is going along in most of the macroeconomic indicators about as expected. But we are also having exceptionally high unemployment. To look for an explanation of this apparent discrepancy you have to look at the new record being set on the labor force; there is a tremendous new development underway. A member of my staff uses an expression to describe

this phenomenon which I have recently adopted, that there is a "cultural revolution" going on. I think you have to look at that.

Senator PROXMIRE. It is likely that that is going to continue, so we have to modify Okun's law and everything else, to recognize that along with accommodating the increase in productivity and other elements here, there are going to be more and more people that are going to be working, or wanting to work, in relationship to the total population. That is another element we are going to have to encompass in our economic policy.

Mr. SHISKIN. Yes, I think the policymakers would be well advised to study the changes in the labor force very intensively; that is a problem.

I have with me a table—and I hope Senator Humphrey gets back to look at it—Bob, would you want to distribute this table you put together? It is really a very illuminating table.

Senator PROXMIRE. Well, while he is coming up, let me ask you this. It is true that the labor force and total employment grew strongly in July. In contrast with the other indicators that would indicate strength in the economy. However, looking at table A-5 of the BLS release on "Reasons for Unemployment," there is a kind of a different picture here. Since April the number of persons who have lost their last job has risen over 300,000. The number who left their last job voluntarily has risen over 100,000. The number of unemployed who are reentering the labor force remains about unchanged. The number of unemployed new entrants has actually dropped about 100,000. So, what looks like a real problem is that people are losing jobs.

Mr. SHISKIN. The data do show that more people have lost jobs since April, and that is a problem too.

Senator PROXMIRE. Well, what would be the explanation for that in a recovery?

Mr. SHISKIN. I don't know. I can only say, if this is helpful, we have had similar experiences in earlier recovery periods. The economy pauses for a few months and then resumes expanding. Hopefully, that will take place this time, too.

Senator PROXMIRE. Let's look at it from another standpoint. The apparent rise in unemployment also appears in the weekly information on insured unemployment.

Mr. SHISKIN. Right.

Senator PROXMIRE. After seasonal adjustments insured unemployment averaged 4.7 percent during the middle 2 weeks in July, 4.7 percent as compared to 4.5 percent in June and 4.2, or 4.3 percent from February through May. You had a steadily increasing proportion of people who have been unemployed during this period. Initial claims for unemployment insurance appeared to be on a rising trend. Now, why is that? Why are new claims for unemployment insurance going up in what is supposed to be an economic recovery?

Mr. SHISKIN. Well, I don't know, I cannot pinpoint that. Let me repeat what I just said, it is not uncommon—

Senator PROXMIRE. Well, it is uncommon for it to go up in a recovery, though, isn't it?

Mr. SHISKIN. No.

Senator PROXMIRE. It is not uncommon for unemployment to be going up in a recovery?

Mr. SHISKIN. Well, for short periods—

Senator PROXMIRE. Well, this is not a short period, we have been going through this period since February.

Mr. SHISKIN. Well, the time we had similar experiences was in the 1954-56 recovery when there were several similar episodes. After an initial burst of activity in 1954 and 1955, the unemployment rate held steady on the average, but went up for several months and then came back down again.

Senator PROXMIRE. You see, what concerns me about all this is that unemployment seems to be coming from layoffs, rather than new entrants into the labor force.

Mr. SHISKIN. Well, it is coming from both.

Senator PROXMIRE. If you look at the participation rate you get the impression that just more new people are coming in, and the people that didn't really have to work for us; but when we look at the details here, these are people losing their jobs, most of them being fired, or laid off.

Mr. SHISKIN. It's both. Here is what has been happening recently: the layoff rate was unchanged, the accession rate declined slightly, we have more job losers, we have more unemployment of household heads and married men. We also have higher unemployment rates in other categories. That is a deplorable situation.

The only comment I can offer is that in some of the recoveries in the past we had similar episodes, and that hopefully the rise in unemployment will reverse itself soon.

Senator PROXMIRE. But in July you have more than half of the unemployed represented by job losers; that was not true before.

Mr. SHISKIN. Well, I don't know. The job loser series is a relatively new one.

Senator PROXMIRE. And then, why has the average hours worked per week remained at such a low level in the recovery period?

Mr. SHISKIN. It hasn't, it has improved in the recovery period. It has gone from 38.8 to 40.1; that is a substantial rise for hours worked. It has not improved in the last few months. The problem has been during the last few months.

It was only a couple of months ago people were deploring what appeared to be a slowdown in retail sales. We had a spurt in June, and it looks from the weekly data like the spurt continued in July. The economy does not move like a sine curve; the economy moves very unevenly. If there is any doubt about that, take a look at table 6, where you see that the changes in GNP move like a roller coaster and not like a very smooth curve. We have got to keep our perspective and not get carried away when for a month or two during expansion things look worse than before. On the other hand, we have to be eternally vigilant to make sure these trends don't continue.

Senator PROXMIRE. Well, before I yield to the chairman, let me just say that I can recall how many, many months we went before it was admitted by you, even though you are one of the really outstanding experts in the world on business cycles, that we were in a recession. It took a long, long time to get that admission out of the administration or anybody in it.

Now it seems to me it is very hard for us to recognize the very sluggish, slow, discouraging nature of this recovery.

Mr. SHISKIN. Well, I am very glad you made this observation, I have been waiting—

Senator PROXMIRE. It seems to me it was almost a year after—we see in retrospect—after the recession began that we got an admission that we were in a recession.

Mr. SHISKIN. I deny that. I am glad you raised the question, I am prepared to comment on it, and I have been waiting for an opportunity to do so for several months.

There is a great controversy taking place among business cycle experts as to what the peak of the recovery was. Now, the National Bureau has tentatively dated, or maybe they have firmly dated the peak as November 1973.

But practically every Government agency, the Treasury, the Federal Reserve, we, and many private experts are using September 1974, as the peak. The reason is that employment rose during that period, and now our revised Federal Reserve Index shows the peak came in the summer or fall of 1974.

How can anyone say we are in a recession when employment and industrial production are rising to new heights every month?

Senator PROXMIRE. I am not saying we are in a recession now.

Mr. SHISKIN. But we are going back. You were saying I didn't admit we were in a recession for a long time. How could I say, how could any analyst say, that we were in a recession at a time when man-hours employment and industrial production were all rising?

I have written two letters to the National Bureau and have urged them to reconsider the November 1973 peak date. I think they are doing it—that a more accurate date for the peak is September 1974. I admitted that we were in a recession in January 1975. If you take September as the peak date, I think perhaps I was a little hasty. I should have waited until February or March. But, of course, the decline in the fall of 1974 was very steep, so recession could perhaps be recognized earlier than usual.

Chairman HUMPHREY. Mr. Shiskin, I will turn the questions over to Congressman Brown, and then we will return, Senator Proxmire and I.

Mr. SHISKIN. Yes; I want to get to the question about the labor force, which we started to talk about.

Chairman HUMPHREY. I want to come back to a number of questions just for purposes of information. I should tell you that in March 1974, in our annual report of the Joint Economic Committee, we called for a tax reduction to offset the first indications of a recession. There was considerable evidence of that. I remember the Summit Conference of 1974, and I remember the people that spoke there. Most everybody had just one theme—inflation. And some of us said there were the twin evils of inflation and recession. By 1974 recession was a living fact, I don't care what the Federal Reserve Board Index said. In fact, we have a lot of trouble getting any statistical information out of the Federal Reserve Board, except their final analysis; the body of information that is needed to analyze the summation is not always available. I don't know why, but maybe the Freedom of Information Act will take care of that a little later.

I just want to say that this committee—and I just asked Mrs. Slater, Courtenay Slater, if she could get us that report because we in March

of 1974, and I think it is important to note, were right, there was a recession underway.

Mr. SHISKIN. Well, sir, I would question that.

Chairman HUMPHREY. There was a recession underway.

Mr. SHISKIN. Senator, if I may ask you this question. How can you say that a recession was underway when total man-hours, total employment, nonagricultural employment and industrial production were all rising to new highs? How can you say that? I just can't understand—

Chairman HUMPHREY. Because, as my staff tells us here, our staff told us the GNP was falling, plus consumer confidence was falling—we will get into that again. There were signs, despite all the governmental statistics which I frankly tell you are misleading at times—the Government sometimes aids and abets its own case—that a recession was underway.

Mr. SHISKIN. Sir, let me comment on the GNP figures. It is true that the real GNP was declining, starting in the fourth quarter of 1973. However, if you will analyze the GNP figures you will see that the reason for that decline in total GNP—which is a very aggregative measure—was because of the change in inventories and the drop in construction.

Chairman HUMPHREY. Right, that is one of the things.

Mr. SHISKIN. But those are both leading indicators. You don't determine a recession on the basis of the leading indicators. You determine it on the basis of economic performance, which is measured by employment, industrial production, personal income, and similar indicators of current economic activity.

So that to make a proper, cyclical analysis of that period you really should take those two components out of real GNP; then it would also show a rise.

Anyway, that is very controversial and my great friend Geoffrey Moore and I are in the midst of a correspondence on it. What I urged Moore to do is appoint an ad hoc committee to reconsider the date of the most recent cyclical peak, and I have disqualified myself as a member of such a committee because I have already taken a strong position on the issue.

I think he is sympathetic to that idea, and I think he will set up a committee of distinguished people who have not already made forceful statements like me, to reconsider that date.

I just find it impossible to say we are in a recession when the major, the most accurate measures we have of economic performance are rising to new highs every month. How can you say that?

Chairman HUMPHREY. Mr. Shiskin, let me just say, I didn't say we were in a recession in March of 1974. I said there were some signs that indicated a slowdown, and one of them was in construction. If the leading indicators are so cockeyed that they cannot spot it, then we had better take a look at the leading indicators.

All I am saying here is—and this is picking up on Senator Proxmire—that there is some indication that the unemployment figures are disturbing, and you and I both agree on that.

Mr. SHISKIN. If that is what you said, I agree with you. But you see, what Senator Proxmire said to me, he said it took me a long time to agree that we were in a recession. I don't think it did. I was kind

of incautious by agreeing only 4 months later that we were in a recession. Usually you wait longer.

Chairman HUMPHREY. I would not want to argue with you on statistics, my friend, that would be like arguing about nuclear physics with Einstein. I prefer to leave.

Mr. SHISKIN. Well, thank you for the compliment.

Chairman HUMPHREY. Congressman Brown, if you will take over will be pleased to.

Representative BROWN of Michigan. Thank you, Mr. Chairman, I will be pleased to.

Mr. SHISKIN. Are you coming back, sir?

Chairman HUMPHREY. Yes.

Representative BROWN of Michigan. In response to the chairman's question of you, how can these things be true, I am sure that if it were a different administration, there would be all kinds of "apologia" as to the reasons for the things that are occurring, which are now being critiqued.

I would like to go through your statement, Mr. Shiskin, and just point out some of these things that I think are of significance, that you have mentioned, in addition to the unemployment figure because I think there is a great lack of appreciation of what the unemployment figure means.

When we say it has gone up three-tenths of 1 percent:

Total employment rose more than 400,000 in July. Nonagricultural payroll employment rose 221,000, not counting an increase in strike activity during the month. Total employment, nonagricultural employment and GNP are all above previous peak levels. Through the first five quarters real GNP has risen at an average of 6.8 percent, higher than the average rise during the first five quarters of the 1961-62 and 1970-71 recovery. The civilian labor force has experienced a very rapid rise during this recovery, particularly in July, when it rose by 700,000, as the rate of labor force participation reached a new all-time high of 61.9 percent. The labor force has risen by 3.8 percent, 3.5 million persons, greater than any comparable postwar recovery period.

I will not read from your statement any further.

The labor force increased 700,000 in July. Now, those 700,000 people were not employed nor seeking employment as of June 30, were they?

Mr. SHISKIN. No, sir.

Representative BROWN of Michigan. Now, then, if their status as of July 31 had not changed except to the extent they sought employment they would all be in that unemployment figure, wouldn't they?

Mr. SHISKIN. A lot of them got jobs.

Representative BROWN of Michigan. So, even though we have three-tenths of 1 percent increase in unemployment, we have a substantial increase in those actually employed.

Mr. SHISKIN. That is absolutely true.

Representative BROWN of Michigan. Now, if those 700,000 had decided not to seek jobs in July, you would have a substantial decrease in unemployment; isn't that correct?

Mr. SHISKIN. That is correct.

Representative BROWN of Michigan. So, isn't there a certain folly in looking at unemployment figures alone?

Mr. SHISKIN. Sir, you have read my statements and I must say I agree with them. [Laughter.]

I try my best, as you know from our many months of discussions, to keep a balanced perspective. What we see today is an average recovery with widespread improvements. There has been a slowdown in the last few months, particularly in the labor markets; retail sales show no sign of slowing down. In fact, retail sales have become very vigorous again.

There are some signs that new investment is beginning to improve, that has been slow; but there are signs here that new investment is beginning to improve. So, I think the recovery, on balance, is about what most of us expected.

There is a problem, however. The problem is that the unemployment rate is very high, and that is in the public consciousness. The individuals involved are having a hard time, many of them, at least psychologically. You know, the statistics are that nearly 75 percent of the people that are unemployed today are on unemployment compensation; and about 60 percent of the people that are unemployed live in families in which another member is employed. So, you don't have the same kind of situation we had in the early thirties, when we didn't have unemployment compensation and we didn't have many additional family workers.

But it is a problem, there is no doubt of that, and psychologically damaging. I think unemployment is psychologically damaging, particularly in the case of teenagers who are starting their lives. They are going to be our leaders in the future. So, there is a serious problem there.

However, you have to look at what has happened to the labor force. We have had a cultural revolution in the labor force. I got out this table which shows the tremendous increases, the tremendous changes that have taken place in the composition of the labor force. What has been happening—and I would like to repeat this point when Senator Humphrey returns—is that we have had, as one of my staff said, a cultural revolution. A much greater percentage of the labor force today is made up of young women. And may I just make this point, Congressman Brown, that is not in my statement and I just learned about this morning from one of the young women who works for us. The biggest increase among women has typically been in young women, 20 to 24. It has been common for young women of 20 to 24 to enter the labor force in large numbers, but they are entering in exceptionally large numbers now. What is uncommon at the present time is this: usually young women, from 20 to 24 drop out of the labor force, many of them—not all of them—so that the percentage of women, 25 to 30, who are in the labor force is usually smaller than the percentage aged 20 to 24. Our latest figures show the young women are not dropping out, they are staying in the labor force because the percentage increases for both these age groups are now about the same.

So, to pinpoint the problem: we have had a tremendous increase in female employment, female participation, particularly among women between 20 and 30.

Representative Brown of Michigan. Well, Mr. Shiskin, projected to an annual rate, a 700,000 monthly increase in the labor force would amount to 8.4 million per year.

Mr. SHISKIN. But, you know, Congressman Brown, I think that is kind of unwise.

Representative BROWN of Michigan. Pardon.

Mr. SHISKIN. That is kind of unwise.

Representative BROWN of Michigan. Well, I was just looking, I was going to say if we got that kind of an increase in the labor force, it would be historically unusual because looking at the chart of all workers, and looking at 16 months following the trough and the increase in the labor force, you find that it doesn't begin to come up to those kinds of figures. The biggest increase in the labor force has been in the 16 months following the recent trough, where we increased by 3,453,000.

Mr. SHISKIN. That's quite an increase.

Representative BROWN of Michigan. Now, then, 700,000 people that were not employed nor seeking employment as of June 30, during July sought employment.

Mr. SHISKIN. Right.

Representative BROWN of Michigan. 400,000 of those were absorbed.

Mr. SHISKIN. Right.

Representative BROWN of Michigan. 300,000 were not.

Mr. SHISKIN. Right.

Representative BROWN of Michigan. That lead to the three-tenths percentage point increase in unemployment.

Mr. SHISKIN. Right.

Representative BROWN of Michigan. Now, then, if you had a grossly disproportionate entry into the labor market, labor force, as we did in July, the 7.8 percent unemployment, if you attempt to extend that to an annual figure, is a distortion.

Mr. SHISKIN. It is. But you know, of course, the pattern is, the historical pattern is that you get a surge, and then for a couple of months you get a slowdown. Now, for example, we had a 720,000 increase in the labor force in April, even bigger than in July, we had a tremendous increase; but the next few were relatively small, I don't remember the exact figures.

Representative BROWN of Michigan. But the whole thing is, the unemployment figure is more related to those who are entering the force than those who are employed and maybe have their status switched during the month.

Mr. SHISKIN. Though this month the rate for job losers went up, and also the rate for married men and for household heads, I think that is a special problem there.

Representative BROWN of Michigan. But Mr. Shiskin, we had coal mine strikes, farm workers on strike, farm product processors on strike, rubber workers on strike, how does that phenomenon fit into your figures?

Mr. SHISKIN. Well, I said at the beginning of my statement that nonagricultural payroll employment rose by 221,000. We made an estimate—I didn't want to put it in the paper because it is an estimate, but I don't mind commenting on it now—that if strike activity had not increased in July, the increase would have been 281,000.

Representative BROWN of Michigan. Would you repeat that?

Mr. SHISKIN. If you look at the first page, there is a statement there that nonagricultural payroll employment rose 221,000. This compares

with an average during the previous months recovery of 214,000, slightly above, not significantly.

My staff estimates the number of persons that were on strike in July, over and above all of those who were on strike earlier, at 60,000.

Representative BROWN of Michigan. 60,000 persons.

Mr. SHISKIN. Now, if we had counted them, the increase in nonagricultural payroll employment would have been about 280,000, clearly above the 214,000.

Representative BROWN of Michigan. Now, how do you analyze or evaluate the impact of strikes upon entries into jobs or even layoffs of jobs? Obviously an employer might be contemplating putting more people on, but he has a rubber strike, so he doesn't do it. Do you take that into consideration, is there any way you can?

Mr. SHISKIN. Well, I am not sure I am responding to your question, Congressman, but we do not count people who are on strike in the payroll surveys as employed; the reason is, they are not on a payroll.

Representative BROWN of Michigan. But for the purposes of your analysis, aren't they on the payroll?

Mr. SHISKIN. No, they are not on the payroll. We get payroll data from employers. When a person is on strike he is not on the payroll. However, we do count them as employed in our other survey, where they are counted in the category of "with a job but not at work." They are counted the same way as people who are on vacation or on sick-leave. They are included in the other figures.

Now, I am not really sure I am being responsive to your question.

Representative BROWN of Michigan. You are talking about those individuals who are on strike. But I am talking about the impact of strikes in industries, entry into jobs by those who are not employed at the present time; or lay-offs of jobs which are associated with the strike to the extent that the workers are laid off.

Mr. SHISKIN. Yes, sir.

Representative BROWN of Michigan. It seems that there is a significant factor there because you have a significant increase in the number of persons on strike and industries affected. Obviously, when you have industries affected though not shut down by a strike you have employment affected.

My time has expired, thank you, Mr. Shiskin.

Chairman HUMPHREY. We are preparing for the Olympics of 1980 here. I just did a little high-jump out here a while ago to get out of the train that carries us around.

Mr. SHISKIN. My days of high-jumping are over, I must say.

Chairman HUMPHREY. It is very difficult for me to know what questions have been asked. Have you discussed the seasonal adjustment factor with us?

Mr. SHISKIN. Only in my opening statement, and I would be delighted to get back to it.

Chairman HUMPHREY. Maybe you will recall, I think it was the June report, in which the Council of Economic Advisers made some comment that really the increase in the unemployment from 7.2 to 7.5 was due to some seasonal adjustment, all that business gets rather complicated.

Mr. SHISKIN. Yes, sir.

Chairman HUMPHREY. I wonder if you would be willing to share with us some of your thoughts on computing the unemployment rate. You do use, as I understand, several methods of seasonal adjustment.

Mr. SHISKIN. We provide you each month—and that is an innovation that was made since I have been Commissioner in the interest of providing you with all the information that we have, we show 10 additional seasonal adjustments of the overall unemployment rate. Of course, you can get a lot more.

Our alternative seasonal adjustments frequently show both higher and lower rates. That happened again this month, there are numerous methods of seasonal adjustment that would yield a lower rate.

Chairman HUMPHREY. The reason I bring this up is that when we asked Assistant Commissioner Norwood whether the increase in unemployment in June was due to seasonal adjustment problems, she told us that it was not.

Yet, only an hour or so within our hearing the Council of Economic Advisers put out a press statement claiming that there had been essentially no change in unemployment during June, and any increase was due to seasonal adjustment factors.

One of the principal reasons for the Joint Economic Committee's holding these hearings month in and month out is to assure what I would hope to be an objective interpretation of the employment statistics by technical experts. So, I would like to have you give us a clear analysis of the labor market developments in June and July. Does that constitute a real worsening in the employment situation or not. In other words, do your alternative calculations show the same pattern in the unemployment rate in the last 2 months because there are several alternatives here.

Mr. SHISKIN. Well, let me explain what the Council of Economic Advisers did. As I said earlier, I am not sure you were in the room, and I hope you won't mind my repeating it, Senator Proxmire. Earlier this year I was being asked by this committee whether I thought it was wise to update the factors, One of the points being made was if we had used the old factors, the unemployment rate would not have been dropping so sharply.

I said at the time that I did think it was wise, you should update the seasonal factors every year. Our method takes into account extreme values by eliminating them, or reducing their weight. It turns out we have eliminated or reduced the weight of six values in 1975. So, I don't think that our results could be very far off.

But what I pointed out was that while it was true that the official unemployment was dropping more rapidly early this year, that it would be offset later in the year, and the official unemployment rate would be higher than the unemployment rate if we had used the previous year's factors.

That is exactly what happened. The unemployment rate for June officially is 7.5; the unemployment rate for July is 7.8 by the official method. If we had used the seasonal factors that were used in 1975, which was the question being raised, the rates would have been 7.4 for June—lower than the official rate—and 7.6 for July.

So, exactly what I said at the time turned out to be the case, and I just make that point to show there are certain things about seasonal factors that we know about.

What the Council of Economic Advisers has done is to take the average of the last 9 years to compute the seasonal factors. They say you should use more stable factors. I don't think so. The reason I don't think so is that our method does take into account abnormal developments. As I said, we eliminated six of the 1975 values by our method. Also, it flies in the face of common sense to say that you should be using stable factors at a time when we have such dramatic changes in the labor force. And, you know, adult men, adult women, and teenagers all have different seasonal patterns.

To say that changes in seasonal factors that are taking place are very slow just flies in the face of common sense in this kind of a situation.

Another comment. On the other hand, nobody can say with certainty at a given time that the figure is exactly 7.3, or 7.4, or 7.5, there is a large element of uncertainty. We take the initiative in calling this to your attention by publishing this table with 10 different methods.

And finally on this point, let me say that I have taken a hard look at the related data for June. I have compared May and June, and here is what happened. Employment declined slightly in June; aggregate hours declined; average weekly hours of work were unchanged; the unemployment insurance rate and initial claims both rose; the lay-off rate was unchanged, the accession rate declined. That is, not a single other series, macro-series for labor market activity, improved in June, and most of them showed some slight decline.

Since all the series that are not affected by seasonal methods for unemployment all showed some determination, I find it hard to believe that a rise in unemployment didn't take place in June.

So, I would say on the basis of my experience, my study of those data, Mrs. Norwood was right when she answered your questions.

Chairman HUMPHREY. Thank you, Mr. Shiskin.

Let me just say that one of the concerns that I have is not only with the so-called official average that the unemployment rate is 7.8—whether it is 7.6 or 7.5—but the fact of the matter is, what is of more interest to me is what it is in metropolitan areas and regions and cities. For example, you can go into a highly rural area and find your unemployment rate down to 5 percent, and even lower.

Mr. SHISKIN. Not only in rural areas, Senator, if I might interrupt, in the Southwest.

Chairman HUMPHREY. Yes.

Mr. SHISKIN. Remember, we had this conversation before, and in Dallas at that time it was running 5 percent.

Chairman HUMPHREY. But then you go into some other areas where there are substantial populations, and you find unemployment rates running 10 percent, 9 percent, and even higher. I would like, if it is at all possible, in your future unemployment statistical presentations, if you could give us—let's take the top 20 metropolitan areas in the United States, and break them down as to what their unemployment rate is because, you see what I am getting at is, these general statistics, what does that mean to somebody in Providence where the unemployment rate is 10 percent? It doesn't mean a thing. All it does is infuriate them.

I have to give you an example. I go home, I am going home, hopefully tonight or tomorrow morning. And in my home State we really

don't have high unemployment, according to the official statistics there, in Minnesota. But I have a neighbor nearby and I was going over some of this material with him, he asked me a lot of questions. I said, "Well, things are improving," and so on, "they are getting better."

And he said, "Listen, do you believe all that?" I said, "Yes, I do."

He said, "Let me tell you something"—my neighbor is a contractor and does a lot of construction work and contract work—and he said, "Every day I am besieged from morning until night by people in Anoka, Minn."—which is an area where they get the statistical evidence which shows that they've got real high employment and low unemployment—"I just have people begging for jobs, any kind of a job."

So, he talked to me about this, and the man hires a lot of people. So, down the road about four houses is a man that worked for General Electric, he was laid off. He is about 50, 51, 52. He has two sons and a daughter. The daughter is teaching. One of the sons has a master's in business administration, he was working in a bank. They computerized all the operations, they decided they didn't need him. So, he is out holding a flag on a highway. He has 6 years of college so he can put the flag up and down out on a highway construction crew. And the other young man is looking for a job.

I run into this all the time. Now, these are not, you know, ethnic problems. This fellow is a member of the Sons of Norway, I might add. So, we don't have the ethnic problems out my way. These are solid, good people that are looking for jobs.

Mr. SHISKIN. Sure.

Chairman HUMPHREY. It happens all the time. So, what I want you to bring to me instead of general statistics is what is really happening where people live.

Mr. SHISKIN. Sir, since our previous conversations we have been publishing local area data.

Chairman HUMPHREY. Bring it in here, too, when you come.

Mr. SHISKIN. All right.

We have areas with very high unemployment rates and others with very low ones, and they average out to 7.8 percent.

Chairman HUMPHREY. If you could break it down to, as I said, on the basis of metropolitan areas as one category; another one is a central city area because, you see, you have problems of mobility. You know, these figures don't mean very much. I hear people say, "Well, if you want a job, there is a job out there." There is a job, they need workers down in Phoenix, or Dallas. The problem is, there are a lot of folks that don't want to go to Dallas.

Mr. SHISKIN. We have a big program now on local area statistics. I might say, it is very controversial because many of the people in the local areas feel that we have not made accurate estimates. Thanks to the generosity and initiative of Congress we got a substantial increase in our appropriation last year to improve the local area unemployment data. As you know, the unemployment survey sample has increased to 60,000 and will be increased to over 70,000 because of action by the Congress. That was initiated by the House Appropriations Committee and, as a result, we will be able to publish better figures for local areas. As time goes on the statistics will keep getting better. I

will mail you a copy of the latest release for each of the people here this morning, and we will bring it with us each time we come.

Chairman HUMPHREY. Congressman Brown.

Representative BROWN of Michigan. Mr. Shiskin, on that subject, in connection with legislation that I have introduced and in connection with legislation that now has passed in the jobs area—supplemental community block grant legislation, which didn't go anywhere, and now the Public Works bill—both of them required a determination on the basis of counties, cities, et cetera, of the unemployment because unemployment in an area is a determining factor in the distribution of funds.

Mr. SHISKIN. Right.

Representative BROWN of Michigan. The attempt to get month-to-month statistics from the BLS has become almost impossible on a current basis. Now, I am just wondering, in view of your answer to the chairman, about being able to provide this on a monthly basis. You cannot do this on a current basis, can you?

Mr. SHISKIN. We can do it, we can do it fairly well; and as time goes on and the sample expands and our expertise improves, we will be able to do it better. By the way, we are using as a starter the data provided by local unemployment offices because they can get those details better than we can. We use our data to benchmark theirs.

What we can do, either now or in the not too distant future, is provide reliable data for SMSA's (standard metropolitan statistical areas). When you get below the SMSA, there is a real question about the reliability of the data. Perhaps we can also do it pretty well for large labor market areas. These are meaningful concepts, because a labor market area takes into account the commuting from the "bedroom counties" to the central cities.

They are meaningful, conceptually, and fairly big. When you get down to very small places, we just cannot produce reliable data.

Representative BROWN of Michigan. Well, what do you mean by "very small"?

Mr. SHISKIN. There are 3,000 counties in the United States.

Representative BROWN of Michigan. Title II provides the funds to be distributed to any city over 50,000 people.

Mr. SHISKIN. Well, there are many counties in the United States for which we cannot provide accurate data at the present time. I think we just have to face up to that. You know, it takes a long lead time to move from a sample of 47,000 to a sample of 70,000; but even a sample of 70,000 cannot provide annual much less monthly data for 3,000 counties in the United States, not accurate data, not data that we would be willing to certify. When we get to the larger places we can do it.

The Congress is just ahead of us in terms of the requirements being put on us for accurate data. We are struggling with that now. We have a lot of pressure on us from the Economic Development Administration and the Treasury Department to provide very detailed data.

Let me give you some numbers. I think there are about 275 SMSA's.

Chairman HUMPHREY. A little louder.

Mr. SHISKIN. There are about 275 SMSA's. We are providing data today for 1,500 areas for CETA; and we have a lot of reservations about the data for the small areas.

What we are being pressed to do is to provide more detailed data because of the passage of this new bill, for 3,000 counties in the United States, and other places. We just cannot provide accurate data for these small areas at the present time. That is a great dilemma for us because we would like to be helpful and we will be helpful working with the EDA people very carefully and closely, and with the Treasury people. We are trying our best to be helpful, but it is a problem for us, a very serious problem for us because we are a national statistical agency. Our credibility is of the utmost importance to us. We have to have figures that we can stand behind; and now we are being asked to provide data that we feel is of dubious reliability.

The question that we are struggling with is, how can we be of service and at the same time protect our reputation as an agency that turns out accurate data. We are having intensive discussions on that, and hopefully we will have a policy statement out in a few weeks.

Chairman HUMPHREY. Senator Proxmire has questions.

Senator PROXMIRE. Mr. Shiskin, you say, "We are in the zone between recovery and expansion." This calls to mind the image of an acrobat, swinging from one high trapeze to another trapeze. In view of what has happened this morning, though, I wonder if he didn't miss grabbing that second trapeze and fell into the net, if there is a net.

Mr. SHISKIN. Well, let's look at the evidence, Senator Proxmire, and the evidence is provided in table 4.

Senator PROXMIRE. Table 4 of your statement?

Mr. SHISKIN. Yes. Now, let's look at the measures of performance, which are in the bottom part of that table, coincident indicators—these are measures of economic performance.

I don't have total employment here. It always confuses people when you have a lot of series, and I already have 14 in the table, so I just use one employment series—nonagricultural payroll employment.

If you look at the fourth column, which is relevant to the question, how do we compare with the previous peaks. And I identify as the distinction between recovery and expansion the movement from the previous peak level to a new high.

Senator PROXMIRE. I'm not sure I understand it, this is table 4?

Mr. SHISKIN. Yes; and I'm asking you to look at column 4.

Senator PROXMIRE. Column 4.

Mr. SHISKIN. In the lower banks, which are the measures of performance.

Senator PROXMIRE. Well, column 4 is percentage of previous peak level.

Mr. SHISKIN. I define a recovery as the period when the economy is moving from the recession low to the previous peak level.

Senator PROXMIRE. All right.

Mr. SHISKIN. So, when it gets to be 100, you are back at the previous peak. I don't have total employment here, that figure is 101.9 percent; payroll employment is 100.4 percent of the previous peak; GNP is 101.4, well above the previous peak. Unemployment, of course, is inverted. Since rising unemployment is undesirable, the 178 shown in the table is a black mark.

Senator PROXMIRE. That GNP is in real terms?

Mr. SHISKIN. Yes; in real terms.

Senator PROXMIRE. Deflated for inflation.

Mr. SHISKIN. Yes; deflated, real GNP. Personal income is 99.9.

Senator PROXMIRE. Again, those are in real terms.

Mr. SHISKIN. Yes; you see, 1967 dollars; the other GNP is in 1972 dollars. Industrial production is lagging, it's 98.7, and retail sales is 98.6. Thus, some of the series are above and some of them are below their previous peaks. That is why I say we are in a zone between recovery and expansion.

Senator PROXMIRE. Well, part of the answer to that is the fact that people are out of work and unemployment is very high. That is undoubtedly in the minds of many people, probably most people, the number one economic statistics measure whether we are in a recession or not in a recession. There is a lot of good sense in that. Furthermore, we have a slow-down in the growth of gross national product, as I understand it, in real terms at least, in the second quarter to 4.4 percent. Now, that 4.4 percent growth of GNP seems to be reasonably consistent with some rise in unemployment; at least it is not enough to erode the rise in unemployment.

I notice that Fortune Magazine in its latest issue says that inventories are higher than business likes at the present time, about 1½ percent higher, but they are higher. They say there is an analytical case for a slow-down in growth to 4 percent in the coming quarter.

Now, under those circumstances and with a reasonable increase in the work force participation, it seems to me that I would not be surprised if we had an 8 percent unemployment level. All the conventional wisdom has been that we will go down to 7 percent. Mr. Burns told this committee only a few weeks ago that he expected by the end of this year the unemployment would be down around 7 percent or below. I think that is the position taken by Mr. Greenspan and the experts in the administration.

Mr. SHISKIN. And by Mr. Klein, Mr. Carter's economic adviser.

Senator PROXMIRE. Now they seem to be all wrong.

Mr. SHISKIN. You have to wait for events to unfold, Senator Proxmire.

Senator PROXMIRE. What is that?

Mr. SHISKIN. We have to wait for events to unfold, you know, it is not the end of the year yet.

Senator PROXMIRE. Well, it is not the end of the year yet, but we are certainly not making very good progress. In February we were 7.5, and now it is higher than it was in February.

Mr. SHISKIN. Nobody can fault that statement.

Senator PROXMIRE. We are going the wrong way.

Mr. SHISKIN. We are going the wrong way.

Senator PROXMIRE. Would you say that would shake faith in predictions and make us aware of the fact that rather than unemployment going below 7 percent it could well go above 8 percent; is there a possibility of that?

Mr. SHISKIN. The high unemployment rates are a matter of great concern. I have tried to throw some light on it by focusing on changes in the labor force so we could understand it better, and so that people, such as you, Senator Humphrey, and Congressman Brown can focus on the real problems that exist. There are two kinds of real problems, first of all adult male unemployment—

Senator PROXMIRE. One of the points that have been made by many people is that we should be very concerned with inflation. I am very concerned about that. I think all of us are. But certainly the performance lately indicates that we ought to have more concern than we have had in the past with unemployment. The inflation situation seems to be improving. I understand the sensitive commodity prices, for instance, are moderating; service costs, including mortgage rates, and almost everything from medical costs to cleaning bills and so forth, have not been going up as expected. The short-term interest rate is down, prime rate is down. All this indicates an easing in inflation, but an increase in unemployment.

So, that should suggest policies that would expand the economy. I think we should move faster.

Mr. SHISKIN. As I pointed out earlier, if you look at table 6 where I show GNP rates, they move like a roller coaster, they bounce around a lot.

On unemployment, we have had a setback in the last few months. I think you have to wait until a few more months have gone by to see if this continues. I would be cautious.

Senator PROXMIRE. We always have to wait for a few more months, but the fact is that—as the Congressman from Michigan pointed out—this is not a matter of just a month, this is 6 months that unemployment has been at a very high level, 7.5 percent, and now going up.

It seems to me that is a reasonable period in which to make a judgment. We are not impulsively acting on just 1 month's statistics. Six months is half a year.

Mr. SHISKIN. What you are talking about is the recent rise in unemployment. I read the trends differently from you. While there is no question in my mind that unemployment has risen for the last 2 months, if you look back a little longer, there has been a downtrend. It was 8.9 a year ago, and it is down to 7.3. So unemployment declined from May 1975 to May 1976 and it has risen in the past 2 months.

Senator PROXMIRE. Exactly, but that trend which looked so promising stopped, flattened out, and now may be going back; at least it has not been improving.

Mr. SHISKIN. It is a matter of concern.

Senator PROXMIRE. It is at a very high level.

Mr. SHISKIN. It is a matter of concern, but you know, all the figures are not in for the year. You know, the view of the economists has been almost unanimous.

Senator PROXMIRE. It has been. The view of the economists has been almost unanimously wrong, nobody expected unemployment to go up, did they?

Mr. SHISKIN. Nobody. I certainly didn't.

Senator PROXMIRE. I don't know of anyone in the private sector, let alone in the public sector.

Mr. SHISKIN. But, you know, the pattern is uneven, Senator, economic fluctuations rarely resemble sine curves, very smooth movements—the figures bounce around from month to month and quarter to quarter.

Senator PROXMIRE. I expect it to move around a little bit, maybe from 7.3 to 7.4, then maybe to 7.1. As I said, all of the predictions this committee had, and we listened to some of the most prestigious people

in the country, unemployment would go to 7 percent or below by the end of the year.

Mr. SHISKIN. And well it may.

Chairman HUMPHREY. I want to just read a statement, and then I have to go and cast a vote, and I want you to give your observations on it.

Several months ago we requested a study by the Bureau of Labor Statistics of the magnitude of frictional unemployment in recent years. That is, I wanted to find out how much the total unemployment consists of short spells of unemployment experienced by persons entering the labor force, taking a few weeks to find a job; and by persons switching from one job to another. That is the way we define, more or less, frictional unemployment.

I felt we needed this information as part of our effort to find out what a reasonable policy target for overall unemployment rate might be. For example, in some legislation we proposed an adult unemployment rate of 3 percent. Is that realistic, or is it unrealistic? There is great argument over it.

The JEC staff discussed this study with the BLS personnel several times and reviewed a preliminary draft back in April. In all these discussions it was assumed by us—and we thought by you—that the BLS would submit a study which the committee could publish in the usual study format.

Now, just this week we received from you what I take to be the final version of this study. However, I find it is labeled, "Internal working document, not to be published or identified as official BLS report."

This seems to me an unfortunate situation. The study is of limited use if we cannot let anybody read it. And I might add, if the Freedom of Information Act is applied, they can read it anyway. I mean, a reporter can walk right in and demand it.

Mr. SHISKIN. Sure.

Chairman HUMPHREY. Now, let me point out that your letter transmitting this study also explains that the BLS gave up on attempting to define the measure of frictional unemployment, you said you introduced a concept called, "noncyclical short term unemployment." To me and the staff this looks like "frictional," smells like "frictional," tastes like "frictional," but is a good deal more difficult to pronounce.

You know, if it walks like a duck, quacks like a duck and looks like a duck, it's a duck.

Mr. SHISKIN. It doesn't include structural unemployment, sir.

Chairman HUMPHREY. I see. Now, I don't question your right to use whatever terminology you think best in your study, but I do question the desirability of keeping the study under wraps. I must say that the staff found it to be of good professional quality, and it contains important information that the public ought to know about unemployment facts.

I would like to place this study in the record, and I should tell you that I intend to do so because it is not labeled "sensitive", it is not secret, or confidential; it does not violate national security—I am sensitive to those matters; but I think we need this information.

Mr. SHISKIN. Do you have time just a minute while I respond?
Chairman HUMPHREY. Quickly.

Mr. SHISKIN. Well, to begin with, you know, we have certain standards that we need to follow to maintain our credibility in our studies. I think the assumptions being made, particularly the assumption about job losers is very dubious. We know job losers move very cyclically. To assume that the ratio of job losers to civilian labor force is constant, that the 1969 ratio or the 1973 ratio held throughout, is just a very poor assumption.

It is my judgment that any study that makes that assumption should not be published under our name. If you wish to publish it in the record, I would have no objection to your doing so, provided you also publish my letter to you, that points out the limitations.

Chairman HUMPHREY. I understand that.

Mr. SHISKIN. If you are willing to do that—

Chairman HUMPHREY. Very, very good, that is very helpful, Mr. Shiskin, and I appreciate that very much. We recognize that it is not necessarily a final document, but it is a helpful instrument.

Mr. SHISKIN. Well, you had better take a hard look at the assumption that says that job losers—

Chairman HUMPHREY. I am going to be a job loser if I don't get out of here right now. [Laughter.]

Mr. SHISKIN. Well, you can't be a job loser—at least not for the next few years.

Chairman HUMPHREY. I will leave the committee in charge on Congressman Brown. Would you wait for Senator Proxmire to come back, and if he does not, we will call you and you can close.

Representative BROWN of Michigan. Mr. Shiskin, I am still fascinated by the impact of the increase in the labor force. I have gone back over your figures in the charts you gave us, and if we just take the 1974-75 trough, the 1969-70 trough—

Mr. SHISKIN. Which table are you referring to?

Representative BROWN of Michigan. This one that you just handed out.

Mr. SHISKIN. On male, female, and total?

Representative BROWN of Michigan. All workers. It is your comparison of the percentage changes of the civilian labor force from trough to 16 months later.

Mr. SHISKIN. Right, table 6.

Representative BROWN of Michigan. Well, no, the one you handed out.

Mr. SHISKIN. Oh, this little table.

Representative BROWN of Michigan. Right, all workers.

Mr. SHISKIN. OK.

[The table referred to follows:]

CHANGE IN THE CIVILIAN LABOR FORCE 16 MONTHS FROM TROUGH OF THE 6 POSTWAR RECESSIONS

[Seasonally adjusted, in thousands]

Recession	Civilian labor force at trough	Civilian labor force 16 months later	Change	Percentage change
All workers:				
1948-49	62,185	61,778	-407	-0.8
1953-54	63,675	65,628	1,953	3.7
1957-58	67,647	68,432	785	1.1
1960-61	70,420	70,514	94	.2
1969-70	83,422	86,132	2,710	3.1
1974-75	91,880	95,333	3,453	3.2
Adult men:				
1948-49	41,667	40,791	-876	-2.1
1953-54	41,642	42,274	632	1.5
1957-58	43,028	43,362	334	.8
1960-61	43,756	43,800	44	.1
1969-70	47,503	48,595	1,092	2.3
1974-75	50,467	51,694	1,227	2.4
Adult women:				
1948-49	16,225	16,949	724	4.5
1953-54	18,029	19,133	1,104	6.1
1957-58	20,354	20,553	199	1.0
1960-61	21,800	21,666	-134	-.6
1969-70	28,555	29,581	1,026	3.6
1974-75	32,659	34,583	1,924	5.9

Representative BROWN of Michigan. I just did some quick calculations here, and in the trough to 16 months later, for the 1969-70 trough; and from trough 1974-75 to 16 months later, those show some of the highest percentage changes in the labor force.

Mr. SHISKIN. That is right.

Representative BROWN of Michigan. Over the whole period.

Mr. SHISKIN. Right.

Representative BROWN of Michigan. And in those, for the 1969-70 period, you only had an increase of 170,000 per month in the work force.

Mr. SHISKIN. Where is that?

Representative BROWN of Michigan. And in the 1974-75 period, you had a 216,000 increase in the work force?

Mr. SHISKIN. Yes.

Representative BROWN of Michigan. Now, so far this year, just in the 2 months you have mentioned, April and July, you had 1.4 million increase. What has been the total increase in the work force for the past year to date?

Mr. SHISKIN. In the last 16 months?

Representative BROWN of Michigan. No; from January 1 to date.

Mr. SHISKIN. Mr. Stein will look that up.

Representative BROWN of Michigan. Why don't I put that in perspective? We are talking about unemployment at year's end. I want to know what we can expect to receive into the work force in the remaining 5 months of the year, by any historical standards.

Mr. SHISKIN. In the last year the female labor force rose by 1.4 million, that is the last year.

Representative BROWN of Michigan. Let's just take all workers.

Mr. SHISKIN. Men, 600,000. I don't have the female here, but Mr. Stein is looking it up.

Mr. STEIN. Congressman Brown, from the beginning of the year the labor force rose from 95.6 million in January to 96.8 million in June, and in July reached 97.5.

Representative BROWN of Michigan. Would you repeat that again, January 1, what?

Mr. STEIN. January 1, 95.6.

Representative BROWN of Michigan. 95.6 million.

Mr. STEIN. And our latest figure, 97.5.

Representative BROWN of Michigan. 97.5. So, you had a 1.9 million increase in the labor force.

Now, then, if you just take the 1974-75 period, which is coming out of the trough when you should have had a faster pickup, the expectations of the increase in labor force for the year would be 2.59 million.

Mr. SHISKIN. Yes.

Representative BROWN of Michigan. So, if all we have got to do in the remaining 5 months of the year is come up to past expectations the labor force would only increase by about 500,000-600,000 more people.

Well, now, if we have a continuation of the employment trends that we have had, where we had for instance an increase of 400,000 in July, if that continues on, it is obvious that your unemployment figures should be substantially below what it is, even below 7 percent, unless you have some kind of an absolute anomaly with respect to those entering the labor force between now and January.

Mr. SHISKIN. That is what we have been having, very exceptionally large increases in the labor force, and they may continue.

Representative BROWN of Michigan. But is it possible? It just seems just out of the question that you would have an increase in the labor force for the remaining 5 months to the extent you have had for the first 7.

Mr. SHISKIN. Well, most economists, obviously, are reasoning the way you are, and that is why they are forecasting a decline in unemployment.

Representative BROWN of Michigan. That is why I think also, when you have a grossly disproportionate number entering the labor force at a period in time, and then because of that you have an unfavorable unemployment rate, to say that this is therefore a slow-down, bad statistics, or anything else, I think is just nonsense.

I think it is a picture of gloom and doom when any fair and objective analysis of the figures just does not have you reach that conclusion.

Thank you, Mr. Shiskin.

Senator PROXMIRE. How about the kind of unemployment we have had, it is not simply because of entrants in the labor force, is it?

Look at your table, table A-5 of the release. It shows the percentage of the total unemployed job losers—job losers. Job losers, 51.5 percent and job leavers 12.9 percent; reentrants—people who have had jobs before and came back in—24.9; new entrants 10.7; only 10 percent of the total unemployed are new entrants.

So, it is 90 percent people who are either job losers, job leavers, or reentrants; and more than half are job losers, 3,843,000 people lost their jobs last month. Isn't that correct, Mr. Shiskin?

Mr. SHISKIN. Right.

Senator PROXMIRE. 3.8 million of unemployed are people who have lost their jobs.

Mr. SHISKIN. These are people who have lost their jobs last month or earlier.

Senator PROXMIRE. I should not say they lost their jobs last month, I misstated it. It is 3,843,000 of the total unemployed were those who have lost their last job.

Mr. SHISKIN. Right, and 36 percent are either reentrants or new entrants.

Senator PROXMIRE. Furthermore, you have another interesting statistic that indicates that this is not simply a matter of an unusual group of people coming into the work force; the fact that the participation rate by teenagers is less in June and July—that is 16 to 19 aged people—in June and July than it was in April and May. That suggests to me that many of these teenagers who ordinarily would be in the work force if we had a more expansive economy have simply become discouraged and decided they would not seek work this summer.

Mr. SHISKIN. Well, our latest figures on discouraged workers show no change.

Senator PROXMIRE. Discouraged workers, that is correct. But am I not correct that the participation rate by people aged 16 to 19—

Mr. SHISKIN. Yes; you are.

Senator PROXMIRE. Now, I would like to ask you about the price situation because maybe I moved over that too rapidly, indicating that the situation was pretty good.

I realize that you don't have the usual wholesale price index figures out today, they won't be out until next Thursday?

Mr. SHISKIN. This is the month in which we introduce new establishments into the sample, and it takes us about an extra week to do it.

Senator PROXMIRE. Well, let me ask you, I went over this pretty rapidly and I want to make sure it is correct. Sensitive commodity prices have been moving favorably, that is, they have not been moving up as rapidly as possible, or have been moving down; is that correct?

Mr. SHISKIN. That is correct.

Senator PROXMIRE. How about service costs, can you tell us?

Mr. SHISKIN. The rate of increase in the services has been declining. The figures for the last 6 months are 1.1, 0.7, 0.7, 0.5, 0.4, 0.6; so, they have been going down.

You know, we had at the beginning of the year a surge of increases, particularly in automobile insurance rates and parking costs; that is what inflated the service figures for early months of the year. It appeared that that stopped, and now the increases in services are running about 6 percent, or so.

Senator PROXMIRE. Now, these are among other elements in the economy that respond to supply and demand situations, special commodity prices.

Mr. SHISKIN. Right.

Senator PROXMIRE. Unlike energy prices, perhaps; unlike food prices, which have a very big element of price supports and so forth, weather conditions and other matters that may not be subject to Government policy, whether expansionary or not.

This would suggest to me, at least in the present situation, that an expansionary policy on the part of the Federal Government would not seem to be as inflationary as it might otherwise be; that is, we are having a performance on the part of the price level that is responsive

to increases in demand, which is favorable now. So, we could expand the economy somewhat, put more people to work without risking the kind of inflation we would have if we had a tighter situation.

Mr. SHISKIN. Perhaps.

Senator PROXMIRE. Congressman Brown.

Representative BROWN of Michigan. Thank you, Mr. Shiskin, I have no further questions.

Senator PROXMIRE. I want to thank you very much, Mr. Shiskin. You are not as attractive as your predecessor, Mrs. Norwood.

Mr. SHISKIN. I agree. She is sitting in the back and you can listen to me and look at her.

Senator PROXMIRE. We would like to have her move up in front where we can get a better look at her.

But, thank you very much for a very responsive hearing.

Mr. SHISKIN. Thank you.

[Whereupon, at 12:40 p.m., the committee adjourned, subject to the call of the Chair.]

EMPLOYMENT-UNEMPLOYMENT

FRIDAY, SEPTEMBER 3, 1976

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

The committee met, pursuant to notice, at 11 a.m., in room 1202, Dirksen Senate Office Building, Hon. Richard Bolling (vice chairman of the committee) presiding.

Present: Representatives Bolling and Brown of Michigan.

Also present: Richard Boltuck, William R. Buechner, G. Thomas Cator, Lucy A. Falcone, Richard F. Kaufman, Louis C. Krauthoff, L. Douglas Lee, and Courtenay M. Slater, professional staff members; Charles H. Bradford, M. Catherine Miller, and Mark R. Policinski, minority professional staff members.

OPENING STATEMENT OF VICE CHAIRMAN BOLLING

Representative BOLLING. The committee will be in order.

Today the Joint Economic Committee continues its monthly hearings on the employment and unemployment situation. Julius Shiskin, Commissioner, Bureau of Labor Statistics is with us this morning to present the unemployment data for the month of August.

Mr. Commissioner, you come this morning with bad news for the worker and for the economist. Last month we saw a very sharp rise in unemployment, from 7.5 to 7.8 percent, and we were all somewhat reluctant to attach much importance to it, but now the evidence is we had a higher unemployment rate in August, and I think it is fair to say that the employment situation has worsened considerably since May.

The unemployment rate for teenagers and blacks, after showing some improvement in July, rose again in August to a level prevailing earlier this summer. The unemployment among teenagers rose from 18.1 percent in July to 19.7 percent in August.

Among blacks the rate rose from 12.9 percent to 13.6 percent. Contrary to the situation in July when both the labor force and employment increased, there is virtually no increase in employment in August. The average weekly hours have shown no recovery at all in recent months. In fact, in August, weekly hours of manufacturers declined from 40.2 to 39.9 hours.

The data which you present today, combined with the sluggish performance of the economy thus far in the third quarter, it suggests we are headed for another quarter of a slow, unsatisfactory pace of growth.

When the unemployment rate in August rises to its highest level this year, it is about time we begin to question those who say recovery is right on track, and that this is merely the cause of the depression.

Mr. Shiskin, please proceed in any manner you wish.

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

Mr. SHISKIN. Thank you, Mr. Chairman.

As usual, I have Mr. Stein, who is our employment expert with me, on my right; and Mr. Layng, our price expert, is on my left.

Representative BOLLING. We welcome them both.

Mr. SHISKIN. I have a brief statement which I wish to read.

Mr. Chairman and members of the committee. I welcome the opportunity to explain to the Joint Economic Committee certain features and implications of the comprehensive and complex body of data released at 10 a.m. this morning in our press release, "The Employment Situation: August 1976."

The pause in the 17-month economic expansion in the labor markets continued in August with total employment and unemployment showing little change. Total employment continued to be at an all-time high, but unemployment remained at unprecedented high levels for this stage of economic expansion. Unlike last month, the civilian labor force showed only a modest increase, divided about equally between employment and unemployment. At the same time, increases in aggregate hours in the private nonfarm sector have slowed in recent months, with little change in August.

Unemployment continues very high. After reaching the highest level of the post-World War II period, 8.9 percent in May 1975, the unemployment rate dropped to 7.3 percent in May 1976, but has risen more than one-half point since then. To some extent, the recent rise in unemployment can be explained by the rapid rise in the labor force. Since May 1976, the labor force has risen by 930,000 of which 285,000 or almost one-third were adult males and 667,000 or more than two-thirds were adult females. Teenagers declined slightly.

The average rise in the labor force over these 3 months was 310,000, compared to an average of 212,000 for the 17 months of the current recovery. In addition to the rapid increase in the labor force as an explanation of the recent rise in unemployment, it is to be noted that the number of job losers rose from 3.5 million in May to 3.8 million in August.

Although showing little change over the month, total employment has risen by 3.9 million since the March 1975 low, an average of 228,000 a month. Nonagricultural payroll employment rose almost 500,000 during the last 2 months. Since the low in June 1975, it has increased by 3.1 million, an average of 221,000 per month. Manufacturing employment showed the first substantial rise since April.

Total private nonfarm hours of work have now been stable for about one-half year, fluctuating between 36.1 and 36.2. Manufacturing

hours, which rose sharply from March 1975 to July 1976, fell in August. After rising substantially during the early months of recovery, aggregate hours have risen more slowly since the first of the year.

Last month my statement for the committee included a description of (1) the overall cyclical situation, (2) recent shifts in the labor force, and (3) BLS practices in making seasonal adjustments. I have nothing to add to these comments today.

The usual tables are attached to this statement. We shall now try to answer your questions.

[The tables referred to, together with the press release follow:]

TABLE 1.—UNEMPLOYMENT RATE BY ALTERNATE SEASONAL ADJUSTMENT METHODS :

Month	Unad-justed rate	Alternative age-sex procedures		Other aggregations (all multiplicative)					Direct adjustments			Composite No. 1	Composite No. 2	Range (cols. 2-14)	
		Official adjusted rate	All multipli-cative	All additive	Duration	Full time, part time	Reasons	Occupation	Industry	Rate	Level				Residual
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
1975:															
January.....	9.0	7.9	8.0	8.3	8.1	7.9	7.8	7.9	7.8	8.1	8.1	8.4	8.0	8.0	0.6
February.....	9.1	8.0	8.1	8.4	7.9	8.0	7.8	7.8	8.0	8.0	8.1	8.4	8.0	8.0	.6
March.....	9.1	8.5	8.5	8.7	8.4	8.4	8.3	8.4	8.4	8.5	8.5	8.7	8.5	8.4	.4
April.....	8.6	8.6	8.7	8.6	8.5	8.6	8.6	8.7	8.7	8.8	8.8	8.7	8.6	8.6	.3
May.....	8.3	8.9	9.0	8.7	8.8	8.8	9.0	9.1	9.0	9.3	9.2	8.7	8.8	8.9	.6
June.....	9.1	8.7	8.6	8.7	8.6	8.7	8.7	8.6	8.7	8.2	8.2	8.5	8.6	8.6	.5
July.....	8.7	8.7	8.6	8.6	8.6	8.7	8.8	8.6	8.6	8.5	8.4	8.5	8.7	8.6	.4
August.....	8.2	8.5	8.5	8.4	8.7	8.5	8.7	8.7	8.6	8.5	8.5	8.4	8.6	8.6	.3
September.....	8.1	8.6	8.6	8.4	8.8	8.6	8.8	8.6	8.5	8.5	8.5	8.4	8.6	8.6	.4
October.....	7.8	8.6	8.7	8.4	8.8	8.7	8.7	8.5	8.6	8.5	8.6	8.4	8.6	8.6	.4
November.....	7.8	8.5	8.5	8.2	8.7	8.6	8.4	8.4	8.5	8.5	8.5	8.3	8.5	8.5	.5
December.....	7.8	8.3	8.4	8.2	8.5	8.3	8.2	8.3	8.4	8.5	8.4	8.2	8.3	8.3	.3
1976:															
January.....	8.8	7.8	7.8	8.2	8.1	7.8	7.7	7.8	7.8	7.9	7.9	8.2	7.9	7.9	.5
February.....	8.7	7.6	7.7	7.9	7.6	7.6	7.5	7.6	7.7	7.7	7.9	7.9	7.6	7.6	.4
March.....	8.1	7.5	7.5	7.7	7.3	7.5	7.4	7.5	7.5	7.6	7.5	7.7	7.5	7.5	.4
April.....	7.4	7.5	7.5	7.4	7.3	7.5	7.5	7.6	7.6	7.6	7.5	7.5	7.5	7.5	.3
May.....	6.7	7.3	7.3	7.1	7.2	7.2	7.4	7.4	7.4	7.5	7.5	7.2	7.3	7.3	.4
June.....	8.0	7.5	7.4	7.5	7.5	7.5	7.5	7.4	7.4	7.2	7.2	7.4	7.5	7.5	.4
July.....	7.8	7.8	7.7	7.7	7.7	7.8	7.8	7.7	7.7	7.6	7.6	7.6	7.7	7.7	.3
August.....	7.6	7.9	7.9	7.8	8.0	7.9	8.0	8.0	7.9	7.9	7.9	7.8	7.9	7.9	.2

: An explanation of cols. 1 to 14 follows:

- (1) Unemployment rate not seasonally adjusted.
- (2) Official rate. This is the published seasonally adjusted rate. Each of four unemployed age-sex components—males and females, 16-19 and 20 yr of age and over—is independently adjusted. The teenage unemployment components are adjusted using the additive procedure of the X-11 method, while adults are adjusted using the X-11 multiplicative option. 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 are as follows:

January.....	113.1
February.....	113.7
March.....	108.1
April.....	99.4
May.....	93.4
June.....	104.5
July.....	99.5
August.....	96.0
September.....	94.7
October.....	89.8
November.....	91.4
December.....	93.4

- (3) Multiplicative rate. 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.

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

- (5) Duration. Unemployment total is aggregated from 3 independently adjusted unemployment by duration groups (0-4, 5-14, 15+).

- (6) Full-time and part-time. Unemployment total is aggregated from 6 independently seasonally adjusted unemployment groups, by whether the unemployed are seeking full-time or part-time work for men 20 plus, women 20 plus, and teenagers.

- (7) Reasons. Unemployment total is aggregated from 4 independently seasonally adjusted unemployment levels by reasons for unemployment—job losers, job leavers, new entrants, and reentrants.

- (8) Occupation. Unemployment total is aggregated from independently seasonally adjusted unemployment by the occupation of the last job held. There are 13 unemployed components—12 major occupations plus new entrants to the labor force (no previous work experience).

- (9) Industry. Unemployment total is aggregated from 12 independently adjusted industry and class-of-worker categories, plus new entrants to the labor force.

- (10) Unemployment rate adjusted directly.

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

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

- (13) Average of (2), (5), (6), (7), and (12).

- (14) Average of (2), (5), (6), (7), (8), (9), and (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.

TABLE 2.—EMPLOYMENT-POPULATION RATIOS

Category	Annual averages		Seasonally adjusted estimates								
	1974	1975	Jan. 1974 (cyclical high month)	Mar. 1975 (cyclical low month)	Quarterly averages—				Current months		
					III, 1975	IV, 1975	I, 1976	II, 1976	June 1976	July 1976	Aug. 1976
Total, all workers.....	57.8	56.0	58.3	55.9	56.1	56.0	56.5	57.0	56.9	57.1	57.0
Adult males.....	77.9	74.9	79.0	74.9	74.9	74.5	74.8	75.3	75.0	75.1	75.3
Adult females.....	42.7	42.3	42.4	42.0	42.5	42.5	43.1	43.5	43.7	43.8	43.8
Teenagers.....	46.1	43.3	47.5	43.2	43.3	43.0	43.8	44.8	44.2	45.1	44.4

Source: U.S. Department of Labor, Bureau of Labor Statistics, Sept. 3, 1976.

TABLE 3.—RANGE OF UNEMPLOYMENT INDICATORS REFLECTING VALUE JUDGMENTS ABOUT SIGNIFICANCE OF UNEMPLOYMENT (PERCENT)

U-1 through U-7	Annual averages		Seasonally adjusted estimates								
	1974	1975	October 1973 (cyclical low month)	May 1975 (cyclical high month)	Quarterly averages				Current months		
					III 1975	IV 1975	I 1976	II 1976	June 1976	July 1976	Aug. 1976
U-1—Persons unemployed 15 weeks or longer as a percent of total civilian labor force.....	1.0	2.7	0.9	2.7	3.1	3.1	2.7	2.2	2.3	2.4	2.5
U-2—Job losers as a percent of civilian labor force.....	2.4	4.7	1.7	5.1	5.0	4.6	3.7	3.7	3.8	4.0	4.0
U-3—Unemployed household heads as a percent of the household head labor force.....	3.3	5.8	2.7	6.1	5.9	5.9	5.0	4.9	5.1	5.4	5.2
U-4—Unemployed full-time job seekers as a percent of the full-time labor force (including those employed part time for economic reasons).....	5.1	8.1	4.1	8.5	8.3	8.2	7.1	7.0	7.4	7.3	7.5
U-5—Total unemployed as a percent of civilian labor force (official measure).....	5.6	8.5	4.7	8.9	8.6	8.5	7.6	7.4	7.5	7.8	7.9
U-6—Total full-time job seekers plus half part-time job seekers plus half total on part time for economic reasons as a percent of civilian labor force less half part-time labor force.....	6.9	10.3	5.9	10.9	10.4	10.3	9.3	9.1	9.2	9.3	9.4
U-7—Total full-time job seekers plus half part-time job seekers plus half total on part time for economic reasons plus discouraged workers as a percent of civilian labor force plus discouraged workers less half of part-time labor force.....	7.7	11.5	6.6	12.0	11.6	11.3	10.3	10.0	(?)	(?)	(?)

¹ Uses discouraged worker figure for quarter which includes applicable month.

² Not available.

Note: The numerators and denominators (in thousands) for the second quarter 1976 rates are as follows: U-1, 2,083/94,546; U-2, 3,528/94,546; U-3, 2,643/53,819; U-4, 5,632/80,176; U-5, 7,014/94,546; U-6, 7,942/87,594; U-7, 8,847/88,499.

Source: U.S. Department of Labor, Bureau of Labor Statistics, Sept. 3, 1976.

TABLE 4.—MEASURES OF PROGRESS TOWARD PREVIOUS CYCLICAL PEAK LEVEL DURING CURRENT ECONOMIC RECOVERY

Series (with latest month available)	Percent decline during 1973-75 recession	Percent of recession decline recovered, trough to date	Percent of previous peak level	Percent change from trough
(1)	(2)	(3)	(4)	(5)
I. Leading indicators:				
Leading index, trend adjusted (July).....	-22.4	100.0	100.0	+28.9
Average workweek (August) ¹	+4.4	61.1	98.3	+2.8
New orders, 1972 dollars (July) ¹	-29.2	66.1	90.1	+27.3
Contracts and orders, 1976 dollars (July) ¹	-29.6	32.6	80.0	+13.7
Housing starts (July) ¹	-58.6	32.4	60.4	+45.8
Stock prices (July).....	-43.4	72.3	88.0	+55.4
Corporate profits after taxes, 1972 dollars (2d quarter, 1976, prel.).....	-38.6	66.9	87.2	+42.1
II. Coincident indicators:				
Nonagricultural payroll employment (August)....	-3.2	124.2	100.8	+4.0
Aggregate hours, nonagricultural establishments (July).....	-5.0	76.0	98.8	+4.0
Unemployment level (August) ²	+98.3	18.2	180.4	-9.0
GNP, 1972 dollars (2d quarter, 1976, rev.).....	-6.6	120.6	101.4	+8.5
Personal income less transfer payments, 1967 dollars (July).....	-6.3	105.8	100.4	+7.2
Industrial production (July).....	-15.1	94.0	99.1	+16.7
Retail sales, 1972 dollars (July) ¹	-10.4	84.1	98.4	+9.8

¹ 3-mo averages have been used for the calculations for this series; for example, the averages of the specific trough month, the previous and following months were compared with the average for the latest 3 mo available to obtain the entries in cols. (3)-(5). For other series single months have been used.

² The unemployment series tends to move counter to movements in general business activity; that is, the unemployment level tends to rise during recessions and decline during expansions. Col. 3 shows the percent of the increase in unemployment that has been offset.

TABLE 5.—MEASURES OF PROGRESS TOWARD PREVIOUS CYCLICAL PEAK LEVEL AT CORRESPONDING STAGE OF 1958-59 ECONOMIC RECOVERY

Series	Percent decline during 1957-58 recession	Percent of recession decline recovered	Percent of previous peak level	Percent change from trough
(1)	(2)	(3)	(4)	(5)
Nonagricultural payroll employment.....	-4.3	125.6	101.1	+5.7
Unemployment level ¹	+102.4	45.5	155.8	-23.0
GNP, 1972 dollars.....	-3.2	283.3	105.9	+9.5

¹ The unemployment series tends to move counter to movements in general business activity; that is, the unemployment level tends to rise during recessions and decline during expansions. Col. 3 shows the percent of the increase in unemployment that has been offset.

News

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SEPTEMBER 3, 1976

THE EMPLOYMENT SITUATION: AUGUST 1976

Both unemployment and total employment were about unchanged in August, it was reported today by the Bureau of Labor Statistics of the U. S. Department of Labor. The Nation's unemployment rate was 7.9 percent, little different from the July rate of 7.8 percent but 0.6 percentage point above the 1976 low reached in May.

Total employment--as measured by the monthly survey of households--totaled 88.0 million in August, about the same level as in July. Since its March 1975 recession low, employment has grown by 3.9 million, or an average monthly change over the 17-month span of nearly 230,000.

Nonagricultural payroll employment--as measured by the monthly survey of establishments--rose by 240,000 to 79.4 million. Payroll jobs were 3.1 million above their June 1975 recession low, a monthly average gain of 220,000.

Unemployment

Both the number of unemployed persons and the unemployment rate were little changed in August, after rising in the 2 previous months. A total of 7.5 million persons (adjusted for seasonality) were jobless, representing 7.9 percent of the labor force. (See table A-1.)

Although overall joblessness was essentially unchanged, there were offsetting movements among major labor force groups. In particular, the unemployment rate for teenagers, which had been declining gradually since the beginning of the year, rose from 18.1 to 19.7 percent, while there was an improvement in the job situation for adult men--especially among heads of households. Divergent movements in joblessness were visible among adult women: The jobless rate for those 25 years of age and over declined over the month, while the rate for younger women (20-24 years) increased substantially. There was also a sizeable rise in the unemployment rate of female family heads. (See table A-2.)

Jobless rates for white and black workers, at 7.1 and 13.6 percent, respectively, were about the same as in July. However, the rate for black teenagers, which had dropped substantially in the prior month, returned to the June level. (See table A-2.)

There was a substantial increase in the number of workers who were seeking their first job, a reflection of the increased joblessness among teenage and young adult women. On the other hand, after rising markedly in June and July, there was little change in the

Table A. Highlights of the employment situation (seasonally adjusted data)

Selected categories	Quarterly averages					Monthly data		
	1975			1976		1976		
	II.	III	IV	I	II	June	July	Aug.
	(Thousands of persons)							
Civilian labor force	92,531	93,134	93,153	93,553	94,546	94,643	95,333	95,487
Total employment	84,443	85,138	85,241	86,402	87,532	87,500	87,907	87,981
Adult men	47,286	47,551	47,540	47,998	48,504	48,391	48,535	48,682
Adult women	30,129	30,537	30,665	31,234	31,677	31,845	31,958	31,983
Teenagers	7,029	7,050	7,036	7,169	7,351	7,264	7,414	7,311
Unemployment	8,087	7,997	7,912	7,151	7,014	7,143	7,426	7,506
	(Percent of labor force)							
Unemployment rates:								
All workers	8.7	8.6	8.5	7.6	7.4	7.5	7.8	7.9
Adult men	7.0	7.0	7.0	5.7	5.7	6.0	6.1	5.9
Adult women	8.4	7.9	7.9	7.4	7.1	7.1	7.6	7.7
Teenagers	20.2	20.2	19.5	19.4	18.7	18.4	18.1	19.7
White	8.0	7.9	7.8	6.9	6.7	6.8	7.1	7.1
Black and other	14.1	14.1	14.0	13.1	12.8	13.3	12.9	13.6
Household heads	6.0	5.9	5.9	5.0	4.9	5.1	5.4	5.2
Married men	5.5	5.4	5.1	4.1	4.1	4.4	4.5	4.2
Full-time workers	8.4	8.3	8.2	7.1	7.0	7.4	7.3	7.5
	(Weeks)							
Average duration of unemployment	13.8	15.6	16.5	16.3	15.8	16.9	15.8	15.5
	(Thousands of persons)							
Nonfarm payroll employment	76,438	77,004	77,642	78,392	78,943	78,943	79,192p	79,431p
Goods-producing industries	22,300	22,414	22,690	22,943	23,119	23,091	23,094p	23,113p
Service-producing industries	54,138	54,590	54,952	55,450	55,824	55,852	56,098p	56,318p
	(Hours of work)							
Average weekly hours:								
Total private nonfarm	35.9	36.1	36.3	36.4	36.1	36.1	36.2p	36.2p
Manufacturing	39.1	39.6	40.0	40.3	39.9	40.2	40.2p	39.9p
Manufacturing overtime	2.4	2.7	2.9	3.1	2.9	3.1	3.2p	3.0p
	(1967=100)							
Hourly Earnings Index, private nonfarm:								
In current dollars	170.7	174.3	177.8	180.6	183.5	184.5	185.6p	186.5p
In constant dollars	107.0	107.0	107.5	107.9	108.4	108.5	108.6p	N.A.

p= preliminary.

N.A.=not available.

number of persons who had lost their last job. The average (mean) duration of unemployment also held relatively steady in August at 15.5 weeks. (See tables A-5 and A-4.)

In addition to the relative stability in total unemployment, there was no change, for the second consecutive month, in the number of persons working part time for economic reasons--those who wish to work full time but are on reduced workweeks involuntarily. (See table A-3.)

Total Employment and the Labor Force

Total employment and the civilian labor force, at 88.0 and 95.5 million, respectively, were both about unchanged in August following sizeable increases in July. A small increase in employment among adult men was offset by a slight decrease among teenagers. Total employment now stands 3.9 million above its March 1975 recession low.

Since August 1975, the civilian labor force has risen 2.4 million. Adult women made up 1.4 million of this increase, with adult men and teenagers accounting for about 700,000 and 300,000, respectively. (See table A-1.)

Industry Payroll Employment

An increase of 240,000 jobs in nonagricultural establishments brought the level of payroll employment to 79.4 million in August, seasonally adjusted. After remaining about unchanged during the April-June period, the payroll job count has increased by 500,000 over the past 2 months and by August was 3.1 million above the recession low of June 1975. Over-the-month increases in employment occurred in about 60 percent of the 172 private nonfarm industries that comprise the BLS index of diffusion. (See tables B-1 and B-6.)

Manufacturing employment, which had shown no growth since April, increased by 85,000 in August, in part due to the settlement of several strikes. The gain, most of which occurred in durable goods industries, brought the number of factory jobs 935,000 above its July 1975 cyclical low.

Employment also rose over the month in services (75,000), State and local government (55,000), and retail trade (45,000). About half the increase in services was due to the settlement of the New York City hospital workers' strike.

Mining payrolls shrank by 40,000 as a result of strikes in the coal industry. Contract construction employment declined by 25,000, as the industry continued to behave sluggishly.

Hours

The average workweek for production or nonsupervisory workers on private nonfarm payrolls was unchanged in August at 36.2 hours, seasonally adjusted. (See table B-2.) The workweek has remained essentially unchanged for the past 6 months at a level slightly above the spring 1975 low of 35.9 hours.

Whereas most other industries showed little change over the month, the manufacturing workweek was down to 39.9 hours but remained 1.1 hours longer than in February 1975. Most of this decline occurred in the overtime component.

The index of aggregate weekly hours of private nonagricultural production or nonsupervisory workers was about unchanged in August at 111.0 (1967=100). Although increases have slowed since the beginning of this year, the index was 4.8 percent above its March 1975 recession low. The factory index, at 94.1, also remained about the same over the month but was up 8.9 percent from its cyclical low. (See table B-5.)

Hourly and Weekly Earnings

Average hourly earnings of production or nonsupervisory workers on private nonagricultural payrolls rose 0.2 percent over the month and 6.8 percent since August 1975 (seasonally adjusted). Average weekly earnings also rose 0.2 percent in August, reflecting the small increase in average hourly earnings. Weekly earnings have risen 6.8 percent over the past year.

Before adjustment for seasonality, average hourly earnings were \$4.87 in August, up 1 cent from July. Since August 1975, hourly earnings have risen 31 cents. Weekly earnings increased 36 cents over the month to \$178.24. Average weekly earnings have risen \$11.34 since last August. (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 186.5 (1967=100) in August, 0.5 percent higher than in July. The index was 6.8 percent above August a year ago. During the 12-month period ended in July the Hourly Earnings Index in dollars of constant purchasing power rose 1.8 percent. (See table B-4.)

This release presents and analyzes statistics from two major surveys. Data on labor force, total employment, and unemployment are derived from the sample survey of households conducted and tabulated by the Bureau of the Census for the Bureau of Labor Statistics. Statistics on payroll employment, hours, and earnings are collected by State agencies from payroll records of employers and are tabulated by the Bureau of Labor Statistics. Unless otherwise indicated, data for both series relate to the week of the specified month containing the 12th day. A description of the two surveys appears in the BLS publication *Employment and Earnings*.

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Table A-1. Employment status of the noninstitutional population

Employment status	Not seasonally adjusted				Seasonally adjusted				
	Aug. 1975	July 1976	Aug. 1976	Aug. 1975	Apr. 1976	May 1976	June 1976	July 1976	Aug. 1976
TOTAL									
Total noninstitutional population ¹	153,824	156,142	156,367	153,824	155,516	155,711	155,925	156,142	156,367
Total labor force	96,493	99,325	98,837	93,397	96,583	96,659	96,780	97,473	97,634
Participation rate	62.7	63.6	62.0	62.1	62.1	62.1	62.1	62.4	62.4
Civilian noninstitutional population ¹	151,639	154,002	154,220	151,639	153,371	153,570	153,788	154,002	154,220
Civilian labor force	94,308	97,185	96,690	93,212	96,439	96,557	96,643	97,333	97,487
Participation rate	62.2	63.1	62.7	61.5	61.6	61.6	61.5	61.9	61.9
Employed	86,612	89,608	89,367	85,288	87,399	87,697	87,500	88,500	88,707
Agriculture	3,886	3,931	3,862	3,464	3,417	3,329	3,294	3,341	3,424
Nonagricultural industries	82,726	85,677	85,525	81,824	83,982	84,368	84,206	84,566	84,557
Unemployed	7,696	7,577	7,323	7,924	7,040	6,860	7,143	7,426	7,506
Unemployment rate	8.2	7.8	7.6	8.5	7.5	7.3	7.5	7.8	7.9
Not in labor force	57,331	56,817	57,530	58,427	58,932	59,013	59,145	58,669	58,733
Males, 20 years and over									
Total noninstitutional population ¹	65,234	66,279	66,384	65,234	66,002	66,087	66,182	66,279	66,384
Total labor force	53,121	53,760	53,765	52,866	53,010	53,144	53,144	53,387	53,436
Participation rate	81.4	81.1	81.0	81.0	80.3	80.4	80.3	80.5	80.5
Civilian noninstitutional population ¹	63,498	64,586	64,688	63,498	64,311	64,398	64,492	64,586	64,688
Civilian labor force	51,385	52,068	52,068	51,130	51,319	51,455	51,454	51,694	51,740
Participation rate	80.9	80.6	80.5	80.5	79.8	79.9	79.8	80.0	80.0
Employed	48,250	49,143	49,307	47,655	48,524	48,596	48,591	48,535	48,682
Agriculture	2,579	2,596	2,531	2,461	2,405	2,427	2,430	2,449	2,415
Nonagricultural industries	45,671	46,547	46,776	45,194	46,119	46,169	45,961	46,086	46,267
Unemployed	3,136	2,925	2,761	3,475	2,795	2,859	3,063	3,159	3,058
Unemployment rate	6.1	5.6	5.3	6.8	5.4	5.6	6.0	6.1	5.9
Not in labor force	12,113	12,518	12,619	12,368	12,992	12,943	13,038	12,892	12,948
Females, 20 years and over									
Civilian noninstitutional population ¹	71,839	72,966	73,078	71,839	72,653	72,753	72,857	72,966	73,078
Civilian labor force	32,663	32,769	34,058	33,227	34,019	33,972	34,290	34,581	34,639
Participation rate	45.5	46.3	46.6	46.3	46.8	46.7	47.1	47.4	47.4
Employed	29,925	31,126	31,288	30,607	31,523	31,664	31,845	31,958	31,988
Agriculture	628	632	633	542	540	473	479	488	546
Nonagricultural industries	29,298	30,494	30,656	30,065	30,983	31,191	31,366	31,470	31,442
Unemployed	2,738	2,643	2,770	2,620	2,496	2,308	2,445	2,625	2,651
Unemployment rate	8.4	7.8	8.1	7.9	7.3	6.8	7.1	7.6	7.7
Not in labor force	39,176	39,196	39,020	38,612	38,634	38,781	38,567	38,383	38,439
Both sexes, 18-19 years									
Civilian noninstitutional population ¹	16,302	16,450	16,454	16,302	16,407	16,419	16,439	16,450	16,454
Civilian labor force	10,259	11,348	10,563	8,855	9,101	9,130	8,899	9,056	9,108
Participation rate	63.8	69.0	64.2	54.3	55.5	55.6	54.1	55.1	55.4
Employed	8,437	9,339	8,772	7,026	7,352	7,437	7,264	7,414	7,311
Agriculture	680	704	679	461	472	429	385	404	463
Nonagricultural industries	7,757	8,635	8,093	6,565	6,880	7,008	6,879	7,010	6,848
Unemployed	1,823	2,008	1,791	1,829	1,749	1,693	1,635	1,642	1,797
Unemployment rate	17.8	17.7	17.0	20.7	19.2	18.5	18.4	18.1	19.7
Not in labor force	6,043	5,102	5,891	7,447	7,306	7,289	7,540	7,394	7,346
WHITE									
Civilian noninstitutional population ¹	133,760	135,643	135,822	133,760	135,141	135,296	135,473	135,643	135,822
Civilian labor force	83,417	85,850	85,453	82,556	83,451	83,642	83,805	84,359	84,503
Participation rate	62.4	63.3	62.9	61.7	61.8	61.8	61.9	62.2	62.2
Employed	77,217	79,856	79,604	76,130	77,867	78,087	78,120	78,341	78,468
Agriculture	6,201	5,993	5,849	6,426	5,584	5,555	5,685	6,018	6,035
Nonagricultural industries	7,046	7,003	7,000	6,704	6,883	6,883	6,883	7,111	7,111
Unemployed	6,201	6,000	5,849	6,426	5,584	5,555	5,685	6,018	6,035
Unemployment rate	7.4	7.0	6.8	7.8	6.7	6.6	6.8	7.1	7.1
Not in labor force	50,343	49,793	50,369	51,204	51,690	51,654	51,668	51,284	51,319
BLACK AND OTHER									
Civilian noninstitutional population ¹	17,879	18,359	18,398	17,879	18,230	18,273	18,315	18,359	18,398
Civilian labor force	10,891	11,335	11,237	10,659	10,901	10,838	10,826	10,867	11,003
Participation rate	60.9	61.7	61.1	59.6	59.8	59.3	59.1	59.2	59.8
Employed	9,396	9,752	9,763	9,134	9,489	9,511	9,382	9,466	9,505
Agriculture	1,495	1,564	1,474	1,325	1,412	1,327	1,444	1,401	1,498
Nonagricultural industries	13.7	14.0	13.1	14.3	13.0	12.2	13.3	12.9	13.6
Unemployed	1,495	1,583	1,474	1,525	1,412	1,327	1,444	1,401	1,498
Unemployment rate	13.7	14.0	13.1	14.3	13.0	12.2	13.3	12.9	13.6
Not in labor force	6,988	7,024	7,161	7,220	7,329	7,435	7,489	7,492	7,395

¹ Seasonal variations are not present in the population figures; therefore, identical numbers appear in the unadjusted and seasonally adjusted columns.

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Table A-2. Major unemployment indicators, seasonally adjusted

Selected categories	Number of unemployed persons (In thousands)		Unemployment rate					
	Aug. 1975	Aug. 1976	Aug. 1975	Apr. 1976	May 1976	June 1976	July 1976	Aug. 1976
Total, 16 years and over	1,924	7,506	8.5	7.5	7.3	7.5	7.8	7.9
Males, 20 years and over	3,475	3,058	6.8	5.4	5.6	6.0	6.1	5.9
Females, 20 years and over	2,620	2,651	7.9	7.3	6.8	7.1	7.6	7.7
Both sexes, 16-19 years	1,829	1,797	20.7	19.2	18.5	18.4	18.1	19.7
White, total	6,426	6,035	7.8	6.7	6.6	6.8	7.1	7.1
Males, 20 years and over	2,873	2,539	6.3	4.9	5.1	5.4	5.7	5.5
Females, 20 years and over	2,070	2,085	7.2	6.7	6.3	6.5	6.9	7.0
Both sexes, 16-19 years	1,483	1,411	18.7	16.6	16.3	16.1	16.3	17.3
Black and other, total	1,525	1,498	14.3	13.0	12.2	13.3	12.9	15.6
Males, 20 years and over	618	535	11.6	10.0	9.2	10.7	10.3	9.9
Females, 20 years and over	554	570	12.6	10.9	10.4	11.3	11.7	12.3
Both sexes, 16-19 years	353	393	37.6	39.2	38.5	40.3	34.1	40.2
Household heads, total	3,062	2,792	5.7	4.8	4.8	5.1	5.4	5.2
Males	2,416	2,054	5.4	4.5	4.4	4.8	4.9	4.5
With relatives	2,059	1,662	5.1	3.9	4.0	4.3	4.5	4.1
Without relatives	357	392	7.9	9.3	8.1	8.9	8.6	8.1
Females	626	693	7.5	6.9	6.3	6.7	7.7	8.0
With relatives	416	466	10.3	9.3	8.6	9.2	10.0	11.1
Without relatives	210	227	4.9	4.7	4.1	4.4	5.5	5.1
Married men, spouse present	2,096	1,687	5.2	3.9	4.0	4.4	4.5	4.2
Full-time workers	6,466	6,059	8.1	7.0	6.8	7.4	7.3	7.5
Part-time workers	1,445	1,437	10.3	10.7	10.2	9.0	10.7	9.9
Unemployed 15 weeks and over¹	2,878	2,387	3.1	2.2	2.1	2.3	2.4	2.5
Labor force time lost²	--	--	8.9	8.2	8.1	7.7	7.9	8.2
OCCUPATION³								
White-collar workers	2,074	2,283	4.6	4.8	4.6	4.4	4.8	5.0
Professional and technical	399	433	3.0	3.4	3.2	2.9	3.1	3.1
Managers and administrators, except farm	281	339	3.0	2.8	3.2	3.1	3.5	3.5
Sales workers	341	345	5.8	4.9	4.8	5.1	5.4	5.9
Clerical workers	1,053	1,166	6.5	7.0	6.4	6.1	6.7	7.0
Blue-collar workers	3,792	3,125	11.9	9.0	9.0	9.3	9.6	9.8
Craft and kindred workers	1,032	846	8.5	7.0	6.2	7.3	7.4	7.0
Operatives	1,968	1,529	13.3	9.3	9.5	9.8	10.1	10.3
Nonfarm laborers	792	750	16.2	13.2	14.0	12.7	13.2	14.8
Service workers	1,190	1,146	9.2	8.1	8.1	8.6	8.5	8.5
Farm workers	114	106	3.7	4.8	5.0	4.1	4.5	3.5
INDUSTRY⁴								
Nonagricultural private wage and salary workers ⁵	6,239	5,641	9.3	7.6	7.6	7.8	8.0	8.2
Construction	895	782	19.7	15.3	14.1	17.0	17.7	17.1
Manufacturing	2,333	1,733	11.1	7.6	7.3	7.6	7.8	8.2
Durable goods	1,483	966	12.0	7.7	7.4	7.5	7.3	7.7
Nondurable goods	850	767	9.8	7.6	7.3	7.7	8.4	8.9
Transportation and public utilities	270	224	5.6	4.1	5.3	5.2	5.2	4.7
Wholesale and retail trade	1,518	1,606	8.9	8.3	8.1	8.2	8.5	9.0
Finance and services industries	1,178	1,266	6.2	6.2	6.4	6.3	6.4	6.5
Government workers	622	704	4.0	5.0	4.8	4.2	4.5	4.4
Agricultural wage and salary workers	159	151	10.5	11.6	13.1	10.9	12.4	10.0
VETERAN STATUS								
Males, Vietnam-era veterans⁶:								
20 to 24 years	568	465	9.3	6.7	7.3	8.8	8.4	7.4
25 to 29 years	183	142	18.1	14.7	14.7	19.6	20.0	15.4
30 to 34 years	268	205	8.2	6.2	6.6	7.9	6.8	6.8
35 to 39 years	117	118	6.4	3.7	5.1	5.5	5.7	5.0
Males, nonveterans:								
20 to 24 years	1,419	1,331	9.9	7.9	7.9	7.8	8.7	8.8
25 to 29 years	894	759	13.9	10.8	10.9	10.5	10.9	11.4
30 to 34 years	352	392	8.3	6.0	6.0	6.4	8.3	8.1
35 to 39 years	173	180	6.7	5.0	4.8	4.9	5.3	5.0

¹ Unemployment rate calculated as a percent of civilian labor force.² Aggregate hours lost by the unemployed and persons on part time for economic reasons as a percent of potentially available labor force hours.³ Unemployment by occupation includes all experienced unemployed persons, whereas that by industry covers only unemployed wage and salary workers.⁴ Includes mining, not shown separately.⁵ Vietnam-era veterans are those who served between August 5, 1964, and April 30, 1975.

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Table A-3. Selected employment indicators

Selected categories	Not seasonally adjusted		Seasonally adjusted					
	Aug. 1975	Aug. 1976	Aug. 1975	Apr. 1976	May 1976	June 1976	July 1976	Aug. 1976
Total employed, 16 years and over	86,612	89,367	85,288	87,399	87,697	87,500	87,907	87,981
Males	52,915	54,196	51,446	52,490	52,554	52,263	52,501	52,655
Females	33,696	35,171	33,842	34,909	35,143	35,237	35,406	35,326
Household heads	50,324	51,272	50,437	51,165	51,200	51,163	51,054	51,170
Married men, spouse present	38,238	38,466	38,012	38,205	38,215	38,090	38,147	38,237
Married women, spouse present	19,023	19,811	19,603	20,073	20,280	20,337	20,399	20,444
OCCUPATION								
White-collar workers	42,224	43,441	42,536	43,433	43,792	43,763	43,681	43,782
Professional and technical	12,418	12,981	12,964	13,004	13,262	13,439	13,297	13,336
Managers and administrators, except farm	9,107	9,421	8,970	9,387	9,200	9,257	9,179	9,282
Sales workers	5,363	5,593	5,521	5,488	5,562	5,512	5,435	5,549
Clerical workers	15,136	15,446	15,101	15,554	15,768	15,555	15,570	15,415
Blue-collar workers	29,239	30,180	27,968	29,110	29,115	29,166	29,279	28,853
Craft and kindred workers	11,445	11,656	11,051	11,162	11,268	11,238	11,372	11,251
Operatives	13,176	13,658	12,807	13,508	13,514	13,690	13,530	13,273
Nonfarm laborers	4,619	4,866	4,110	4,441	4,333	4,238	4,377	4,329
Service workers	11,784	12,452	11,676	11,858	11,981	12,028	12,185	12,325
Farm workers	3,364	3,295	3,008	2,922	2,833	2,802	2,878	2,951
MAJOR INDUSTRY AND CLASS OF WORKER								
Agriculture:								
Wage and salary workers	1,602	1,604	1,361	1,388	1,286	1,299	1,301	1,363
Self-employed workers	1,769	1,776	1,702	1,641	1,672	1,670	1,695	1,709
Unpaid family workers	515	462	397	394	359	341	340	356
Nonagricultural industries:								
Wage and salary workers	76,554	79,341	75,711	77,834	78,134	78,098	78,390	78,469
Private households	1,375	1,409	1,366	1,351	1,294	1,415	1,436	1,401
Government	14,164	14,658	14,805	14,796	14,850	14,894	14,988	15,317
Other	61,015	63,274	59,540	61,687	61,990	61,789	61,966	61,751
Self-employed workers	5,687	5,719	5,633	5,608	5,778	5,657	5,649	5,662
Unpaid family workers	486	464	457	463	460	451	432	436
PERSONS AT WORK¹								
Nonagricultural industries	71,939	74,350	76,323	77,413	79,056	79,497	79,189	78,931
Full-time schedules	60,319	62,683	62,198	63,708	64,947	64,860	65,259	64,622
Part time for economic reasons	3,895	3,652	3,234	3,248	3,382	3,080	3,012	3,047
Usually work full time	1,555	1,384	1,436	1,342	1,457	1,307	1,259	1,295
Usually work part time	2,360	2,298	1,798	1,798	1,925	1,773	1,753	1,752
Part time for noneconomic reasons	7,725	7,985	10,891	10,457	10,727	11,557	10,918	11,262

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

Weeks of unemployment	Not seasonally adjusted		Seasonally adjusted					
	Aug. 1975	Aug. 1976	Aug. 1975	Apr. 1976	May 1976	June 1976	July 1976	Aug. 1976
Less than 5 weeks	2,668	2,738	2,738	2,979	2,855	2,618	2,951	2,829
5 to 14 weeks	2,548	2,526	2,449	1,883	1,947	2,261	2,028	2,427
15 weeks and over	2,481	2,058	2,878	2,035	1,998	2,215	2,317	2,387
15 to 26 weeks	998	785	1,431	669	830	916	1,116	1,143
27 weeks and over	1,482	1,274	1,447	1,366	1,168	1,301	1,201	1,244
Average (mean) duration, in weeks	15.2	15.2	15.5	15.7	15.0	16.9	15.8	15.5
PERCENT DISTRIBUTION								
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 5 weeks	34.7	37.4	34.1	43.2	42.0	36.9	40.4	37.0
5 to 14 weeks	33.1	34.5	30.3	27.3	28.6	31.9	27.8	31.8
15 weeks and over	32.2	28.1	35.6	29.5	29.4	31.2	31.8	31.2
15 to 26 weeks	13.0	10.7	17.7	9.7	12.2	12.9	15.3	15.0
27 weeks and over	19.3	17.4	17.9	19.8	17.2	18.3	16.5	16.3

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Table A-5. Reasons for unemployment

Reason	Not seasonally adjusted		Seasonally adjusted					
	Aug. 1975	Aug. 1976	Aug. 1975	Apr. 1976	May 1976	June 1976	July 1976	Aug. 1976
NUMBER OF UNEMPLOYED								
Lost last job	4,016	3,308	4,588	3,499	3,461	3,623	3,863	3,781
Left last job	848	1,080	792	831	881	882	964	1,008
Reentered labor force	1,877	1,939	1,873	1,833	1,781	1,795	1,856	1,935
Seeking first job	955	997	909	894	856	805	795	951
PERCENT DISTRIBUTION								
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Job losers	32.2	45.2	36.2	49.6	49.6	31.0	51.5	49.3
Job leavers	11.1	16.7	9.7	11.8	12.6	12.4	12.9	13.1
Reentrants	24.4	26.5	22.9	26.0	25.5	25.3	24.9	25.2
New entrants	12.4	13.6	11.1	12.7	12.3	11.3	10.7	12.4
UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE								
Job losers	4.3	3.4	4.9	3.7	3.7	3.8	4.0	4.0
Job leavers .....	.9	1.1	.8	.9	.9	.9	1.0	1.1
Reentrants	2.0	2.0	2.0	1.9	1.9	1.9	1.9	2.0
New entrants	1.0	1.0	1.0	.9	.9	.9	.8	1.0

Table A-6. Unemployment by sex and age

Sex and age	Not seasonally adjusted			Seasonally adjusted unemployment rates					
	Thousands of persons		Percent looking for full-time work	Aug. 1975	Apr. 1976	May 1976	June 1976	July 1976	Aug. 1976
	Aug. 1975	Aug. 1976								Aug. 1976
Total, 18 years and over	7,696	7,323	81.4	8.5	7.5	7.3	7.5	7.8	7.9
18 to 19 years	1,823	1,791	64.5	20.7	19.2	18.5	18.4	18.1	19.7
19 to 17 years	820	833	42.3	22.8	20.8	21.9	21.5	20.8	22.5
18 to 19 years	1,002	958	83.8	19.4	18.2	16.4	15.6	15.9	18.0
20 to 24 years	1,836	1,682	89.7	13.4	11.8	11.1	11.4	11.2	11.8
25 years and over	4,037	3,850	85.7	6.0	5.1	5.0	5.5	5.9	5.6
25 to 54 years	3,429	3,225	87.7	6.4	5.3	5.3	5.7	6.1	5.8
55 years and over	608	625	75.5	4.7	4.6	4.2	4.7	4.8	4.8
Males, 18 years and over	4,102	3,650	86.5	8.0	6.7	6.8	7.0	7.2	7.0
18 to 19 years	967	888	64.6	20.8	20.1	19.4	18.5	18.4	18.8
18 to 17 years	439	430	49.7	22.9	21.5	23.1	21.3	21.0	21.8
18 to 19 years	528	458	84.3	19.5	19.1	16.9	15.9	16.4	16.7
20 to 24 years	1,002	838	93.9	14.5	11.2	11.3	11.7	11.9	11.8
25 years and over	2,133	1,924	93.3	5.5	4.5	4.4	5.0	5.1	4.9
25 to 54 years	1,782	1,570	95.7	5.9	4.6	4.5	5.1	5.4	5.1
55 years and over	351	354	83.1	4.5	4.4	4.4	4.8	4.2	4.5
Females, 18 years and over	3,594	3,673	76.4	9.3	8.5	8.0	8.3	8.7	9.1
18 to 19 years	856	903	64.2	20.5	18.1	17.5	18.2	17.8	20.8
18 to 17 years	381	403	40.7	22.6	19.9	20.5	21.6	20.7	23.3
18 to 19 years	475	500	83.4	19.3	17.1	15.9	15.3	15.3	19.5
20 to 24 years	833	844	85.4	12.0	12.6	10.8	11.0	10.4	11.8
25 years and over	1,904	1,926	78.1	6.8	6.1	6.0	6.3	7.1	6.6
25 to 54 years	1,647	1,555	80.2	7.4	6.5	6.4	6.7	7.3	7.0
55 years and over	258	271	65.3	5.1	4.9	4.0	4.5	5.8	5.2

ESTABLISHMENT DATA

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

Industry	Not seasonally adjusted				Seasonally adjusted					
	Aug. 1975	June 1976	July 1976 p	Aug. 1976 p	Aug. 1975	Apr. 1976	May 1976	June 1976	July 1976 p	Aug. 1976 p
TOTAL	76,900	79,805	78,900	79,280	77,023	78,963	78,923	78,943	79,192	79,431
GOODS-PRODUCING	22,901	23,435	23,202	23,586	22,418	23,144	23,123	23,091	23,094	23,113
MINING	763	795	804	763	749	772	773	779	788	749
CONTRACT CONSTRUCTION	3,688	3,523	3,578	3,610	3,415	3,399	3,386	3,362	3,369	3,343
MANUFACTURING	18,450	19,117	18,820	19,213	18,254	18,973	18,964	18,950	18,937	19,021
<i>Production workers</i>	13,180	13,774	13,473	13,839	13,011	13,668	13,656	13,630	13,610	13,679
DURABLE GOODS	10,592	11,162	10,958	11,126	10,563	11,000	11,046	11,046	11,035	11,103
<i>Production workers</i>	7,468	7,994	7,790	7,938	7,450	7,858	7,900	7,890	7,877	7,934
Ordinance and accessories	167.4	157.5	156.5	156.8	167	161	161	158	157	156
Lumber and wood products	583.9	622.8	622.8	627.4	563	597	600	602	604	605
Stone, clay, and glass products	457.4	493.8	480.8	491.9	452	492	495	490	490	486
Furniture and fixtures	624.9	640.8	642.3	644.9	610	624	626	627	630	629
Primary metal industries	1,147.8	1,215.1	1,207.4	1,209.3	1,148	1,181	1,187	1,197	1,203	1,209
Fabricated metal products	1,332.0	1,400.9	1,373.1	1,405.2	1,331	1,389	1,391	1,388	1,386	1,404
Machinery, except electrical	2,000.6	2,081.8	2,062.5	2,076.6	2,013	2,054	2,064	2,065	2,075	2,089
Electrical equipment	1,740.3	1,842.3	1,807.6	1,842.3	1,747	1,828	1,833	1,833	1,819	1,850
Transportation equipment	1,635.8	1,750.8	1,677.4	1,725.4	1,645	1,739	1,748	1,747	1,735	1,743
Instruments and related products	483.8	515.3	511.3	515.1	481	510	512	512	512	516
Miscellaneous manufacturing	417.0	430.8	416.0	427.3	406	425	429	427	424	416
NONDURABLE GOODS	7,858	7,955	7,862	8,087	7,691	7,973	7,918	7,904	7,902	7,918
<i>Production workers</i>	5,712	5,780	5,683	5,901	5,561	5,810	5,756	5,740	5,733	5,745
Food and kindred products	1,804.1	1,707.4	1,748.9	1,844.8	1,688	1,707	1,712	1,716	1,713	1,726
Tobacco manufactures	85.1	67.7	73.2	82.3	78	75	75	74	80	76
Textile mill products	923.4	981.3	951.9	976.7	918	972	973	969	965	971
Apparel and other textile products	1,255.1	1,331.0	1,251.6	1,316.8	1,245	1,317	1,315	1,315	1,308	1,306
Paper and allied products	644.9	684.7	678.9	685.3	639	674	678	677	679	679
Printing and publishing	1,069.5	1,077.8	1,075.3	1,077.7	1,072	1,077	1,079	1,076	1,079	1,080
Chemicals and allied products	1,015.8	1,036.2	1,041.6	1,042.4	1,008	1,033	1,031	1,027	1,033	1,034
Petroleum and coal products	204.6	205.7	207.3	207.0	199	204	203	202	202	202
Rubber and plastics products, nec.	592.4	580.0	567.1	581.1	588	634	573	573	571	577
Leather and leather products	262.6	282.7	266.0	273.2	256	280	279	275	272	267
SERVICE-PRODUCING	53,999	56,370	55,698	55,694	54,605	55,819	55,800	55,852	56,098	56,318
TRANSPORTATION AND PUBLIC UTILITIES	4,493	4,531	4,532	4,522	4,466	4,510	4,498	4,477	4,492	4,495
WHOLESALE AND RETAIL TRADE	16,959	17,552	17,509	17,553	17,016	17,444	17,439	17,460	17,559	17,612
WHOLESALE TRADE	4,192	4,280	4,292	4,302	4,159	4,255	4,262	4,254	4,262	4,268
RETAIL TRADE	12,767	13,272	13,217	13,251	12,857	13,189	13,177	13,206	13,297	13,344
FINANCE, INSURANCE, AND REAL ESTATE	4,273	4,344	4,365	4,368	4,218	4,293	4,278	4,297	4,300	4,312
SERVICES	14,162	14,775	14,778	14,812	14,050	14,498	14,514	14,557	14,617	14,694
GOVERNMENT	14,112	15,168	14,514	14,439	14,855	15,074	15,071	15,061	15,130	15,205
FEDERAL	2,775	2,758	2,775	2,758	2,756	2,730	2,727	2,725	2,721	2,739
STATE AND LOCAL	11,337	12,410	11,739	11,681	12,099	12,344	12,344	12,336	12,409	12,466

p=preliminary.

ESTABLISHMENT DATA

ESTABLISHMENT DATA

Table B-2. Average weekly hours of production or nonsupervisory workers¹ on private nonagricultural payrolls, by industry

Industry	Not seasonally adjusted				Seasonally adjusted					
	Aug. 1975	June 1976	July 1976 ^P	Aug. 1976 ^P	Aug. 1975	Apr. 1976	May 1976	June 1976	July 1976 ^P	Aug. 1976 ^P
TOTAL PRIVATE.....	36.6	36.4	36.6	36.6	36.2	36.1	36.2	36.1	36.2	36.2
MINING.....	42.0	42.8	43.0	40.0	41.8	42.6	42.5	42.3	42.8	39.8
CONTRACT CONSTRUCTION.....	37.8	37.9	37.9	38.0	36.7	37.5	37.2	37.1	36.8	36.9
MANUFACTURING.....	39.7	40.4	40.0	39.9	39.7	39.4	40.2	40.2	40.2	39.9
Overtime hours.....	2.9	3.2	3.1	3.1	2.8	2.5	3.2	3.1	3.2	3.0
DURABLE GOODS.....	39.9	41.1	40.5	40.5	40.2	39.7	40.9	40.8	40.8	40.8
Overtime hours.....	2.7	3.4	3.1	3.2	2.7	2.5	3.3	3.3	3.2	3.2
Ordnance and accessories.....	41.0	41.2	40.4	40.1	41.2	39.6	40.8	41.1	40.8	40.3
Lumber and wood products.....	39.8	40.6	40.3	40.8	39.5	40.0	40.1	39.8	40.4	40.5
Furniture and fixtures.....	38.8	39.0	38.3	39.2	38.3	38.4	38.9	38.6	38.6	38.7
Stone, clay, and glass products.....	41.1	41.7	41.3	41.1	40.7	41.0	41.3	41.2	41.1	40.7
Primary metal industries.....	39.6	41.3	41.1	41.1	39.9	40.4	40.9	41.1	41.3	41.4
Fabricated metal products.....	40.0	41.3	40.6	41.1	40.0	39.6	40.9	40.9	40.8	41.1
Machinery, except electrical.....	40.4	41.2	40.6	40.8	40.8	40.2	41.1	41.1	41.2	41.2
Electrical equipment.....	39.5	40.3	39.5	39.8	39.6	39.2	40.2	40.1	40.1	39.9
Transportation equipment.....	40.0	42.8	42.0	40.2	41.2	40.6	42.2	42.4	42.0	41.4
Instruments and related products.....	39.3	40.5	40.1	40.4	39.5	39.6	40.8	40.5	40.6	40.6
Miscellaneous manufacturing.....	38.3	38.7	38.4	38.6	38.2	38.0	38.7	38.6	38.7	38.5
NONDURABLE GOODS.....	39.5	39.4	39.2	39.2	39.3	38.7	39.5	39.2	39.1	39.0
Overtime hours.....	3.1	3.0	3.0	2.9	2.9	2.6	3.1	2.9	3.0	2.7
Food and kindred products.....	41.3	40.2	40.5	40.6	40.7	40.0	40.2	40.0	40.1	40.0
Tobacco manufacturers.....	38.2	38.2	33.8	36.4	37.6	39.0	38.4	38.4	34.5	35.9
Textile mill products.....	40.6	40.7	40.0	39.8	40.4	39.0	40.7	40.3	40.2	39.6
Apparel and other textile products.....	35.9	35.9	35.6	35.4	35.5	34.9	35.9	35.9	35.5	35.0
Paper and allied products.....	42.4	42.6	42.3	42.5	42.1	41.8	42.8	42.5	42.3	42.2
Printing and publishing.....	37.2	37.5	37.6	37.7	37.1	37.1	37.5	37.4	37.6	37.5
Chemicals and allied products.....	40.9	41.6	41.4	41.1	41.1	41.5	41.6	41.4	41.5	41.3
Petroleum and coal products.....	41.0	42.2	42.6	42.2	41.0	42.2	42.2	41.9	42.1	42.2
Rubber and plastics products, nec.....	40.1	40.5	39.8	39.8	40.1	39.4	40.7	40.3	40.2	39.8
Leather and leather products.....	38.2	37.8	37.5	36.7	38.0	37.5	38.1	37.1	37.1	36.6
TRANSPORTATION AND PUBLIC UTILITIES.....	39.9	40.0	40.3	40.2	39.5	40.0	39.6	39.8	39.8	39.8
WHOLESALE AND RETAIL TRADE.....	34.6	33.9	34.5	34.5	33.8	33.9	33.8	33.6	33.6	33.7
WHOLESALE TRADE.....	38.7	38.9	39.3	39.3	38.6	38.9	38.9	38.7	39.1	39.2
RETAIL TRADE.....	33.4	32.4	33.0	33.0	32.3	32.5	32.3	32.0	31.9	31.9
FINANCE, INSURANCE, AND REAL ESTATE.....	36.4	36.6	36.7	37.0	36.3	36.6	36.8	36.6	36.6	36.9
SERVICES.....	34.3	33.6	34.0	33.9	33.8	33.5	33.7	33.4	33.4	33.4

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

ESTABLISHMENT DATA

ESTABLISHMENT DATA

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

Industry	Average hourly earnings				Average weekly earnings			
	Aug. 1975	June 1976	July 1976 ^p	Aug. 1976 ^p	Aug. 1975	June 1976	July 1976 ^p	Aug. 1976 ^p
TOTAL PRIVATE	\$4.56	\$4.84	\$4.86	\$4.87	\$166.90	\$176.18	\$177.88	\$178.24
<i>Seasonally adjusted</i>	4.57	4.84	4.87	4.88	165.43	174.72	176.29	176.66
MINING	5.92	6.32 ¹	6.37	6.21	248.64	270.50	273.91	248.40
CONTRACT CONSTRUCTION	7.	7.60	7.68	7.70	274.81	288.04	291.07	292.60
MANUFACTURING	4.82	5.15	5.19	5.20	191.35	208.06	207.60	207.48
DURABLE GOODS	5.16	5.53	5.55	5.57	205.88	227.28	224.78	225.59
Ornance and accessories	5.28	5.64	5.72	5.75	216.42	232.37	231.09	230.58
Lumber and wood products	4.39	4.76	4.82	4.86	174.72	193.26	194.25	198.29
Furniture and fixtures	3.78	3.96	3.97	4.03	146.66	154.44	152.05	157.98
Stone, clay, and glass products	4.96	5.30	5.34	5.35	203.86	221.01	220.54	219.89
Primary metal industries	6.29	6.77	6.83	6.91	249.08	279.60	280.71	284.00
Fabricated metal products	5.10	5.44	5.42	5.48	204.00	224.67	220.05	225.23
Machinery, except electrical	5.39	5.72	5.74	5.79	217.76	235.66	233.04	236.23
Electrical equipment	4.60	4.84	4.88	4.88	181.70	195.05	192.76	194.22
Transportation equipment	6.01	6.52	6.48	6.53	240.40	279.06	272.16	262.51
Instruments and related products	4.57	4.83	4.87	4.88	179.60	195.62	195.29	197.15
Miscellaneous manufacturing	3.79	3.99	4.03	4.03	145.16	154.41	154.75	155.56
NONDURABLE GOODS	4.36	4.62	4.68	4.68	172.22	182.03	183.46	183.46
Food and kindred products	4.58	4.92	4.94	4.90	189.15	197.78	200.07	198.94
Tobacco manufactures	4.32	5.23	4.99	4.80	165.02	199.79	168.66	174.72
Textile mill products	3.38	3.59	3.72	3.74	137.23	146.11	148.80	148.85
Apparel and other textile products	3.16	3.40	3.39	3.41	113.44	122.06	120.68	120.71
Paper and allied products	5.10	5.39	5.47	5.52	216.24	229.61	231.38	234.60
Printing and publishing	5.45	5.65	5.67	5.69	202.74	211.88	213.19	214.51
Chemicals and allied products	5.44	5.84	5.91	5.90	222.50	242.94	244.67	242.49
Petroleum and coal products	6.55	7.11	7.12	7.11	268.55	300.04	303.31	300.04
Rubber and plastics products, nec	4.39	4.38	4.40	4.41	176.04	177.39	175.12	175.52
Leather and leather products	3.21	3.43	3.41	3.45	122.62	129.65	127.88	126.62
TRANSPORTATION AND PUBLIC UTILITIES	6.05	6.42	6.45	6.49	241.40	256.80	259.94	260.90
WHOLESALE AND RETAIL TRADE	3.76	3.96	3.97	3.96	130.10	134.24	136.97	136.62
WHOLESALE TRADE	4.93	5.14	5.17	5.17	190.79	199.95	203.18	203.18
RETAIL TRADE	3.35	3.53	3.55	3.52	111.89	114.37	117.15	116.16
FINANCE, INSURANCE, AND REAL ESTATE	4.15	4.34	4.36	4.40	151.06	158.84	160.01	162.80
SERVICES	4.03	4.34	4.32	4.35	138.23	145.82	146.88	147.47

¹ See footnote 1, table B-2, preliminary.

ESTABLISHMENT DATA

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Table B-4. Hourly earnings index for production or nonsupervisory workers¹ on private nonagricultural payrolls, by industry division, seasonally adjusted

(1967=100)

Industry	Aug. 1975	Mar. 1976	Apr. 1976	May 1976	June 1976	July 1976	Aug. 1976	Percent change from	
								Aug. 1975	July 1976
TOTAL PRIVATE NONFARM:									
Current dollars	174.6	181.4	182.2	183.7	184.5	185.6	186.5	6.8	0.5
Constant (1967) dollars	107.3	108.2	108.3	108.5	108.5	108.6	N.A.	(2)	(3)
MINING	186.2	194.8	195.9	197.6	197.7	199.1	202.1	8.6	1.5
CONTRACT CONSTRUCTION	176.7	183.4	183.2	185.1	185.8	188.3	186.9	5.7	-8
MANUFACTURING	173.3	180.7	181.8	182.4	183.6	185.2	186.3	7.5	-6
TRANSPORTATION AND PUBLIC UTILITIES	186.2	194.8	195.5	198.5	199.4	199.5	200.0	7.4	.3
WHOLESALE AND RETAIL TRADE	170.5	174.9	175.7	177.3	177.5	178.6	178.9	4.9	.1
FINANCE, INSURANCE, AND REAL ESTATE	163.0	168.3	169.0	170.4	170.0	170.7	173.4	6.3	1.5
SERVICES	177.1	185.2	186.5	188.2	189.3	189.0	191.2	7.9	1.2

¹ See footnote 1, table B-2.² Percent change was 1.8 from July 1975 to July 1976, the latest month available.³ Percent change was 0.1 from June 1976 to July 1976, the latest month available.

N.A. = not available.

preliminary.

NOTE: All series are in current dollars except where indicated. The index excludes effects of two types of changes that are unrelated to underlying wage-rate development: 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 workers¹ on private nonagricultural payrolls, by industry, seasonally adjusted

(1967=100)

Industry division and group	1975					1976							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July ^P	Aug. ^P
TOTAL	107.4	107.9	108.4	108.8	109.3	110.3	110.5	110.2	110.7	111.2	110.6	110.9	111.0
GOODS-PRODUCING	91.2	92.4	92.7	92.9	94.3	95.5	95.2	94.8	94.5	96.0	95.5	95.4	94.9
MINING	118.6	119.9	125.0	124.7	125.7	125.2	124.4	124.8	124.9	124.4	124.9	128.1	111.7
CONTRACT CONSTRUCTION	98.3	98.6	97.3	97.7	98.8	100.3	98.8	93.4	98.8	97.8	96.8	96.6	96.0
MANUFACTURING	89.0	90.3	90.8	90.9	92.5	93.7	93.6	94.0	92.7	94.7	94.2	94.0	94.1
DURABLE GOODS	86.7	87.7	87.8	88.1	90.0	91.3	91.3	92.0	91.0	93.6	93.4	93.3	93.8
Ornance and accessories	43.7	43.0	42.9	40.8	41.5	41.6	40.9	41.0	40.3	41.0	40.7	39.9	38.8
Lumber and wood products	88.8	90.1	92.1	90.8	93.4	97.0	96.4	95.2	95.8	96.4	96.1	97.9	98.4
Furniture and fixtures	92.6	97.4	97.9	99.2	101.0	101.5	103.1	102.8	102.5	104.8	102.5	102.3	101.8
Stone, clay, and glass products	94.5	95.7	95.7	96.2	97.1	97.6	96.7	95.7	98.0	99.1	99.1	99.6	98.2
Primary metal industries	81.7	83.5	81.9	82.3	83.6	84.1	84.9	85.3	85.8	87.4	88.7	89.9	90.6
Fabricated metal products	90.9	92.0	92.8	92.7	94.6	95.7	96.6	97.3	95.0	98.3	97.9	97.4	99.6
Machinery, except electrical	91.0	91.8	91.9	92.0	92.5	93.4	93.2	93.3	91.6	94.3	94.0	94.7	95.8
Electrical equipment and supplies	84.3	84.9	85.8	85.5	87.5	89.0	89.2	90.3	89.2	91.9	91.6	90.8	92.4
Transportation equipment	82.9	82.2	81.5	83.1	87.3	89.0	88.2	90.8	88.5	92.3	92.6	90.7	89.8
Instruments and related products	97.2	99.4	100.8	101.7	103.4	105.0	105.2	106.3	105.7	109.9	109.1	109.7	109.7
Miscellaneous manufacturing, Ind.	89.0	91.4	91.3	90.8	91.7	94.4	94.3	95.1	92.9	95.7	94.6	93.7	90.9
NONDURABLE GOODS	92.4	94.1	95.1	95.0	96.2	97.1	96.9	96.9	95.3	96.2	95.4	95.0	94.6
Food and kindred products	96.1	96.9	96.5	95.1	95.4	96.9	97.3	95.5	95.9	96.7	96.5	96.6	97.0
Tobacco manufactures	85.8	88.1	85.6	93.4	87.4	90.6	88.8	85.6	84.9	83.6	82.2	81.2	79.4
Textile mill products	93.0	96.4	98.1	98.0	99.1	99.7	99.0	98.6	95.2	99.5	98.0	97.4	96.8
Apparel and other textile products	85.3	87.8	90.0	90.1	92.1	93.1	91.8	92.6	88.9	91.2	91.3	89.5	88.1
Paper and allied products	89.6	91.3	92.0	92.6	94.7	95.2	95.8	95.9	95.0	97.9	97.2	96.9	96.7
Printing and publishing	92.4	91.9	91.8	92.4	93.5	93.4	92.5	92.7	92.1	93.4	92.7	93.2	93.2
Chemicals and allied products	94.5	96.1	97.4	97.6	98.1	98.5	99.4	99.1	99.5	99.5	98.4	99.1	99.2
Petroleum and coal products	107.3	108.9	110.2	111.6	111.1	113.8	114.4	114.4	114.8	113.9	111.4	111.9	112.2
Rubber and plastics products, nec	110.6	113.0	114.7	113.5	116.2	118.8	119.3	121.8	118.5	107.8	106.2	105.7	105.6
Leather and leather products	72.1	74.9	77.2	77.2	78.1	79.3	78.9	79.9	78.3	79.2	76.2	75.5	72.6
SERVICE-PRODUCING	118.7	118.7	119.3	119.8	119.7	120.6	121.0	120.9	121.9	121.7	121.1	121.6	122.2
TRANSPORTATION AND PUBLIC UTILITIES	100.5	101.1	101.2	101.5	101.7	101.5	102.7	102.5	102.9	101.4	101.4	101.7	101.8
WHOLESALE AND RETAIL TRADE	114.6	114.6	115.1	115.2	115.5	116.8	116.8	116.8	118.2	117.7	116.8	116.7	118.0
WHOLESALE TRADE	111.0	111.3	112.0	111.5	112.3	113.4	113.6	113.2	114.3	114.5	113.7	115.1	115.5
RETAIL TRADE	115.9	115.8	116.2	116.6	116.6	118.1	118.0	118.1	119.7	118.9	118.0	118.5	118.9
FINANCE, INSURANCE, AND REAL ESTATE	122.9	123.5	123.7	125.1	124.5	125.1	125.8	125.5	126.1	126.2	126.3	126.3	127.6
SERVICES	131.4	131.1	132.0	133.1	132.3	133.3	133.9	133.7	134.3	135.3	134.5	135.0	135.9

¹ See footnote 1, table B-2.

preliminary.

ESTABLISHMENT DATA

ESTABLISHMENT DATA

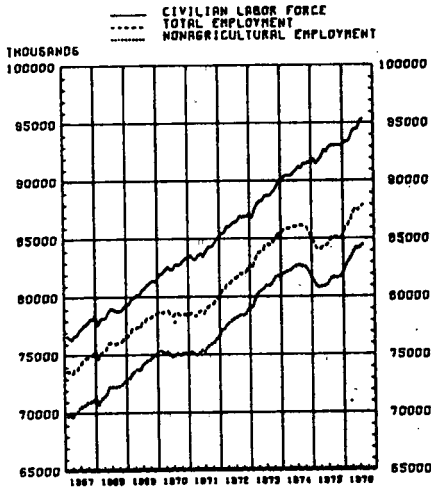
Table B-6. Indexes of diffusion: Percent of industries in which employment¹ increased

Year and month	Over 1-month span	Over 3-month span	Over 6-month span	Over 12-month span
1973				
January	76.7	84.0	81.7	81.1
February	75.0	83.7	79.4	80.8
March	73.8	76.2	79.4	82.6
April	62.5	71.5	74.7	81.4
May	59.9	70.3	72.1	79.7
June	68.0	63.1	66.6	78.5
July	55.8	66.9	72.1	75.6
August	63.1	64.8	72.7	73.5
September	61.6	74.7	73.0	69.2
October	72.7	75.9	75.6	66.0
November	75.0	76.5	70.3	66.6
December	66.6	70.1	66.0	64.2
1974				
January	59.3	62.8	60.8	63.4
February	52.6	53.8	55.2	59.6
March	46.5	48.0	49.7	55.2
April	47.1	48.3	48.5	50.3
May	55.2	51.7	49.7	40.1
June	53.2	52.6	45.6	28.2
July	52.3	45.1	37.2	27.0
August	45.9	39.2	31.1	22.4
September	36.0	40.4	23.3	20.9
October	37.8	28.8	17.7	18.6
November	20.1	21.5	17.2	16.6
December	18.6	13.4	13.1	14.0
1975				
January	18.6	12.5	13.4	16.6
February	16.6	13.7	13.1	17.4
March	25.0	19.2	16.3	17.4
April	40.4	35.8	27.9	20.9
May	53.8	40.4	40.1	25.9
June	40.4	48.5	60.8	40.4
July	55.2	55.8	67.4	50.3
August	73.5	80.2	67.4	62.5
September	81.7	81.4	76.5	71.2
October	64.8	70.3	79.4	75.9
November	54.7	68.9	82.0	79.1
December	66.6	72.7	75.6	81.4
1976				
January	75.0	78.8	80.2	83.4p
February	70.1	81.7	77.9	79.1p
March	70.9	78.8	74.4	
April	75.3	77.3	74.1p	
May	66.3	67.7	69.8p	
June	42.4	58.1p		
July	55.5p	54.9p		
August	59.3p			
September				
October				
November				
December				

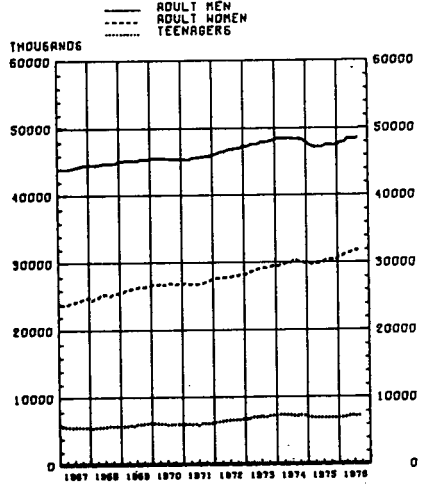
¹ Number of employees, seasonally adjusted, on payrolls of 172 private nonagricultural industries.
p = preliminary.

LABOR FORCE, EMPLOYMENT, UNEMPLOYMENT
HOUSEHOLD DATA - SEASONALLY ADJUSTED

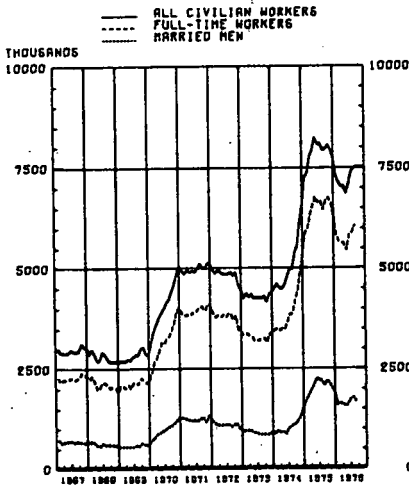
1. LABOR FORCE AND EMPLOYMENT



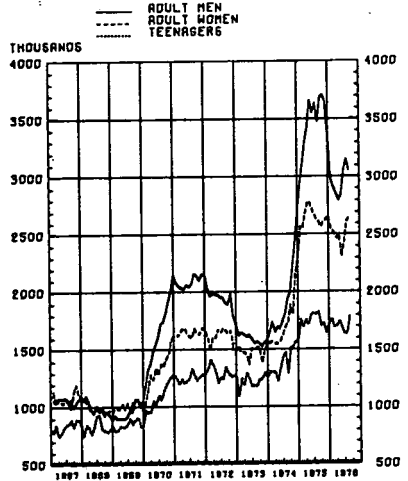
2. TOTAL EMPLOYMENT



3. UNEMPLOYMENT

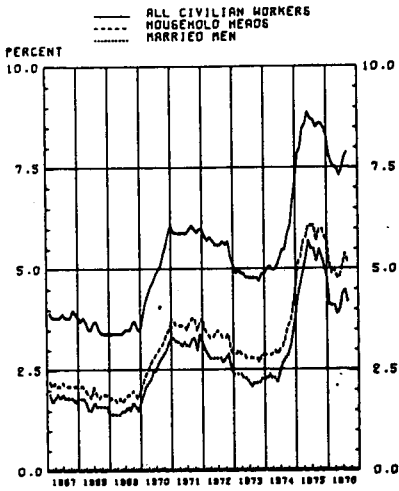


4. UNEMPLOYMENT

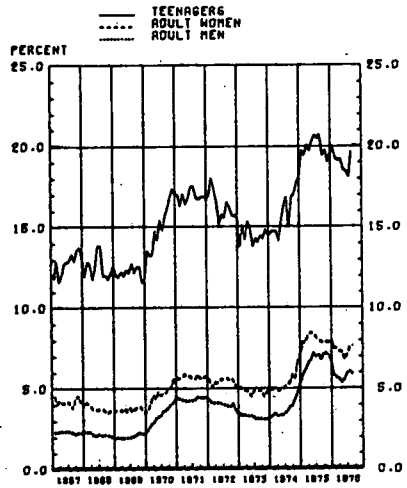


UNEMPLOYMENT RATES
HOUSEHOLD DATA - SEASONALLY ADJUSTED

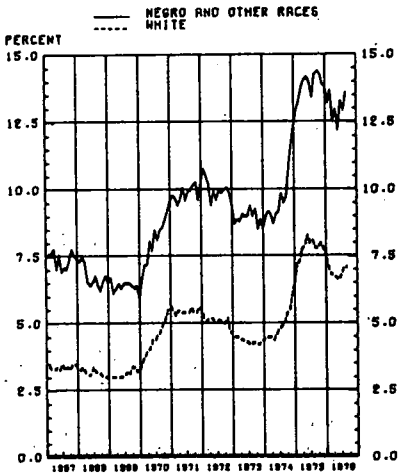
5. UNEMPLOYMENT RATES



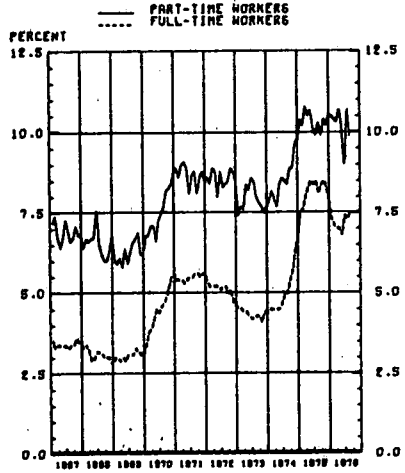
6. UNEMPLOYMENT RATES



7. UNEMPLOYMENT RATES

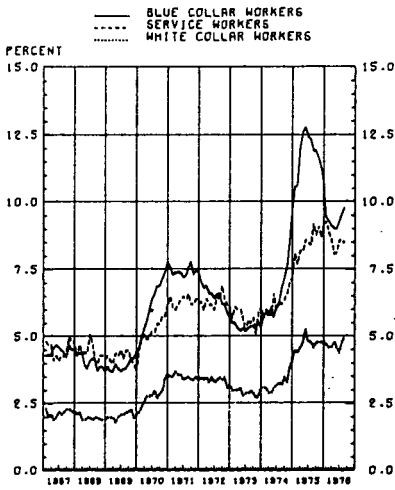


8. UNEMPLOYMENT RATES

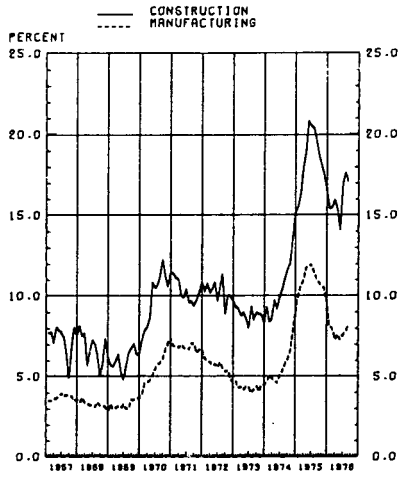


UNEMPLOYMENT
HOUSEHOLD DATA - SEASONALLY ADJUSTED

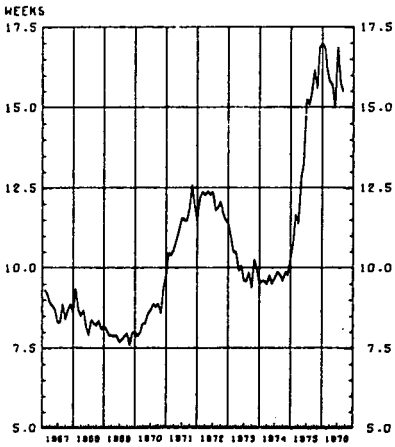
9. UNEMPLOYMENT RATES



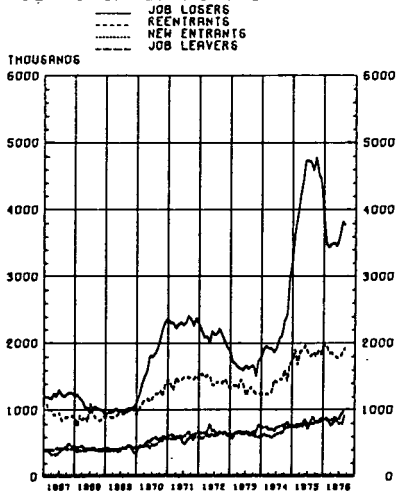
10. UNEMPLOYMENT RATES



11. AVERAGE DURATION
OF UNEMPLOYMENT



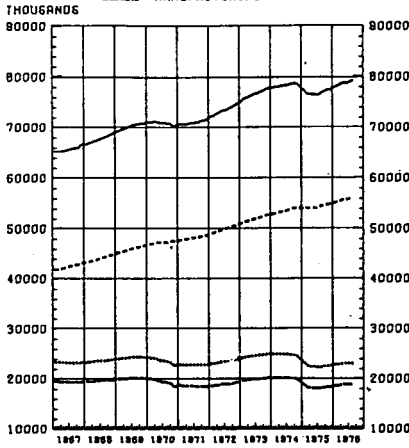
12. UNEMPLOYMENT BY REASON



NONAGRICULTURAL EMPLOYMENT AND HOURS
ESTABLISHMENT DATA - SEASONALLY ADJUSTED

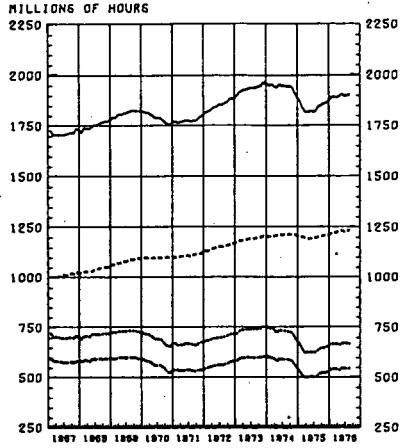
13. EMPLOYMENT

— TOTAL NONAGRICULTURAL
- - - SERVICE-PRODUCING
- - - GOODS-PRODUCING
— MANUFACTURING



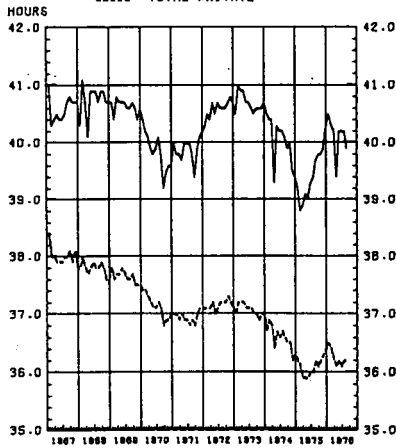
14. HOURS

— TOTAL PRIVATE NONAGRICULTURAL
- - - PRIVATE SERVICE-PRODUCING
- - - GOODS-PRODUCING
— MANUFACTURING

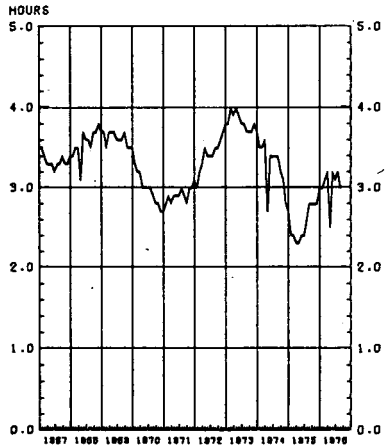


15. AVERAGE WEEKLY HOURS

— MANUFACTURING
- - - TOTAL PRIVATE



16. AVERAGE WEEKLY OVERTIME HOURS
IN MANUFACTURING



NOTE: Charts 14 and 15 relate to production or nonsupervisory workers; chart 16 relates to production workers. Data for the 2 most recent months are preliminary in charts 13-16.

Representative BOLLING. Mr. Commissioner, I would like to try to set what seems to be the current situation in the economy. Unemployment rose for the third straight month. Total hours of work rose scarcely at all. Employment did not go up at all this month. Average weekly hours remained flat, or at a low level. Industrial production leveled off. Construction spending has been down actually all year in real terms. Retail sales are flat, declining in real terms.

You are a longtime student of the business cycle or business cycles. It looks to me like this is more than just a lull or pause, it looks like it might preface real trouble. How do you add all of these figures up?

Mr. SHISKIN. Well, first of all, there is no doubt that we are having a lull in the economic expansion. However, movements like this have occurred in many expansions in the past.

With respect to the statistics you recited, I think they are all correct. However, there are additional kinds of observations that I think are worth making.

First of all, payroll employment, the number of persons on payrolls, has been very strong. The rise for the last 2 months was about half a million; that is a very good record.

Our series on aggregate hours—this is what we used to call man-hours—has slow down, but still, in recent months, it has been rising.

Let me give you a few figures on the aggregate hour series which is a comprehensive labor market series because it combines both employment and hours. This leaves some things out, government and supervisory employees, but it does combine employment and hours for what it covers, the private sector.

Something I just learned yesterday is that a 0.1 rise in that index equals 1,700,000 hours. If you convert that into full-time equivalent jobs, that is about 50,000 jobs. So, in recent months, while the index itself seems to be showing very small movements, it has involved a lot of jobs. There is some improvement there. I would add comments on those two indexes, payroll employment and aggregate hours, to balance your statement out.

Let me now come to your question whether this could be a more serious situation than a pause. Well, first of all, I think we have to be eternally vigilant during a pause; you have to watch it very carefully; and it should not be underestimated.

As a longtime student of the business cycle, as you indicated, I look at other kinds of data, data mostly which foreshadow business development. If you look at the index of the leading indicators, first of all, you see it has been rising for many months in a row; there is no evidence of a decline. If you look at certain key components of it, for example, new orders for capital goods and new contracts for construction, you will see that they are beginning to pick up. In fact, new orders for capital goods have risen 6 months in a row. So, investment, new investment, which has been sluggish, appears to be getting underway.

This morning the New York Times carried a report that capital appropriations by manufacturers have risen very sharply.

So, what I would say is this: while we certainly have a slow-down, a pause, a lull, whatever you wish to call it in employment, industrial production, and retail sales, other types of indicators, specifically,

the leading indicators, are not behaving like we have a more serious situation ahead.

Representative BOLLING. But you are not saying this is a situation that is ideal in the trend, that these are some indicators that you added to the ones that I mentioned, that give us a more optimistic view.

Mr. SHISKIN. I think my comment balances out your statement.

Representative BOLLING. But the situation is one that needs a very, very careful look.

Mr. SHISKIN. I agree.

Representative BOLLING. And part of the look is the whole question of where we are going to be on employment and unemployment. We have a very high level of unemployment as far as I know, in terms of any previous recent situation at this stage of the recovery.

Mr. SHISKIN. Right.

Representative BOLLING. Now, the administration economists have been talking about, I think, something like 7 percent for this year. What would it take in terms of a decrease in unemployment for the rest of the year to get to the seven-percent rate for the year; it would take an enormous change, would it not?

Mr. SHISKIN. Well, let me say this, by my reading of the newspapers, it is not only the administration economists, but if you look at the familiar models prepared by private groups, and one of Mr. Carter's advisers, they have about the same view as the administration's economists about the outlook for the rest of this year and 1977.

Clearly it would take a very substantial drop in unemployment to bring us down to the 7-percent rate by the end of 1976. As a statistical agency, we have to maintain our neutrality and objectivity. For this reason, we try to stay away from policy issues and forecasts. So, I do not want to comment more specifically than I have already about the implications of some of these other indicators.

Representative BOLLING. Well, just one more question, and then I will yield to Mr. Brown. It seems to me that it is important to emphasize that the rate of unemployment itself, at least in my opinion, is excessive. It is not only excessive, it is pervasive due to the fact that virtually all classes are disadvantaged—and I think my figures are correct—from May to August we have a change in the total from 7.3 to 7.9 of virtually everybody. Adult men, 5.6 in May to 5.9 in August; adult women from 6.8 in May to 7.7 in August; teenagers, 18.5 in May to 19.7 in August; whites, 6.6 to 7.1; blacks in May 12.2 to 13.6 in August; white collar, 4.6 in May to 5.0 in August; blue collar, 9.0 to 9.8; construction, 14.1 to 17.1; manufacturing, 7.3 to 8.2.

It seems to me that in human terms—while in the technical sense this may be a lull—in human terms they certainly are not getting any better, in fact across the board they seem to be getting worse for people.

Now, I take it that those figures are accurate.

Mr. SHISKIN. Well, it is clear that unemployment has risen since May. As I have said many times in the past, rising unemployment is deplorable. I can't think of any better way to describe it.

Representative BOLLING. Well, that is a good description. Congressman Brown.

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

Mr. Shiskin, I don't think that you show in your statement the specific increase in the labor force for the month of August, what was that figure?

Mr. SHISKIN. 154,000.

Representative BROWN of Michigan. 154,000. And I think you said that was evenly spread between those who became employed and those who did not.

Mr. SHISKIN. Roughly evenly spread. There was a small rise in employment and a small rise in unemployment.

Representative BROWN of Michigan. I think you agreed with the statement of the chairman earlier when he was reciting the different factors, you said he was correct, but one of the statistics that he cited said that there had not been an increase in employment. I think you wish to correct that because there has not been a month during this recovery that there has not been an increase in the pure employment figures, is that correct?

Mr. SHISKIN. Well, Congressman Brown, the rise in total employment was very small in August. Statisticians have a measure which they call "statistical significance." People have different views on it. I do not share the majority view on this, as some members of this committee know. That was not a "statistically significant" increase. And that explains why our release says there has been no change in the figures.

On the other hand, there is another series we have on employment, the series on payroll employment, and that shows a very strong rise in employment. And let me just add this, while the movements in our series on aggregate hours have been very small in recent months, they involve a lot of jobs. So, I think that is economically significant.

Representative BROWN of Michigan. Well, isn't it also significant because of its ripple effect, that there has been a substantial increase in manufacturing employment for the first time, really, since April?

Mr. SHISKIN. Yes. I think you need a much more complex statement than the ones that have been made earlier on employment statistics, as you indicated.

Representative BROWN of Michigan. For instance, in August there was a 240,000 job increase in the nonagricultural establishment, covered by your survey.

Mr. SHISKIN. Yes.

Representative BROWN of Michigan. I think that, at least we always argue, that when you have a job created in the manufacturing sector, that it has a ripple effect not applicable to the service or even the agricultural sectors; is that not correct?

Mr. SHISKIN. Yes.

Representative BROWN of Michigan. So, to the extent that manufacturing establishments are providing more jobs, that industrial jobs are up, that is certainly a healthy figure, even though the overall figures have not shown any significant improvement.

Mr. SHISKIN. The overall figures have shown a significant improvement in recent months. On the other hand, you have to bear in mind that the rise last month, July, in total employment was exceptional, and what I do in my own mind is to average the last 2 months—July and August.

Representative BROWN of Michigan. Well, a month ago, Mr. Shiskin, we had a discussion about increases in the labor force, and at that time I attempted to point out that we had had of the four-fifths increase in the labor force we reasonably would expect this year, and we had it in the first 7 months.

Mr. SHISKIN. I remember.

Representative BROWN of Michigan. Now, certainly, there has been a decrease in the number, July vis-a-vis August, from 700,000 new entrants into the labor force down to 150,000 in August. That certainly indicates that there will not be the entrants into the labor force that we have had in the first 7 months; is that not correct?

Mr. SHISKIN. Well, the movements in the labor force are quite erratic, and it is pretty clear that the 700,000 we had in July was out of line. The figure we got for August is probably out of line, too; but the average of the two is pretty good.

Representative BROWN of Michigan. I think you had 725,000 enter the labor force in April, which brought your total entrants into the labor force as of the 1st of August, for the first 7 months of this year, up to 2 million, when the highest 12-month figure we have had in the past was 2.5 million.

months of the current expansion has been for a net expansion of a little over 200,000 new entrants a month into the labor force.

Representative BROWN of Michigan. Would you repeat that?

Mr. SHISKIN. If you take the 17 months of the recovery, or expansion, so far, the average rise in the labor force has been 212,000 a month. Now, we had 700,000 last month and 154,000 this month, and they compare with this average. What we have been getting is about 200,000 a month on the average.

Representative BROWN of Michigan. So, what we can say, in the first 7 or 8 months of this year, we have had a significantly greater number of persons seeking employment in the labor force than we have had historically.

Mr. SHISKIN. I think that is correct.

Representative BROWN of Michigan. In fact, we have had a 50 percent greater number, 200,000-plus, and in the last 3 months you have had over 300,000-plus, a greater increase in the labor force than the historical average.

Certainly, I don't appreciate the fact of an increase in unemployment. I had hoped I could walk in here this morning and find that my prognostication of a month ago, namely, we would have had a 0.2 percent decrease in the unemployment figure this month, and from now on to the end of the year, would be borne out by your figures here this morning, and they have not. But it just seems to me that, looking at what we can expect to come into the labor force in the remaining 4 months of this year, and the number of total jobs we can expect in this period of time, we will still have a significant decrease in unemployment by the end of the year.

The very fact that the particular classification, manufacturing jobs, that I think is so significant, insofar as the future is concerned, has improved substantially in August, should offset our pessimism, especially as expressed by the chairman, with respect to a one-tenths of 1 percent increase in unemployment in August.

Mr. SHISKIN. I agree. I agree generally with what you have said. I tried to make that point when I added various statistics to the chairman's statement; I thought it needed to be balanced out, particularly by the employment figures. And if you go beyond the employment figures, the payroll employment figures, to the leading indicators that measure new investment, there the picture is better than in the labor market.

Representative BROWN of Michigan. Mr. Shiskin, you provided us a report on what Chairman Humphrey calls "frictional" unemployment, and you refer to as temporary noncyclical unemployment.

Mr. SHISKIN. That is correct.

Representative BROWN of Michigan. Do you have figures for that classification of unemployment for the month of August?

Mr. SHISKIN. I don't believe so.

Mr. STEIN. Congressman, we only attempt to prepare those figures on an annual basis. We are a little bit doubtful those figures are reliable enough to do month by month.

Representative BROWN of Michigan. Well, I thought the report was interesting. As I recall, I think your report indicated that this type of unemployment, in other words, that unemployment which is not affected by economic conditions, that goes on and on irrespective of the economic situation, that that varied from 2 percent 3.6 percent, I think.

Mr. SHISKIN. 3.8 percent.

Representative BROWN of Michigan. 3.8 percent. So, for all intents and purposes the unemployment figure you gave here today, if we are going to relate that to the economic situation, you would have to reduce that figure by the percentage applicable to the short-term noncyclical unemployment.

Mr. SHISKIN. If you measure cyclical unemployment, it is obviously less than that figure.

Representative BROWN of Michigan. Thank you.

Representative BOLLING. Go right ahead, I don't believe in the 10-minute rule.

Representative BROWN of Michigan. You probably do not wish to do so, but would you care to speculate what we can expect in the coming months?

Mr. SHISKIN. Well, sir, you really got it right in the first phrase. Let me take 1 minute to explain this. It is of the utmost importance that everyone, the public, media, and both political parties accept the BLS figures. Everybody has to acknowledge that they are accurate figures. In our view, if we get involved in policy judgments, making judgments on policy, or get involved in forecasting—later you have the problem of defending the forecast—our credibility will be affected. So, we try to avoid forecasting, as well as taking positions on policy issues.

I personally like to do it, and I have done a lot of it in the past, but I think as Commissioner of Labor Statistics, it is unwise for me to do so.

Representative BROWN of Michigan. I certainly concur with you. I think it is terribly important to maintain the credibility of the statistics you present.

I also wish, however, that we could focus attention on the many factors that result in an unemployment rate of 7.9, rather than only focusing on the figure itself.

In the month of July we were able to absorb into the job holder classification about 60 percent—not quite 60, 58 percent—of those who entered the labor force. This month we have been able to absorb about 50 percent. It seems to me as long as we can improve upon that figure, those coming into the force and being able to get a job, we are doing a pretty good job.

Mr. SHISKIN. Let me make one observation about the labor force. In the short run, the problem is to absorb all the people who are looking for jobs, when there is a very large increase in the labor force. But in the long run, expansion of the labor force will add to our economic capability because a very large factor in producing the total output of the United States is the size of its labor force. In the long term the rises in the labor force mean a greater income. From that point of view the rises in the labor force are good.

Representative BOLLING. Mr. Shiskin, along a slightly different line. This week the Bureau of Labor Statistics released figures on employment for the second quarter. This is a relatively new series and little back data is available. It does show, however, that employment costs, the price of labor, have risen 5.5 percent during the 9 months ending in June.

If we assume that rate continues, this would mean an annual increase in labor costs of about 7.3 percent. I would consider that as a relatively encouraging figure in the sense that it indicates a considerable moderation in the wage behavior relative to past price increases.

We also have the information that productivity, output per hour, has gone up 4.5 percent in the non-farm business sector in the past year; and unit labor costs have risen only 3.3 percent. Yet, wholesale industrial prices are up 6.6 percent over the past year, and we have had a nearly 8 percent rate in the past 3 months. Labor costs have moderated quite a bit, yet prices continue up.

Is there an explanation for this?

Mr. SHISKIN. Well, let me respond to that by making a general statement on the wage situation in relation to prices and productivity. It appears to us that the settlements up to now in 1976 have been running at an average of 8 or 8½ percent. That includes very large catch-up settlements by the rubber workers and the teamsters, but also includes settlements that were at a significantly lower rate.

Let's take a look at the figure of 8½ percent. The rate of increase in consumer prices is where we have to look because wholesale prices are much more volatile than retail prices. So, let us for the moment focus our attention on retail prices. The increases have been running less than 6 percent above a year ago.

In addition, most experts in the field of productivity say the long-term rate is somewhere in the neighborhood of 2½ percent. The 5 percent we are getting now most people think cannot be sustained. Let's assume these estimates—which I am not making but experts in the field are—prevailed. Then we see the ranges are right on target. That is, wages are going up about 8 percent to 8½ percent, and that is consistent with a rise of about 6 percent in the CPI and 2½ percent in productivity. And, if you think that labor should be getting

an adjustment for prices, and for the increase in productivity, it looks like $8\frac{1}{2}$ percent is right on target.

Is that responsive to your question, sir? I hope it is.

Representative BOLLING. I think it is responsive, from my point of view.

I worry a little bit about some other things in the price field, that I am going to get to. Can you explain to us the way in which the price increases on 1977 automobiles will show up in the CPI? I know you adjust price increases for what you call quality changes. In the past, increased weight of new cars has been regarded as a measure of increased quality.

Since manufacturers are now making efforts to reduce the weight in order to achieve fuel economy, this no longer seems a good way to measure quality changes. Indeed, reduced weight may now indicate better quality from an overall point of view.

Are you changing the way you measure quality changes?

Mr. SHISKIN. Well, sir, the quality adjustment of automobiles will be very difficult this year. The matter has not yet been brought to my attention. Usually, a few weeks before the quality adjustment for automobiles is made each year, the staff prepares a document which I review very carefully, and we have discussions. We have not reached that stage, so, I am really unprepared to respond to your question at this time.

Next month, is that right, Mr. Layng, by next month we will have done this work. Is that right?

John Layng, our price expert, is right in the middle of the discussions with staff right now, and he may wish to amplify on my remarks.

Mr. LAYNG. The area that is most difficult this year is the full size General Motors automobiles, which have undergone the most extensive changes in some time. As you indicated, both the weight and the size are being reduced, with the objective in mind of maintaining the interior space of the automobile, and increasing gasoline mileage.

It is very difficult to deal with these kinds of changes with the traditional techniques we have used. So, we are reviewing the techniques we have used in the past, and techniques that we could use this year in addition to the kind of data that we will have available to us. We rely primarily on the automobile companies themselves to provide us with production cost information on physical changes in automobiles.

That is much more difficult to do this year with respect to full-size automobiles produced by the General Motors Co. The other cars are not changing as dramatically, and therefore we will be able to use, we believe, the same techniques we have in the past with respect to them. But, the GM full-size cars will require some special treatment, and we are working on the techniques.

Representative BOLLING. Thank you. Now I would like to pursue this line a little bit. What month will the price increase show up in the CPI?

Mr. LAYNG. Right now we try to put them in in October, which is the usual month, and that will be released in November.

Representative BOLLING. Will that produce a considerable bulge?

Mr. LAYNG. It is hard to say now. List price increases have been announced, but how much of that list price increase may be attributable to quality change or improvement we do not know yet. In addition,

there is normally a seasonal increase between September and October, as discounts drop.

Representative BOLLING. That is perhaps a partial answer to my next question. Do you price automobiles by manufacturer's list prices or by actual dealers' transaction prices?

Mr. LAYNG. No, sir. In the wholesale price index we attempt to obtain the transaction price, which reflects discounts from the manufacturer to the dealer. In the Consumer Price Index we enter dealerships and ask for the discounted price, and we have these two independent pieces of information to compare.

Representative BOLLING. Well, might it not happen, since the steel price increase, that General Motors claimed for the new car prices has been withdrawn, there will be some shaving of transaction prices on GM cars, even though the increase in the list price is apparently not going to be reduced?

Mr. LAYNG. That is possible.

Representative BOLLING. Will the CPI pick that up?

Mr. LAYNG. Yes, sir.

Representative BOLLING. Mr. Shiskin, now getting to a slightly different line, one suggestion which has been made in the press is that businesses are raising their prices in anticipation of a new administration in January, an administration which they fear might engage in some form of wage and price control. Of course, businessmen should understand that this is the very behavior that might bring on the control they hope to avoid. But, if such an anticipatory pricing is taking place, it might show up in list prices, but not in actual transaction prices. If so, would it show up in the Wholesale Price Index, or not?

Mr. SHISKIN. It would show up in the wholesale price index. I think you have to bear in mind that it is typical in periods of economic expansion for business to keep testing the market by raising prices. Now, U.S. Steel did that a few weeks ago, they tested the market, and as I understand it, they reduced the price later. They dropped the increase because the market would not bear it. So, that is a common experience.

Now, of course, whether there is a new element that is political, a judgment about political trends, I have no way of knowing.

Representative BOLLING. Now, did you mean to answer that as you did, list prices, rather than transaction prices?

Mr. SHISKIN. We try very hard to try to get transaction prices in the WPI. In retail, as Mr. Layng pointed out, we go to the dealers and we ask them for the transaction price. So, certainly, consumer prices are transaction prices; and while we have had a lot of criticism on that point, it is not because we have not tried to get transaction prices.

Also, as you know, this is a voluntary survey. We ask manufacturers to report and ask them to report in a certain way. We have checks on what they report, but in a sense we have to use what the companies report to us.

Representative BOLLING. Now, if this was at another time that was started considerably back in the days when I was chairman of the Economic Statistics Subcommittee of this committee, I would have taken off on that, but I won't this time, I will restrain myself.

Mr. SHISKIN. I just want to emphasize, sir, that all our surveys—with the exception of one survey, the Occupational Safety and Health Survey—are voluntary surveys, and we have to persuade people to report to us.

Representative BOLLING. Well, we have gotten a great deal of complaints that they are even begged to furnish information.

Mr. Shiskin, another approach, but not a different thing but a similar thing, something that will take a little introducing, the Bureau of Labor Statistics computes more than just the national unemployment figure based upon the household survey. The BLS periodically calculates the unemployment rate in CETA prime sponsorship areas by a complicated formula which converts unemployment insurance registrant rates into an unemployment rate comparable, conceptually, to the national household survey's definition—I did not punctuate that properly, but the sense, I hope, came across.

Now, this concerns and worries me for a variety of reasons.

First, many billions of dollars are apportioned—especially under the targeted programs of title II of the Comprehensive Employment and Training Act—on the basis of your computations. More than \$32 billion of Federal grants-in-aid to States and local governments will be distributed through formulas often utilizing population as a factor in 1976. So, this is no small matter.

And second—and most important—the unemployment rates BLS computes for CETA prime sponsors, for most inner cities, and for blacks and other minorities, are of questionable validity.

I draw your attention to a column by Laurie Cohen in the Wall Street Journal on Tuesday, August 31. She states that Government statisticians estimate 7.7 percent of blacks were uncounted in the 1970 census, compared with only 1.9 percent of whites. There are understandable reasons why, but the fact is that no correction of the count was made. The problem is worse among male and younger blacks—the very segments that suffer worse from unemployment and poverty. Aside from the few central cities in which surveys are made, unemployment estimates are so unreliable that it was only with reluctance and extreme qualification that the BLS statisticians released a set of them corresponding to CETA tracts of core cities to the committee staff.

We will return to this matter in subsequent sessions with you, Mr. Commissioner, but for now I would like to ask you a few initial questions.

1. Are BLS unemployment computations, on which distribution of targeted Federal money is based, reliable?

Mr. SHISKIN. Many of them are reliable, and there are others that we cannot assign a measure of reliability to. Let me amplify that statement.

We get a great deal of data from unemployment insurance offices on the number of people who are claiming unemployment insurance benefits. These figures omit a very substantial part of the unemployment count. They omit entrants, for example, people coming into the market who are not eligible for benefits, and similarly they omit re-entrants, people who have not had recent work experience.

That percentage is sometimes very high. In normal periods, on the average, it runs somewhere around 40 percent of the total unemployment.

Upon passage of the CETA law by Congress—and now we have two other bills that require us to make estimates for small geographic areas—that is we make estimates of unemployment in very small places. We have been trying very hard to be responsive, and we recognize the great need for these data. We also believe in general that our technicians can probably do the best job. But Congress in its legislation is way ahead of our technical capabilities. As far as the large places, the States, the large major labor market areas are concerned, we can provide the data because we have a current population survey benchmark; that is the survey from which we get the national unemployment statistics. We have benchmarks from that for the large places, but not for the small ones.

So, our estimates of the small places are less reliable. We do not really know how reliable they are.

I would like to add two comments. One, Congress has recognized the situation and last year at the initiative of the House Appropriations Committee, \$5 million were added to our budget. Now, that is a lot to us, though it may not be a lot to other people.

Representative BOLLING. I know it is a lot. I remember how hard it was to get money for statistics.

Mr. SHISKIN. You remember those days?

Representative BOLLING. Yes, sir, I sure do.

Mr. SHISKIN. So, we got \$5 million on their initiative and put that into the pipeline, and that is going to lead to better figures. But, as you know, there is a substantial lead time involved.

So, what I am saying is that we really were not prepared to provide figures with the same degree of accuracy as our national figures for these small places at the time the legislation was passed. We put into the mill activities which will lead to improvement. One thing we are concerned about is to develop a system which will lead to steady improvement in the quality of the small area unemployment statistics over the next few years.

Representative BOLLING. Thank you. I have some more questions along that line.

Assuming in part that the answer indicated that we could have a more reliable set of figures if the state of the art was more advanced and the money continued to flow, that there is a tendency to understate unemployment, as the journal article suggested, for certain groups of the labor force, such as blacks and other minorities, is probably an accurate guess?

Mr. SHISKIN. I thought they were talking about population statistics.

Representative BOLLING. We are?

Mr. SHISKIN. We know about the undercount in population statistics. Could you comment on that, Bob?

Mr. STEIN. We really don't have any way of building in adjustments for the undercounted in the regular monthly statistics, and we would have an even greater problem to do it in States and small areas because the census bureau itself only has rather crude estimates of the size of the undercounted and the composition. So, it is something that up to this point we have had to live with.

Representative BOLLING. Well, that in effect amounts to a situation where the information that we need to make rational policy with regard to the special problems of the unemployment among blacks and other minorities, perhaps other groups, it is just simply not possible to have it. That is not your fault, I am not suggesting it is.

It is just that we do not have a body of information, and there is not available anywhere a body of information that we pretty badly need to have if we want to do something about the socially excessive rate of unemployment among blacks and other Americans.

Mr. SHISKIN. It is clear from the figures we have that the unemployment rate in the poverty areas, the central cities, at least many of the central cities is very, very high. I wonder if the policy would be much affected if adjustments, relatively small adjustments, were made. We know already from the various statistics where the big pockets of unemployment are.

Representative BOLLING. Well, our problem of course, it seems to me, is a multiple problem, and I think it is pertinent. I think a great many people are going to believe less and less in the efficacy as far as minorities and other underemployed groups, of the purely macro-economic approach. It is very difficult to sell the idea of the necessity for attack on a particular structural problem unless you are pretty convincing in proving that these structural problems really exist, and exist in a major kind of particular way.

I am not suggesting that we have an all new series of statistics, but I am suggesting that person who spends a considerable amount of time worrying about the problem of full employment, and not full employment for just the more fortunate, while you may be right, we may not need it to make the judgment, we may need it to sell the programs.

Mr. SHISKIN. Well, then there is another place where we get into difficulty. While we generally know where the highest levels of unemployment are, we get into problems in connection with CETA and the new other laws that have recently been passed, because there is a big pie of money that gets allocated on the basis of these figures—by the Secretary of Labor, the Secretary of Commerce, and the Secretary of the Treasury, not by the Bureau of Labor Statistics, I might add.

If you give one place a little more, you have to give another one a little less. So, we have a lot of problems with particular localities where they believe our figures are low. I am just pointing this out to you to indicate that we do not underestimate the problem. As I said earlier, in general it all averages out, but in some areas where we have been underestimating unemployment, a lot of dollars may be involved. For example, the State of New Jersey is suing us because they think our estimate of unemployment in New Jersey is too low.

Well, I talked to the man who is the commissioner of labor in New Jersey at a banquet. We sat together and had a very friendly conversation, and I asked him how much was involved for New Jersey. He said between \$20 and \$30 million a year. That is a lot of money for New Jersey. So, that is a very important issue for a State or locality.

What I can assure you, sir, we have very competent staff, doing our level best to improve the figures. Over time they will be improved,

and I really don't think you could find a better staff anywhere else in the world.

Representative BOLLING. One more question on an entirely different point. On the 27th of August in the New York Times there was an article by A. Raskin, it started out, "Labor sees jobless rate as outmoded index." You are quoted in the article in a rather general statement, saying, "He has no quarrel with the idea of developing a new index," and so on. I am talking about the approach of Mr. Levitan, his criticism of the unemployment index, and his suggestion that we have a new employment and earnings index.

Would you be able to comment a little more fully what you think of that notion?

Mr. SHISKIN. Sure. What Mr. Levitan is concerned with is to obtain a good measure of economic hardship. He directs his interest to one that is related to economic hardship and the labor market. He has compiled a measure which he feels is pretty good.

His measure is very complex. He makes many adjustments in the unemployment figures. For example, he adds to his unemployment figures to get his index people who have earnings below the poverty line; and this includes full-time workers, part-time workers, and intermittent workers.

On the other hand, he subtracts out students and people over 65; and he also subtracts out people, families, who have above average earnings. So, it is a serious attempt to find a better measure of economic hardship.

That is why I said that I don't quarrel with what he is trying to do. His measure itself leaves a lot to be desired in many ways. It is very complex; it uses last year's data, the year before's data, in some of the calculations. There are other limitations where he makes many value judgments. For example, he leaves out students from 16 to 21, people whom I have to consider in measuring unemployment. He wants to leave out all people who live in families where the earnings are high. There are a lot of arbitrary judgments. I don't quarrel with his objective.

Since you asked me, I would like to comment on two other aspects. The unemployment index itself, I am finally convinced, is not a good index at the present time to use as a measure of economic hardship. What concerns me in this context is that many unemployed live in fairly well-to-do families; for example, teenagers and women whose husbands are earning a lot. If they are unemployed, we count them just like anybody else.

Second, there are many unemployed people who are not affluent but can get along fairly well. For example, some 70 percent of the unemployed receive unemployment compensation, and about 60 percent of them have wives or other family members working. So, the unemployment measure as we are getting it out is a difficult measure to convert to a measure of economic hardship.

On the other hand, there is a measure of economic hardship which the Census Bureau puts out. This is the number of people with poverty-level incomes, and you can, through their measure, find out how many of the people are in poverty because of job-related factors; that is, the number of people who are unemployed.

The Census Bureau measure is based on income data. What I have been urging now for some years—as you know, I was with OMB before I took on this job—I have been urging that funds be made available to collect more detailed data on income distribution so that we can have breakdowns of income classes at the low income levels, with a detailed breakdown between \$1,000 and \$15,000. Then these should be deflated and should be made available more frequently. Now, if we could get measures like that, we could do much better in measuring economic hardship, I think, than going through the unemployment measure.

Representative BOLLING. Now, tell me this, and this relates to what I was talking about earlier, that approach that you are talking about is something that would be on an annual basis?

Mr. SHISKIN. No. Quarterly if the Government followed my recommendation. The only objection to it is that it is expensive.

Representative BOLLING. Expensive in what amount?

Mr. SHISKIN. You would have to collect income distribution at very detailed levels.

Representative BOLLING. Expensive in what terms, how many million dollars?

Mr. SHISKIN. I am not prepared to give you a number.

Representative BOLLING. Tens or hundreds?

Mr. SHISKIN. Tens.

Representative BOLLING. And that is the kind of information that might make it possible for us to make economic judgments on a relatively current basis, relatively current.

Mr. SHISKIN. If you could get the data currently. You know, we have not sat by idly in this regard.

Representative BOLLING. I am not being critical.

Mr. SHISKIN. I understand. We are just trying to understand something. We have not solved the problem. I just make the point in general that the unemployment group is not the best group to take, if you look for economic hardship.

And, as I was quoted as saying quite accurately, I don't think the new index should be a substitute for the unemployment index because the unemployment data have very important uses of their own.

We have, for example, proposed this year that the data we collect annually now on earnings, which have demographic information so you know what the earnings of household heads are, if they are male or female, if other people are present in the family. We expect to recommend to OMB that these data be collected quarterly.

I have been in OMB and I know they get a lot of recommendations from us on price data, employment data and so on. So, they have to make the judgment how much money they are going to put into these statistics compared to others. They also have to make a judgment about how much money they can put into statistics compared to other programs. We have no way of determining how this is going to come out.

In addition we have completed through the Census Bureau an intensive study, through a questionnaire, on discouraged workers, to learn something about why they are staying out of the labor market.

We are also going to start publishing early next year monthly data showing unemployment, together with other family members that are working. So, we are collecting data along this line.

But at the present time, to the best of my knowledge, the only data on income is available annually, and that is not adequate for making current judgments; I think they should be quarterly. They should also be deflated. The deflation process, let me say, is a very tough one. We will have two deflators when the new CPI comes out early next year. When we deflate income data by one of those average price indexes, there may be something deficient there. Ideally, we should deflate income distribution data by an index of prices paid by people in each income group.

So, to get the kind of data that people are pushing for, for policy purposes and for other purposes, requires a major improvement in the data that we have.

Representative BOLLING. That is the point I want to get at. The feeling that I have had, it seems clear to me, since I worked really as a lobbyist for Federal statistics, an internal lobbyist, that the economy has become much more intricate and complex, and therefore the kinds of series we need have also become more complex. We probably need another quantum pump, almost, in information, in order for policy to be made in a more sophisticated and timely fashion. I think that is the burden of the interchange we have had. I feel very strongly about that. I know you cannot make sensible policy unless you have adequate statistics, you surely do not know what you are dealing with in any of these areas.

Mr. SHISKIN. Sir, may I just say that I have used the very language you have used, a "quantum jump" in funds available for the statistics is required to meet today's needs by policymakers.

Representative BOLLING. I tell you, I respect you, and I think it is absolutely essential that we do something about that very rapidly. Thank you.

Representative BROWN of Michigan. I would like to follow up on this colloquy a little bit because it has been my argument consistently, as you know, that the unemployment figure does not truly reflect economic hardships of individuals, nor is it a good, a pure indicator of economic activity, economic conditions.

The economic hardship factor, if you could in some way fold it in to show the head of household being employed, and there may be one or two others, a wife and son, looking for a job. That economic hardship for that household is significantly different than when the only wage earner of the household is looking for a job.

I remember a case in my district. I was talking to a fellow and he said the employer had to lay off one fellow—I forgot what the conditions were—but when the old man was laid off, the wife had worked sometime back, and she decided she ought to get a job. And the son who was going to school, he decided he ought to get a job. So, you have one layoff and end up with three statistics. Certainly, the statistics with respect to that family were not truly reflective of the actual unemployment since there was only one job loser.

The fact that we have so many more in the labor force as a percentage of the population than we had before, it mitigates against the unemployment figures being a true reflection of economic activity and condition. We check on how many cars and how many televisions a family has in determining the standard of living of the people, but we don't use those kinds of factors in deciding economic hardship, reflected by the unemployment rate.

Mr. SHISKIN. Well, as I said, Congressman Brown, starting early next year we will be publishing data that will show unemployment together with the number of persons in the household who are working, and you will be able to make a better judgment when we get these figures, about economic hardship arising from unemployment than you can today. So, we are moving on this question.

Representative BROWN of Michigan. Now, in this, of course, you are depending totally on household surveys—

Mr. SHISKIN. Yes.

Representative BROWN of Michigan [continuing]. Where unemployment figures are established.

Mr. SHISKIN. No; the employment and unemployment figures come from the household survey, but we also collect employment data from establishments.

There is one other comment that needs to be made in this context, which is, there are other kinds of hardships besides economic hardships. For example, I think it is very damaging for the country in the long run to have a large number of unemployed teenagers because not many years will go by before they will have responsible positions in our society. Some of them will be our top leaders. It is very unfortunate to have them start their careers with long spells of unemployment.

Representative BOLLING. If the gentleman would yield. I will go one step further and say, if they are lost in their teens, they have no future. I think it is even more serious than you described.

Representative BROWN of Michigan. Mr. Chairman, the thing I cannot reconcile with that statement, the concern you expressed and the concern Mr. Shiskin expresses, and that is, there are many surveys that indicate the increase in the minimum wage does have a very debilitating effect upon teenage employment. Now, how can you express this great compassion and concern and take the legislative steps that basically mandate—

Representative BOLLING. Mr. Brown, if you would yield. I will be glad to debate that at some other time. I am talking about something else. I am talking about the opportunity of the young black to look forward to a career—not to look forward to employment. To look forward to an opportunity for employment that will be of interest and will give him a good life. I will be happy to argue the other one any time you want to, but there is a difference between my objective and your depicting my objective.

Representative BROWN of Michigan. There is one statistic in the report that is interesting to me. It appears that the unemployment rate of male heads of household with relative is 4.1 percent, and the unemployment rate of male heads of household without relatives is 8.1 percent. Do you have any explanation for that?

Mr. SHISKIN. You are talking about males?

Representative BROWN of Michigan. Yes.

Mr. SHISKIN. The opposite is true for females.

Representative BROWN of Michigan. I was talking about male heads of household. Is there any explanation for that phenomenon?

Mr. STEIN. Male heads of household by and large are more experienced workers, the ones that have relatives. The others are for the most part younger and probably more mobile, perhaps not quite settled down in the labor market as fully as the ones with relatives.

Representative BROWN of Michigan. Because others do not depend upon them, they have greater mobility, so probably they would be the ones that would make up, to a good extent, this temporary noncyclical unemployment factor.

Mr. STEIN. That is correct.

Representative BROWN of Michigan. Thank you. I have no further questions.

Representative BOLLING. Thank you very much, Commissioner, we are grateful to you and your associates for being with us.

The committee stands adjourned.

[Whereupon, at 12:05 p.m., the committee adjourned, subject to the call of the Chair.]

EMPLOYMENT-UNEMPLOYMENT

FRIDAY, NOVEMBER 5, 1976

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

The committee met, pursuant to notice, at 11:10 a.m., in room 1202, Dirksen Senate Office Building, Hon. William Proxmire (member of the committee) presiding.

Present: Senator Proxmire and Representative Reuss.

Also present: William R. Buechner, G. Thomas Cator, Lucy A. Falcone, Ralph L. Schlosstein, and Courtenay M. Slater, professional staff members; Michael J. Runde, administrative assistant; and Charles H. Bradford, M. Catherine Miller, and Mark R. Policinski, minority professional staff members.

OPENING STATEMENT OF SENATOR PROXMIRE

SENATOR PROXMIRE. The committee will come to order. Mr. Shiskin, we are very happy to have you with us this morning. The figures as you and I have just been discussing are not encouraging. Unemployment rose last spring rather sharply and has stayed at a discouragingly high level since then; 7.9 percent is one of the highest levels we have had historically, certainly since the great depression. It is not a matter of expanding the work force. That is an argument of many people, that many more people are coming in looking for jobs and we have an inability of the economy to absorb them.

That certainly has not been the case in the last 2 or 3 months. As a matter of fact, in September the number of jobs available dropped by 160,000. Last month the number of jobs dropped another 45,000. So we are stalled, and I notice in *Fortune Magazine* this morning, which I have just received, they say that the labor force can't keep increasing as it has.

Growth in labor force is sure to slow. If that happens, the gains in employment will again start cutting into unemployment though somewhat behind the hoped for schedule.

Well, the gains in the labor force have stopped. Yet unemployment remains at high levels. There is no question in my mind that we are in a serious stall. Now, I would like to also point out that we are very concerned about—I am very concerned at least—about the inflationary situation.

It is true that the overall figure for wholesale prices this past month was at a 7.2 percent annual rate. But if you recognize that industrial commodities, one of the three components and the only component that I think is a stable component for which the month-by-month figures

would have significance, that has gone up at an alarmingly steady rate. Farm prices are all over the place, and last month they dropped and that is why inflation overall seemed relatively moderate.

But in May industrial commodities were rising at a 1.2 annual rate; in July, they were rising at an 8-percent rate, a steady increase until now they are rising at a double digit annual rate. It seems to me that this is most disturbing. It is a great challenge for the new President of the United States, and it is a great challenge for those of us who are responsible in the Congress for economic policy.

We are very anxious to get your comments on these figures, your explanation of them.

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

Mr. SHISKIN. Thank you, Mr. Chairman.

Let me say that it is a great relief for me to be coming here today after the election. During the recent election period, there was a tremendous amount of pressure on us, much greater than during other periods.

As I have said repeatedly, we did not have any political pressures at all and that was true through the very last day. What I told this committee and others was that the BLS releases would be compiled and issued during the election period in exactly the same manner as they had been in previous months. And that is just what happened.

There was no difference in the procedures we followed before the election. I only want to add today that there will also be no difference in the ensuing months. We will always be compiling and issuing the data in an objective and neutral way.

I do have a brief statement. I only have a few comments but I try to deal in these comments with what I consider to be the major issues. As usual, Mr. Layng to my left, and Mr. Stein to my right, will help me out when you ask me questions I don't know the answers to.

Mr. Chairman and members of the committee, I wish to offer the Joint Economic Committee a few brief comments to supplement our press release, the employment situation, issued this morning at 10 a.m.

Our press release reports that the employment situation was little changed in October with employment, aggregate hours, and unemployment all at high levels. This standstill situation has now prevailed since July and is consistent with the recent small declines in the leading indicator index and the slow growth recently shown by most broad measures of economic activity.

After rising sharply during the first half of 1976, the civilian labor force stood at 95.3 million in October, the same as in July. Similarly, total employment was reported at 87.9 million in July and 87.8 million in October. Payroll employment and aggregate hours have continued up over this period, but manufacturing employment was virtually unchanged and aggregate hours in manufacturing were down, before

adjusting for additions to the number of workers on strike. There was an increase of about 100,000 people on strike last month.

The unemployment rate has fluctuated between 7.8 and 7.9 percent after rising sharply from the May low of 7.3. Over the last three months, the number of job losers has also been virtually unchanged—at 3.8 million in July and October. The number of new entrants and re-entrants rose slightly over these three months, while the number of job leavers showed little change.

During the past few months, our broadest measures of economic activity have moved sluggishly, with small rises in real GNP, industrial production, real personal income (less transfer payments), and real manufacturers' and trade sales.

Similarly, the leading indicator index and most of the leading indicators have weakened, particularly the sensitive labor market indicators. Furthermore, some indicators which reflect excesses and imbalances (lagging indicators)—for example, unit labor costs in manufacturing, deflated manufacturing and trade inventories, and consumer installment debt as a percentage of personal savings—have recently been rising, though only slightly.

In the past, such patterns of sluggishness have sometimes been followed by renewed growth, as in 1951-52, 1956, and 1967. Usually, it has been only after these patterns have extended over a longer period, with deeper declines in the leading indicators and larger rises in measures of excesses and imbalances, that recession has followed.

The usual tables are attached to this statement.

My colleagues and I shall now try to answer your questions.

[The tables referred to, together with the press release follow:]

TABLE 1.—UNEMPLOYMENT RATE BY ALTERNATE SEASONAL ADJUSTMENT METHODS ¹

Month	Unadjusted rate	Official adjusted rate	Alternative age-sex procedures		Other aggregations (all multiplicative)				Direct adjustments			Composite No. 1	Composite No. 2	Range (cols. 2-14)	
			All multiplicative	All additive	Duration	Full-time, part-time	Reasons	Occupation	Industry	Rate	Level				Residual
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
1975:															
January.....	9.0	7.9	8.0	8.3	8.1	7.9	7.8	7.9	7.8	8.1	8.1	8.4	8.0	8.0	0.6
February.....	9.1	8.0	8.1	8.4	7.9	8.0	7.8	7.8	8.0	8.0	8.1	8.4	8.0	8.0	.6
March.....	9.1	8.5	8.5	8.7	8.4	8.4	8.3	8.4	8.4	8.5	8.5	8.7	8.5	8.4	.4
April.....	8.6	8.6	8.7	8.6	8.5	8.6	8.6	8.7	8.7	8.8	8.8	8.7	8.6	8.6	.3
May.....	8.3	8.9	9.0	8.7	8.8	8.8	9.0	9.1	9.0	9.3	9.2	8.7	8.8	8.9	.6
June.....	9.1	8.7	8.6	8.7	8.6	8.7	8.7	8.6	8.7	8.2	8.2	8.5	8.6	8.6	.5
July.....	8.7	8.7	8.6	8.6	8.6	8.7	8.8	8.6	8.6	8.5	8.5	8.5	8.7	8.6	.4
August.....	8.2	8.5	8.5	8.4	8.7	8.5	8.7	8.7	8.6	8.5	8.5	8.4	8.6	8.6	.3
September.....	8.1	8.6	8.6	8.4	8.8	8.6	8.8	8.6	8.5	8.5	8.5	8.4	8.6	8.6	.4
October.....	7.8	8.6	8.7	8.4	8.8	8.7	8.7	8.5	8.6	8.5	8.6	8.4	8.6	8.6	.4
November.....	7.8	8.5	8.5	8.2	8.7	8.6	8.6	8.4	8.5	8.5	8.5	8.3	8.5	8.5	.5
December.....	7.8	8.3	8.4	8.2	8.5	8.3	8.2	8.3	8.4	8.5	8.4	8.2	8.3	8.3	.3
1976:															
January.....	8.8	7.8	7.8	8.2	8.1	7.8	7.7	7.8	7.8	7.9	7.9	8.2	7.9	7.9	.5
February.....	8.7	7.6	7.7	7.9	7.6	7.6	7.5	7.6	7.7	7.7	7.7	7.9	7.6	7.6	.4
March.....	8.1	7.5	7.5	7.7	7.3	7.5	7.4	7.5	7.5	7.6	7.5	7.7	7.5	7.5	.4
April.....	7.4	7.5	7.5	7.4	7.3	7.5	7.5	7.6	7.6	7.6	7.5	7.5	7.5	7.5	.3
May.....	6.7	7.3	7.3	7.1	7.2	7.2	7.4	7.4	7.4	7.5	7.5	7.2	7.3	7.3	.4
June.....	8.0	7.5	7.4	7.5	7.5	7.5	7.5	7.4	7.4	7.2	7.2	7.4	7.5	7.5	.3
July.....	7.8	7.8	7.7	7.7	7.7	7.8	7.8	7.7	7.7	7.6	7.6	7.6	7.7	7.7	.2
August.....	7.6	7.9	7.9	7.8	8.0	7.9	8.0	8.0	7.9	7.9	7.9	7.8	7.9	7.9	.2
September.....	7.4	7.8	7.8	7.7	8.0	7.8	7.9	7.8	7.7	7.7	7.7	7.7	7.8	7.8	.3
October.....	7.2	7.9	8.0	7.7	8.1	8.0	7.9	7.8	7.9	7.9	7.9	7.8	7.9	7.9	.4

¹ An explanation of cols. 1 to 14 follows:

- (1) Unemployment rate not seasonally adjusted.
- (2) Official rate. This is the published seasonally adjusted rate. Each of four unemployed age-sex components—males and females, 16-19 and 20 yr of age and over—is independently adjusted. The teenage unemployment components are adjusted using the additive procedure of the X-11 method, while adults are adjusted using the X-11 multiplicative option. 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 are as follows:

January.....	113.1
February.....	113.7
March.....	108.1
April.....	99.4
May.....	93.4
June.....	104.5
July.....	99.5
August.....	96.0
September.....	94.7
October.....	89.8
November.....	91.4
December.....	93.4

- (3) Multiplicative rate. 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.

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

- (5) Duration. Unemployment total is aggregated from 3 independently adjusted unemployment by duration groups (0-4, 5-14, 15+).

- (6) Full-time and part-time. Unemployment total is aggregated from 6 independently seasonally adjusted unemployment groups, by whether the unemployed are seeking full-time or part-time work for men 20 plus, women 20 plus, and teenagers.

- (7) Reasons. Unemployment total is aggregated from 4 independently seasonally adjusted unemployment levels by reasons for unemployment—job losers, job leavers, new entrants, and reentrants.

- (8) Occupation. Unemployment total is aggregated from independently seasonally adjusted unemployment by the occupation of the last job held. There are 13 unemployed components—12 major occupations plus new entrants to the labor force (no previous work experience).

- (9) Industry. Unemployment total is aggregated from 12 independently adjusted industry and class-of-worker categories, plus new entrants to the labor force.

- (10) Unemployment rate adjusted directly.

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

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

- (13) Average of (2), (5), (6), (7), and (12).

- (14) Average of (2), (5), (6), (7), (8), (9), and (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.

TABLE 2.—EMPLOYMENT-POPULATION RATIOS

Category	Annual averages		Seasonally adjusted estimates								
	1974	1975	Jan. 1974 (cyclical high month)	Mar. 1975 (cyclical low month)	Quarterly averages—				Current months		
					IV, 1975	I, 1975	II, 1976	III, 1976	Aug. 1976	Sept. 1976	Oct. 1976
Total, all workers.....	57.8	56.0	58.3	55.9	56.0	56.5	57.0	57.0	57.0	56.9	56.8
Adult males.....	77.9	74.9	79.0	74.9	74.5	74.8	75.3	75.2	75.3	75.2	75.1
Adult females.....	42.7	42.3	42.4	42.0	42.5	43.1	43.5	43.7	43.8	43.6	43.4
Teenagers.....	46.1	43.3	47.5	43.2	43.0	43.8	44.8	44.4	44.4	43.7	44.1

Source: U.S. Department of Labor, Bureau of Labor Statistics, Nov. 5, 1976.

TABLE 3.—RANGE OF UNEMPLOYMENT INDICATORS REFLECTING VALUE JUDGMENTS ABOUT SIGNIFICANCE OF UNEMPLOYMENT (PERCENT)

U-1 through U-7	Annual averages		Seasonally adjusted estimates								
	1974	1975	October 1973 (cyclical low month)	May 1975 (cyclical high month)	Quarterly averages				Current months		
					IV 1975	I 1976	II 1976	III 1976	Aug. 1976	Sept. 1976	Oct. 1976
U-1—Persons unemployed 15 weeks or longer as a percent of total civilian labor force.....	1.0	2.7	0.9	2.7	3.1	2.7	2.2	2.5	2.5	2.4	2.4
U-2—Job losers as a percent of civilian labor force.....	2.4	4.7	1.7	5.1	4.6	3.7	3.7	4.0	4.0	3.9	4.0
U-3—Unemployed household heads as a percent of the household head labor force.....	3.3	5.8	2.7	6.1	5.9	5.0	4.9	5.3	5.2	5.4	5.4
U-4—Unemployed full-time job seekers as a percent of the full-time labor force (including those employed part time for economic reasons).....	5.1	8.1	4.1	8.5	8.2	7.1	7.0	7.4	7.5	7.5	7.6
U-5—Total unemployed as a percent of civilian labor force (official measure).....	5.6	8.5	4.7	8.9	8.5	7.6	7.4	7.8	7.9	7.8	7.9
U-6—Total full-time job seekers plus half part-time job seekers plus half total on part time for economic reasons as a percent of civilian labor force less half part-time labor force.....	6.9	10.3	5.9	10.9	10.3	9.3	9.1	9.4	9.4	9.6	9.8
U-7—Total full-time job seekers plus half part-time job seekers plus half total on part time for economic reasons plus discouraged workers as a percent of civilian labor force plus discouraged workers less half of part-time labor force.....	7.7	11.5	6.6	12.0	11.3	10.3	10.0	10.3	(?)	(?)	(?)

¹ Uses discouraged worker figure for quarter which includes applicable month.

² Not available.

Note: The numerators and denominators (in thousands) for the third quarter 1976 rates are as follows: U-1, 2,339/95,341; U-2, 3,793/95,341; U-3, 2,878/54,030; U-4, 6,017/81,076; U-5, 7,439/95,341; U-6, 8,305/88,127; U-7, 9,122/88,944.

Source: U.S. Department of Labor, Bureau of Labor Statistics, Nov. 5, 1976.

TABLE 4.—MEASURES OF PROGRESS TOWARD PREVIOUS CYCLICAL PEAK LEVEL DURING CURRENT ECONOMIC RECOVERY

Series (with latest month available)	Percent decline during 1973-75 recession	Percent of recession decline recovered, trough to date	Percent of previous peak level	Percent change from trough
(1)	(2)	(3)	(4)	(5)
I. Leading indicators:				
Leading index, trend adjusted (September).....	-22.4	97.4	99.4	+28.1
Average workweek (October) ¹	-4.4	44.4	97.5	+2.1
New orders, 1972 dollars (September) ¹	-29.2	51.7	85.9	+21.3
Contracts and orders, 1967 dollars (September) ¹ ..	-29.6	20.1	76.3	+8.4
Housing starts (September) ¹	-58.6	41.9	66.0	+59.3
Stock prices (October).....	-43.4	67.8	86.0	+51.9
Corporate profits after taxes, 1972 dollars (2d quarter, 1976).....	-38.6	71.4	89.0	+44.9
II. Coincident indicators:				
Total civilian employment (September).....	-2.5	170.0	101.8	+4.4
Nonagricultural payroll employment (October).....	-3.2	127.5	100.9	+4.2
Aggregate hours, nonagricultural establishments (September).....	-5.0	83.4	99.2	+4.4
Unemployment level (October) ²	+98.3	16.6	181.9	-8.3
GNP, 1972 dollars (3d quarter, 1976).....	-6.6	136.3	102.4	+9.6
Personal income less transfer payments, 1972 dollars (September).....	-6.4	98.4	99.9	+6.7
Industrial production (September).....	-15.1	98.5	99.8	+17.5
Retail sales, 1972 dollars (September) ¹	-10.4	98.1	99.8	+11.4

¹ 3-mo averages have been used for the calculations for this series; for example, the averages of the specific trough month, the previous and following months were compared with the average for the latest 3 mo available to obtain the entries in cols. (3)-(5). For other series single months have been used.

² The unemployment series tends to move counter to movements in general business activity; that is, the unemployment level tends to rise during recessions and decline during expansions. Col. 3 shows the percent of the increase in unemployment that has been offset.

TABLE 5.—MEASURES OF PROGRESS TOWARD PREVIOUS CYCLICAL PEAK LEVEL AT CORRESPONDING STAGE OF 1958-59 ECONOMIC RECOVERY

Series	Percent decline during 1957-58 recession	Percent of recession decline recovered	Percent of previous peak level	Percent change from trough
(1)	(2)	(3)	(4)	(5)
Nonagricultural payroll employment.....	-4.3	108.3	100.4	+4.9
Unemployment level ¹	+102.4	-55.5	145.6	-28.1
GNP, 1972 dollars.....	-3.2	248.6	104.8	+8.3

¹ The unemployment series tends to move counter to movements in general business activity; that is, the unemployment level tends to rise during recessions and decline during expansions. Col. 3 shows the percent of the increase in unemployment that has been offset.

small and offsetting, but there was an increase for service workers to a high for the year of 9.5 percent. (See table A-2.)

Although there were some small changes among the individual duration of unemployment categories from September to October, the average duration of joblessness remained the same--15.4 weeks. (See table A-4.)

Table A. Highlights of the employment situation (seasonally adjusted data)

Selected categories	Quarterly averages					Monthly data		
	1975		1976			1976		
	III	IV	I	II	III	Aug.	Sept.	Oct.
	(Thousands of persons)							
Civilian labor force	93,134	93,153	93,553	94,546	95,341	95,487	95,203	95,342
Total employment	85,138	85,241	86,402	87,532	87,902	87,981	87,819	87,773
Adult men	47,551	47,540	47,998	48,504	48,646	48,682	48,721	48,716
Adult women	30,537	30,665	31,234	31,677	31,951	31,988	31,907	31,799
Teenagers	7,050	7,036	7,169	7,351	7,305	7,311	7,191	7,258
Unemployment	7,997	7,912	7,151	7,014	7,439	7,506	7,384	7,569
	(Percent of labor force)							
Unemployment rates:								
All workers	8.6	8.5	7.6	7.4	7.8	7.9	7.8	7.9
Adult men	7.0	7.0	5.7	5.7	6.0	5.9	6.1	6.3
Adult women	7.9	7.9	7.4	7.1	7.6	7.7	7.5	7.6
Teenagers	20.2	19.5	19.4	18.7	18.8	19.7	18.6	19.0
White	7.9	7.8	6.9	6.7	7.1	7.1	7.1	7.3
Black and other	14.1	14.0	13.1	12.8	13.1	13.6	12.7	13.5
Household heads	5.9	5.9	5.0	4.9	5.3	5.2	5.4	5.4
Married men	5.4	5.1	4.1	4.1	4.4	4.2	4.6	4.4
Full-time workers	8.3	8.2	7.1	7.0	7.4	7.5	7.5	7.6
	(Weeks)							
Average duration of unemployment	15.6	16.5	16.3	15.9	15.6	15.5	15.4	15.4
	(Thousands of persons)							
Nonfarm payroll employment	77,004	77,642	78,392	78,943	79,359p	79,333	79,567p	79,513p
Goods-producing industries	22,414	22,690	22,943	23,119	23,144p	23,083	23,254p	23,137p
Service-producing industries	54,590	54,952	55,450	55,824	56,215p	56,250	56,313p	56,376p
	(Hours of work)							
Average weekly hours:								
Total private nonfarm	36.1	36.3	36.4	36.1	36.1p	36.2	36.0p	36.2p
Manufacturing	39.6	40.0	40.3	39.9	40.0p	40.0	39.7p	39.8p
Manufacturing overtime	2.7	2.9	3.1	2.9	3.1p	3.0	3.1p	2.9p
	(1967=100)							
Hourly Earnings Index, private nonfarm:								
In current dollars	174.3	177.8	180.6	183.5	186.7p	187.0	187.5p	188.6p
In constant dollars	107.0	107.5	107.9	108.4	108.7p	108.9	108.7p	N.A.

p= preliminary.

N.A.=not available.

The number of persons working part time because of economic factors edged up to 3.5 million in October, reaching its highest level since January. All of this increase occurred among persons who could only find part-time work (rather than full-time workers whose hours were reduced). (See table A-3.)

Total Employment and the Labor Force

Total employment was 87.8 million, seasonally adjusted, in October, the fourth straight month that it has been at about this level. There was also little over-the-month change among the major age-sex groups. Despite the lack of growth in recent months, the October employment total was 3.7 million above the March 1975 recession low.

The civilian labor force, at 95.3 million in October, was about unchanged following a 280,000 decline in September. Over the past year, the labor force has grown by 2.3 million, with 1.2 million of the increase occurring among adult women, almost 900,000 among adult men, and 200,000 among teenagers. (See table A-1.)

Industry Payroll Employment

Nonagricultural payroll employment was essentially unchanged in October at 79.5 million, seasonally adjusted, following increases totaling 625,000 over the prior 3 months. This over-the-month stability reflected some counterbalancing movements among the various industrial groups; there were also nearly 100,000 workers off payrolls due to increased strike activity. Additions to payrolls in October occurred in less than half of the 172 industries that comprise the BLS diffusion index of nonagricultural payroll employment. (See tables B-1 and B-6.)

Manufacturing employment moved down 145,000 to 19.0 million, seasonally adjusted; this followed a rise of similar magnitude in September. The reduction in October occurred primarily in the durable goods sector and was most pronounced among workers in the transportation equipment industry, where a decline of 45,000 resulted from a strike against the Ford Motor Company. Job losses were also posted in the primary metals, fabricated metals, and machinery industries, some of which also stemmed from new strike activity. Within nondurable goods, employment reductions took place in the textile, apparel, and paper products industries.

Transportation and public utilities was the only other major industry to show a decline, and the job loss of 15,000 was the result of a strike. These reductions were nearly offset by employment increases in most other major industry divisions. In addition to gains of 20,000 each in contract construction and services, employment in finance, insurance, and real estate rose by 30,000 and mining was up by 10,000.

Hours

The average workweek for production or nonsupervisory workers on private nonagricultural payrolls was 36.2 hours in October, seasonally adjusted, 0.2 hour longer than in September. (See table B-2.) This increase returned the average workweek to the levels prevailing during the March-August period.

The manufacturing workweek edged up 0.1 hour to 39.8 hours, seasonally adjusted, following declines in the prior 2 months. The factory workweek in October was a full hour longer than the February 1975 recession low. Overtime in manufacturing averaged 2.9 hours, a 0.2-hour decline from September; however, this reduction may be attributed to the occurrence of the Columbus Day holiday during the survey period.

The index of aggregate hours of private nonagricultural production or nonsupervisory workers rose to 111.3 (1967=100), the highest level recorded since November 1974 and 5.0 percent above the March 1975 cyclical low point. In manufacturing, the aggregate hours index dipped 0.8 percent over the month to 93.5, a reflection of the job reductions (including strikes) in the industry. This index now stands 8.2 percent above the level for March 1975.

Hourly and Weekly Earnings

Average hourly earnings of private nonagricultural production or nonsupervisory workers rose 0.4 percent over the month (seasonally adjusted). Average weekly earnings rose 1.0 percent in October, as a result of higher hourly earnings combined with a slightly longer workweek.

Before adjustment for seasonality, average hourly earnings were \$4.97, up 1 cent from September. Hourly earnings were up 31 cents from last October. Average weekly earnings increased 36 cents over the month to \$179.91 and have risen \$11.22 since October 1975. (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 188.6 (1967=100) in October, 0.6 percent higher than in September.

The index was 6.7 percent above October a year ago. During the 12-month period ended in September, the Hourly Earnings Index in dollars of constant purchasing power rose 1.4 percent. (See table B-4.)

This release presents and analyzes statistics from two major surveys. Data on labor force, total employment, and unemployment are derived from the sample survey of households conducted and tabulated by the Bureau of the Census for the Bureau of Labor Statistics. Statistics on payroll employment, hours, and earnings are collected by State agencies from payroll records of employers and are tabulated by the Bureau of Labor Statistics. Unless otherwise indicated, data for both series relate to the week of the specified month containing the 12th day. A description of the two surveys appears in the BLS publication *Employment and Earnings*.

HOUSEHOLD DATA

HOUSEHOLD DATA

Table A-1. Employment status of the noninstitutional population

(Numbers in thousands)

Employment status	Not seasonally adjusted				Seasonally adjusted				
	Oct. 1975	Sept. 1976	Oct. 1976	Oct. 1975	June 1976	July 1976	Aug. 1976	Sept. 1976	Oct. 1976
TOTAL									
Total noninstitutional population ¹	154,256	156,595	156,788	154,256	155,925	156,142	156,367	156,595	156,788
Total labor force	95,431	97,120	97,677	95,377	96,780	97,473	97,634	97,348	97,489
Participation rate	61.9	62.0	62.3	61.8	62.1	62.4	62.4	62.2	62.2
Civilian noninstitutional population ¹	152,092	154,451	154,642	152,092	153,788	154,002	154,220	154,451	154,642
Civilian labor force	93,267	94,975	95,530	93,213	94,643	95,333	95,487	95,203	95,342
Participation rate	61.3	61.5	61.8	61.3	61.5	61.9	61.9	61.6	61.7
Employed	86,023	87,949	88,697	85,151	87,500	87,907	87,981	87,819	87,773
Agriculture	3,326	3,396	3,482	3,408	3,294	3,314	3,426	3,286	3,329
Nonagricultural industries	82,499	84,553	85,215	81,743	84,206	84,566	84,557	84,533	84,444
Unemployed	7,244	7,026	6,833	8,062	7,143	7,506	7,506	7,384	7,569
Unemployment rate	7.8	7.4	7.2	8.6	7.5	7.8	7.9	7.8	7.9
Not in labor force	58,825	59,476	59,112	58,879	59,145	58,669	58,733	59,248	59,300
Males, 20 years and over									
Total noninstitutional population ¹	65,444	66,491	66,598	65,444	66,182	66,279	66,384	66,491	66,598
Total labor force	32,711	33,504	33,560	32,964	33,144	33,387	33,436	33,563	33,682
Participation rate	80.5	80.3	80.4	80.9	80.3	80.5	80.5	80.6	80.6
Civilian noninstitutional population ¹	63,725	64,796	64,902	63,725	64,492	64,586	64,688	64,796	64,902
Civilian labor force	30,992	31,810	31,864	31,225	31,454	31,694	31,740	31,869	31,986
Participation rate	80.0	80.0	79.9	80.4	79.8	80.0	80.0	80.0	80.1
Employed	47,983	49,172	49,215	47,513	48,391	48,535	48,682	48,721	48,716
Agriculture	2,514	2,405	2,424	2,430	2,430	2,449	2,415	2,326	2,342
Nonagricultural industries	45,470	46,766	46,791	45,083	45,961	46,086	46,267	46,395	46,374
Unemployed	3,008	2,638	2,649	3,712	3,063	3,159	3,058	3,148	3,270
Unemployment rate	5.9	5.1	5.1	7.2	6.0	6.1	5.9	6.1	6.3
Not in labor force	12,733	12,987	13,038	12,500	13,038	12,892	12,948	12,927	12,916
Females, 20 years and over									
Civilian noninstitutional population ¹	72,029	73,196	73,288	72,029	72,857	72,966	73,078	73,196	73,288
Civilian labor force	33,857	34,728	35,046	33,236	34,290	34,583	34,639	34,505	34,396
Participation rate	47.0	47.4	47.8	46.1	47.1	47.4	47.4	47.1	46.9
Employed	31,224	31,943	32,430	30,621	31,485	31,958	31,988	31,907	31,799
Agriculture	599	560	621	534	479	488	546	524	562
Nonagricultural industries	30,625	31,383	31,799	30,087	31,366	31,470	31,442	31,383	31,237
Unemployed	2,634	2,785	2,615	2,615	2,445	2,625	2,651	2,598	2,597
Unemployment rate	7.8	8.0	7.5	7.9	7.1	7.6	7.7	7.5	7.6
Not in labor force	38,172	38,468	38,243	38,793	38,567	38,383	38,439	38,691	38,892
Both sexes, 15-19 years									
Civilian noninstitutional population ¹	16,338	16,458	16,452	16,338	16,439	16,450	16,454	16,458	16,452
Civilian labor force	8,418	8,438	8,621	8,752	8,899	9,056	9,108	8,829	8,960
Participation rate	51.5	51.3	52.4	53.6	54.1	55.1	55.4	53.6	54.5
Employed	6,816	6,834	7,052	7,017	7,264	7,414	7,311	7,191	7,258
Agriculture	412	430	392	444	385	404	463	436	425
Nonagricultural industries	6,405	6,404	6,660	6,573	6,879	7,010	6,848	6,755	6,833
Unemployed	1,602	1,603	1,569	1,735	1,635	1,642	1,797	1,638	1,702
Unemployment rate	19.0	19.0	18.2	19.8	18.4	18.1	19.7	18.6	19.0
Not in labor force	7,920	8,021	7,831	7,586	7,540	7,394	7,346	7,629	7,492
WHITE									
Civilian noninstitutional population ¹	136,121	136,005	136,165	136,121	135,473	135,643	135,822	136,005	136,165
Civilian labor force	82,627	86,119	84,819	82,725	83,805	84,359	84,503	84,371	84,595
Participation rate	61.6	61.8	61.8	61.7	61.9	62.2	62.2	62.0	62.1
Employed	76,768	78,452	79,133	76,077	78,120	78,341	78,468	78,365	78,402
Unemployed	5,858	5,667	5,486	6,648	5,685	6,018	6,035	6,006	6,193
Unemployment rate	7.1	6.7	6.5	8.0	6.8	7.1	7.1	7.1	7.3
Not in labor force	51,494	51,886	51,546	51,396	51,668	51,284	51,319	51,634	51,570
BLACK AND OTHER									
Civilian noninstitutional population ¹	17,971	18,445	18,476	17,971	18,315	18,359	18,398	18,445	18,476
Civilian labor force	10,640	10,856	10,911	10,668	10,826	10,867	11,003	10,930	10,923
Participation rate	59.2	58.9	59.1	59.4	59.1	59.2	59.8	59.3	59.1
Employed	9,255	9,497	9,564	9,147	9,382	9,466	9,505	9,538	9,448
Unemployed	1,385	1,359	1,347	1,521	1,444	1,401	1,498	1,392	1,475
Unemployment rate	13.0	12.5	12.3	14.3	13.3	12.9	13.6	12.7	13.5
Not in labor force	7,331	7,589	7,565	7,303	7,489	7,492	7,395	7,515	7,553

¹ Seasonal variations are not present in the population figures; therefore, identical numbers appear in the unadjusted and seasonally adjusted columns.

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Table A-2. Major unemployment indicators, seasonally adjusted

Selected categories	Number of unemployed persons (in thousands)		Unemployment rates					
	Oct. 1975	Oct. 1976	Oct. 1975	June 1976	July 1976	Aug. 1976	Sept. 1976	Oct. 1976
	Total, 16 years and over							
Total, 16 years and over	8,062	7,569	8.6	7.5	7.8	7.9	7.8	7.9
Males, 20 years and over	3,712	3,270	7.2	6.0	6.1	5.9	6.1	6.3
Females, 20 years and over	2,615	2,597	7.9	7.1	7.6	7.7	7.5	7.6
Both sexes, 16-19 years	1,735	1,702	19.8	18.4	18.1	19.7	18.6	19.0
White, total								
White, total	6,648	6,193	8.0	6.8	7.1	7.1	7.1	7.3
Males, 20 years and over	3,105	2,712	6.7	5.4	5.7	5.5	5.7	5.8
Females, 20 years and over	2,160	2,133	7.5	6.5	6.9	7.0	6.8	7.1
Both sexes, 16-19 years	1,383	1,346	17.7	16.1	16.3	17.3	16.5	16.7
Black and other, total								
Black and other, total	1,521	1,475	14.3	13.3	12.9	13.6	12.7	13.5
Males, 20 years and over	644	587	12.2	10.7	10.3	9.9	9.6	10.9
Females, 20 years and over	528	535	11.9	11.3	11.7	12.3	11.4	11.6
Both sexes, 16-19 years	349	353	36.7	40.3	34.1	40.2	38.5	38.4
Household heads, total								
Household heads, total	3,188	2,912	6.0	5.1	5.4	5.2	5.4	5.4
Males	2,617	2,265	5.8	4.8	4.9	4.5	5.0	5.0
With relatives	2,152	1,804	5.2	4.3	4.5	4.1	4.5	4.5
Without relatives	465	461	10.2	8.9	8.6	8.1	8.6	9.0
Females	673	714	8.0	6.7	7.7	8.0	7.9	8.2
With relatives	430	461	10.7	9.2	10.0	11.1	10.6	10.9
Without relatives	243	253	5.6	4.4	5.5	5.1	5.4	5.7
Married men, spouse present								
Married men, spouse present	2,137	1,749	5.3	4.4	4.5	4.2	4.6	4.4
Full-time workers	6,758	6,221	8.5	7.4	7.3	7.5	7.5	7.6
Part-time workers	1,407	1,431	10.4	9.0	10.7	9.9	9.3	10.2
Unemployed 15 weeks and over ¹	2,719	2,330	2.9	2.3	2.4	2.5	2.4	2.4
Labor force time lost ²	--	--	9.4	7.7	7.9	8.2	8.4	8.8
OCCUPATION³								
White-collar workers	2,119	2,057	4.8	4.4	4.8	5.0	4.5	4.5
Professional and technical	421	428	3.2	2.9	3.1	3.1	3.0	3.1
Managers and administrators, except farm	265	271	2.9	3.1	3.5	3.5	3.2	2.8
Sales workers	352	318	6.0	5.1	5.4	5.9	5.4	5.4
Clerical workers	1,081	1,040	6.7	6.0	6.7	7.0	6.2	6.2
Blue-collar workers	3,697	3,119	11.6	9.3	9.6	9.8	9.8	9.7
Craft and kindred workers	1,053	831	8.7	7.3	7.4	7.0	7.0	6.8
Operatives	1,842	1,576	12.5	9.8	10.1	10.3	10.5	10.7
Nonfarm laborers	802	712	16.4	12.7	13.2	14.8	14.5	13.9
Service workers	1,182	1,260	9.1	8.6	8.5	8.5	8.6	9.5
Farm workers	115	119	3.7	4.1	4.5	3.5	3.7	4.0
INDUSTRY³								
Nonagricultural private wage and salary workers ⁴	6,234	5,635	9.2	7.8	8.0	8.2	8.0	8.1
Construction	811	666	18.1	17.0	17.7	17.1	15.8	14.9
Manufacturing	2,226	1,742	10.6	7.6	7.8	8.2	8.0	8.2
Durable goods	1,396	1,029	11.1	7.5	7.3	7.7	7.4	8.1
Nondurable goods	832	713	9.7	7.7	8.4	8.9	8.9	8.2
Transportation and public utilities	280	278	5.6	5.2	5.2	4.7	5.4	5.6
Wholesale and retail trade	1,563	1,588	9.1	8.2	8.5	9.0	8.8	9.0
Finance and service industries	1,337	1,311	7.0	6.3	6.4	6.5	6.3	6.6
Government workers	645	684	4.3	4.2	4.5	4.4	3.8	4.4
Agricultural wage and salary workers	156	167	10.7	10.9	12.4	10.0	10.6	11.2
VETERAN STATUS								
Males, Vietnam-era veterans⁵:								
20 to 34 years	610	569	9.9	8.8	8.4	7.4	9.3	8.9
20 to 24 years	221	190	22.3	19.6	20.0	15.4	19.8	19.7
25 to 29 years	279	241	8.4	7.9	6.8	6.8	8.0	8.0
30 to 34 years	110	138	5.9	5.5	5.7	5.0	6.7	5.7
Males, nonveterans:								
20 to 34 years	1,475	1,376	10.2	7.8	8.7	8.8	8.1	8.9
20 to 24 years	893	807	13.8	10.5	10.9	11.4	10.4	11.9
25 to 29 years	358	385	8.2	6.4	8.3	8.1	7.0	7.9
30 to 34 years	224	184	6.0	4.9	5.3	5.0	5.5	5.0

¹ Unemployment rate calculated as a percent of civilian labor force.² Aggregate hours lost by the unemployed and persons on part time for economic reasons as a percent of potentially available labor force hours.³ Unemployment by occupation includes all experienced unemployed persons, whereas that by industry covers only unemployed wage and salary workers.⁴ Includes mining, not shown separately.⁵ Vietnam-era veterans are those who served between August 5, 1964, and April 30, 1975.

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Table A-3. Selected employment indicators

Selected categories	Not seasonally adjusted		Seasonally adjusted					
	Oct. 1975	Oct. 1976	Oct. 1975	June 1976	July 1976	Aug. 1976	Sept. 1976	Oct. 1976
Total employed, 18 years and over	86,023	88,697	85,151	87,500	87,907	87,981	87,819	87,773
Males	51,632	52,971	51,300	52,243	52,501	52,655	52,564	52,613
Females	34,392	35,726	33,851	35,257	35,406	35,326	35,255	35,160
Household heads	50,866	51,790	50,258	51,163	51,054	51,170	51,234	51,176
Married men, spouse present	38,342	38,426	37,921	38,090	38,147	38,237	38,218	38,008
Married women, spouse present	20,359	20,993	19,799	20,337	20,399	20,444	20,536	20,421
OCCUPATION								
White-collar workers	42,697	44,387	42,386	43,763	43,481	43,782	44,183	44,067
Professional and technical	13,037	13,612	12,773	13,439	13,297	13,536	13,619	13,332
Managers and administrators, except farm	9,067	9,463	9,027	9,257	9,179	9,282	9,580	9,425
Sales workers	5,362	5,592	5,315	5,312	5,435	5,549	5,607	5,542
Clerical workers	15,031	15,721	15,071	15,555	15,570	15,415	15,377	15,768
Blue-collar workers	28,449	29,354	28,105	29,166	29,279	28,853	28,739	29,001
Craft and kindred workers	11,184	11,486	11,104	11,238	11,372	11,251	11,348	11,406
Operatives	13,196	13,493	12,915	13,690	13,530	13,273	13,091	13,203
Nonfarm laborers	4,069	4,376	4,086	4,238	4,377	4,329	4,300	4,394
Service workers	11,813	12,031	11,759	12,028	12,185	12,328	12,219	11,976
Farm workers	3,064	2,925	2,975	2,902	2,878	2,951	2,791	2,840
MAJOR INDUSTRY AND CLASS OF WORKER								
Agriculture:								
Wage and salary workers	1,352	1,370	1,303	1,299	1,301	1,363	1,329	1,321
Self-employed workers	1,726	1,698	1,710	1,670	1,695	1,709	1,606	1,683
Unpaid family workers	447	379	408	341	340	356	351	346
Nonagricultural industries:								
Wage and salary workers	76,437	79,147	75,760	78,098	78,390	78,469	78,584	78,444
Private households	1,393	1,423	1,349	1,415	1,436	1,401	1,410	1,379
Government	14,612	15,063	14,443	14,894	14,988	15,317	15,185	14,884
Other	60,432	62,661	59,968	61,789	61,966	61,751	61,989	62,181
Self-employed workers	5,591	5,658	5,531	5,657	5,649	5,662	5,714	5,596
Unpaid family workers	470	445	478	451	432	436	428	452
PERSONS AT WORK¹								
Nonagricultural industries	78,680	81,460	76,822	79,497	79,189	78,931	79,921	79,572
Full-time schedules	64,174	66,378	62,824	64,860	65,259	64,622	65,064	65,013
Part time for economic reasons	3,015	3,105	3,361	3,080	3,012	3,067	3,268	3,469
Usually work full time	1,361	1,229	1,459	1,307	1,259	1,295	1,339	1,337
Usually work part time	1,674	1,876	1,902	1,773	1,753	1,752	2,009	2,132
Part time for noneconomic reasons	11,491	11,977	10,637	11,557	10,918	11,262	11,509	11,090

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

Weeks of unemployment	Not seasonally adjusted		Seasonally adjusted					
	Oct. 1975	Oct. 1976	Oct. 1975	June 1976	July 1976	Aug. 1976	Sept. 1976	Oct. 1976
Less than 5 weeks	2,800	2,796	3,015	2,618	2,951	2,829	2,828	3,010
5 to 14 weeks	2,154	2,075	2,446	2,261	2,028	2,427	2,453	2,355
15 weeks and over	2,289	1,962	2,719	2,215	2,317	2,387	2,314	2,330
15 to 20 weeks	1,005	866	1,238	914	1,116	1,143	1,123	1,066
27 weeks and over	1,284	1,096	1,461	1,301	1,201	1,244	1,191	1,264
Average (mean) duration, in weeks	14.9	14.7	15.6	16.9	15.8	15.5	15.4	15.4
PERCENT DISTRIBUTION								
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 5 weeks	39.7	40.9	36.9	36.9	40.4	37.0	37.2	39.1
5 to 14 weeks	29.7	30.4	29.9	31.9	27.8	31.8	32.3	30.6
15 weeks and over	31.6	28.7	33.2	31.2	31.8	31.2	30.5	30.3
15 to 20 weeks	13.9	12.7	15.1	12.9	15.3	15.0	14.8	13.9
27 weeks and over	17.7	16.0	18.1	18.3	16.5	16.3	15.7	16.4

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Table A-5. Reasons for unemployment

Reason	Not seasonally adjusted		Seasonally adjusted					
	Oct. 1975	Oct. 1976	Oct. 1975	June 1976	July 1976	Aug. 1976	Sept. 1976	Oct. 1976
NUMBER OF UNEMPLOYED								
Lost last job	3,617	3,015	4,531	3,623	3,843	3,781	3,756	3,778
Left last job	874	1,003	829	882	964	1,008	929	953
Reentered labor force	1,942	1,952	1,892	1,795	1,856	1,935	1,895	1,903
Seeking first job	811	861	844	805	795	951	932	894
PERCENT DISTRIBUTION								
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Job losers	49.9	44.1	56.0	51.0	51.5	49.3	50.0	50.2
Job leavers	12.1	14.7	10.2	12.4	12.9	13.1	12.4	12.7
Reentrants	26.8	28.6	23.4	25.3	24.9	25.2	25.2	25.3
New entrants	11.2	12.6	10.4	11.3	10.7	12.4	12.4	11.9
UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE								
Job losers	3.9	3.1	4.9	3.8	4.0	4.0	3.9	4.0
Job leavers .....	.9	1.1	.9	.9	1.0	1.1	1.0	1.0
Reentrants	2.1	2.0	2.0	1.9	1.9	2.0	2.0	2.0
New entrants .....	.9	.9	.9	.9	.8	1.0	1.0	.9

Table A-6. Unemployment by sex and age

Sex and age	Not seasonally adjusted			Seasonally adjusted unemployment rates					
	Thousands of persons		Percent looking for full-time work	Oct. 1975	June 1976	July 1976	Aug. 1976	Sept. 1976	Oct. 1976
	Oct. 1975	Oct. 1976							
Total, 16 years and over	7,244	6,833	77.3	8.6	7.5	7.8	7.9	7.8	7.9
16 to 19 years	1,602	1,569	52.1	19.8	18.4	18.1	19.7	18.6	19.0
16 to 17 years	744	714	25.5	21.9	21.3	20.8	22.5	20.5	21.3
18 to 19 years	858	855	74.2	18.2	15.6	15.9	18.0	17.8	17.3
20 to 24 years	1,670	1,582	84.1	14.0	11.4	11.2	11.8	11.5	12.8
25 years and over	3,973	3,682	85.2	6.3	5.5	5.9	5.6	5.7	5.6
25 to 54 years	3,336	3,098	87.7	6.6	5.7	6.1	5.8	5.9	5.9
55 years and over	637	584	71.7	4.9	4.7	4.8	4.8	4.8	4.5
Males, 16 years and over	3,837	3,491	81.8	8.3	7.0	7.2	7.0	7.1	7.4
16 to 19 years	829	843	52.2	19.8	18.5	18.4	18.8	18.8	19.5
16 to 17 years	382	409	22.8	21.6	21.3	21.0	21.8	21.2	22.1
18 to 19 years	447	442	78.7	18.2	15.9	16.4	16.7	17.8	17.5
20 to 24 years	912	816	88.5	15.1	11.7	11.9	11.8	11.6	13.0
25 years and over	2,096	1,832	92.5	6.0	5.0	5.1	4.9	5.1	5.1
25 to 54 years	1,728	1,499	95.9	6.2	5.1	5.4	5.1	5.2	5.3
55 years and over	368	334	76.6	4.6	4.8	4.2	4.5	4.6	4.2
Females, 16 years and over	3,406	3,341	72.7	9.2	8.3	8.7	9.1	8.7	8.7
16 to 19 years	773	726	51.9	19.9	18.2	17.8	20.8	18.3	18.3
16 to 17 years	362	314	29.0	22.3	21.6	20.7	23.3	19.7	20.3
18 to 19 years	411	412	69.4	18.2	15.3	15.3	19.5	17.7	17.1
20 to 24 years	757	766	79.5	12.7	11.0	10.4	11.8	11.4	12.5
25 years and over	1,876	1,850	77.9	6.8	6.3	7.1	6.6	6.7	6.4
25 to 54 years	1,607	1,599	80.1	7.3	6.7	7.3	7.0	7.0	7.0
55 years and over	269	250	65.2	5.4	4.3	5.8	5.2	5.2	4.9

ESTABLISHMENT DATA

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

Industry	Not seasonally adjusted				Seasonally adjusted					
	Oct. 1975	Aug. 1976	Sept. 1976 ^p	Oct. 1976 ^p	Oct. 1975	June 1976	July 1976	Aug. 1976	Sept. 1976 ^p	Oct. 1976 ^p
TOTAL	78,193	79,187	79,855	80,158	77,555	78,943	79,176	79,333	79,567	79,513
GOODS-PRODUCING	23,070	23,557	23,753	23,538	22,669	23,091	23,094	23,083	23,254	23,137
MINING	763	766	801	793	774	779	788	752	795	804
CONTRACT CONSTRUCTION	3,620	3,620	3,557	3,572	3,402	3,362	3,373	3,352	3,337	3,357
MANUFACTURING	18,687	19,171	19,395	19,173	18,493	18,950	18,933	18,979	19,122	18,976
Production workers	13,420	13,797	14,029	13,808	13,235	13,630	13,607	13,640	13,766	13,622
DURABLE GOODS	10,750	11,108	11,268	11,144	10,661	11,046	11,029	11,086	11,157	11,052
Production workers	7,631	7,922	8,082	7,957	7,548	7,890	7,872	7,919	7,975	7,871
Ordnance and accessories	165.4	157.1	156.1	155.0	164	158	157	156	154	154
Lumber and wood products	583.6	629.0	626.8	622.8	576	602	605	607	613	615
Furniture and fixtures	472.2	491.8	498.3	492.2	467	490	488	485	496	487
Stone, clay, and glass products	623.5	644.6	643.3	640.3	615	627	630	629	631	631
Primary metal industries	1,144.8	1,234.8	1,220.7	1,203.0	1,149	1,197	1,204	1,215	1,221	1,208
Fabricated metal products	1,359.7	1,396.7	1,421.1	1,407.2	1,344	1,388	1,386	1,395	1,406	1,391
Machinery, except electrical	2,029.1	2,069.2	2,105.1	2,074.3	2,039	2,065	2,077	2,082	2,111	2,085
Electrical equipment	1,780.9	1,837.6	1,862.2	1,870.6	1,767	1,833	1,817	1,845	1,846	1,856
Transportation equipment	1,670.5	1,724.2	1,781.5	1,728.8	1,641	1,747	1,733	1,744	1,744	1,698
Instruments and related products	492.0	512.3	513.9	511.9	490	512	511	509	512	510
Miscellaneous manufacturing	428.7	430.4	438.7	437.7	409	427	421	419	423	417
NONDURABLE GOODS	7,937	8,063	8,127	8,029	7,832	7,904	7,904	7,893	7,965	7,924
Production workers	5,789	5,878 ^p	5,947	5,851	5,687	5,740	5,735	5,721	5,791	5,751
Food and kindred products	1,762.6	1,835.2	1,838.3	1,775.4	1,695	1,716	1,714	1,717	1,716	1,707
Tobacco manufactures	88.1	85.0	84.9	85.0	79	74	80	78	76	76
Textile mill products	950.8	973.5	975.3	959.3	953	969	965	969	974	961
Apparel and other textile products	1,304.6	1,299.7	1,295.8	1,286.9	1,287	1,315	1,311	1,289	1,278	1,269
Paper and allied products	654.8	684.7	683.7	675.6	652	677	679	679	682	672
Printing and publishing	1,074.4	1,079.1	1,085.6	1,089.0	1,071	1,076	1,080	1,081	1,088	1,086
Chemicals and allied products	1,020.0	1,048.5	1,041.4	1,038.8	1,019	1,027	1,034	1,040	1,037	1,038
Petroleum and coal products	203.1	207.1	205.4	204.4	201	202	201	202	202	203
Rubber and plastics products, nec.	611.5	576.5	649.8	650.2	608	573	569	572	644	647
Leather and leather products	266.6	272.7	268.1	264.6	267	275	271	266	268	265
SERVICE-PRODUCING	55,123	55,630	56,102	56,620	54,886	55,852	56,082	56,250	56,313	56,376
TRANSPORTATION AND PUBLIC UTILITIES	4,503	4,528	4,543	4,519	4,476	4,477	4,500	4,501	4,507	4,492
WHOLESALE AND RETAIL TRADE	17,136	17,544	17,652	17,722	17,043	17,460	17,567	17,603	17,612	17,625
WHOLESALE TRADE	4,209	4,302	4,299	4,321	4,180	4,254	4,267	4,268	4,286	4,291
RETAIL TRADE	12,927	13,242	13,353	13,401	12,863	13,206	13,300	13,335	13,326	13,334
FINANCE, INSURANCE, AND REAL ESTATE	4,238	4,368	4,347	4,363	4,246	4,297	4,303	4,312	4,343	4,372
SERVICES	14,185	14,827	14,768	14,818	14,157	14,557	14,623	14,709	14,768	14,788
GOVERNMENT	15,061	14,363	14,792	15,198	14,964	15,061	15,089	15,125	15,083	15,099
FEDERAL	2,742	2,754	2,717	2,714	2,767	2,725	2,721	2,735	2,736	2,739
STATE AND LOCAL	12,319	11,609	12,075	12,484	12,197	12,336	12,368	12,390	12,347	12,360

^ppreliminary.

ESTABLISHMENT DATA

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Table B-2. Average weekly hours of production or nonsupervisory workers¹ on private nonagricultural payrolls, by industry

Industry	Not seasonally adjusted				Seasonally adjusted					
	Oct. 1975	Aug. 1976	Sept. 1976 p	Oct. 1976 p	Oct. 1975	June 1976	July 1976	Aug. 1976	Sept. 1976 p	Oct. 1976 p
TOTAL PRIVATE.....	36.2	36.6	36.2	36.2	36.2	36.1	36.2	36.2	36.0	36.2
MINING.....	43.1	41.2	43.4	43.6	42.7	42.3	42.5	41.0	43.1	43.2
CONTRACT CONSTRUCTION.....	37.5	37.9	36.8	38.1	36.6	37.1	36.8	36.8	35.9	37.2
MANUFACTURING.....	39.9	40.0	40.1	39.9	39.8	40.2	40.2	40.0	39.7	39.8
Overtime hours.....	3.0	3.1	3.4	3.1	2.8	3.1	3.2	3.0	3.1	2.9
DURABLE GOODS.....	40.2	40.5	40.6	40.6	40.0	40.8	40.8	40.8	40.3	40.4
Overtime hours.....	2.8	3.2	3.4	3.3	2.6	3.3	3.3	3.2	3.1	3.1
Ordnance and accessories.....	41.5	40.3	40.5	40.9	41.6	41.1	40.9	40.5	40.5	41.0
Lumber and wood products.....	40.0	40.6	40.2	40.6	39.8	39.8	40.5	40.3	39.8	40.4
Furniture and fixtures.....	39.3	39.0	38.6	38.8	38.9	38.6	38.5	38.5	38.1	38.4
Stones, clay, and glass products.....	41.2	41.5	41.4	41.5	40.8	41.2	41.0	41.1	41.0	41.1
Primary metal industries.....	39.7	40.6	40.9	40.5	39.9	41.1	41.2	40.9	40.5	40.7
Fabricated metal products.....	40.5	41.0	40.9	40.4	40.4	40.9	40.8	41.0	40.6	40.3
Machinery, except electrical.....	40.6	41.0	41.0	40.9	40.6	41.1	41.4	41.4	40.8	40.9
Electrical equipment.....	39.8	40.0	40.1	40.6	39.6	40.1	40.1	40.1	39.8	40.4
Transportation equipment.....	40.8	40.9	41.5	41.4	40.4	42.4	42.0	42.1	41.1	41.0
Instruments and related products.....	39.8	40.2	40.2	40.0	39.7	40.5	40.8	40.4	39.9	39.9
Miscellaneous manufacturing.....	39.0	38.5	38.5	38.8	38.8	38.6	38.7	38.4	38.4	38.6
NONDURABLE GOODS.....	39.6	39.2	39.4	39.1	39.5	39.2	39.1	39.0	39.0	39.0
Overtime hours.....	3.2	3.0	3.2	3.0	3.0	2.9	3.0	2.8	2.8	2.8
Food and kindred products.....	40.6	40.7	40.9	40.4	40.6	40.0	40.0	40.1	40.2	40.4
Tobacco manufactures.....	38.9	37.3	37.8	38.4	37.5	38.4	34.5	36.7	37.0	37.0
Textile mill products.....	41.0	39.6	39.4	39.4	41.0	40.3	40.1	39.4	39.2	39.4
Apparel and other textile products.....	36.3	35.6	35.2	35.1	36.2	35.9	35.5	35.2	35.0	35.0
Paper and allied products.....	42.4	42.4	42.5	42.0	42.3	42.5	42.3	42.1	42.2	41.9
Printing and publishing.....	37.1	37.7	37.8	37.4	37.0	37.4	37.6	37.5	37.4	37.3
Chemicals and allied products.....	41.4	41.1	42.0	41.5	41.4	41.4	41.4	41.3	42.0	41.5
Petroleum and coal products.....	42.2	42.0	42.8	42.2	41.8	41.9	42.1	42.0	42.2	41.8
Rubber and plastics products, nec.....	40.1	40.1	40.7	40.5	40.0	40.3	40.3	40.1	40.3	40.4
Leather and leather products.....	38.6	36.9	36.5	36.6	38.9	37.1	37.0	36.8	36.7	36.9
TRANSPORTATION AND PUBLIC UTILITIES.....	39.9	40.4	40.2	40.2	39.7	39.8	39.7	40.0	40.0	40.0
WHOLESALE AND RETAIL TRADE.....	33.7	34.4	33.6	33.4	33.9	33.6	33.6	33.6	33.5	33.6
WHOLESALE TRADE.....	38.8	39.0	38.9	38.7	38.8	38.7	39.1	38.9	38.8	38.7
RETAIL TRADE.....	32.1	33.0	32.1	31.8	32.3	32.0	32.0	31.9	32.0	32.0
FINANCE, INSURANCE, AND REAL ESTATE.....	36.4	36.9	36.6	36.6	36.4	36.6	36.6	36.8	36.7	36.6
SERVICES.....	33.6	34.0	33.4	33.4	33.7	33.4	33.4	33.5	33.3	33.5

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

ESTABLISHMENT DATA

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Table B-3. Average hourly and weekly earnings of production or nonsupervisory workers¹ on private nonagricultural payrolls, by industry

Industry	Average hourly earnings				Average weekly earnings			
	Oct. 1975	Aug. 1976	Sept. 1976 ^P	Oct. 1976 ^P	Oct. 1975	Aug. 1976	Sept. 1976 ^P	Oct. 1976 ^P
TOTAL PRIVATE	\$4.66	\$4.88	\$4.96	\$4.97	\$168.69	\$178.61	\$179.55	\$179.91
Seasonally adjusted.....	4.63	4.89	4.92	4.94	167.61	177.02	177.12	178.83
MINING	6.02	6.29	6.55	6.57	259.46	259.15	284.27	286.45
CONTRACT CONSTRUCTION	7.42	7.71	7.81	7.84	278.25	292.21	287.41	298.70
MANUFACTURING	4.90	5.21	5.30	5.29	195.51	208.40	212.53	211.07
DURABLE GOODS	5.26	5.58	5.66	5.64	211.45	225.99	229.80	228.98
Ordnance and accessories.....	5.41	5.77	5.86	5.92	224.52	232.53	237.33	242.13
Lumber and wood products.....	4.42	4.83	4.87	4.85	176.80	196.10	195.77	196.91
Furniture and fixtures.....	3.81	4.01	4.05	4.04	149.73	156.39	156.33	156.75
Stone, clay, and glass products.....	5.02	5.36	5.42	5.44	206.82	222.44	224.39	225.76
Primary metal industries.....	6.35	6.92	6.95	6.96	254.10	280.95	284.26	281.88
Fabricated metal products.....	5.19	5.46	5.54	5.49	210.20	223.86	226.59	221.80
Machinery, except electrical.....	5.51	5.79	5.86	5.84	223.71	237.39	240.26	238.86
Electrical equipment.....	4.66	4.95	5.02	5.05	185.47	198.00	201.30	205.03
Transportation equipment.....	6.24	6.52	6.67	6.63	254.59	266.67	276.81	274.48
Instruments and related products.....	4.60	4.90	4.93	4.89	183.08	196.98	198.19	195.60
Miscellaneous manufacturing.....	3.83	4.00	4.02	4.06	149.37	154.00	154.77	157.53
NONDURABLE GOODS	4.42	4.70	4.80	4.80	175.03	184.24	189.12	187.68
Food and kindred products.....	4.65	4.98	5.01	5.04	188.79	202.69	204.91	203.62
Tobacco manufactures.....	4.27	4.62	4.65	4.66	166.10	172.33	175.77	178.94
Textile mill products.....	3.53	3.75	3.78	3.80	144.73	148.50	148.93	149.72
Apparel and other textile products.....	3.24	3.42	3.49	3.47	117.61	121.75	122.85	121.80
Paper and allied products.....	5.15	5.50	5.57	5.57	218.36	233.20	236.73	233.94
Printing and publishing.....	5.49	5.71	5.79	5.76	203.68	215.27	218.86	215.42
Chemicals and allied products.....	5.50	5.93	6.03	6.03	227.70	243.72	253.26	250.25
Petroleum and coal products.....	6.61	7.13	7.23	7.18	278.94	299.46	309.44	303.00
Rubber and plastics products, nec.....	4.42	4.40	4.84	4.82	177.24	176.44	196.99	195.21
Leather and leather products.....	3.25	3.45	3.48	3.48	125.45	127.31	127.02	127.37
TRANSPORTATION AND PUBLIC UTILITIES	6.14	6.56	6.61	6.62	244.99	265.02	265.72	266.12
WHOLESALE AND RETAIL TRADE	3.82	3.98	4.03	4.03	128.73	136.91	135.41	134.60
WHOLESALE TRADE	4.98	5.21	5.24	5.24	193.22	203.19	203.84	202.79
RETAIL TRADE	3.41	3.55	3.59	3.60	109.46	117.15	115.24	114.48
FINANCE, INSURANCE, AND REAL ESTATE	4.17	4.40	4.40	4.41	151.79	162.36	161.04	161.41
SERVICES	4.16	4.32	4.43	4.46	139.78	146.88	147.96	148.96

¹ See footnote 1, table B-2, preliminary.

ESTABLISHMENT DATA

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Table B-4. Hourly earnings index for production or nonsupervisory workers¹ on private nonagricultural payrolls, by industry division, seasonally adjusted
(1967=100)

Industry	Oct. 1975	May 1976	June 1976	July 1976	Aug. 1976	Sept. P 1976	Oct. P 1976	Percent change from	
								Oct. 1975- Oct. 1976	Sept. 1976- Oct. 1976
TOTAL PRIVATE NONFARM:									
Current dollars	176.7	183.7	184.5	185.7	187.0	187.5	188.6	6.7	0.6
Constant (1967) dollars	107.4	108.5	108.5	108.7	108.7	108.9	N.A.	(2)	(3)
MINING	188.9	197.6	197.7	199.9	203.1	203.9	207.2	9.7	1.7
CONTRACT CONSTRUCTION	176.0	185.1	185.8	187.5	187.1	186.6	187.4	5.5	.4
MANUFACTURING	176.0	182.4	183.6	185.4	186.6	188.1	188.8	7.3	.4
TRANSPORTATION AND PUBLIC UTILITIES	188.8	198.5	199.4	200.1	202.3	202.0	203.4	7.7	.7
WHOLESALE AND RETAIL TRADE	171.9	177.3	177.5	178.8	180.0	180.3	180.9	5.2	.3
FINANCE, INSURANCE, AND REAL ESTATE	163.8	170.4	170.0	170.6	173.1	172.0	173.0	5.6	.6
SERVICES	179.4	188.2	189.3	189.0	190.4	190.7	192.6	7.3	1.0

¹ See footnote 1, table B-2.

² Percent change was 1.4 from September 1975 to September 1976, the latest month available.

³ Percent change was -0.2 from August 1976 to September 1976, the latest month available.

N.A. = not available.

p=preliminary.

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

Table B-5. Indexes of aggregate weekly hours of production or nonsupervisory workers¹ on private nonagricultural payrolls, by industry, seasonally adjusted
(1967 = 100)

Industry division and group	1976												
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept. P	Oct. P
TOTAL	108.4	108.8	109.3	110.3	110.5	110.2	110.7	111.2	110.6	111.0	111.1	111.2	111.3
GOODS-PRODUCING	92.7	92.9	94.3	95.5	95.2	94.8	94.5	96.0	95.5	95.3	94.9	95.1	95.1
MINING	125.0	124.7	125.7	125.2	124.4	124.8	124.9	124.4	124.9	127.2	114.9	129.8	131.0
CONTRACT CONSTRUCTION	97.3	97.7	98.8	100.3	98.8	93.4	98.8	97.8	96.8	96.7	96.1	93.2	97.1
MANUFACTURING	90.8	90.9	92.5	93.7	93.6	94.0	92.7	94.7	94.2	94.0	94.0	94.3	93.5
DURABLE GOODS	87.8	88.1	90.0	91.3	91.3	92.0	91.0	93.6	93.4	93.3	93.8	93.3	92.5
Ornance and accessories	42.9	40.8	41.5	41.6	40.9	41.0	40.3	41.0	40.7	40.0	39.6	37.9	38.4
Lumber and wood products	92.1	90.8	93.4	97.0	96.4	95.2	95.8	96.4	96.1	98.4	98.1	98.4	100.3
Furniture and fixtures	97.9	99.2	101.0	101.5	103.1	102.8	102.5	104.8	102.5	101.5	101.2	102.7	101.2
Stone, clay, and glass products	95.7	96.2	97.1	97.6	96.7	95.7	98.0	99.1	99.1	99.2	99.0	99.0	99.4
Primary metal industries	81.9	82.3	85.6	84.1	84.9	85.3	85.8	87.4	88.7	89.8	89.9	89.5	88.9
Fabricated metal products	92.8	92.7	94.6	95.7	96.6	97.3	95.0	98.3	97.9	97.4	98.7	98.7	96.5
Machinery, except electrical	91.9	92.0	92.5	93.4	93.2	93.3	91.6	94.3	94.0	95.3	95.6	95.7	93.8
Electrical equipment and supplies	85.8	85.5	87.5	89.0	89.2	90.3	89.2	91.9	91.6	90.6	92.3	91.4	93.4
Transportation equipment	81.5	83.1	87.3	89.0	88.2	90.8	88.5	92.3	92.6	90.6	91.5	89.4	86.2
Instruments and related products	100.8	101.7	103.4	105.0	105.2	106.3	105.7	109.9	109.1	109.9	108.1	107.2	106.5
Miscellaneous manufacturing, Ind.	91.3	90.8	91.7	94.4	94.3	95.1	92.9	95.7	94.6	93.1	91.8	93.3	92.0
NONDURABLE GOODS	95.1	95.0	96.2	97.1	96.9	96.3	96.2	95.4	95.0	94.3	95.7	95.0	95.0
Food and kindred products	96.5	95.1	95.4	96.9	97.3	95.3	95.9	96.7	96.5	96.5	96.6	96.8	95.6
Tobacco manufactures	85.6	93.4	87.4	90.6	86.8	85.6	84.9	83.6	82.2	81.2	83.8	81.8	81.8
Textile mill products	98.1	98.0	99.1	99.7	99.0	98.6	95.2	99.5	98.0	97.0	96.1	96.1	95.0
Apparel and other textile products	90.0	90.1	92.1	93.1	91.8	92.6	88.9	91.2	91.3	89.7	87.5	86.2	85.3
Paper and allied products	92.0	92.6	94.7	95.2	95.8	95.9	95.0	97.9	97.2	96.7	96.1	96.9	94.5
Printing and publishing	91.8	92.4	93.5	93.4	92.5	92.7	92.1	93.4	92.7	93.3	93.1	93.1	92.7
Chemicals and allied products	97.4	97.6	98.1	98.5	99.4	99.1	99.5	99.5	98.4	99.1	98.8	101.4	100.5
Petroleum and coal products	110.2	111.6	111.1	113.8	114.4	114.4	114.8	113.9	111.4	111.9	111.6	113.0	113.7
Rubber and plastics products, nec	114.7	113.5	116.2	118.8	119.3	121.8	118.5	107.8	106.2	105.7	105.7	124.4	124.9
Leather and leather products	77.2	77.2	78.1	79.3	78.9	79.9	78.3	79.2	76.2	74.7	72.7	72.5	72.3
SERVICE-PRODUCING	119.3	119.8	119.7	120.6	121.0	120.9	121.9	121.7	121.1	121.8	122.3	122.4	122.6
TRANSPORTATION AND PUBLIC UTILITIES	101.2	101.5	101.7	101.5	102.7	102.5	102.9	101.4	101.4	101.7	102.5	102.6	102.2
WHOLESALE AND RETAIL TRADE	115.1	115.2	115.5	116.8	116.8	116.8	118.2	117.7	116.8	117.9	117.7	118.0	118.0
WHOLESALE TRADE	112.0	111.5	112.3	113.4	113.6	113.2	114.3	114.5	113.7	115.3	114.6	114.7	114.6
RETAIL TRADE	116.2	116.6	116.6	118.1	118.0	118.1	119.7	118.9	118.0	118.9	118.9	119.2	119.3
FINANCE, INSURANCE, AND REAL ESTATE	123.7	125.1	124.5	125.1	125.8	125.5	126.1	126.2	126.3	126.3	127.3	127.9	128.2
SERVICES	132.0	133.1	132.5	133.3	133.9	133.7	134.3	135.3	134.5	135.0	136.3	137.9	138.6

¹For coverage of series, see footnote 1, table B-2.

p = preliminary.

ESTABLISHMENT DATA

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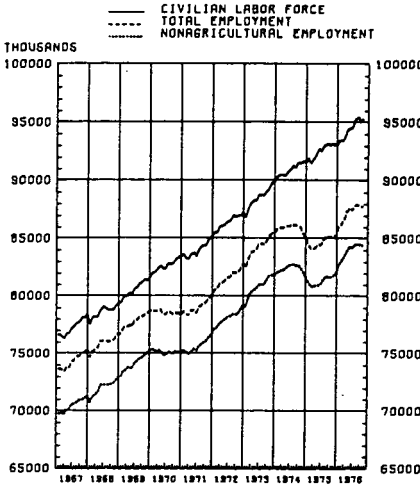
Table B-6. Indexes of diffusion: Percent of industries in which employment¹ increased

Year and month	Over 1-month span	Over 3-month span	Over 6-month span	Over 12-month span
1973				
January	76.7	84.0	81.7	81.1
February	75.0	83.7	79.4	80.8
March	73.8	76.2	79.4	82.6
April	62.5	71.5	74.7	81.4
May	59.9	70.3	72.1	79.7
June	68.0	63.1	66.6	78.5
July	55.8	66.9	72.1	75.6
August	63.1	64.8	72.7	73.5
September	61.6	74.7	73.0	69.2
October	72.7	75.9	75.6	66.0
November	75.0	76.5	70.3	66.6
December	66.6	70.1	66.0	64.2
1974				
January	59.3	62.8	60.8	63.4
February	52.6	53.8	55.2	59.6
March	46.5	48.0	49.7	55.2
April	47.1	48.3	48.5	50.3
May	55.2	51.7	49.7	40.1
June	53.2	52.6	45.6	28.2
July	52.3	45.1	37.2	27.0
August	45.9	39.2	31.1	22.4
September	36.0	40.4	23.3	20.9
October	37.8	28.8	17.7	18.6
November	20.1	21.5	17.2	16.6
December	18.6	13.4	12.1	14.0
1975				
January	18.6	12.5	13.4	16.6
February	16.6	13.7	13.1	17.4
March	25.0	19.2	16.3	17.4
April	40.4	35.8	27.9	20.9
May	53.8	40.4	40.1	25.9
June	40.4	48.5	60.8	40.4
July	55.2	55.8	67.4	50.3
August	73.5	80.2	67.4	62.5
September	81.7	81.4	76.5	71.2
October	64.8	70.3	79.4	75.9
November	54.7	68.9	82.0	79.1
December	66.6	72.7	75.6	81.4
1976				
January	75.0	78.8	80.2	84.6
February	70.1	81.7	77.9	82.8
March	70.9	78.8	74.4	80.8p
April	75.3	77.3	75.3	71.8p
May	66.3	67.7	69.8	
June	42.4	57.8	69.5p	
July	53.8	48.8	55.5p	
August	56.4	67.2p		
September	70.9p	56.7p		
October	42.7p			
November				
December				

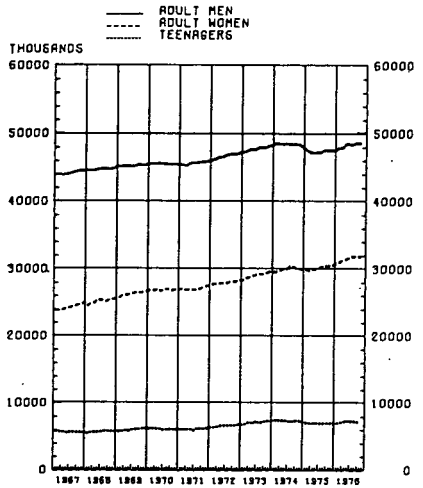
¹ Number of employees, seasonally adjusted, on payrolls of 172 private nonagricultural industries.
p = preliminary.

LABOR FORCE, EMPLOYMENT, UNEMPLOYMENT
HOUSEHOLD DATA - SEASONALLY ADJUSTED

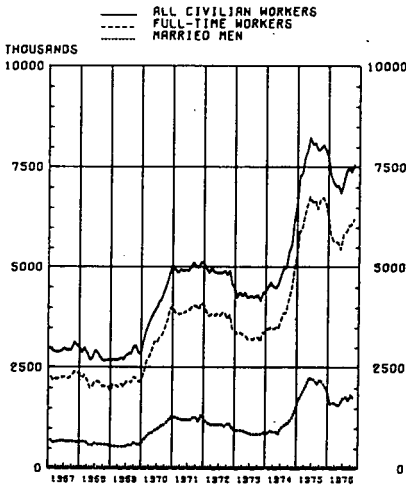
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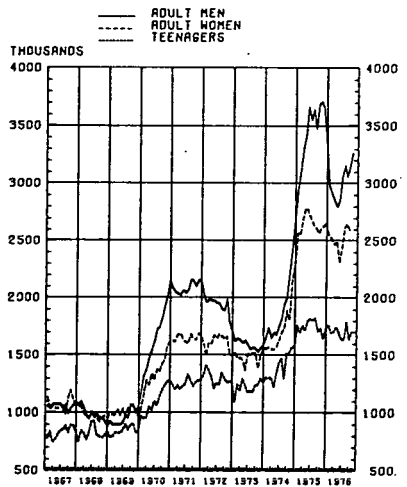
2. TOTAL EMPLOYMENT



3. UNEMPLOYMENT

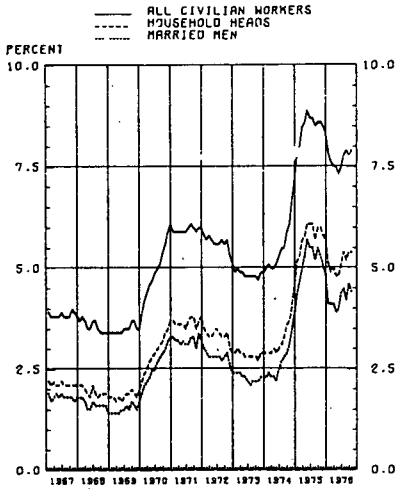


4. UNEMPLOYMENT

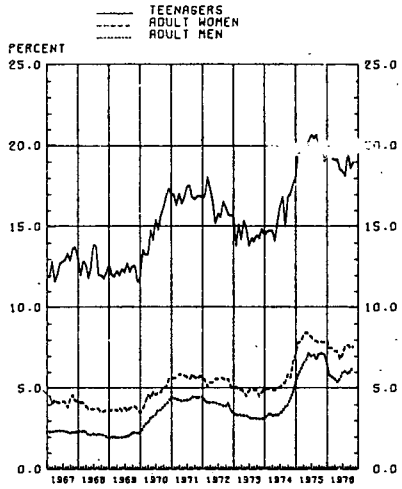


UNEMPLOYMENT RATES
HOUSEHOLD DATA - SEASONALLY ADJUSTED

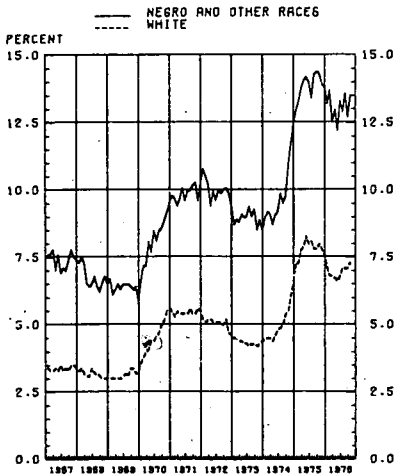
5. UNEMPLOYMENT RATES



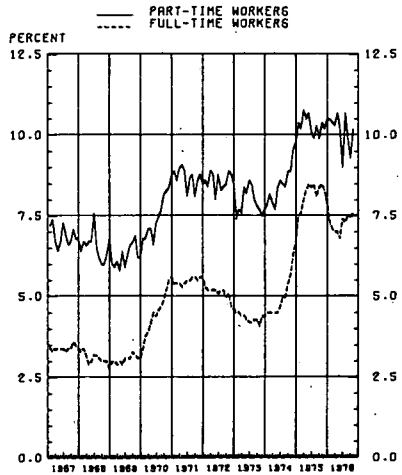
6. UNEMPLOYMENT RATES



7. UNEMPLOYMENT RATES

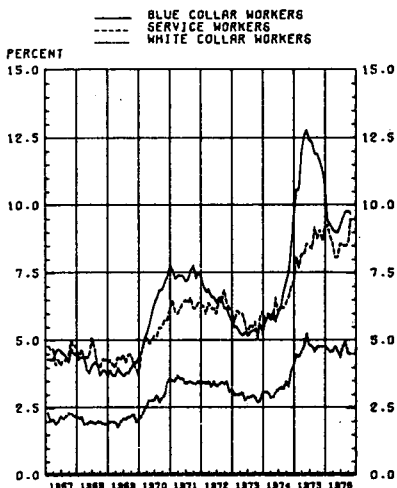


8. UNEMPLOYMENT RATES

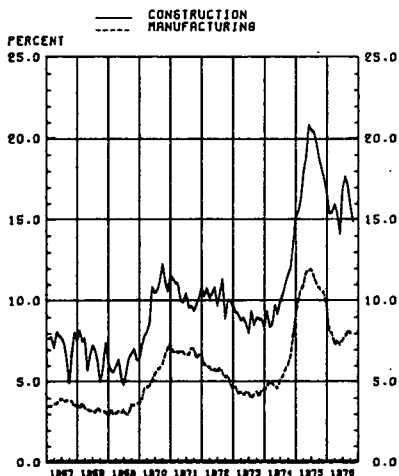


UNEMPLOYMENT
HOUSEHOLD DATA - SEASONALLY ADJUSTED

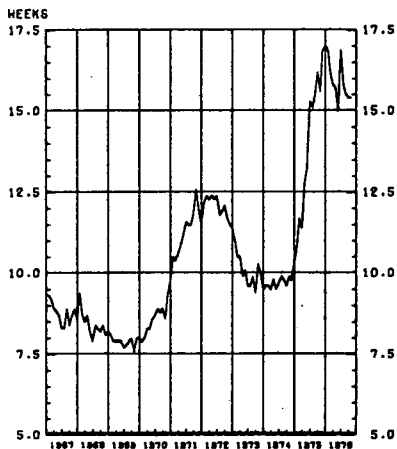
9. UNEMPLOYMENT RATES



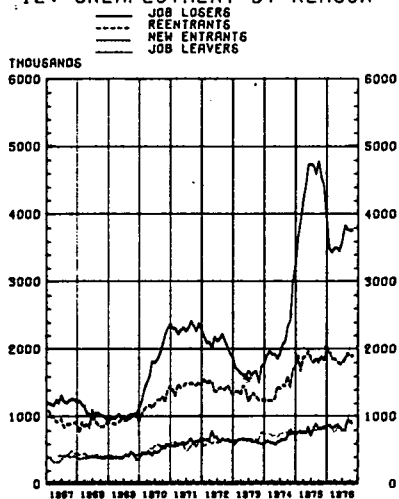
10. UNEMPLOYMENT RATES



11. AVERAGE DURATION
OF UNEMPLOYMENT



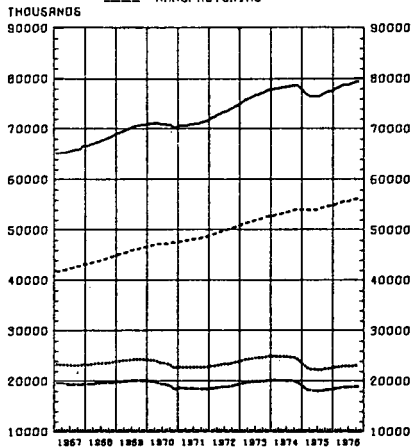
12. UNEMPLOYMENT BY REASON



NONAGRICULTURAL EMPLOYMENT AND HOURS
ESTABLISHMENT DATA - SEASONALLY ADJUSTED

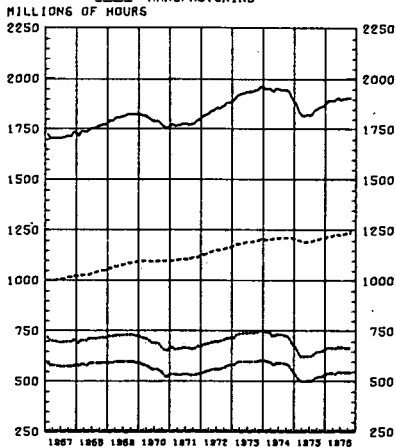
13. EMPLOYMENT

— TOTAL NONAGRICULTURAL
- - - SERVICE-PRODUCING
- - - GOODS-PRODUCING
— MANUFACTURING



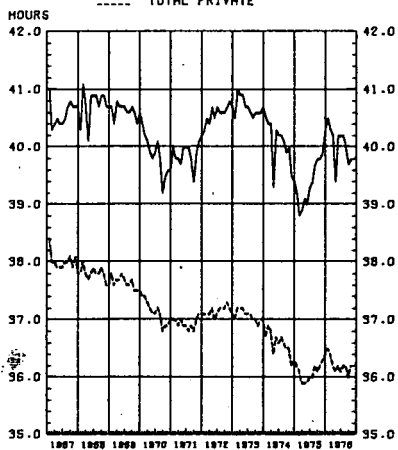
14. HOURS

— TOTAL PRIVATE NONAGRICULTURAL
- - - PRIVATE SERVICE-PRODUCING
- - - GOODS-PRODUCING
— MANUFACTURING

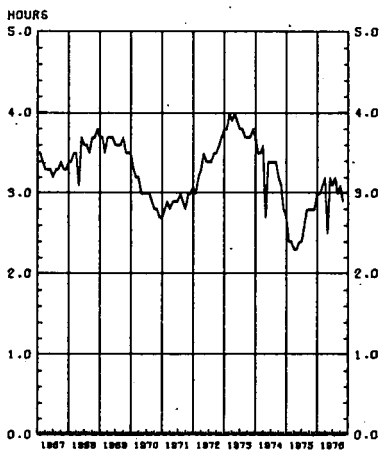


15. AVERAGE WEEKLY HOURS

— MANUFACTURING
- - - TOTAL PRIVATE



16. AVERAGE WEEKLY OVERTIME HOURS
IN MANUFACTURING



NOTE: Charts 14 and 15 relate to production or nonsupervisory workers; chart 16 relates to production workers. Data for the 2 most recent months are preliminary in charts 13-16.

Senator PROXMIRE. We thank you, Mr. Shiskin. First I would like to ask a question that concerns me very much and should concern everybody interested in getting the most competent possible ability focused on the very important job you have.

I have great admiration for your professional ability. I consider you certainly a professional and not a political appointment in any real sense. And yet I understand you do have a fixed term. You are appointed by the President, is that correct?

Mr. SHISKIN. That is correct.

Senator PROXMIRE. And your term would expire this coming year in August, is that right?

Mr. SHISKIN. August 1.

Senator PROXMIRE. August 1. You have come before this committee now for more than 3 years, as I recall, every single month, with only one exception and have given us your reports. I think the job you have done has been most useful and helpful.

Could you enlighten the committee on what effect the advent of a new administration will have mechanically so we understand what it is and what the effect might be on the BLS?

Mr. SHISKIN. Well, every person who works in the Bureau except the Commissioner is a civil servant. So presumably, the staff of the BLS as a whole will be unaffected. Now, in its wisdom, 92 years ago or so, Congress established a fixed term for the Commissioner.

The objective clearly was to reduce the vulnerability of the Commissioner to political pressures, so he could give an unbiased statement on the economic indicators each month. I think that was a very desirable thing to do. So, when I was appointed, I had a fixed term and the term ends on August 1, as I just said. I am going to be here until August 1.

What will happen after August 1, I don't know. Obviously it depends on two people, the President and myself. But in any case, I think experience shows that when the decision was made by Congress to establish a fixed term for the reasons given that is, presumably, to maintain objectivity and neutrality and reduce political pressures. They were very good reasons.

Senator PROXMIRE. Isn't it true that in the past we have had Commissioners for quite long periods, that they have served in Democratic and Republican administrations?

As I recall we had the same Commissioner under Truman and Eisenhower and the same Commissioner under Eisenhower and Kennedy and Johnson. Isn't that right?

Mr. SHISKIN. That is right (Ewan Clague, August 1946 to October 1965). Another Commissioner (Carroll D. Wright, January 1885 to January 1905), was Commissioner for 20 years. Now with the exception of the last two Commissioners before me, Arthur Ross, who resigned after a little more than 2 years for personal reasons, and Geoffrey Moore, where there was a special problem, all the Commissioners have had more than one term.

So that is the record.

Senator PROXMIRE. Now—

Mr. SHISKIN. I would only want to add to it that in seeking a Commissioner of Labor Statistics, I think a vigorous effort must be made to find a person who is professionally qualified and who is a man of absolute integrity.

Senator PROXMIRE. I would like to ask you, last night the President-elect indicated that he might—might, he did not say definitely—might favor a substantial tax reduction at the payroll level.

He was not clear on exactly what kind of a tax cut that would be. Presumably it would be a major tax cut, say \$20 billion, to reduce taxes for people with incomes of less than \$15,000.

Can you give us a notion on two implications of that kind of a cut? No. 1, what effect would that kind of a cut have in your judgment on unemployment? No. 2, what effect if any, would it have on inflation?

Mr. SHISKIN. I think as I said in my very brief statement, we are at a critical juncture. We have had a period of at least 3 months with little growth in the economy. There are some indications that more sluggishness is ahead.

In the past, such periods have often been followed by renewed growth. At other times, they have just continued and gotten worse, that is, the pattern I described in my statement has continued or gotten worse. Excesses and imbalances, such as long-term unemployment, higher unit labor costs, a higher ratio of consumer debt to personal savings, have just kept growing, and eventually we have had a recession.

I don't think you can tell right now from the data we have which of these alternative paths the economy is going to take. I would agree with what President-elect Carter said last night, that early next year we will be able to get a better reading of these patterns.

It is clear that a substantial tax cut of the kind you describe would stimulate the economy and reduce unemployment.

Senator PROXMIRE. I would think that a tax cut of the order I suggested would increase money in the hands of people and the people would obviously spend it because their income is low; it might have the effect of reduction of a half-million or 1 million in the numbers of people unemployed.

This is based on our experience in the 1960 experience. Is that plausible?

Mr. SHISKIN. I don't know.

Senator PROXMIRE. Give us your views on the effect that might have on prices.

Mr. SHISKIN. I think it will stimulate price increases, too. Further—

Senator PROXMIRE. How when we have sufficient unused capacity, when we are operating with very low employment?

Mr. SHISKIN. That statement troubles me whenever it is made. The price increases will initially take place at the margins where there is close to or full utilization of capacity. The price increases are not going to take place in industries which are suffering from a great—

Senator PROXMIRE. What industries are operating at full utilization of capacity?

Mr. SHISKIN. I can't provide a list of them today, but there are always in the middle of an expansion, certain industries that are developing new types of products and are operating at or close to their preferred capacity.

This is a very dynamic economy and there are always new products and shifts in demand for established products. In many industries there

are companies that are operating at or close to capacity, while average capacity for the industry is low.

Now, in those industries, prices will rise. Prices are rising. We also have strong cost-push pressures in some industries.

Senator PROXMIRE. There is no strong cost-push now from the usual source, that is from wage increases, is there?

Mr. SHISKIN. Well, the wage situation that I see is that on average, wages have been rising—new collective-bargaining contracts, I am talking about, new collective bargaining agreements have been rising about 8.5 percent. Now I think—

Senator PROXMIRE. Productivity increasing at about 3 percent.

Mr. SHISKIN. I would say the 8½-percent rise in wages reflects a 2½-percent increase in productivity, which is the longtime rate, and a 6-percent inflation. Now 6 percent is a high rate of inflation. The most recent reports we have put out show that the collective-bargaining agreements are somewhat higher. It is hard to judge those figures. We show 9 months at a time. It is hard to appraise them because of special situations in such industries as tires.

Senator PROXMIRE. I want to get into these other things. Your response does seem to contradict our entire economic experience during the periods in the past when we have had unemployment at this high level and we have had capacity operating at 75 percent or 80 percent as we have now.

Mr. SHISKIN. But prices are rising now. As you pointed out so cogently, if you take a look at some of the key series that we issued yesterday, industrial prices, there has been a steady rise in industrial prices for the last 5 months.

Senator PROXMIRE. But what I am getting at is whether or not those price increases are justified based on cost or whether they are the result of the concentration of power. The biggest increases were in automobiles and fuel, both of which are concentrated industries.

Mr. SHISKIN. The increases with the biggest effects were in natural gas and automobiles. Each of these increases was responsible for two-thirds of the 1 percent increase.

Senator PROXMIRE. That was the element last month that was responsible for a big part of the increase, right?

Mr. SHISKIN. That is right. These were the ones that were responsible last month. I have been trying to say two things. It is always common in a period of economic expansion for prices to rise. Moreover, companies are always testing the market. They are always trying to find places where they can raise prices.

That explains in part the increasing total profits. I see no reason to expect it is going to be any different in the months ahead. In fact, what I read in the newspapers is that price increases will be greater because we are in for a big increase in oil prices.

Senator PROXMIRE. Well, I will get back to that a little later. Let me ask you about the overall figures. In reviewing the unemployment rates among major labor force groups during the past year, from January 1976 to date, the entire year, it seems that we have higher unemployment in virtually every category.

For all workers, 7.8 percent in January and 7.9 percent in October. Adult men, 5.8 in January, now 6.3. Adult women, 7.5 percent,

now 7.6. Teenagers is a little lower, 19.9 down to 19. It is up for whites, blacks, household heads. Isn't it the inescapable conclusion that we have made no real progress in fighting unemployment this year?

In fact aren't we sliding backwards?

Mr. SHISKIN. I think that is correct. Also, it is confirmed by figures we turn out in another release, the layoff rate. That rate has been rising now for 5 or 6 months. It has not been rising sharply, but it has been rising. Those figures are consistent with the statement you just made.

Senator PROXMIRE. Following up the very interesting statement you made to us at the very beginning, you have been a long-term analyst of business conditions. This is one of your specialties. I would like to ask you to comment on the rather disturbing prognosis for the fourth quarter of this year.

The leading Indicators series has now dropped 2 months in a row, falling for both August and September. Now there is a decline in employment during the month of October. What, if any evidence is there of a positive nature that would lead you to expect a real growth rate in excess of 4 percent in the fourth quarter?

Mr. SHISKIN. The only data we have now for the fourth quarter are the data that came out this morning. The unemployment picture and the employment picture show little change. I don't think there is anything positive in that.

Senator PROXMIRE. Under Okun's law, unless we have an increase in growth of 5 percent—in the remaining months of the year—we are not going to get any improvement in unemployment. Instead of closing out at below 7 percent as originally predicted by the administration, unemployment is going to be about 8 percent.

Mr. SHISKIN. Let me only refer back to one sentence that I did make about historical patterns. In the past, situations of this kind which threaten real business setbacks, have sometimes been followed by renewed growth. Most economists seem to think that renewed growth will take place again. But I don't know whether it will happen again.

Senator PROXMIRE. Congressman Reuss.

Representative REUSS. Thank you, Mr. Chairman. I welcome you, Mr. Shiskin. I would like to dissect some of the September statistics a bit—October statistics, that is to say. As I read them, they are bad news. They show that among the groups worst hit are always teenagers, women, and blacks. There has been a disturbing upward trend from September through October.

I note that one group has improved its position, October over September; namely, married men. That has gone from 4.6 unemployment in September down to 4.4 in October. But that, as you point out, masks what is really happening which is that married men looks a little better because they tend to be older.

If you look, however, at teenagers, they went up from 18.6 in September to 19 percent unemployment in October.

Blacks went up from 12.7 in September to 13.5 in October. Adult women from 7.5 in September to 7.6 in October. All of this looks like a repetition of the sad story we have had for some time whereby those

groups, I repeat, the young, the black and the female, are worst hurt.

Is that not a proper interpretation of these statistics?

Mr. SHISKIN. When I was walking in, I met Dan Cortz of ABC, and he said the bad news in this release is that there is no good news. I think that sums it up.

Representative REUSS. Let me ask this: President-elect Carter at his press conference yesterday at Plains talked about the need to do something about this situation. I am sure he would have talked even more vigorously had he seen this morning's figures.

One of the measures he suggested was a tax cut. I would ask you this: The Congressional Budget Office came out with an important document about a year ago called "Temporary Measures to Stimulate Employment, an Evaluation of Some Alternatives."

Among other things, they evaluated public service employment versus general tax cuts and came to the conclusion that public service employment was a far better stimulator of jobs per dollar spent than tax cuts, for example.

The conclusion of the Congressional Budget Office was that:

Public service employment can be an effective means of creating job quickly at a relatively low cost per job. Under such programs, most of the money goes for wages and relatively little for materials or equipment. If the new jobs are primarily for unskilled workers at low wage levels, the cost per job created may be as low as \$8,000.

That was, of course, a year ago. In this connection, I note that the unemployment increases which are most alarming as you and I just agreed, are those for largely unskilled workers who if they did work would work at low wage levels, the black, the female, and the young.

Then the Congressional Budget Office study goes on to say:

A general tax cut while it may have many other advantages ranks low in jobs created per billion dollars expended. The part that is spent will add to general consumer demand and will not be focused on products or services that require large amounts of unskilled labor.

Let me ask you first, do you disagree with those conclusions of the Congressional Budget Office?

Mr. SHISKIN. I don't disagree with them but I don't have enough expertise in that kind of study to be able to make a good response to the statement.

Representative REUSS. If the Congressional Budget Office conclusions are right, it seems to me that the proper method for what ails our society is the utmost concentration on jobs for the relatively unskilled, which means the young, the female and the minorities up to the administrative limits of our various governments to process and provide those jobs.

Fortunately we have had CETA and similar programs for some time so we have a base on which to build. If the CBO, the Congressional Budget Office, is right, then we might do better with a jobs program than with a tax reduction program.

Mr. SHISKIN. Yes. Certainly, that follows, but again let me repeat that I have no personal expertise in this field and I would be unwilling—I can't offer you a responsible judgment. So I am better off if I say nothing.

Representative REUSS. Thank you, Mr. Chairman.

Senator PROXMIRE. Mr. Shiskin, one of the most puzzling and remarkable developments that I have seen in a long time is the budget shortfall; in the midsession review estimate fiscal year 1976 shows a shortfall of \$3.5 billion in expenditures and a shortfall in the transitional quarter of \$7.6 billion, a total of \$11.1 billion.

If you compare the shortfall with the congressional resolution, it is \$17 billion. Somewhere between \$11 billion and \$17 billion, that was expected to be expended by the Federal Government was not expended. It seems that could have a substantial effect on jobs and economic growth.

Do you have any idea of what happened to the \$11 billion?

Mr. SHISKIN. It was not spent.

Senator PROXMIRE. How could they make that kind of miscalculation?

Mr. SHISKIN. Well, I don't know. I suppose that the kinds of pressures that are usually put on spending officials in the Government at such times were not put on them. Again, I have no expertise on this subject. It is as much a puzzle to me as to everyone else.

Senator PROXMIRE. As one who anticipated that we would probably have a vigorous recovery in 1972 because it was an election year—we have had one in almost every election year—this time we not only did not have it but they did not spend the money they said they would spend and were expected to spend and were authorized to spend. They had a duty to provide services this money would provide and they did not do it.

Mr. SHISKIN. I keep getting into things I don't know much about this morning. But I can add one small example to your list of areas that have been affected by this shortfall and that is inflation.

You have to bear in mind the possibility that the shortfall in expenditures was responsible for or could have affected the rate of inflation. The shortfall in spending would have brought the inflation rate down.

Senator PROXMIRE. You say that we might have had a worse inflation if we had gone ahead and spent the money?

Mr. SHISKIN. I take a very dim view of the argument that spending of various different kinds will not affect the rate of inflation.

There are many areas—by the way BLS is one of them—where we can't do any more than we are doing. One of the things that people do under these circumstances is raise prices. If you do not spend this money, you will have a slower rate of inflation, yes.

Senator PROXMIRE. Let me get back to the employment indicators and how disturbing they seem to be. A number of the employment indicators that economists use as good measures seem to be quite weak. For example, the layoff rate was 1.1 in July, 1.3 in August, and 1.5 in September.

When I look at the proportion of industries in which employment has increased in the past 6 months I see in July there was only 55.5 percent, the lowest in over a year. How do you explain the jump in the layoff rate and what does it imply for future employment prospects?

Mr. SHISKIN. The rise in the layoff rate I think is a valid rise. It is confirmed by the figures on the number of job losers. The number has

not changed in the last 3 months but there was a rise of about 300,000 a few months before.

So there is a rise in layoffs. It is obvious to me, it is clear that the labor markets have weakened in recent months. I guess that is all I can say. I would like as a separate point to say that I think our payroll figures this month are not strictly accurate because of an addition of 100,000 persons to the number on strike. Many industries were affected, partly by the Ford strike and a few others. But I am not arguing at all. Your basic point is that the employment picture is a very unhappy picture.

Senator PROXMIRE. You agree that the labor market is weak and unsatisfactory. Are there any bright spots at all?

Mr. SHISKIN. It is hard to find one. Some people might suggest that the decline in the rate for married men is significant in some sense. But, I think the picture is essentially we have been at a stand-still in the labor markets since July. That is not a good situation.

Senator PROXMIRE. Now, industrial prices as we have pointed out earlier have risen sharply in recent months, an 11-percent annual rate for the past 3 months. There does not seem to be any good explanation for why this is happening.

From the Wall Street Journal, "Economists were puzzled by this increase. Robert Crandall says measurement problems may have overstated the October increase. Mr. Kendrick from the Commerce Department says increases in aggregate demand have been moderate."

Mr. Shiskin, do you know what measurement problems Mr. Crandall may be referring to?

Mr. SHISKIN. Let me first comment on this: I have been saying this for months. The common experience in business expansion is that the rate of increase in industrial prices rise.

Senator PROXMIRE. What? I missed that.

Mr. SHISKIN. The rate of industrial prices rises during an economic expansion.

Senator PROXMIRE. We are not having an economic expansion. We have had an economic contraction, if anything, or stalling or standing still and yet the prices keep going up.

Mr. SHISKIN. We have had slow expansion.

Senator PROXMIRE. Not much expansion in the last quarter. The indicators suggest it is not only in labor markets but that the recovery has been stalled throughout.

Mr. SHISKIN. Well, all right. Let me repeat again just so we get back on the track, the common experience is for industrial price increases to rise during economic expansion. We had an economic expansion up through August and July. Then the labor market has been almost flat for a few months. However, real GNP has risen. Real final sales rose more in the third than in the second quarter. So what we are having is slow growth. During such periods in the past—there has not been a one-to-one monthly relationship between price changes and growth.

The price rises have also started during this expansion. They have been going up since February 1976. You may want to subtract from the current figures two-tenths from the total rise on the ground that we had an especially large increase in the price of natural gas as a result of Government action.

On the other hand, you know, we have had special influences on wholesale and consumer prices one after another in recent months.

We had a big increase in automobile insurance rates, a big increase in automobile parking rates, and so on. We have had many other special influences and this is still another one.

But again, let me come back to the point that I don't think this is a very puzzling situation because prices rise during expansions. If the expansion should continue to moderate or continue at a standstill, I think—

Senator PROXMIRE. You have just said that since July, we have not had much real growth and it is since July that price increases began to rise from .5 up to 1.0.

Mr. SHISKIN. There are inflationary expectations built in and they don't change overnight.

Senator PROXMIRE. One big increase in October was automobile price increases. The Committee on Wage and Price Stabilization calculated 8.9 percent. Due to the fact that they are lighter and smaller cars, it is hard to see how that might be justified.

What is the explanation of the difference? Is the Committee on Wage Price Stability wrong? Did they fail to make an adjustment they should make?

Mr. SHISKIN. I am not familiar with what they did. We made a quality adjustment and our adjustment explains 15.5 percent of the price increase. We considered 15.5 percent of the price increase as explainable by improved quality including improvements in air and safety standards which were mandated by the Government.

Let me give you another statistic that may help you understand this. The effect of the price increase of automobiles on total increase in industrial prices of 1.0 was about two-tenths. So that was not that big. It did not have that big an impact on the overall figures.

Senator PROXMIRE. Did Mr. Layng want to make a further explanation?

Mr. LAYNG. The increase in wholesale prices of passenger cars was 5.6 percent. I am not sure what figure you referred to.

Senator PROXMIRE. Anyway, there is a sharp difference.

Mr. LAYNG. I believe the number they had was about 6 percent and the number in the WPI is 5.6 percent.

Senator PROXMIRE. You attempt to make quality adjustments in the same way to machinery and equipment and home appliances also?

Mr. LAYNG. Yes, where we have the information and can obtain it, we use similar calculations.

Senator PROXMIRE. Do you make the same effort there as with automobiles?

Mr. LAYNG. Yes.

Senator PROXMIRE. Isn't that quite controversial now or is that well accepted that quality changes can be measured and are appropriate?

Mr. LAYNG. I think it is generally accepted that they are appropriate and also that the techniques that we use are probably the best that are available right now. There is a great deal of research going on developing new techniques using regression analyses. But they are not developed to the point where they can be used in a series like the "Wholesale Price Index" or the "Consumer Price Index."

We do a great deal of research ourselves and we hope to improve them over the years.

Senator PROXMIRE. Congressman Reuss.

Representative REUSS. Thank you, Senator.

Mr. Shiskin, you parried with Senator Proxmire awhile ago when Senator Proxmire was saying that he can't see any reason for the large increase in the "Wholesale Price Index," particularly in industrial prices, in view of the available capacity and in view of the fact that there doesn't seem to be any crucial bottlenecks, a position, incidentally, that I happen to share with the Senator. Your answer was pragmatic.

You said "look at the figures." Prices have been going up. What I wondered is, have prices really been going up because capacity is being reached or could it not be that instead of the law of supply and demand, people are sitting in a room someplace and figuring out that they better get their list prices up high quick before somebody freezes prices.

The tragedy of it is that neither the President-elect nor the Congress have the slightest desire to do that or the slightest intention of doing it. But isn't that a rather realistic explanation of what goes on? In some cases if my information is correct, industrial firms are getting their prices up but then giving under-the-counter discounts which they are forced to do by competitive conditions.

Is there some truth to that?

Mr. SHISKIN. First of all, this is not the only time this has happened. This usually happens in business expansion. Wholesale prices rise, and particularly industrial prices. It is happening this time. Now second, I want to repeat a point and I hope I will get it across this time.

I think it is unwise to limit an explanation of the capacity figures to the aggregates because within each category, there are new firms being established, new industries, new types of products.

These are the areas where prices tend to rise. It is not so much in the established products, though we have had that, too. But you have got to keep your eye on the new products, the shifting demand for products, the new plants that are bound to emerge during a business expansion.

Representative REUSS. And where there will be limited capacity?

Mr. SHISKIN. Yes. And where there is limited capacity.

Representative REUSS. Fine. Would you furnish for the record a list? Err on the side of inclusion, if you err, and give us a big list because we would like to get into some ad hoc activity.

It seems outrageous that we let the national economy stagnate because in a few industries there seems to be close to full use of capacity. I think it is ridiculous that we sit still and say we will participate if it is now operating at 93 percent of capacity, isn't that terrible, while paper is running over people's ears in Sweden? Somebody ought to be able to figure out a way of marrying the shortages and the surpluses.

Mr. SHISKIN. I think that is a very good question and I am very glad you asked that. We will try very hard to compile such information.

Representative REUSS. When we get that list, I am going to ask Chairman Proxmire to schedule special industry hearings in which we get to the bottom of these mysterious shortages. Because I am not ready and you are not ready to see the economy stagnate and our industries ruined because of spot shortages.

Now, on a more cheerful note, all is not gloom in the price field. Were not you and your price expert, Mr. Layng, as delighted as Senator Proxmire and I were to be made aware of the \$253 immediate reduction in Gremlin automobiles by American Motors, an excellent company that just happens to conduct its operations in Wisconsin?

Mr. SHISKIN. Yes, we were, especially because automobiles are something that people buy so much of. But, I don't want to get away from the basics. This apparently rising rate of price increase for industrials is worrisome. It is a matter of concern. This steadily rising rate in industrial prices over the last 5 or 6 months is a matter of great concern.

Representative REUSS. The chairman and I have always been quick to speak critically of price increases which we feel to be totally unjustified. Would the Bureau of Labor Statistics be willing to join us in a little informal congratulations to American Motors for doing what they have done?

Mr. SHISKIN. I will be very happy to do that.

Senator PROXMIRE. I might point out that in the sixties in the expansion period of lower unemployment than we have now and of a higher utilization capacity than we have now, there was an expansion as you know 1960, 1961, 1962, 1963, 1964 and industrial wholesale prices stayed stable during that period.

They were 95.3 in 1960 on up to 94.2. They were lower in 1964 than they were in 1960.

That was a period of expansion.

Mr. SHISKIN. That is right. None of these rules that I cite is immutable. The economy behaves in its own way many times. The figures that I cite are averages. But it is true, however, that in general, most of the time, industrial prices rise during periods of business recovery.

Senator PROXMIRE. Maybe it is also true, isn't it, that in periods of recession that industrial prices tend to fall?

Mr. SHISKIN. They used to fall.

Senator PROXMIRE. But they aren't falling this time. So we have a situation where industrial prices that don't fall or if anything rise a little bit in recession and then when expansion comes, they rise sharply.

Mr. SHISKIN. That is correct.

Senator PROXMIRE. I thought I read that steel price increases announced for October have been withdrawn by the steel companies because the market was too soft to make them stick. But I see that steel prices went up quite a bit, 0.9 percent in October.

How do you explain that?

Mr. LAYNG. I am not sure you are talking about the same products but there were some steel products for which the increases went through. Some of the increases that were expected earlier did not go through.

The full impact of the increase was less than was anticipated a couple of months ago.

Senator PROXMIRE. Still, that was a very sharp increase. On an annual basis, that is 10 percent.

Mr. LAYNG. As a group, metals and metal products which includes both ferrous and nonferrous, increases were larger in June and July, very small in August, and then a little bit larger in September and October.

So it seems like they picked up a little bit from August but not as much as in June and July. But I would have to look at the details because there was a lot of movement going on up and down. Non-ferrous scrap metals declined in price.

Senator PROXMIRE. Suppose there is an OPEC price increase of say, 10 percent in December? When is that likely to show up in the Wholesale Price Index and how big an impact would it have?

Mr. LAYNG. It would probably take several months. We do not price in the Wholesale Price Index imported crude oil. I suspect it would take a couple of months before that would show up. We have some estimates of what the impact would be under certain assumptions of different percentage increases.

Senator PROXMIRE. Maybe for the record or next time you could tell us what that is.

Mr. SHISKIN. You will recall last time, we prepared various documents. We will dig those out and make them available.

Senator PROXMIRE. Mr. Shiskin, I am very disturbed about what we seem to be arriving at here. I don't mean in any way to question your ability which as you know I greatly respect. But it seems as if we have a situation in which there is no way the President-elect and the Congress can expand the economy without paying the price of aggravating inflation. Is there no way we can get employment down to 5 percent or 6 percent without stimulating inflation?

Mr. SHISKIN. Let me give a more refined interpretation of recent price changes which may be helpful. If you take a look at rates of change in prices, both consumer and industrial prices, this is what you will find. You find that recent prices rises have been somewhat larger—not a great deal larger—than we used to experience prior to 1972, let's say, about that time.

They are a little bit larger. But they are not at all at the same rate of increase as in 1973 and 1974. I think that when people think of price rises today, they have in the back of their minds an experience similar to 1973 and 1974.

Now I don't see anything like that in sight. It seems to me we are just getting a little bit more of what we used to get in the past prior to 1972.

Senator PROXMIRE. We are at a level of inflation of 5 percent or 6 percent. It is true it is far better than it was 1½ years ago. But it is at a level which is still dangerous, still unacceptable to most of us, and if you say it is going to get only a little worse, that is very troublesome.

There must be some way we can solve this problem without wage-price controls which, I would agree with Congressman Reuss, are impractical.

Mr. SHISKIN. I have no solutions for this problem. It is a problem many of us have struggled with. The present period is beginning to look a little like stagflation. If it continues, that is what people are going to start calling it.

Senator PROXMIRE. Thank you. I appreciate your testimony. It is very helpful. It is good to get away from the election situation with the pressures you were subjected to. You have done a fine job, as always.

The committee will stand adjourned.

[Whereupon, at 12 noon, the committee adjourned, subject to call of the Chair.]

EMPLOYMENT-UNEMPLOYMENT

FRIDAY, DECEMBER 3, 1976

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

The committee met, pursuant to notice, at 11:30 a.m., in room 1212, Dirksen Senate Office Building, Hon. Richard Bolling (vice chairman of the committee) presiding.

Present: Representatives Bolling and Brown of Michigan.

Also present: John R. Stark, executive director; William R. Buechner, William A. Cox, Robert D. Hamrin, Louis C. Krauthoff, L. Douglas Lee, and Courtenay M. Slater, professional staff members; Michael J. Runde, administrative assistant; and Charles H. Bradford, George D. Krumbhaar, Jr., M. Catherine Miller, and Mark R. Polcinski, minority professional staff members.

OPENING STATEMENT OF VICE CHAIRMAN BOLLING

Representative BOLLING. The committee will be in order.

Today we are once again pleased to have Commissioner Shiskin with us to testify on the employment, unemployment and price situation in November, the day on which the Bureau of Labor Statistics released its report on unemployment and on the Wholesale Price Index.

Commissioner Shiskin hits us with bad news from both barrels. First, the unemployment rate in November rose to 8.1 percent, and the number of people unemployed rose to almost 7.8 million, 700,000 more than were jobless when unemployment hit its low point during the second quarter of this year. The unemployment situation release points out that most of the increase in unemployment which took place in November occurred among adult men, and that their unemployment has increased significantly during the last 3 months.

The same pattern has occurred among heads of households. This indicates to me that the rise in unemployment is not just due to new workers entering the labor force, but that there is a much more serious problem of experienced workers losing their jobs.

Second, the wholesale price index increased in November by 0.6 percent seasonally adjusted. This is the third month in a row that we have had a major increase in the Wholesale Price Index, with the index rising during this time by almost 9 percent at an annual rate.

Most of this rise has come from industrial price rises. And the recent news we have had from the steel companies seems to forebode worse news in the future.

I recall that during our unemployment hearings at the beginning of this year we were all optimistic that the unemployment rate would

be close to 7 percent or even lower by the end of the year. None of us foresaw that the year would end on such a depressing note.

The news you bring us today, Mr. Shiskin, is very disturbing. We would like to hear what you have to say about it, and then we will have some questions.

We are glad to have you here this morning.

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

Mr. SHISKIN. Thank you, Mr. Chairman.

I have a brief statement I would like to read.

And as usual, I have Mr. Stein to help me out on unemployment questions, and Mr. Layng to help me out on price questions.

Mr. Chairman and members of the committee, I wish to offer the Joint Economic Committee a few brief comments to supplement our press release, the employment situation, issued this morning at 10 a.m.

In November, the labor force, total employment, nonagricultural employment, average weekly hours, aggregate hours, and unemployment all rose, a pattern similar to this past July. The labor force increased by 557,000, with 357,000 persons obtaining jobs and 200,000 joining the ranks of the unemployed.

Following the plateau of the previous 4 months, the unemployment rate, at 8.1 percent, resumed the rise that had begun May 1976. The November unemployment rate is the highest since December 1975. The unemployment rise was mostly among adult males. The number of job losers increased by about 150,000, with the total increase since last May exceeding 450,000. This unemployment pattern is also consistent with the data issued earlier this week showing that the layoff rate in manufacturing had increased for 3 months in a row (through October) and that the accession rate declined during this period.

The sharp rise in the labor force in November continues the trend of the past year, with a 12-month increase of nearly 2.9 million (compared to year-to-year gains of 2.0 million in 1972, 2.9 million in 1973, 1.7 million in 1974, and 1.2 million in 1975). The 1976 rise was well above the typical rise during economic recovery. Over the past 12 months, the rise in the adult female (20 years and over) labor force was more than one and a half million, and the rise in the adult male (20 years and over) labor force about 1 million. There was also a rise in the teenager labor force, but that was relatively small.

The rise in the female labor force during the current cyclical expansion is more rapid than in any other expansion in the post-World War II period. The rise in the adult male labor force was well above the average, exceeded only in the 1970-73 expansion.

Nonagricultural employment rose sharply in November and over the year, according to both the household and business surveys. The over-the-month increases were widespread among industries, with the

largest taking place in manufacturing and services. Almost 60 percent of the 172 industries into which the total nonagricultural employment is divided by the BLS showed an increase in employment in November. However, it is to be noted that the increase in manufacturing employment was accounted for by the return of striking workers.

It is also to be noted that more than 90 percent of the rise in total employment reported in the household survey was made up of adult women. The adult female employment-population ratio was an all-time high in November of 43.8 percent, the same as in both July and August of this year.

Average weekly hours rose. The increase in the manufacturing workweek was large, partly because of overtime in the automobile industry to catch up with the production losses from the Ford strike. Factory overtime hours also rose.

With the rise in nonagricultural employment and in average hours worked, aggregate hours, the most comprehensive measure of labor activity, surged ahead, with the largest 1-month rise since the beginning of this year.

In summary, employment and aggregate hours expanded substantially in November. However, the growth of employment was not sufficient to absorb the large numbers of additional persons seeking jobs.

The usual tables are attached to this statement. My colleagues and I shall now try to answer your questions.

[The tables referred to, together with the press release follow:]

TABLE 1.—UNEMPLOYMENT RATE BY ALTERNATE SEASONAL ADJUSTMENT METHODS¹

Month	Unad-justed rate	Alternative age-sex procedures		Other aggregations (all multiplicative)					Direct adjustments			Composite No. 1	Composite No. 2	Range (cols. 2-14)	
		Official adjusted rate	All multipli-cative	All additive	Duration	Full-time, part-time	Reasons	Occupation	Industry	Rate	Level				Residual
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
1975:															
January.....	9.0	7.9	8.0	8.3	8.1	7.9	7.8	7.9	7.8	8.1	8.1	8.4	8.0	8.0	0.6
February.....	9.1	8.0	8.1	8.4	7.9	8.0	7.8	7.8	8.0	8.0	8.1	8.4	8.0	8.0	.6
March.....	9.1	8.5	8.5	8.7	8.4	8.4	8.3	8.4	8.4	8.5	8.5	8.7	8.5	8.4	.4
April.....	8.6	8.6	8.7	8.6	8.5	8.6	8.6	8.7	8.7	8.8	8.8	8.7	8.6	8.6	.3
May.....	8.3	8.9	9.0	8.7	8.8	8.8	8.8	9.0	9.1	9.0	9.3	9.2	8.7	8.8	.6
June.....	9.1	8.7	8.6	8.7	8.6	8.7	8.7	8.6	8.7	8.2	8.2	8.5	8.6	8.6	.5
July.....	8.7	8.7	8.6	8.6	8.6	8.7	8.8	8.6	8.6	8.5	8.4	8.5	8.7	8.6	.4
August.....	8.2	8.5	8.5	8.4	8.7	8.5	8.7	8.7	8.6	8.5	8.5	8.4	8.6	8.6	.3
September.....	8.1	8.6	8.6	8.4	8.8	8.6	8.8	8.6	8.5	8.5	8.5	8.4	8.6	8.6	.4
October.....	7.8	8.6	8.7	8.4	8.8	8.7	8.7	8.5	8.6	8.5	8.6	8.4	8.6	8.6	.4
November.....	7.8	8.5	8.5	8.2	8.7	8.6	8.4	8.4	8.5	8.5	8.5	8.3	8.5	8.5	.5
December.....	7.8	8.3	8.4	8.2	8.5	8.3	8.2	8.3	8.4	8.5	8.4	8.2	8.3	8.3	.3
1976:															
January.....	8.8	7.8	7.8	8.2	8.1	7.8	7.7	7.8	7.8	7.9	7.9	8.2	7.9	7.9	.5
February.....	8.7	7.6	7.7	7.9	7.6	7.6	7.5	7.6	7.7	7.7	7.7	7.6	7.6	7.6	.4
March.....	8.1	7.5	7.5	7.7	7.3	7.5	7.4	7.5	7.5	7.6	7.5	7.7	7.5	7.5	.4
April.....	7.4	7.5	7.5	7.4	7.3	7.5	7.5	7.6	7.6	7.6	7.5	7.5	7.5	7.5	.3
May.....	6.7	7.3	7.3	7.1	7.2	7.2	7.4	7.4	7.4	7.5	7.5	7.2	7.3	7.3	.4
June.....	8.0	7.5	7.4	7.5	7.5	7.5	7.5	7.4	7.4	7.2	7.2	7.4	7.5	7.5	.3
July.....	7.8	7.8	7.7	7.7	7.7	7.8	7.8	7.7	7.7	7.6	7.6	7.6	7.7	7.7	.2
August.....	7.6	7.9	7.9	7.8	8.0	7.9	8.0	8.0	7.9	7.9	7.9	7.8	7.9	7.9	.2
September.....	7.4	7.8	7.8	7.7	8.0	7.8	7.9	7.8	7.7	7.7	7.7	7.7	7.8	7.8	.3
October.....	7.2	7.9	8.0	7.7	8.1	8.0	7.9	7.8	7.9	7.9	7.9	7.8	7.9	7.9	.4
November.....	7.4	8.1	8.1	7.8	8.2	8.1	8.1	8.0	8.0	8.0	8.0	7.9	8.1	8.1	.4

¹ An explanation of cols. 1 to 14 follows:

(1) Unemployment rate not seasonally adjusted.

(2) Official rate. This is the published seasonally adjusted rate. Each of four unemployed age-sex components—males and female, 16-19 and 20 yr and over—is independently adjusted. The teenage unemployment components are adjusted using the additive procedure of the X-11 method, while adults are adjusted using the X-11 multiplicative option. 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 non-agricultural 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 are as follows:

January.....	113.1
February.....	113.7
March.....	108.1
April.....	99.4
May.....	93.4
June.....	104.5
July.....	99.5
August.....	96.0
September.....	94.7
October.....	89.8
November.....	91.4
December.....	93.4

(3) Multiplicative rate. 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.

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

(5) Duration. Unemployment total is aggregated from 3 independently adjusted unemployment by duration groups (0-4, 5-14, 15+).

(6) Full-time and part-time. Unemployment total is aggregated from 6 independently seasonally adjusted unemployment groups, by whether the unemployed are seeking full-time or part-time work for men 20+, women 20+, and teenagers.

(7) Reasons. Unemployment total is aggregated from 4 independently seasonally adjusted unemployment levels by reasons for unemployment—job losers, job leavers, new entrants, and reentrants.

(8) Occupation. Unemployment total is aggregated from independently seasonally adjusted unemployment by the occupation of the last job held. There are 13 unemployed components—12 major occupations plus new entrants to the labor force (no previous work experience).

(9) Industry. Unemployment total is aggregated from 12 independently adjusted industry and class-of-worker categories, plus new entrants to the labor force.

(10) Unemployment rate adjusted directly.

(11) Unemployment and labor force levels adjusted directly.

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

(13) Average of (2), (5), (6), (7), and (12).

(14) Average of (2), (5), (6), (7), (8), (9), and (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.

TABLE 2.—EMPLOYMENT-POPULATION RATIOS

Category	Annual averages		Seasonally adjusted estimates								
	1974	1975	Jan. 1974 (cyclical high month)	Mar. 1975 (cyclical low month)	Quarterly averages—				Current months		
					IV 1975	I 1976	II 1976	III 1976	Sept. 1976	Oct. 1976	Nov. 1976
Total, all workers.....	57.8	56.0	58.3	55.9	56.0	56.5	57.0	57.0	56.9	56.8	56.9
Adult males.....	77.9	74.9	79.0	74.9	74.5	74.8	75.3	75.2	75.2	75.1	75.0
Adult females.....	42.7	42.3	42.4	42.0	42.5	43.1	43.5	43.7	43.6	43.4	43.8
Teenagers.....	46.1	43.3	47.5	43.2	43.0	43.8	44.8	44.4	43.7	44.1	44.0

Source: U.S. Department of Labor, Bureau of Labor Statistics, Dec. 3, 1976.

TABLE 3.—RANGE OF UNEMPLOYMENT INDICATORS REFLECTING VALUE JUDGMENTS ABOUT SIGNIFICANCE OF UNEMPLOYMENT (PERCENT)

U-1 through U-7	Seasonally adjusted estimates										
	Annual averages		October 1973 (cyclical low month)	May 1975 (cyclical high month)	Quarterly averages				Current months		
	1974	1975			IV 1975	I 1976	II 1976	III 1976	Sept. 1976	Oct. 1976	Nov. 1976
U-1—Persons unemployed 15 weeks or longer as a percent of total civilian labor force.....	1.0	2.7	0.9	2.7	3.1	2.7	2.2	2.5	2.4	2.4	2.7
U-2—Job losers as a percent of civilian labor force.....	2.4	4.7	1.7	5.1	4.6	3.7	3.7	4.0	3.9	4.0	4.1
U-3—Unemployed household heads as a percent of the household head labor force.....	3.3	5.8	2.7	6.1	5.9	5.0	4.9	5.3	5.4	5.4	5.4
U-4—Unemployed full-time job seekers as a percent of the full-time labor force (including those employed part time for economic reasons).....	5.1	8.1	4.1	8.5	8.2	7.1	7.0	7.4	7.5	7.6	7.7
U-5—Total unemployed as a percent of civilian labor force (official measure).....	5.6	8.5	4.7	8.9	8.5	7.6	7.4	7.8	7.8	7.9	8.1
U-6—Total full-time job seekers plus half part-time job seekers plus half total on part time for economic reasons as a percent of civilian labor force less half part-time labor force.....	6.9	10.3	5.9	10.9	10.3	9.3	9.1	9.4	9.6	9.8	10.0
U-7—Total full-time job seekers plus half part-time job seekers plus half total on part time for economic reasons plus discouraged workers as a percent of civilian labor force plus discouraged workers less half of part-time labor force.....	7.7	11.5	1 6.6	1 12.0	11.3	10.3	10.0	10.3	(*)	(*)	(*)

1 Uses discouraged worker figure for quarter which includes applicable month.

2 Not available.

Note: The numerators and denominators (in thousands) for the third quarter 1976 rates are as follows: U-1, 2,339/95,341; U-2, 3,793/95,341; U-3, 2,878/54,030; U-4, 6,017/81,076; U-5, 7,439/95,341; U-6, 8,305/88,127; U-7, 9,122/88,944.

Source: U.S. Department of Labor, Bureau of Labor Statistics, Dec. 3, 1976.

TABLE 4.—MEASURES OF PROGRESS TOWARD PREVIOUS CYCLICAL PEAK LEVEL DURING CURRENT ECONOMIC RECOVERY

Series (with latest month available)	Percent decline during 1973-75 recession	Percent of recession decline recovered, trough to date	Percent of previous peak level	Percent change from trough
(1)	(2)	(3)	(4)	(5)
I. Leading indicators:				
Leading index, trend adjusted (October).....	-22.4	95.8	99.1	+27.6
Average workweek (November) ¹	-4.9	55.6	97.6	+2.6
New orders, 1972 dollars (October).....	-29.2	48.4	84.9	+19.9
Contracts and orders, 1967 dollars (October) ¹	-29.6	25.7	78.0	+10.8
Housing starts (October) ¹	-58.6	52.6	72.3	+74.5
Stock prices (October).....	-43.4	67.8	86.0	+51.9
Corporate profits after taxes, 1972 dollars (3d quarter, 1976).....	-38.6	74.4	90.1	+46.8
II. Coincident indicators:				
Total civilian employment (October).....	-2.5	184.2	102.1	+4.8
Nonagricultural payroll employment (November).....	-3.0	131.4	101.2	+4.3
Aggregate hours, nonagricultural establishments (October).....	-5.0	92.3	99.6	+4.8
Unemployment level (November) ²	+98.3	11.8	186.7	-5.8
GNP, 1972 dollars (3d quarter, 1976).....	-6.6	135.7	102.3	+9.5
Personal income less transfer payments, 1972 dollars (October).....	-6.4	101.6	100.1	+6.9
Industrial production (October).....	-15.1	94.0	99.1	+16.7
Retail sales, 1972 dollars (October).....	-10.4	92.1	99.2	+10.7

¹ 3-mo averages have been used for the calculations for this series; for example, the averages of the specific trough month, the previous and following months were compared with the average for the latest 3 mo available to obtain the entries in cols. (3)-(5). For other series single months have been used.

² The unemployment series tends to move counter to movements in general business activity; that is, the unemployment level tends to rise during recessions and decline during expansions. Col. 3 shows the percent of the increase in unemployment that has been offset.

TABLE 5.—MEASURES OF PROGRESS TOWARD PREVIOUS CYCLICAL PEAK LEVEL AT CORRESPONDING STAGE OF 1958-59 ECONOMIC RECOVERY

Series	Percent decline during 1957-58 recession	Percent of recession decline recovered	Percent of previous peak level	Percent change from trough
(1)	(2)	(3)	(4)	(5)
Nonagricultural payroll employment.....	-4.3	104.6	100.2	+4.7
Unemployment level ¹	+102.4	-57.0	144.1	-28.8
GNP, 1972 dollars.....	-3.2	248.6	104.8	+8.3

¹ The unemployment series tends to move counter to movements in general business activity; that is, the unemployment level tends to rise during recessions and decline during expansions. Col. 3 shows the percent of the increase in unemployment that has been offset.

contrast, jobless rates for most other major demographic groups--including adult women (7.7 percent), teenagers (19.0 percent), whites (7.4 percent), and blacks (13.6 percent)--showed little or no change in November. (See tables A-2 and A-6.)

Increases in the numbers of both job losers and persons re-entering the labor force accounted for the November unemployment upturn. The job-loser total rose to 3.9 million, the highest level this year and 460,000 above the May low point. (See table A-5.)

Table A. Highlights of the employment situation (seasonally adjusted data)

Selected categories	Quarterly averages					Monthly data		
	1975		1976			1976		
	III	IV	I	II	III	Sept.	Oct.	Nov.
	(Thousands of persons)							
Civilian labor force	93,134	93,153	93,553	94,546	95,341	95,203	95,342	95,899
Total employment	85,138	85,241	86,402	87,532	87,902	87,819	87,773	88,130
Adult men	47,551	47,540	47,998	48,504	48,646	48,721	48,716	48,768
Adult women	30,537	30,665	31,234	31,677	31,951	31,907	31,799	32,126
Teenagers	7,050	7,036	7,169	7,351	7,305	7,191	7,258	7,236
Unemployment	7,997	7,912	7,151	7,014	7,439	7,384	7,569	7,769
	(Percent of labor force)							
Unemployment rates:								
All workers	8.6	8.5	7.6	7.4	7.8	7.8	7.9	8.1
Adult men	7.0	7.0	5.7	5.7	6.0	6.1	6.3	6.5
Adult women	7.9	7.9	7.4	7.1	7.6	7.5	7.6	7.7
Teenagers	20.2	19.5	19.4	18.7	18.8	18.6	19.0	19.0
White	7.9	7.8	6.9	6.7	7.1	7.1	7.3	7.4
Black and other	14.1	14.0	13.1	12.8	13.1	12.7	13.5	13.6
Household heads	5.9	5.9	5.0	4.9	5.3	5.4	5.4	5.4
Married men	5.4	5.1	4.1	4.1	4.4	4.6	4.4	4.6
Full-time workers	8.3	8.2	7.1	7.0	7.4	7.5	7.6	7.7
	(Weeks)							
Average duration of unemployment	15.6	16.5	16.3	15.9	15.6	15.4	15.4	15.6
	(Thousands of persons)							
Nonfarm payroll employment	76,978	77,592	78,397	79,020	79,344	79,572	79,451p	79,711p
Goods-producing industries	22,422	22,654	22,950	23,168	23,142	23,228	23,101p	23,240p
Service-producing industries	54,556	54,938	55,447	55,852	56,202	56,344	56,350p	56,471p
	(Hours of work)							
Average weekly hours:								
Total private nonfarm	36.1	36.3	36.3	36.2	36.1	36.0	36.1p	36.2p
Manufacturing	39.6	40.0	40.3	40.0	39.9	39.7	39.8p	40.1p
Manufacturing overtime	2.7	2.9	3.1	3.0	3.0	3.0	2.9p	3.1p
	(1967=100)							
Hourly Earnings Index, private nonfarm:								
In current dollars	173.9	177.3	180.2	183.1	186.3	187.2	188.1p	189.2p
In constant dollars	106.8	107.1	107.7	108.2	108.5	108.5	108.7p	N.A.

p=preliminary.

N.A.=not available.

In terms of duration of unemployment, there was a decline in very short-term unemployment (less than 5 weeks) that was more than offset by large increases in the longer duration categories. These movements combined to push the average (mean) duration of joblessness to 15.6 weeks, compared with 15.4 weeks in the 2 previous months. (See table A-4.)

The number of persons working part time involuntarily totaled 3.6 million in November. The size of this group has been increasing steadily since July, when it totaled 3.0 million. (See table A-3.)

Total Employment and the Labor Force

After 4 straight months of little or no change, total employment registered a strong gain in November, rising by 360,000 to 88.1 million. Nearly all of the over-the-month increase was among adult women, whose employment had remained fairly steady since mid-summer. Employment has risen by 4 million from the March 1975 trough—including 2.2 million adult women and 1.6 million adult men. Over the past 12 months alone, total employment was up by 3 million. (See table A-1.)

The over-the-month increases in employment and unemployment resulted in substantial growth in the civilian labor force, which increased in November by 560,000 to 95.9 million. Since November of last year, the civilian labor force has grown by nearly 2.9 million, with adult women accounting for over half of the rise. During that period, the labor force participation rate of adult women rose from 46.1 to 47.4 percent (seasonally adjusted), continuing their secular uptrend. In contrast, the percentage of adult men in the labor force was virtually unchanged over the year at 80.3 percent. (See table A-1.)

Industry Payroll Employment

Nonagricultural payroll employment increased by 260,000 in November to 79.7 million, seasonally adjusted. The payroll job count has risen almost continuously since the June 1975 recession low to a level nearly 1 million above the previous high in September 1974. Over-the-month employment gains occurred in nearly three-fifths of the 172 industries comprising the BLS diffusion index of nonagricultural payroll employment. (See tables B-1 and B-6.)

Manufacturing employment rose by 100,000 in November to 19.1 million, after declining by a slightly larger amount in October. The entire over-the-month gain occurred in durable goods, stemming from the settlement of several strikes. Employment gains were posted in the transportation equipment, fabricated metals, machinery, and electrical equipment industries. Elsewhere in the goods-producing industries, contract construction registered a gain of 30,000 jobs, and there was a 10,000 pickup in mining.

The service-producing sector, which has shown strong gains throughout most of the year, increased by 120,000 in November. Employment rose in services (50,000), State and local government (35,000), finance, insurance and real estate (25,000), and transportation and public utilities (25,000). Employment in retail trade declined.

Hours

The average workweek for production or nonsupervisory workers on private nonagricultural payrolls was 36.2 hours in November, seasonally adjusted, 0.1 hour longer than in October. The manufacturing workweek rose 0.3 hour to 40.1 hours, the second consecutive monthly increase. Overtime in manufacturing rose 0.2 hour to 3.1 hours in November. Both total and overtime hours in manufacturing returned to the levels prevailing earlier in the year. (See table B-2.)

The index of aggregate hours of private nonagricultural production or nonsupervisory workers increased to 112.1 in November (1967=100), reflecting increases in both employment and hours. The index was 5.7 percent above the March and April 1975 recession low. In manufacturing, the index increased 1.5 percent over the month to 94.6, while there was a 9.2 percent increase from March 1975. (See table B-5.)

Hourly and Weekly Earnings

Average hourly earnings of private nonagricultural production or nonsupervisory workers rose 1.0 percent over the month (seasonally adjusted). Average weekly earnings rose 1.3 percent in November, as a result of higher hourly earnings combined with a slightly longer workweek.

Before adjustment for seasonality, average hourly earnings were \$5.00, up 3 cents from October. Hourly earnings were up 32 cents from November 1975. Average weekly

earnings increased \$1.09 over the month to \$181.00 and have risen \$11.58 since November a year ago. (See table B-3.)

The Hourly Earnings Index

The Hourly Earnings Index--earnings adjusted for overtime in manufacturing, seasonality, and the effects of changes in the proportion of workers in high-wage and low-wage industries--was 189.2 (1967=100) in November, 0.6 percent higher than in October. The index was 6.5 percent above November a year ago. During the 12-month period ended in October, the Hourly Earnings Index in dollars of constant purchasing power rose 1.3 percent. (See table B-4.)

Revisions in Establishment Data

This release introduces revisions in seasonally-adjusted data from the establishment survey (tables B-1 through B-6). The revised data reflect the seasonal experience from January 1967 through August 1976. The revisions, which affect most seasonally-adjusted data since January 1971, are being made in accordance with long-standing annual practice. There was one modification in procedure: The method used to seasonally adjust most aggregated establishment-based hours and earnings series has been changed so that aggregate levels are the weighted averages of their seasonally-adjusted components rather than directly adjusted. The current seasonal factors, as well as revised historical data and a description of the methodology used in the revision, will appear in the December issue of the BLS periodical *Employment and Earnings*.

The usual adjustment of the establishment series levels to reflect the most recent, complete employment counts, termed benchmarks, will not be made this year because tabulations needed for benchmarking are not yet available. These tabulations have been delayed because of the introduction of a revised Standard Industrial Classification structure. The next benchmark adjustment is scheduled for the fall of 1977. However, interim corrections in the levels of several series known to have deviated considerably since the last benchmark--contract construction, trade, services, and State and local government--will be made early in 1977.

This release presents and analyzes statistics from two major surveys. Data on labor force, total employment, and unemployment are derived from the sample survey of households conducted and tabulated by the Bureau of the Census for the Bureau of Labor Statistics. Statistics on payroll employment, hours, and earnings are collected by State agencies from payroll records of employers and are tabulated by the Bureau of Labor Statistics. Unless otherwise indicated, data for both series relate to the week of the specified month containing the 12th day. A description of the two surveys appears in the BLS publication *Employment and Earnings*.

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Table A-1. Employment status of the noninstitutional population

(Numbers in thousands)

Employment status	Not seasonally adjusted			Seasonally adjusted					
	Nov. 1975	Oct. 1976	Nov. 1976	Nov. 1975	July 1976	Aug. 1976	Sept. 1976	Oct. 1976	Nov. 1976
TOTAL									
Total noninstitutional population ¹	154,476	156,788	157,006	154,476	156,142	156,367	156,595	156,788	157,006
Total labor force	94,963	97,677	97,786	95,272	97,473	97,634	97,348	97,689	98,064
Participation rate	61.5	62.3	62.3	61.7	62.4	62.4	62.2	62.2	62.4
Civilian noninstitutional population ¹	152,320	154,642	154,857	152,320	154,002	154,220	154,451	154,642	154,857
Civilian labor force	92,787	95,330	95,637	91,117	93,333	93,487	93,203	93,342	93,699
Participation rate	60.9	61.8	61.8	61.1	61.9	61.9	61.6	61.7	61.9
Employed	85,556	88,697	88,542	85,178	87,907	87,981	87,819	87,773	88,130
Agriculture	3,156	3,447	3,081	3,301	3,341	3,424	3,286	3,329	3,232
Nonagricultural industries	82,400	85,250	85,460	81,877	84,566	84,557	84,533	84,444	84,898
Unemployed	7,231	6,833	7,095	7,939	7,426	7,306	7,384	7,569	7,769
Unemployment rate	7.8	7.2	7.4	8.5	7.8	7.9	7.8	7.9	8.1
Not in labor force	59,533	59,112	59,220	59,203	58,669	58,733	59,248	59,300	58,958
Males, 20 years and over									
Total noninstitutional population ¹	65,542	66,598	66,699	65,542	66,279	66,384	66,491	66,598	66,699
Total labor force	52,519	53,560	53,542	52,688	53,387	53,436	53,363	53,682	53,869
Participation rate	80.1	80.4	80.3	80.4	80.5	80.5	80.6	80.6	80.6
Civilian noninstitutional population ¹	63,830	64,902	65,001	63,830	64,586	64,688	64,796	64,902	65,001
Civilian labor force	50,807	51,864	51,844	51,176	51,694	51,740	51,869	51,986	52,171
Participation rate	79.6	79.9	79.8	80.2	80.0	80.0	80.1	80.1	80.3
Employed	47,678	49,215	48,931	47,321	48,335	48,682	48,721	48,716	48,768
Agriculture	2,362	2,424	2,248	2,386	2,448	2,415	2,326	2,342	2,271
Nonagricultural industries	45,315	46,791	46,683	45,135	46,086	46,267	46,395	46,374	46,497
Unemployed	3,129	2,649	2,913	3,655	3,159	3,058	3,148	3,270	3,403
Unemployment rate	6.2	5.1	5.6	7.1	6.1	5.9	6.1	6.3	6.5
Not in labor force	13,023	13,038	13,158	12,654	12,892	12,948	12,927	12,916	12,830
Females, 20 years and over									
Civilian noninstitutional population ¹	72,139	73,288	73,401	72,139	72,966	73,078	73,196	73,288	73,401
Civilian labor force	33,664	35,046	35,227	33,256	34,583	34,639	34,505	34,396	34,790
Participation rate	46.7	47.8	48.0	46.1	47.4	47.4	47.1	46.9	47.4
Employed	31,145	32,430	32,683	30,619	31,958	31,988	31,907	31,799	32,126
Agriculture	454	631	512	491	498	546	524	562	554
Nonagricultural industries	30,691	31,799	32,172	30,128	31,470	31,442	31,383	31,237	31,572
Unemployed	2,519	2,615	2,544	2,637	2,625	2,651	2,598	2,597	2,664
Unemployment rate	7.5	7.5	7.2	7.9	7.6	7.7	7.5	7.6	7.7
Not in labor force	38,475	38,242	38,173	38,883	38,383	38,439	38,691	38,892	38,611
Both sexes, 18-19 years									
Civilian noninstitutional population ¹	16,352	16,452	16,455	16,352	16,450	16,454	16,458	16,452	16,455
Civilian labor force	8,316	8,621	8,565	8,685	9,056	9,108	8,829	8,960	8,938
Participation rate	50.9	52.4	52.1	53.1	55.1	55.4	53.6	54.5	54.3
Employed	6,734	7,052	6,927	7,038	7,414	7,311	7,191	7,258	7,236
Agriculture	340	392	321	424	404	463	436	425	407
Nonagricultural industries	6,394	6,660	6,606	6,514	7,010	6,848	6,755	6,833	6,829
Unemployed	1,582	1,569	1,638	1,647	1,642	1,797	1,638	1,702	1,702
Unemployment rate	19.0	18.2	19.1	19.0	18.1	19.7	18.6	19.0	19.0
Not in labor force	8,035	7,831	7,889	7,667	7,394	7,346	7,629	7,492	7,517
WHITE									
Civilian noninstitutional population ¹	134,303	136,165	136,336	134,303	135,643	135,822	136,005	136,165	136,336
Civilian labor force	82,171	84,619	84,570	82,133	84,359	84,503	84,371	84,595	84,837
Participation rate	61.2	62.1	62.0	61.4	62.2	62.2	62.0	62.1	62.2
Employed	76,317	79,133	78,877	76,059	78,341	78,468	78,365	78,402	78,572
Unemployed	5,854	5,486	5,693	6,458	6,018	6,035	6,006	6,193	6,265
Unemployment rate	7.1	6.5	6.7	7.8	7.1	7.1	7.1	7.3	7.4
Not in labor force	52,132	51,546	51,766	51,786	51,284	51,319	51,634	51,570	51,499
BLACK AND OTHER									
Civilian noninstitutional population ¹	18,016	18,476	18,521	18,018	18,359	18,398	18,445	18,476	18,521
Civilian labor force	10,616	10,911	11,067	10,684	10,867	11,003	10,930	10,923	11,127
Participation rate	58.9	59.1	59.8	59.3	59.2	59.8	59.3	59.1	60.1
Employed	9,239	9,564	9,664	9,197	9,466	9,505	9,538	9,448	9,619
Unemployed	1,377	1,347	1,402	1,487	1,401	1,498	1,392	1,475	1,508
Unemployment rate	13.0	12.3	12.7	13.9	12.9	13.6	12.7	13.5	13.6
Not in labor force	7,401	7,565	7,454	7,334	7,492	7,395	7,515	7,553	7,394

¹ Seasonal variations are not present in the population figures; therefore, identical numbers appear in the unadjusted and seasonally adjusted columns.

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Table A-2. Major unemployment indicators, seasonally adjusted

Selected categories	Number of unemployed persons (in thousands)		Unemployment rates					
	Nov. 1975	Nov. 1976	Nov. 1975	July 1976	Aug. 1976	Sept. 1976	Oct. 1976	Nov. 1976
Total, 16 years and over	7,939	7,769	8.5	7.8	7.9	7.8	7.9	8.1
Males, 20 years and over	3,655	3,403	7.1	6.1	5.9	6.1	6.3	6.5
Females, 20 years and over	2,637	2,664	7.9	7.6	7.7	7.5	7.6	7.7
Both sexes, 16-19 years	1,647	1,702	19.0	18.1	19.7	18.6	19.0	19.0
White, total	6,458	6,265	7.8	7.1	7.1	7.1	7.3	7.4
Males, 20 years and over	2,973	2,764	6.5	5.7	5.5	5.7	5.8	5.9
Females, 20 years and over	2,158	2,159	7.5	6.9	7.0	6.8	7.1	7.2
Both sexes, 16-19 years	1,327	1,362	17.1	16.3	17.3	16.5	16.7	17.1
Black and other, total	1,487	1,508	13.9	12.9	13.6	12.7	13.5	15.6
Males, 20 years and over	685	661	12.8	10.3	9.9	9.6	10.9	12.1
Females, 20 years and over	485	509	11.0	11.7	12.3	11.4	11.6	10.8
Both sexes, 16-19 years	317	338	34.3	34.1	40.2	38.5	38.4	35.5
Household heads, total	3,124	2,932	5.8	5.4	5.2	5.4	5.4	5.4
Males	2,507	2,320	5.6	4.9	4.5	5.0	5.0	5.1
With relatives	2,001	1,816	4.9	4.5	4.1	4.5	4.5	4.5
Without relatives	506	506	11.0	8.6	8.1	8.6	9.0	9.6
Females	669	657	8.0	7.7	8.0	7.9	8.2	7.5
With relatives	404	420	10.1	10.0	11.1	10.6	10.9	9.8
Without relatives	265	237	6.1	5.5	5.1	5.4	5.7	5.3
Married men, spouse present	2,041	1,816	5.1	4.5	4.2	4.6	4.6	4.6
Full-time workers	6,626	6,326	8.3	7.3	7.5	7.5	7.6	7.7
Part-time workers	1,362	1,465	10.2	10.7	9.9	9.3	10.2	10.5
Unemployed 15 weeks and over¹	3,004	2,556	3.2	2.4	2.5	2.4	2.4	2.7
Labor force time lost²	--	--	9.3	7.9	8.2	8.4	8.8	8.8
OCCUPATION³								
White-collar workers	2,151	2,192	4.8	4.8	5.0	4.5	4.5	4.7
Professional and technical	491	512	3.7	3.1	3.1	3.0	3.1	3.6
Managers and administrators, except farm	273	296	2.9	3.5	3.5	3.2	2.8	3.0
Sales workers	353	349	6.3	5.4	5.9	5.4	5.4	5.9
Clerical workers	1,034	1,035	6.4	6.7	7.0	6.2	6.2	6.2
Blue-collar workers	3,582	3,150	11.3	9.6	9.8	9.8	9.7	9.8
Craft and kindred workers	991	882	8.3	7.4	7.0	7.0	6.8	7.2
Operatives	1,852	1,593	12.4	10.1	10.3	10.5	10.7	10.7
Nonfarm laborers	749	675	15.5	13.2	14.8	14.5	13.9	13.2
Service workers	1,125	1,228	8.7	8.5	8.5	8.6	8.5	9.2
Farm workers	112	144	3.8	4.5	3.5	3.7	4.0	5.0
INDUSTRY⁴								
Nonagricultural private wage and salary workers⁵	6,143	5,776	9.2	8.0	8.2	8.0	8.1	8.3
Construction	772	674	17.5	17.7	17.1	15.8	14.9	15.4
Manufacturing	2,206	1,755	10.5	7.8	8.2	8.0	8.2	8.3
Durable goods	1,365	969	10.8	7.3	7.7	7.4	8.1	7.7
Nondurable goods	840	786	10.0	8.4	8.9	8.9	8.2	9.1
Transportation and public utilities	248	283	4.9	5.2	4.7	5.4	5.6	5.7
Wholesale and retail trade	1,592	1,641	9.1	8.5	9.0	8.8	9.0	9.2
Finance and service industries	1,308	1,397	7.0	6.4	6.5	6.3	6.6	6.9
Government workers	614	692	4.0	4.5	4.4	3.8	4.4	4.4
Agricultural wage and salary workers	143	191	10.2	12.4	10.0	10.6	11.2	13.1
VETERAN STATUS								
Males, Vietnam-era veterans⁶								
20 to 24 years	629	554	10.2	8.4	7.4	9.3	8.9	8.6
25 to 29 years	226	159	23.1	20.0	15.4	19.8	19.7	16.4
30 to 34 years	108	115	5.6	5.7	5.0	6.7	5.7	4.7
Males, nonveterans								
20 to 34 years	1,458	1,461	10.1	8.7	8.8	8.1	8.9	9.4
25 to 29 years	850	834	13.2	10.9	11.4	10.4	11.9	12.1
30 to 34 years	344	407	7.9	8.3	8.1	7.0	7.9	8.3
35 to 39 years	264	220	7.1	5.3	5.0	5.5	5.0	5.9

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

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

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

⁴ Includes mining, not shown separately.

⁵ Vietnam-era veterans are those who served between August 5, 1964, and April 30, 1975.

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Table A-3. Selected employment indicators

Selected categories	Not seasonally adjusted				Seasonally adjusted			
	Nov.	Nov.	Nov.	July	Aug.	Sept.	Oct.	Nov.
	1975	1976	1975	1976	1976	1976	1976	1976
Total employed, 16 years and over	85,556	88,542	85,178	87,907	87,981	87,819	87,773	88,130
Males	51,229	52,544	51,325	52,501	52,655	52,564	52,613	52,671
Females	34,327	35,998	33,853	35,406	35,326	35,255	35,160	35,459
Household heads	50,572	51,608	50,316	51,054	51,170	51,234	51,176	51,351
Married men, spouse present	38,117	38,123	37,458	38,147	38,237	38,216	31,708	37,858
Married women, spouse present	20,361	21,042	19,833	20,399	20,444	20,536	20,421	20,489
OCCUPATION								
White-collar workers	42,807	44,738	42,253	43,481	43,782	44,183	44,067	44,150
Professional and technical	13,092	13,900	12,795	13,297	13,536	13,619	13,332	13,58 ¹
Managers and administrators, except farm	9,175	9,569	9,077	9,179	9,282	9,580	9,425	9,465
Sales workers	5,243	5,600	5,269	5,435	5,549	5,607	5,562	5,523
Clerical workers	15,197	15,668	15,112	15,570	15,615	15,377	15,768	15,375
Blue-collar workers	28,216	29,177	28,126	29,279	28,853	28,739	29,003	29,093
Craft and kindred workers	11,038	11,412	11,018	11,372	11,251	11,348	11,406	11,389
Operatives	13,184	13,439	13,010	13,330	13,273	13,091	13,203	13,267
Nonfarm laborers	3,994	4,326	4,098	4,277	4,299	4,300	4,394	4,437
Service workers	11,807	12,000	11,872	12,185	12,325	12,219	11,976	12,070
Farm workers	2,727	2,627	2,838	2,878	2,951	2,791	2,840	2,734
MAJOR INDUSTRY AND CLASS OF WORKER								
Agriculture								
Wage and salary workers	1,177	1,178	1,262	1,301	1,363	1,329	1,321	1,263
Self-employed workers	1,671	1,609	1,687	1,695	1,709	1,606	1,683	1,624
Unpaid family workers	308	294	349	340	356	351	346	334
Nonagricultural industries								
Wage and salary workers	75,962	79,280	75,468	78,390	78,469	78,584	78,444	78,782
Private households	1,302	1,443	1,307	1,436	1,401	1,410	1,379	1,449
Government	16,825	15,195	14,628	14,988	15,317	15,185	14,884	15,000
Other	59,835	62,642	59,533	61,966	61,751	61,989	62,181	62,333
Self-employed workers	5,929	5,758	5,991	5,649	5,662	5,714	5,596	5,816
Unpaid family workers	510	423	540	432	436	428	452	448
PERSONS AT WORK¹								
Nonagricultural industries	79,264	82,219	77,103	79,189	78,931	79,921	79,572	80,030
Full-time schedule	64,485	66,822	63,141	65,259	64,622	65,064	65,013	65,448
Part-time for economic reasons	3,033	3,244	3,353	3,012	3,047	3,348	3,469	3,604
Usually work full time	1,124	1,210	1,405	1,259	1,295	1,359	1,357	1,285
Usually work part time	1,709	2,034	1,948	1,753	1,752	2,009	2,132	2,319
Part-time for noneconomic reasons	11,746	12,153	10,609	10,918	11,262	11,509	11,090	10,978

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

Weeks of unemployment	Not seasonally adjusted		Seasonally adjusted					
	Nov.	Nov.	Nov.	July	Aug.	Sept.	Oct.	Nov.
	1975	1976	1975	1976	1976	1976	1976	1976
Less than 5 weeks	2,601	2,698	2,641	2,951	2,829	2,828	3,010	2,739
5 to 14 weeks	2,230	2,355	2,489	2,028	2,427	2,453	2,355	2,608
15 weeks and over	2,400	2,042	3,004	2,317	2,387	2,314	2,330	2,556
15 to 26 weeks	940	899	1,286	1,116	1,143	1,123	1,066	1,211
27 weeks and over	1,460	1,143	1,718	1,201	1,244	1,191	1,264	1,345
Average (mean) duration, in weeks	16.2	15.0	16.9	15.8	15.5	15.4	15.4	15.6
PERCENT DISTRIBUTION								
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 5 weeks	36.0	38.0	32.5	40.4	37.0	37.2	39.1	34.7
5 to 14 weeks	30.8	33.2	30.4	27.8	31.8	32.3	30.6	33.0
15 weeks and over	33.2	28.8	37.0	31.8	31.2	30.5	30.3	32.3
15 to 26 weeks	13.0	12.7	15.8	15.3	15.0	14.8	13.9	15.3
27 weeks and over	20.2	16.1	21.2	16.5	16.3	15.7	16.4	17.0

HOUSEHOLD DATA

HOUSEHOLD DATA

Table A-5. Reasons for unemployment

Reason	Not seasonally adjusted		Seasonally adjusted					
	Nov. 1975	Nov. 1976	Nov. 1975	July 1976	Aug. 1976	Sept. 1976	Oct. 1976	Nov. 1976
NUMBER OF UNEMPLOYED								
Lost last job	3,810	3,364	4,464	3,843	3,781	3,756	3,778	3,925
Left last job	886	876	872	954	1,008	929	933	962
Reen and inv. force	1,774	2,009	1,846	1,856	1,935	1,895	1,903	2,091
Seeking first job	761	846	837	795	951	932	894	922
PERCENT DISTRIBUTION								
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Job losers	52.7	47.4	55.6	51.5	49.3	50.0	50.2	50.3
Job leavers	12.3	12.3	10.9	12.9	13.1	12.4	12.7	11.1
Reentrants	24.5	28.3	23.1	24.9	25.2	25.2	25.3	26.8
New entrants	10.5	11.9	10.5	10.7	12.4	12.4	11.9	11.8
UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE								
Job losers	4.1	3.5	4.8	4.0	4.0	3.9	4.0	4.1
Job leavers	1.0	1.0	0.9	1.0	1.1	1.0	1.0	0.9
Reentrants	1.9	2.1	2.0	1.9	2.0	2.0	2.0	2.2
New entrants	.8	.9	.9	.8	1.0	1.0	.9	1.0

Table A-6. Unemployment by sex and age

Sex and age	Not seasonally adjusted			Seasonally adjusted unemployment rates					
	Thousands of persons		Percent looking for full-time work	Nov. 1975	July 1976	Aug. 1976	Sept. 1976	Oct. 1976	Nov. 1976
	Nov. 1975	Nov. 1976							
Total, 16 years and over	7,231	7,095	77.1	8.5	7.8	7.9	7.8	7.9	8.1
16 to 19 years	1,582	1,638	46.8	19.0	18.1	19.7	18.6	19.0	19.0
16 to 17 years	710	760	19.9	20.1	20.8	22.5	20.5	21.3	21.4
18 to 19 years	873	878	70.0	18.1	15.9	18.0	17.8	17.3	17.4
20 to 24 years	1,674	1,614	85.4	14.2	11.2	11.8	11.5	12.8	13.0
25 years and over	3,974	3,842	86.5	6.1	5.9	5.6	5.7	5.6	5.8
25 to 54 years	3,318	3,215	88.8	6.4	6.1	5.8	5.9	5.9	6.0
55 years and over	655	627	74.5	5.0	4.8	4.8	4.8	4.5	4.7
Males, 16 years and over	3,986	3,824	82.0	8.1	7.2	7.0	7.1	7.4	7.6
16 to 19 years	857	912	50.8	18.8	18.4	18.8	18.8	19.5	19.5
16 to 17 years	372	419	22.7	19.6	21.0	21.8	21.2	22.1	21.8
18 to 19 years	485	493	74.8	18.2	16.4	16.7	17.8	17.5	17.8
20 to 24 years	955	882	89.0	14.6	11.9	11.8	11.6	13.0	12.8
25 years and over	2,174	2,031	93.0	5.8	5.1	4.9	5.1	5.1	5.4
25 to 54 years	1,777	1,663	93.4	6.0	5.4	5.1	5.2	5.3	5.6
55 years and over	398	368	81.8	4.8	4.2	4.5	4.6	4.2	4.4
Females, 16 years and over	3,245	3,270	71.3	9.1	8.7	9.1	8.7	8.7	8.8
16 to 19 years	726	726	41.6	19.1	17.8	20.8	18.3	18.3	18.5
16 to 17 years	338	361	16.4	20.7	20.7	23.3	19.7	20.3	20.9
18 to 19 years	388	386	64.0	17.9	15.3	19.5	17.7	17.1	16.9
20 to 24 years	719	733	80.9	13.7	10.4	11.8	11.4	12.5	13.3
25 years and over	1,800	1,811	79.2	6.7	7.1	6.6	6.7	6.4	6.4
25 to 54 years	1,543	1,552	81.7	7.0	7.3	7.0	7.0	7.0	6.7
55 years and over	258	260	63.8	5.3	5.8	5.2	5.2	4.9	5.2

ESTABLISHMENT DATA

ESTABLISHMENT DATA

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

Industry	Not seasonally adjusted				Seasonally adjusted					
	Nov. 1975	Sept. 1976	Oct. p 1976	Nov. p 1976	Nov. 1975	July 1976	Aug. 1976	Sept. 1976	Oct. p 1976	Nov. p 1976
TOTAL	78,339	79,910	80,187	80,534	77,562	79,183	79,278	79,572	79,451	79,711
GOODS PRODUCING	22,920	23,775	23,565	23,521	22,639	23,114	23,080	23,228	23,101	23,240
MINING	763	804	807	815	761	791	752	798	801	813
CONTRACT CONSTRUCTION	3,522	3,563	3,564	3,490	3,406	3,382	3,349	3,330	3,346	3,375
MANUFACTURING	18,635	19,408	19,194	19,216	18,472	18,945	18,979	19,100	18,952	19,052
Production workers	13,370	14,040	13,818	13,841	13,214	13,618	13,627	13,749	13,589	13,680
DURABLE GOODS	10,739	11,278	11,140	11,238	10,652	11,034	11,083	11,146	11,028	11,149
Production workers	7,623	8,092	7,952	8,048	7,535	7,878	7,911	7,975	7,847	7,957
Ordnance and accessories	162.2	156.9	155.8	157.5	162	156	157	156	155	158
Lumber and wood products	574.3	626.9	623.0	615.2	578	605	605	613	613	619
Furniture and fixtures	476.0	499.0	499.0	494.4	469	490	486	495	491	487
Stone, clay, and glass products	619.1	643.7	640.9	636.6	614	631	628	630	630	632
Primary metal industries	1,141.7	1,220.0	1,193.4	1,192.6	1,145	1,206	1,215	1,216	1,195	1,196
Fabricated metal products	1,356.4	1,421.3	1,408.8	1,420.5	1,362	1,387	1,394	1,404	1,389	1,405
Machinery, except electrical	2,030.4	2,110.4	2,074.6	2,107.8	2,026	2,084	2,090	2,115	2,081	2,104
Electrical equipment	1,782.0	1,866.7	1,870.8	1,880.7	1,764	1,815	1,843	1,848	1,850	1,862
Transportation equipment	1,678.1	1,782.1	1,724.6	1,787.4	1,652	1,728	1,737	1,737	1,697	1,759
Instruments and related products	494.6	513.7	513.3	515.3	491	512	510	512	511	512
Miscellaneous manufacturing	423.7	437.6	435.9	430.0	409	420	418	420	416	415
NONDURABLE GOODS	7,896	8,130	8,054	7,978	7,820	7,911	7,896	7,954	7,924	7,903
Production workers	5,747	5,948	5,866	5,793	5,679	5,740	5,716	5,774	5,742	5,723
Food and kindred products	1,710.1	1,837.1	1,782.1	1,721.5	1,688	1,719	1,715	1,711	1,710	1,699
Tobacco manufactures	87.0	84.8	84.2	80.4	80	80	78	76	76	74
Textile mill products	955.2	973.0	964.9	960.3	950	970	969	971	961	956
Apparel and other textile products	1,307.8	1,298.9	1,294.6	1,288.8	1,290	1,299	1,292	1,281	1,272	1,271
Paper and allied products	657.2	684.8	680.4	683.6	651	680	679	681	676	678
Printing and publishing	1,075.8	1,084.9	1,089.8	1,090.2	1,072	1,082	1,082	1,086	1,087	1,086
Chemicals and allied products	1,018.8	1,040.6	1,036.5	1,034.0	1,017	1,037	1,040	1,035	1,031	1,032
Petroleum and coal products	202.4	205.2	204.5	202.3	202	201	202	202	202	201
Rubber and plastics products, nec.	610.4	652.4	652.8	652.5	601	572	572	643	645	643
Leather and leather products	271.0	268.1	264.4	264.5	269	271	267	268	264	263
SERVICE PRODUCING	55,419	56,135	56,622	57,013	54,903	56,065	56,198	56,344	56,350	56,471
TRANSPORTATION AND PUBLIC UTILITIES	4,509	4,560	4,536	4,555	4,482	4,508	4,501	4,528	4,504	4,528
WHOLESALE AND RETAIL TRADE	17,313	17,655	17,705	17,898	17,027	17,531	17,554	17,625	17,608	17,589
WHOLESALE TRADE	4,207	4,300	4,318	4,332	4,178	4,271	4,272	4,283	4,288	4,302
RETAIL TRADE	13,106	13,355	13,387	13,566	12,849	13,260	13,282	13,342	13,320	13,287
FINANCE, INSURANCE, AND REAL ESTATE	4,235	4,347	4,357	4,373	4,248	4,312	4,312	4,338	4,361	4,386
SERVICES	14,174	14,773	14,816	14,821	14,188	14,623	14,709	14,758	14,786	14,836
GOVERNMENT	15,188	14,800	15,208	15,366	14,958	15,091	15,122	15,095	15,091	15,132
FEDERAL	2,742	2,717	2,711	2,720	2,756	2,723	2,732	2,728	2,730	2,734
STATE AND LOCAL	12,446	12,083	12,497	12,646	12,202	12,368	12,390	12,367	12,361	12,398

ppreliminary.

NOTE: Seasonally adjusted data revised.

ESTABLISHMENT DATA

ESTABLISHMENT DATA

Table B-2. Average weekly hours of production or nonsupervisory workers¹ on private nonagricultural payrolls, by industry

Industry	Not seasonally adjusted				Seasonally adjusted					
	Nov. 1975	Sept. 1976	Oct., p 1976	Nov., p 1976	Nov. 1975	July 1976	Aug. 1976	Sept. 1976	Oct., p 1976	Nov., p 1976
TOTAL PRIVATE	36.2	36.2	36.2	36.2	36.3	36.2	36.1	36.0	36.1	36.2
MINING	43.0	43.8	44.0	44.0	42.7	42.6	41.2	43.5	45.3	43.7
CONTRACT CONSTRUCTION	36.3	36.8	38.2	36.6	36.9	36.9	36.8	35.9	37.3	37.2
MANUFACTURING	40.1	40.1	40.0	40.3	39.9	40.1	40.0	39.7	39.8	40.1
Overtime hours	2.9	3.4	3.1	3.2	2.9	3.1	3.0	3.0	2.9	3.1
DURABLE GOODS	40.4	40.6	40.6	41.0	40.3	40.9	40.8	40.2	40.4	40.8
Overtime hours	2.8	3.4	3.2	3.4	2.7	3.3	3.1	3.0	3.0	3.3
Ordnance and accessories	41.7	40.2	40.6	40.2	41.5	40.9	40.7	40.1	40.6	40.0
Lumber and wood products	39.2	40.2	40.7	40.0	39.6	40.6	40.2	39.8	40.4	40.4
Furniture and fixtures	39.3	38.6	38.9	38.6	39.1	38.6	38.5	38.0	38.5	38.4
Stone, clay, and glass products	41.0	41.4	41.8	41.7	40.9	41.0	41.1	40.9	41.4	41.6
Primary metal industries	40.0	40.8	39.9	40.4	40.0	41.2	40.9	42.3	40.0	40.4
Fabricated metal products	40.7	40.9	40.6	41.3	40.5	41.0	41.0	40.6	40.4	41.1
Machinery, except electrical	41.1	41.0	41.0	41.5	40.9	41.5	41.4	40.8	41.0	41.3
Electrical equipment	40.0	40.0	40.2	40.8	39.7	40.1	40.1	39.7	40.0	40.5
Transportation equipment	41.0	41.5	41.3	42.0	41.0	42.0	41.9	41.1	41.1	42.0
Instruments and related products	40.3	40.2	40.3	41.1	39.8	40.8	40.4	39.9	40.3	40.7
Miscellaneous manufacturing	39.0	38.4	38.9	39.2	38.7	38.8	38.5	38.2	38.7	38.9
NONDURABLE GOODS	39.7	39.4	39.2	39.3	39.5	39.1	38.9	39.0	39.0	39.2
Overtime hours	3.1	3.3	3.0	2.9	3.2	2.9	2.8	2.9	2.8	2.9
Food and kindred products	40.4	40.9	40.4	40.3	40.4	40.0	40.1	40.2	40.3	40.3
Tobacco manufactures	40.5	37.8	38.7	38.1	39.2	35.0	36.8	37.1	37.5	36.9
Textile mill products	41.2	39.4	39.5	39.8	41.0	40.2	39.3	39.0	39.4	39.6
Apparel and other textile products	36.4	35.2	35.3	35.7	36.1	35.5	35.2	34.9	35.0	35.4
Paper and allied products	42.6	42.6	42.2	42.3	42.4	42.3	42.1	42.2	42.0	42.1
Printing and publishing	37.4	37.8	37.5	37.6	37.2	37.7	37.5	37.4	37.4	37.4
Chemicals and allied products	41.5	42.0	41.5	41.9	41.4	41.4	41.3	41.9	41.5	41.8
Petroleum and coal products	42.3	42.8	42.4	41.7	41.8	42.2	42.3	42.2	41.9	41.3
Rubber and plastic products, nec	40.3	40.9	41.1	41.3	40.1	40.3	40.0	40.5	41.1	41.1
Leather and leather products	38.6	36.3	36.2	36.6	38.5	37.0	36.7	36.5	36.3	36.5
TRANSPORTATION AND PUBLIC UTILITIES	39.6	40.1	40.1	39.9	39.5	39.8	40.0	39.9	39.9	39.9
WHOLESALE AND RETAIL TRADE	33.6	33.7	33.4	33.4	33.8	33.7	33.6	33.6	33.5	33.7
WHOLESALE TRADE	38.7	38.9	38.7	39.0	38.7	39.1	38.9	38.8	38.7	39.0
RETAIL TRADE	32.1	32.1	31.8	31.8	32.4	32.1	32.0	32.1	32.0	32.1
FINANCE, INSURANCE, AND REAL ESTATE	36.6	36.6	36.7	36.6	36.7	36.6	36.8	36.7	36.7	36.7
SERVICES	33.7	33.5	33.4	33.4	33.8	33.4	33.5	33.5	33.5	33.5

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

NOTE: Seasonally adjusted data revised.

ESTABLISHMENT DATA

ESTABLISHMENT DATA

Table B-3. Average hourly and weekly earnings of production or nonsupervisory workers¹ on private nonagricultural payrolls, by industry

Industry	Average hourly earnings				Average weekly earnings			
	Nov. 1975	Sept. 1976	Oct. p 1976	Nov. p 1976	Nov. 1975	Sept. 1976	Oct. p 1976	Nov. p 1976
TOTAL PRIVATE	\$4.68	\$4.96	\$4.97	\$5.00	\$169.42	\$179.55	\$179.91	\$181.00
<i>Seasonally adjusted</i>	4.67	4.92	4.94	4.99	169.52	177.12	178.33	180.64
MINING	6.11	6.60	6.57	6.60	262.73	289.08	289.08	290.40
CONTRACT CONSTRUCTION	7.45	7.81	7.86	7.83	270.44	287.41	300.25	266.58
MANUFACTURING	4.93	5.31	5.28	5.35	197.69	212.93	211.20	215.61
DURABLE GOODS	5.29	5.66	5.62	5.71	213.72	229.80	228.17	234.11
Ordinance and accessories.....	5.44	5.85	5.87	5.95	226.85	235.17	238.32	239.19
Lumber and wood products.....	4.61	4.87	4.88	4.91	172.87	195.77	198.62	196.40
Furniture and fixtures.....	3.82	4.09	4.05	4.08	150.13	156.33	157.55	157.49
Stone, clay, and glass products.....	5.06	5.43	5.44	5.48	207.46	224.80	227.39	228.52
Primary metal industries.....	6.43	6.95	6.89	6.97	257.20	283.56	274.91	281.59
Fabricated metal products.....	5.22	5.54	5.49	5.58	212.45	226.59	222.89	230.45
Machinery, except electrical.....	5.54	5.86	5.85	5.91	227.69	240.26	239.85	245.22
Electrical equipment.....	4.70	5.02	5.04	5.09	188.00	200.80	202.61	207.67
Transportation equipment.....	6.25	6.67	6.60	6.73	256.25	276.81	272.58	282.66
Instruments and related products.....	4.64	4.93	4.95	4.98	186.99	198.19	199.49	204.68
Miscellaneous manufacturing.....	3.87	4.02	4.06	4.07	150.93	154.37	157.93	159.54
NONDURABLE GOODS	4.45	4.80	4.80	4.83	176.67	189.12	188.16	189.82
Food and kindred products.....	4.70	5.02	5.04	5.07	189.88	205.32	203.62	204.32
Tobacco manufactures.....	4.40	4.65	4.69	4.89	178.20	175.77	181.50	186.31
Textile mill products.....	3.53	3.78	3.79	3.81	145.44	148.93	149.71	151.64
Apparel and other textile products.....	3.25	3.49	3.50	3.52	118.30	122.85	123.55	125.66
Paper and allied products.....	5.21	5.58	5.56	5.60	221.99	237.71	234.63	236.88
Printing and publishing.....	5.47	5.79	5.77	5.78	204.58	218.86	216.38	217.35
Chemicals and allied products.....	5.56	6.04	6.04	6.09	230.74	253.68	250.66	255.17
Petroleum and coal products.....	6.66	7.22	7.18	7.23	281.72	309.02	304.43	301.49
Rubber and plastics products, nec.....	4.44	4.85	4.84	4.91	178.93	198.37	198.92	202.78
Leather and leather products.....	3.28	3.48	3.47	3.49	126.61	126.32	125.61	127.73
TRANSPORTATION AND PUBLIC UTILITIES	6.19	6.61	6.61	6.64	245.12	265.06	265.06	264.94
WHOLESALE AND RETAIL TRADE	3.83	4.04	4.06	4.08	128.69	136.15	135.60	136.27
WHOLESALE TRADE	5.02	5.26	5.28	5.32	194.27	204.61	204.34	207.48
RETAIL TRADE	3.41	3.61	3.63	3.64	109.46	115.88	115.43	115.75
FINANCE, INSURANCE, AND REAL ESTATE	4.24	4.39	4.40	4.42	155.18	160.67	161.48	161.77
SERVICES	4.22	4.43	4.44	4.48	142.21	148.41	148.30	149.63

¹ See footnote 1, table B-2, preliminary.

NOTE: Seasonally adjusted data revised.

ESTABLISHMENT DATA

ESTABLISHMENT DATA

Table B-4. Hourly earnings index for production or nonsupervisory workers¹ on private nonagricultural payrolls, by industry division, seasonally adjusted

[1967=100]

Industry	Nov. 1975	June 1976	July 1976	Aug. 1976	Sept. 1976	Oct. p. 1976	Nov. p. 1976	Percent change from	
								Nov. 1975	Oct. 1976
TOTAL PRIVATE NONFARM:									
Current dollars	177.6	184.0	185.2	186.4	187.2	187.1	189.2	6.5	0.6
Constant (1967) dollars	107.3	105.1	108.4	108.5	108.5	108.7	111.1	(2)	(3)
MINING	189.6	197.5	199.7	202.9	204.4	206.2	205.0	8.1	-6
CONTRACT CONSTRUCTION	179.2	185.6	187.7	187.1	186.5	188.2	187.6	5.3	-3
MANUFACTURING	176.8	183.6	185.4	186.6	188.1	188.6	190.1	7.6	.8
TRANSPORTATION AND PUBLIC UTILITIES	190.3	199.6	200.5	201.5	202.2	202.5	204.3	7.3	.9
WHOLESALE AND RETAIL TRADE	172.6	177.5	178.8	180.0	180.8	181.8	183.1	6.1	.7
FINANCE, INSURANCE, AND REAL ESTATE	167.1	169.2	170.8	173.1	172.0	172.9	173.5	7.9	.4
SERVICES	181.9	189.1	189.2	190.6	190.9	192.3	193.2	6.2	-5

¹ See footnote 1, table B-2.² Percent change was 1.3 from October 1975 to October 1976, the latest month available.³ Percent change was 0.1 from September 1976 to October 1976, the latest month available.

N.A. = not available.

p.preliminary.

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

NOTE: Seasonally adjusted data revised.

Table B-5. Indexes of aggregate weekly hours of production or nonsupervisory workers¹ on private nonagricultural payrolls, by industry, seasonally adjusted

[1967=100]

Industry division and group	1976												
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct. p.	Nov. p.
TOTAL	108.6	109.3	110.1	110.4	110.4	110.8	111.3	110.9	111.1	111.0	111.4	111.3	112.1
GOODS-PRODUCING	92.8	94.0	95.2	95.2	95.2	94.8	96.3	95.9	95.6	94.8	94.9	94.9	96.2
MINING	123.3	124.9	125.2	125.0	125.7	125.9	124.7	125.0	127.7	115.6	131.7	132.1	134.7
CONTRACT CONSTRUCTION	97.9	98.1	99.6	98.5	94.1	99.0	97.8	97.6	97.2	95.9	92.8	97.4	98.1
MANUFACTURING	90.9	92.2	93.4	93.6	94.3	93.0	95.1	94.6	94.2	93.9	94.0	93.2	94.6
DURABLE GOODS	88.1	89.6	91.0	91.4	92.4	90.9	94.0	93.8	93.5	93.6	93.2	92.0	94.3
Ornament and accessories	40.6	42.1	41.5	41.0	41.0	39.9	41.0	40.7	40.0	39.8	38.6	38.5	39.1
Lumber and wood products	91.4	93.2	97.0	96.0	95.8	96.0	96.6	96.1	98.6	97.6	98.2	99.7	100.7
Furniture and fixtures	98.9	100.7	101.3	103.1	103.6	102.7	105.1	103.3	102.3	101.2	102.4	102.8	101.7
Stone, clay, and glass products	96.0	96.5	97.7	97.4	96.5	98.6	99.5	99.7	99.2	98.6	98.9	99.5	100.4
Primary metal industries	81.7	82.8	83.6	84.8	86.0	86.8	88.3	89.2	90.1	89.8	88.8	86.0	86.8
Fabricated metal products	92.9	94.5	95.3	96.4	97.2	94.9	98.7	98.4	98.0	98.6	98.6	96.8	99.8
Machinery, except electrical	91.7	91.8	92.8	93.0	93.3	91.7	94.9	94.5	95.9	95.9	95.9	93.7	96.0
Electrical equipment and supplies	85.8	87.2	88.6	89.3	90.4	89.0	92.2	91.9	90.5	92.2	91.5	92.2	94.1
Transportation equipment	83.6	87.4	89.2	89.2	91.8	86.9	92.8	92.6	90.3	90.7	89.1	86.4	92.6
Instruments and related products	101.3	103.0	104.7	105.2	106.7	105.7	109.6	109.6	110.3	108.1	107.2	107.5	108.6
Miscellaneous manufacturing, ind.	91.1	91.2	94.4	94.3	95.4	93.1	95.4	94.7	93.1	91.8	92.2	92.0	92.4
NONDURABLE GOODS	95.0	95.9	96.8	96.8	97.1	96.0	96.6	95.8	95.2	94.2	95.2	94.9	95.0
Food and kindred products	95.3	95.5	96.7	96.8	96.0	96.1	96.6	96.8	97.0	95.5	96.4	96.4	95.4
Tobacco manufactures	92.2	88.1	89.0	88.1	84.9	85.4	85.4	83.4	82.3	84.0	82.1	83.0	79.0
Textile mill products	97.9	98.5	99.1	99.0	99.3	96.1	99.9	98.6	98.0	95.5	95.2	95.0	94.8
Apparel and other textile products	90.1	91.9	92.7	92.2	92.6	89.3	92.0	91.4	88.9	87.6	86.2	85.6	86.7
Paper and allied products	92.6	94.5	95.2	95.8	96.1	95.9	98.1	97.3	96.9	96.1	96.5	95.3	95.9
Printing and publishing	92.2	92.9	93.1	92.6	92.7	92.3	93.6	93.1	95.6	92.9	93.1	93.1	93.1
Chemicals and allied products	97.2	97.5	98.4	99.4	99.4	100.1	100.0	99.0	99.4	99.8	100.3	99.0	99.5
Petroleum and coal products	111.4	111.4	113.6	114.2	113.9	115.6	113.9	111.6	112.2	112.4	112.2	112.2	110.6
Rubber and plastics products, nec	113.3	115.9	117.7	117.9	121.7	121.3	108.8	107.0	106.2	105.2	124.3	125.9	125.9
Leather and leather products	77.1	78.3	79.7	79.2	79.3	78.4	79.8	76.0	74.7	72.5	72.1	70.8	70.9
SERVICE-PRODUCING	119.6	119.9	120.5	120.9	121.0	121.9	121.6	121.2	121.8	122.2	122.8	122.6	123.1
TRANSPORTATION AND PUBLIC UTILITIES	101.3	101.9	101.3	102.3	102.5	102.4	101.9	101.6	102.1	102.5	102.9	102.3	102.9
WHOLESALE AND RETAIL TRADE	115.0	113.5	116.6	116.8	117.0	118.4	117.5	117.0	117.8	117.6	118.3	117.9	118.2
WHOLESALE TRADE	111.6	112.4	113.2	113.4	113.2	114.3	114.3	114.1	115.3	114.7	114.9	114.8	116.2
RETAIL TRADE	116.2	116.6	117.9	118.0	118.4	120.0	118.8	118.1	118.8	118.7	119.6	119.0	119.0
FINANCE, INSURANCE, AND REAL ESTATE	125.1	124.5	125.1	125.4	125.5	126.1	126.3	126.3	126.6	127.3	127.7	128.3	129.2
SERVICES	132.7	132.8	133.3	133.9	133.7	134.3	134.9	134.6	135.0	136.2	136.8	136.8	137.4

¹ See footnote 1, table B-2.

p.preliminary.

NOTE: Seasonally adjusted data revised.

ESTABLISHMENT DATA

ESTABLISHMENT DATA

Table B-6. Indexes of diffusion: Percent of industries in which employment¹ increased

Year and month	Over 1-month span	Over 3-month span	Over 6-month span	Over 12-month span
1973				
January	75.9	84.9	83.7	81.1
February	76.5	83.7	79.7	81.1
March	75.3	77.6	80.8	82.3
April	66.3	73.5	75.6	81.1
May	58.1	72.7	70.9	79.7
June	66.3	65.4	65.4	78.5
July	55.8	62.8	69.2	76.2
August	56.4	60.8	70.9	73.3
September	54.9	66.9	70.9	69.8
October	71.2	74.7	72.4	66.6
November	77.0	77.3	67.7	66.9
December	66.0	70.6	67.7	64.2
1974				
January	58.7	61.6 ^a	64.8	63.1
February	55.8	55.2	56.4	59.6
March	48.0	54.7	54.7	54.9
April	54.7	52.3	51.5	50.0
May	54.7	57.0	50.3	40.1
June	54.4	50.9	44.5	28.2
July	49.1	44.2	35.8	26.7
August	42.2	36.0	32.0	22.1
September	32.6	35.5	21.8	20.6
October	35.5	26.2	15.7	18.6
November	19.8	21.8	16.0	16.6
December	19.8	12.8	13.7	14.0
1975				
January	16.9	12.5	13.7	16.3
February	16.9	14.0	12.8	17.4
March	27.3	22.7	18.9	17.2
April	44.2	34.6	29.1	20.3
May	51.2	43.6	40.7	25.6
June	39.8	47.7	59.0	40.1
July	57.3	55.5	63.4	50.3
August	72.4	75.0	66.6	61.9
September	81.4	78.8	72.4	71.5
October	64.0	70.6	78.8	75.9
November	59.6	69.2	79.4	79.1
December	69.2	75.0	77.6	81.4
1976				
January	76.7	82.0	82.8	84.6
February	74.4	84.3	83.1	82.8
March	77.9	84.9	77.0	79.4
April	77.9	81.1	77.0	74.4p
May	63.4	70.6	71.5	73.8p
June	47.1	57.0	70.9	
July	52.9	47.4	56.4p	
August	49.1	65.1	54.1p	
September	68.9	54.4p		
October	39.8p	54.4p		
November	57.8p			
December				

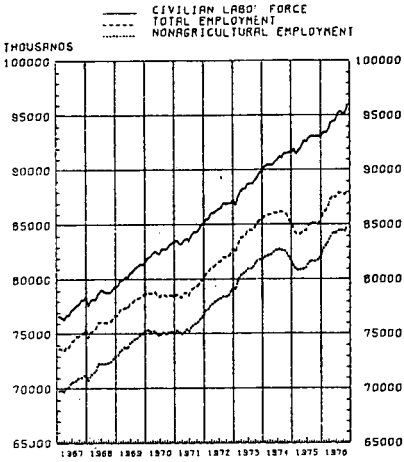
¹ Number of employees, seasonally adjusted, on payrolls of 172 private nonagricultural industries.

p = preliminary.

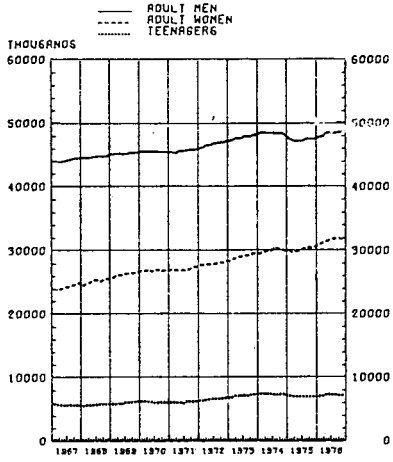
NOTE: Seasonally adjusted data revised.

LABOR FORCE, EMPLOYMENT, UNEMPLOYMENT
HOUSEHOLD DATA - SEASONALLY ADJUSTED

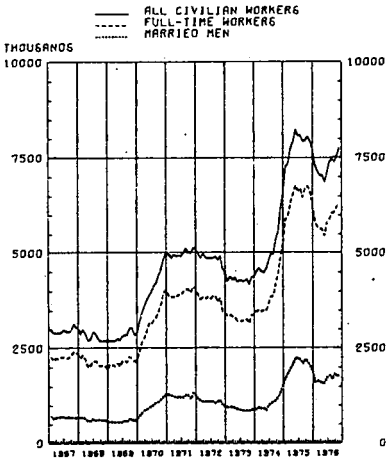
1. LABOR FORCE AND EMPLOYMENT



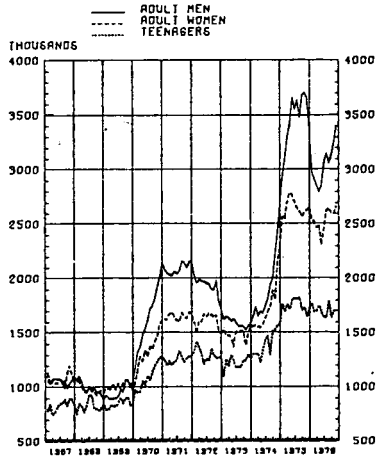
2. TOTAL EMPLOYMENT



3. UNEMPLOYMENT

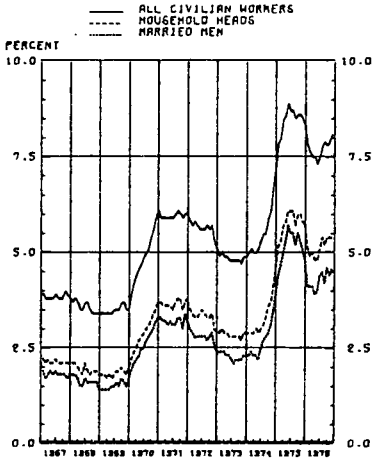


4. UNEMPLOYMENT

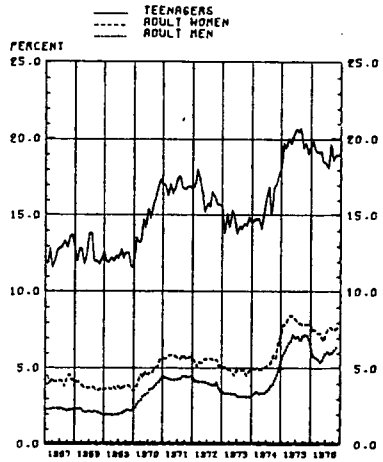


UNEMPLOYMENT RATES
HOUSEHOLD DATA - SEASONALLY ADJUSTED

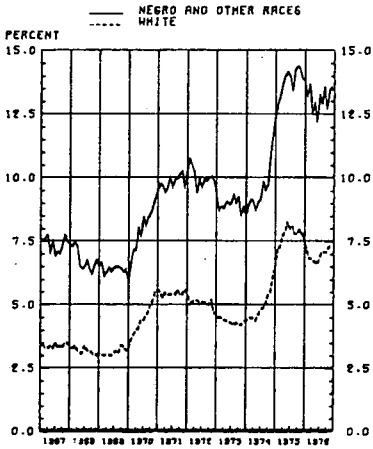
5. UNEMPLOYMENT RATES



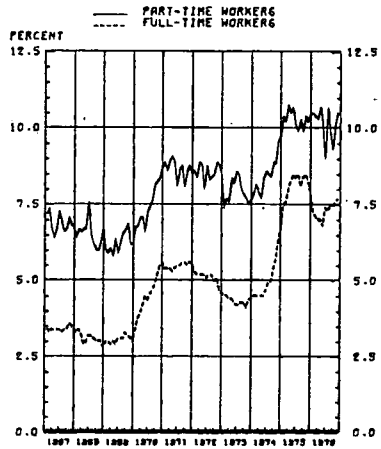
6. UNEMPLOYMENT RATES



7. UNEMPLOYMENT RATES

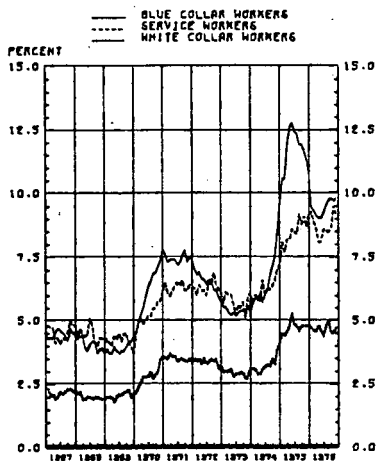


8. UNEMPLOYMENT RATES

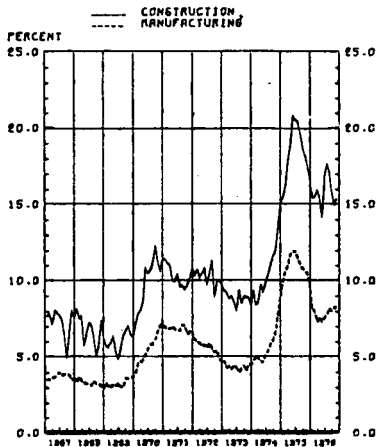


UNEMPLOYMENT
HOUSEHOLD DATA - SEASONALLY ADJUSTED

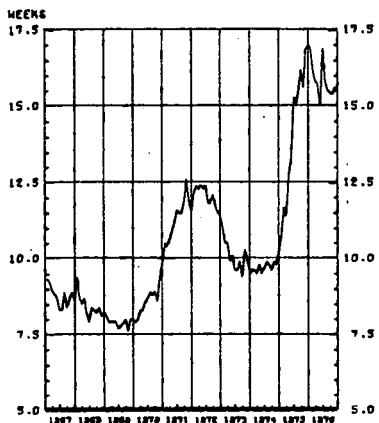
9. UNEMPLOYMENT RATES



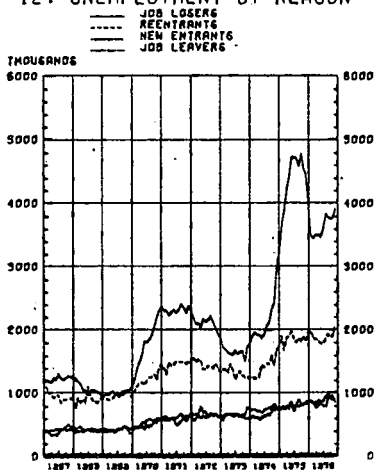
10. UNEMPLOYMENT RATES



11. AVERAGE DURATION
OF UNEMPLOYMENT

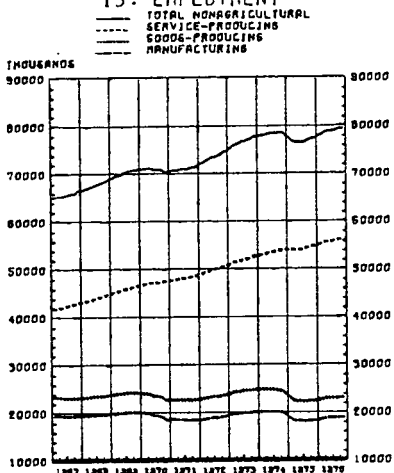


12. UNEMPLOYMENT BY REASON

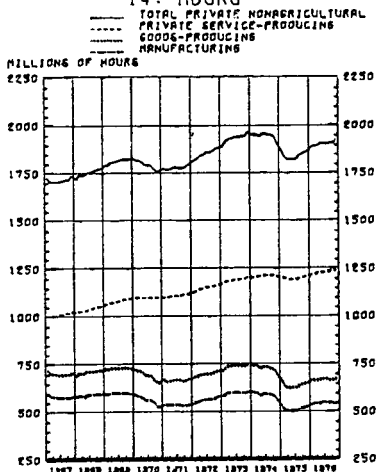


NONAGRICULTURAL EMPLOYMENT AND HOURS
ESTABLISHMENT DATA - SEASONALLY ADJUSTED

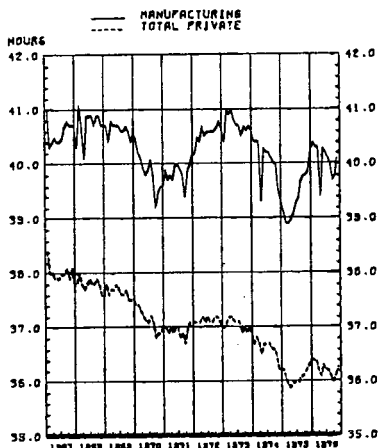
13. EMPLOYMENT



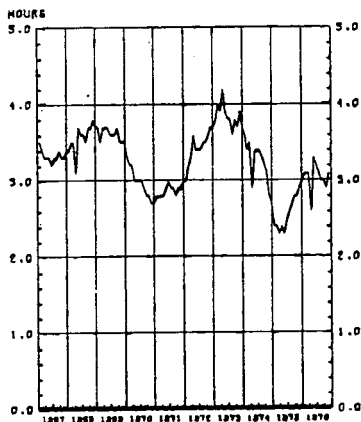
14. HOURS



15. AVERAGE WEEKLY HOURS



16. AVERAGE WEEKLY OVERTIME HOURS
IN MANUFACTURING



NOTE: Charts 14 and 15 relate to production or nonsupervisory workers; chart 16 relates to production workers.
Data for the 2 most recent months are preliminary in charts 13-16.

Representative BOLLING. Mr. Shiskin, yesterday Mr. Greenspan said that the economy is weaker than he or anyone in the administration had expected it to be, and that he expects real GNP growth in the fourth quarter to be much lower than the 3.8-percent growth registered during the third quarter. If his prediction is correct, what might this imply for unemployment in December and the first quarter of next year?

Mr. SHISKIN. Well, if his prediction is correct—and I want to come back to that—and the labor force growth continues—I think that is very important in connection with the judgments about the unemployment figures—then unemployment would rise.

Now, there are two big ifs there. In forecasting real GNP, or considering real GNP, or most other variables other than the unemployment figures, I think this morning's figures suggest that the forecasts that we have seen in the last month or so will be too low.

On the other hand, with respect to unemployment again, if we keep getting these big rises in the labor force, then the unemployment rate is bound to go up.

Representative BROWN of Michigan [presiding]. Congressman Bolling had to step out for a minute, Mr. Shiskin.

Mr. SHISKIN. Excuse me, Mr. Congressman. May I just say that I believe that the Alan Greenspan interview took place before these figures were available, so he didn't have the benefit of these figures when he was making his judgments. And I would guess that if he had had them he would have made different judgments.

Representative BROWN of Michigan. As I recall, if he said it yesterday he couldn't have had the advantage of these figures. I know from individual conversations that you keep these figures under a very tight lock and key until 10 o'clock Friday morning.

Mr. SHISKIN. We do, but there is one exception to the rule. We make them available to the President in advance. And this is done through Mr. Greenspan. So what I was trying to figure out in my mind is when I got this question was whether Mr. Greenspan had these figures when he had the interview.

We happened to be very late with the payroll employment figures this month. The payroll employment survey ran into serious computer problems, and we didn't have the figures, most of them, until late yesterday afternoon, about 3 o'clock. So we couldn't have transmitted the key figures that are involved. And, therefore, Mr. Greenspan made these judgements without the benefit of these figures. But if it had been a normal month he would have had the figures, because we give them to him for the President.

Representative BROWN of Michigan. I think what the chairman was assuming was that Mr. Greenspan did not have these figures as of that time, and he made that projection or prediction not knowing what these figures were. I think the chairman's question, with his rather dire prediction for the last quarter, plus what you are telling us today, was, what does that mean insofar as December is concerned. What can we expect in December? Is it to be significantly worse, do you think?

Mr. SHISKIN. I do not know, Congressman Brown. I also distinguish, as I did in this statement, between the data on employment,

hours and aggregate hours which are measures of business activity, the volume of business activity, on the one hand, and the unemployment rate, which is substantially affected by other factors, particularly the growth in the labor force, on the other. So my guess is—I am telling you what I think he would say today—I think he would temper his forecasts about GNP to account for the fact that employment and aggregate hours were quite strong last month.

Representative BROWN of Michigan. Yes.

Mr. SHISKIN. On the other hand, the unemployment figures are another matter. If you keep getting big increases in the labor force, it is going to be very hard for the economy to absorb all the new persons seeking jobs. In that event we may expect to continue at a high rate of unemployment.

Representative BROWN of Michigan. What you say in your statement's last couple of paragraphs is:

With the rise in nonagricultural employment and in average hours worked, aggregate hours, the most comprehensive measure of labor activity, surged ahead, with the largest 1-month rise since the beginning of this year.

Those statistics, aggregate hours, more overtime and all that you have indicated, would tend to belie the prediction that Greenspan made. Would you concur?

Mr. SHISKIN. Right. However, let me hasten to put in my usual qualifications. One, it is 1 month's data that my statement is based on. We had a standstill period of a few months with respect to aggregate hours and employment. And now we have employment figures that look somewhat better. But they represent only 1 month. Furthermore, there is another important element that must be considered, namely, about 100,000 of the workers who were counted in the increase represent returnees from strikes, from the Ford strike for instance, which ended a little earlier—though the workers are not coming back that fast—and the John Deere strike.

So I think you have to interpret these employment figures with some caution. And I have mentioned this point earlier in my statement, the one about the strikes. But I hasten again to emphasize the fact that we have just 1 month's improved employment data. My guess, nevertheless, is that what economists will be doing in the next few weeks is being a little more cautious about making pessimistic forecasts for the rest of this quarter and the next.

Representative BROWN of Michigan. Yesterday Mr. O'Neil from the the Office of Management and Budget and Mrs. Rivlin from the Congressional Budget Office were here and testified on the current services estimates that they have submitted. We got into a discussion about the shortfall in expenditures. And a significant portion of the shortfall in expenditures was occasioned by or caused by the failure to pay out as much in unemployment compensation benefits as had been anticipated. It just seems to me that there are so many incongruities concerning these different things. Since we have rising unemployment you would, therefore, think that unemployment compensation benefit payments would be going up. But instead we don't even with the anticipation of 7 percent unemployment, we don't have the anticipated expenditure of unemployment compensation benefits that we thought we would have.

Mr. SHISKIN. I wasn't aware of what took place yesterday. But that surprises me, that fact you just cited. Because the weekly unemployment insurance figures have remained about the same. As you know, we have a weekly report on insured unemployment, and it has been running about 5.0 percent. There hasn't been much decline so far.

We saw a sharp decline in the initial claims a week ago, but when we got last week's figure, the claims were back up again. So I don't understand it. I don't know what is going on in the local area offices.

Representative BROWN of Michigan. I notice that you have pointed out in your statement that the 12-month period ending in November constituted the second time that we had hit the historical high as far as numbers of persons entering the labor force in a 12-month period, 2.9 million. The other period was what, 1973?

Mr. SHISKIN. The period of the 1973 expansion.

Representative BROWN of Michigan. And that was an expansion period?

Mr. SHISKIN. Yes. So was most of 1976.

Representative BROWN of Michigan. Which, as I recall—I don't remember the figures—but as far as the expansion of GNP, the 1973 period was much more significant, wasn't it?

Mr. SHISKIN. Yes. There was a very rapid rise in economic growth in 1973. That was one of the best years in our history—in many ways, it was the best one for economic growth.

Representative BROWN of Michigan. Does the fact that we have a historical high entering the labor market at a time when there is significantly reduced economic activity tell us anything?

Mr. SHISKIN. Let me see if I can be helpful by making this observation. I have said again and again that we are in the middle of a cultural revolution with respect to the labor markets. This cultural revolution consists of a rapidly growing participation of women in the labor force, and particularly young women. I have said earlier that one of the ways you can see this is as follows: Not only have more young women been coming into the labor force, but they have also been staying there. Now, if you look at the trends during this period of expansion—and I used the period of expansion because it is comparable to other periods of expansion, and you don't get confused about the stage of the business cycle.

Representative BROWN of Michigan. Thank you.

Mr. SHISKIN. May I continue. I haven't quite finished.

If you will look at these expansion periods what you see is that you have had a very rapid growth in the labor force, both in 1973 and in the 1975-76 expansion. However, there is this difference, that in the current expansion, the growth in the number of adult females that are in the labor force has been the greatest of all postwar expansion. On the other hand, while there are many males also entering the labor force, the rate of increase is not as great as it was in 1973. So there has been a change, and the change is in the relationship of males and females in the labor force. And I think that is very important, both in interpreting the unemployment figures and in making economic policy.

Representative BROWN of Michigan. Thank you.

Representative BOLLING [presiding]. I find that I will have to leave prematurely, because of an emergency in another matter. And as a

result of that, I will ask you, would you mind if I would submit some questions to you to answer in writing?

Mr. SHISKIN. I would be very happy to answer them.¹

Representative BOLLING. I will do that. The staff will give them to you.

I have one housekeeping matter that I would like to take care of. And it has a question connected with it.

Two weeks ago you presented a thorough description of what the Bureau of Labor Statistics is doing to improve our employment and unemployment statistics at a seminar at the University of Michigan. I would like for your paper entitled "Labor Force and Unemployment" printed in the hearing record, without objection.

[The paper referred to follows:]

¹ See response of Mr. Shiskin to additional written questions posed by Representative Bolling, p. 1538.

Labor Force and Unemployment

By Julius Shiskin
U. S. Commissioner of Labor Statistics

University of Michigan Economic and
Social Outlook Program
November 18, 1976

Introduction

As part of a continuing effort to promote public understanding of the meaning and measurement of unemployment statistics, this report discusses the various techniques used by the Government to measure unemployment and comments on some of the controversial aspects of the overall system. Perhaps the most controversial and least understood aspects are the underlying concepts and definitions, that is, what it is that the Government's unemployment statistics are designed to measure.

This report is divided into three major parts. The first part is devoted to methodological issues and includes a discussion of the source of unemployment statistics, the Current Population Survey, its concepts and definitions, seasonal adjustment, and State and local statistics. The second section covers recent and prospective developments in the labor force, a brief analysis of the latest employment and unemployment figures, and short-term prospects for the economy. Part III concludes with a brief description of the legislation which establishes a new National Commission that will examine the issues described below and many others.

Part I: Methodological Issues

The current population survey

The official figures on employment and unemployment are derived from the Current Population Survey, which is conducted for the Bureau of Labor Statistics by the Bureau of the Census. Each month, trained employees of the Census Bureau contact responsible members of the sample households, the first month in person and subsequently by personal visit or telephone, in order to ask a series of standardized questions about current labor force activity. This information results in the determination of the labor force status of each member of the household 16 years of age and over during the week of the month containing the 12th day, commonly called the reference week.

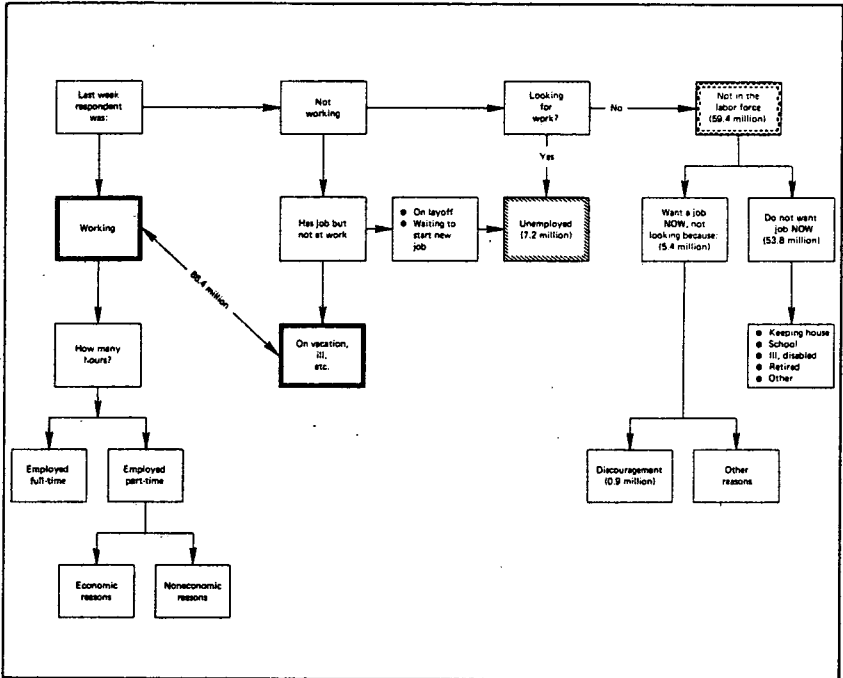
The writer wishes to express his indebtedness to various colleagues at BLS: Stephen St. Marie participated in the preparation of all aspects of this paper; Deborah Klein is responsible for the section on labor force; Kathleen Beall and Thomas Piewes assisted on the seasonal adjustment section; and Robert Stein and John Bregger reviewed successive drafts and made valuable contributions to each.

The questions have been carefully designed to elicit an accurate picture of each person's labor force activities during the previous week. Because they are based on activities rather than on attitudes, the information derived from the CPS questionnaire is clear and consistent. But of greatest importance, it is objective information, untainted by feelings or states of mind. Thus, without ever using the word "unemployed," the questions categorize the respondents as employed, unemployed, or not in the labor force. Chart 1 shows the flow of the labor force classification system.

Data generated from these sample interviews are "blown up" to independent population controls to derive totals for the entire country by a wide variety of characteristics (age, sex, race, marital status, household relationship, ethnic origin, occupation, and industry, with many cross-classifications). There are also periodic supplements to the CPS which elicit additional information from respondents on such subjects as income and work experience in the prior year, usual weekly earnings, marital and family characteristics, educational attainment, and school enrollment status. The most recent supplement probes discouraged

Chart 1. Status of the labor force

(Figures shown are for first quarter of 1976, seasonally adjusted)



DEFINITIONS

Employed — Employed persons comprise (a) all those who during the survey week did any work at all as paid employees or worked 15 hours or more as unpaid workers in a family-operated enterprise; (b) all those who were not working but who had jobs or businesses from which they were temporarily absent for personal or noneconomic reasons.

Unemployed — Unemployed persons comprise all those who did not work during the survey week, who made specific efforts to find a job within the past

four weeks, and who were available for work during the survey week (except for temporary illness). Also included as unemployed are those who were available for work, and (a) were waiting to be called back to a job from which they had been laid off; or (b) were waiting to report to a new wage or salary job within 30 days.

Not in the labor force — Not in the labor force includes all civilians 16 years and over who are neither employed nor unemployed.

workers (persons outside the labor force who want jobs but are not searching for work because they believe that they could not find any) in order to determine the reasons for their discouragement and the conditions under which they would enter the labor market. Together with the basic data, these supplements help to fill in the picture of America's labor force.

Since its inception in 1940, the sample size of the CPS has been increased several times in order to provide more accurate and detailed information. Presently about 58,000 households are assigned for interview. After discounting those demolished, converted, removed, vacant, or not ready or unfit for occupancy, there are about 47,000 occupied households eligible for interview. At some 2,000 households each month, people are either not at home during the survey week or refuse to be interviewed. The rest, some 45,000 interviewed households, form the base from which the labor force statistics are derived.

The households selected for the survey come from 461 areas throughout the country, with coverage in every State and the District of Columbia. The sample is selected by probability methods and is designed to represent different geographic areas of the country in proportion to the relative size of their respective populations. To insure series continuity and to minimize the burden on individual families, a household is in the sample for 8 months, 4 months one year and the same 4 months the following year. In this way, roughly three quarters of the households are identical from month to month and about half from year to year.

Beginning in mid-1975, data have been collected from 9,000 additional households monthly. These data will be used as 1976 annual benchmarks for State and local area data, but the households will be melded into the national sample as well beginning next spring. Subsequently, the sample will be expanded further and by 1979 there will be more than 65,000 households in the national sample. While the principal objective of these expansions is to assist in the provision of more accurate State and local area unemployment estimates, taken together these additions will also provide more reliable estimates for all national estimates but will be particularly beneficial for such groups as agricultural workers, nonmetropolitan area workers, and persons of Spanish origin.

Because the data are derived from a sample, they are, of course, subject to sampling error, which varies according to the size of the estimate. For the level of unemployment, for example, the chances are 90 in 100 that the measured level is within 110,000 of the "true" level which could be discovered only through a complete census. The rate of unemployment, which in October was published as 7.9 percent, was most likely accurate within the range of 7.7 to 8.1 percent. The standard error for a month-to-month change is somewhat greater. The level of measured unemployment must change by 170,000, which is a bit more than 2 percent of its level, in order for the BLS to say with 90-percent confidence that the level actually

prevailing has moved up or down from the previous month. For larger aggregates, such as total employment and the civilian labor force, the statistical error on the change is relatively much smaller, on the order of 0.3 percent.

A remarkable feature of the Current Population Survey program is the very short time period between the survey reference week and the final publication of the unemployment data—3 weeks. Moreover, at its present size, the Current Population Survey is the second largest monthly household survey of its type in the world, some 50 times larger than many of the national public opinion polls. (The Canadian household survey now numbers nearly 55,000 household interviews.) Its relatively large sample size permits publication of detailed industry, occupational, and demographic data. And month after month it yields consistent, objective, and accurate statistics on the numbers and status of our working age population.

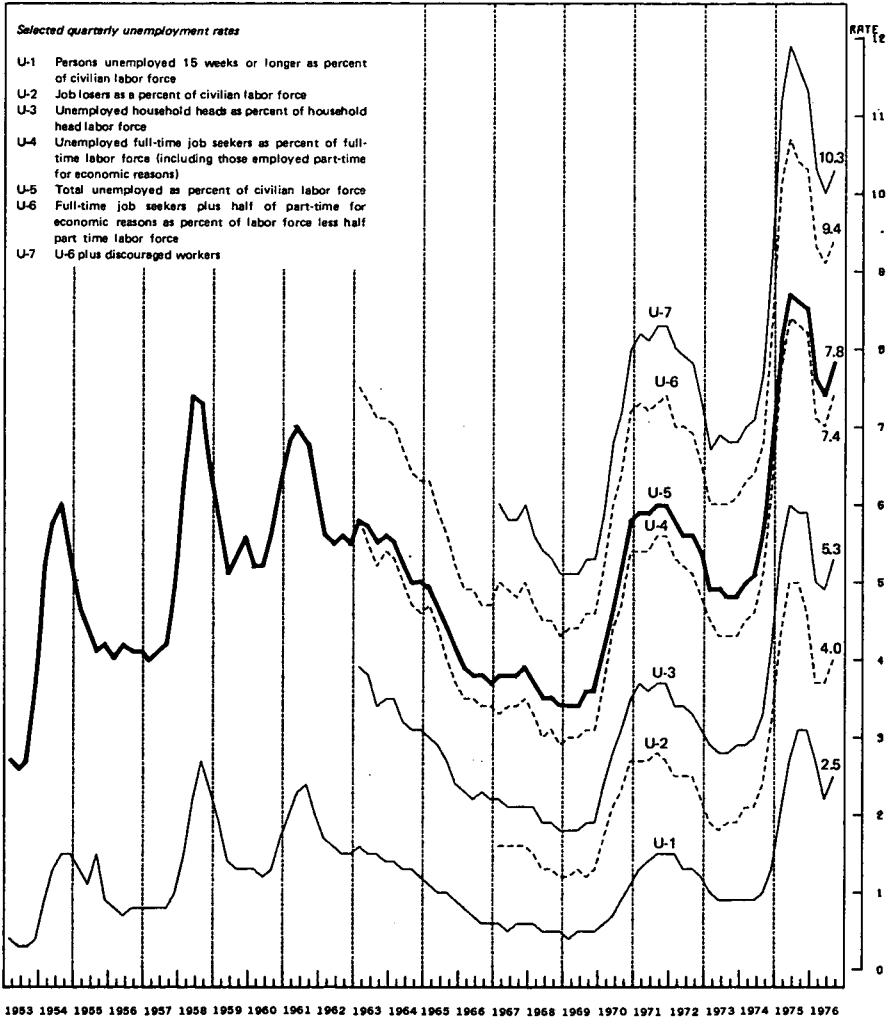
The definitions

The definition of unemployment has been the subject of continuing controversy over the years. There are many reasons for this, but the primary reason appears to be that some people have in mind different uses of the unemployment rate from that to which the survey is directed. The definition of unemployment, as BLS measures it, is this: All persons 16 years of age and over who did not work at all during the survey week, who were available for work during the survey week (except for a temporary illness), and who made at least one specific attempt to find work during the prior 4 weeks. In addition, persons on layoff who may not have searched for work, and those waiting to start a new job within 30 days are included among the unemployed. This definition, which is based on the activities of the unemployed rather than on their wants or needs, is simple, objective, and easily understood. And it has the important quality of representing an actual, effective labor force supply.

The official measures provide current estimates of the supply of jobless persons under real labor market conditions. Some people, however, seek an unemployment rate which measures economic hardship and others seek an unemployment rate which measures potential labor force supply. A single unemployment rate cannot do these things very well and still accomplish its main objective of measuring effective labor force supply.

In recognition of the multiple uses for the unemployment data, the BLS has been providing the Joint Economic Committee of Congress with an array of seven different, reasonable definitions of unemployment which are more specifically designed to reflect economic hardship or potential labor supply. These are labeled U-1 (U is for unemployment), the most restrictive, to U-7, the most inclusive, with the official rate identified as U-5. (See chart 2.)

Chart 2. Employment indicators, 1953 through third quarter 1976



Even this broad array does not provide the best possible measures of either labor force potential or economic hardship. The broadest measure, U-7, is a crude measure of the potential labor force supply. It includes discouraged workers and gives half weight to involuntary part-time workers. However, U-7 does not take into account the fact that if economic conditions were very good, many persons besides discouraged workers would enter the labor force. There are perhaps millions outside the labor force who would be motivated to seek and take jobs under certain hypothetical conditions.

Similarly, the U-1 to U-7 array does not include a good measure of economic hardship. The hardship notion is recognized in U-1, which shows persons who have been unemployed for 15 weeks and over, and in U-3, which reflects the unemployment of household heads. However, in order to provide comprehensive information on economic hardship, we would need detailed income distributions (including income in kind and other noncash receipts as well as cash income), adjusted for changes in prices, frequently with economic and demographic breaks.

New data are now being tabulated by the BLS on a regular basis in order to show the extent to which the hardship caused by unemployment is mitigated by the employment of other family members. For example, in the first quarter of 1976, nearly 60 percent of the total unemployed lived in families where at least one other person was employed. Some of this employment was part time, but over half the unemployed were in families which include a full-time worker. It is also noteworthy that wives and other relatives typically outnumber household heads among the unemployed.

Precisely comparable historical data are not available for all the unemployed. However, data for male heads of families are available for earlier periods of high unemployment. Whereas in the winter of 1976, 49 percent of all jobless male family heads had an employed person in the family (usually a working wife), in March of 1958 and in 1961 the comparable figures were 39 and 42 percent.

Seasonal adjustment

Nearly all economic phenomena are affected to some degree by seasonal variations. These are taken here to describe recurring, predictable events which are repeated more or less regularly each year—changes in weather, school vacations, major holidays, industry production schedules, and the like. The cumulative effects of these events are often large. For example, on average over the year, they explain about 90 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. This

is particularly critical at certain junctures—such as around business cycle turning points—at which time a faulty seasonal adjustment may lead to inflationary policies, when restraint is appropriate, or policies which lead to restraint, when stimulation is needed. For this reason, the unemployment figures are seasonally adjusted by the Bureau of Labor Statistics monthly.

Seasonal adjustment generates a great deal of interest and controversy. The principal reasons appear to be that this process often changes the unadjusted figures substantially, in the case of the total unemployment rate, more than 1 full point in some months, and that different methods of seasonal adjustment yield results which differ by more than half a point in some months. (See table 1.)

With the rapidly growing interest in economic indicators, another aspect of seasonal adjustment must be considered: It is hard for the public to understand. Not only is the methodology formidable for most laymen, but even the basic objectives are difficult to comprehend. For example, the seasonal adjustment procedure involves the redistribution of figures for each year in such a way that there is no regular pattern of intra-year (e.g., seasonal) variations in the final seasonally-adjusted series, and that the annual sums of the adjusted and unadjusted figures are nearly equal. One consequence of this procedure is that the sums of the seasonally-adjusted and unadjusted data for parts of a year will typically not be equal, and in some cases the differences can be quite large. With respect to unemployment, the seasonal factors reduce the levels of the series for the early months of the year and raise them for the later months of the year. Some critics have objected to seasonal adjustments on the ground that sums of adjusted and unadjusted data for parts of the year are not equal. They clearly do not understand either the objectives or the procedures for seasonal adjustment.

It would be useful to outline the current BLS practice in seasonally adjusting the unemployment rate to show that there is no mystery about it and that what we do is plain for all to see. The official seasonally-adjusted unemployment rate is based on 12 component series—8 employed age-sex groups and 4 unemployed age-sex groups—each independently seasonally adjusted. Ten of these components are seasonally adjusted using a multiplicative model, and the other two, male and female unemployed persons 16-19 years of age, are adjusted additively. The additive procedure is used for the teenage unemployed because seasonal changes in their levels of unemployment are not so much related to their overall level of unemployment as to the size of their civilian population and the number attending school. This basic relationship does not change much, even when unemployment is very high, as it has been in 1975 and 1976.

The seasonal factors themselves are derived through the X-11 program each January, using data series beginning in 1967 running through the end of the previous year. They are published, along with the revised season-

ally-adjusted data for the previous 5 years, in each February issue of the BLS publication, *Employment and Earnings*.

Over the years, a number of other methods of seasonally adjusting the unemployment rate besides the method we use officially have been suggested. Not surprisingly, they yield somewhat different results. While the BLS uses, as the official method, the one described above, we also release monthly a table of unemployment rates which are developed by alternative methods. Basically there are five issues involved in the seasonal adjustment of the unemployment rate. They are: (1) All additive, all multiplicative, or a simultaneous additive and multiplicative adjustment, (2), moving versus stable seasonality, (3) adjustment and aggregation of different components (e.g., age-sex groups, or reasons for unemployment), (4) residual adjustment (adjusted labor force less adjusted employment), and (5) direct adjustment of the unemployment rate itself. These options are illustrated in table 1,

(1) *Unemployment rate not seasonally adjusted*

(2) *Official rate*

This is the published seasonally adjusted rate. Each of four unemployed age-sex components—males and females, 16-19 and 20 years of age and over—is independently adjusted. The teenage unemployment components are adjusted using the additive procedure of the X-11 method, while adults are adjusted using the X-11 multiplicative option. The rate is calculated by aggregating the four and dividing them by 12 summed labor force components—these 4 plus 8 employment components, which are the 4 age-sex groups in agricul-

ture and nonagricultural industries. This employment total is also used in the calculation of the labor force base in columns (3) - (9).

The current "implicit" factors for the total unemployment rate are as follows:

January	113.1	July	99.5
February	113.7	August	96.0
March	108.1	September	94.7
April	99.4	October	89.8
May	93.4	November	91.4
June	104.5	December	93.4

(3) *Multiplicative rate*

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

(4) *Additive rate*

The 4 basic unemployed age-sex groups—males and females, 16-19 and 20 years and over—are adjusted by the X-11 additive procedure.

(5) *Year-ahead factors*

The official seasonal adjustment procedure for each of the components is followed through computation of the factors for the last years of data. A projected factor—the factor for the last year plus one-half of the difference from the previous year—is then computed for each of the components, and the rate is calculated.

(6) *Concurrent adjustment through current month*

The official procedure is followed with data re-seasonally adjusted incorporating the experience through the current

Table 1. Unemployment Rate by Alternate Seasonal Adjustment Methods

Month	Unadjusted rate	Official adjusted rate	Alternative age-sex procedures				Other aggregations (all multiplicative)				Direct adjustment Rate	Composite	Range (cols. 2-13)	
			All multiplicative	All additive	Year-ahead	Concurrent	Stable 67-73	Duration	Reasons	Total				Residual
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1975														
January	9.0	7.9	8.0	8.3			8.1	8.1	7.8	8.1	8.4	8.1	8.1	.6
February	9.1	8.0	8.1	8.4			8.1	7.9	7.8	8.1	8.4	8.0	8.1	.6
March	9.1	8.5	8.5	8.7			8.6	8.4	8.3	8.5	8.7	8.5	8.5	.4
April	8.6	8.6	8.7	8.6			8.8	8.5	8.6	8.8	8.7	8.8	8.7	.3
May	8.3	8.9	9.0	8.7			9.2	8.8	9.0	9.2	8.7	9.3	9.0	.8
June	9.1	8.7	8.6	8.7			8.6	8.6	8.7	8.2	8.5	8.2	8.5	.5
July	8.7	8.7	8.6	8.6	Not applicable	Not available	8.6	8.6	8.8	8.4	8.5	8.5	8.6	.4
August	8.2	8.5	8.5	8.4			8.3	8.7	8.7	8.5	8.4	8.5	8.5	.4
September	8.1	8.6	8.6	8.4			8.3	8.8	8.8	8.5	8.4	8.5	8.5	.5
October	7.8	8.6	8.7	8.4			8.3	8.8	8.7	8.6	8.4	8.5	8.6	.5
November	7.8	8.5	8.5	8.2			8.2	8.7	8.6	8.5	8.3	8.5	8.4	.5
December	7.8	8.3	8.4	8.2			8.3	8.5	8.2	8.4	8.2	8.5	8.3	.3
1976														
January	8.8	7.8	7.8	8.2	7.8	7.8	8.0	8.1	7.7	7.9	8.2	7.9	7.9	.5
February	8.7	7.6	7.7	7.9	7.6	7.6	7.8	7.6	7.5	7.7	7.9	7.7	7.7	.4
March	8.1	7.5	7.5	7.7	7.5	7.5	7.7	7.3	7.4	7.5	7.7	7.6	7.5	.4
April	7.4	7.5	7.5	7.4	7.4	7.4	7.6	7.3	7.5	7.5	7.5	7.6	7.5	.3
May	6.7	7.3	7.3	7.1	7.2	7.2	7.5	7.2	7.4	7.5	7.2	7.5	7.3	.4
June	8.0	7.5	7.4	7.5	7.5	7.6	7.5	7.5	7.5	7.2	7.4	7.2	7.4	.4
July	7.8	7.8	7.7	7.7	7.8	7.8	7.7	7.7	7.8	7.6	7.6	7.6	7.7	.2
August	7.6	7.9	7.9	7.8	7.9	7.9	7.7	8.0	8.0	7.9	7.8	7.9	7.9	.3
September	7.4	7.8	7.8	7.7	7.8	7.8	7.6	8.0	7.9	7.7	7.7	7.7	7.8	.4
October	7.2	7.9	8.0	7.7	7.9	7.9	7.7	8.1	7.9	7.9	7.8	7.9	7.9	.4

month, i.e., the rate for March 1976 is based on adjustment of data for the period, January 1967-March 1976.

(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 cut-off of input data as of December 1973 was selected to avoid the impact of cyclical changes in the 1974-1975 period.

(11) *Labor force and employment levels adjusted directly, unemployment as a residual and rate then calculated*

(12) *Unemployment rate adjusted directly*

(13) *Average of cols. 2-12*

a revision of a similar table which the BLS has been preparing for the Joint Economic Committee, and distributing to others as well.

Although the columns of the table show some diversity in the rates for any particular month, there is considerable similarity in terms of movement over time. Only the seasonally-adjusted unemployment rate using stable factors computed for the period 1967-73 shows a significantly different pattern in 1976. The rationale for the alternative procedures is discussed below.

The 1974-75 recession saw employment fall and unemployment climb. Both movements were quick and severe, and, of course, the original data that we used to develop the official seasonal adjustment factors for 1976 include those large swings. The question in many people's minds is whether the new factors include some cyclical as well as seasonal movement. As some have suggested, in an effort to control for the influence of the 1974-75 large cyclical swings, we have recently seasonally adjusted data over a 7-year period including a full business cycle, but not the most recent recession, and used the same X-11 program to yield stable seasonal factors for that period—from January 1967 through December 1973. We then applied these factors to the data for 1975 and 1976. The results are displayed in column 7, "stable seasonal" of table 1.

Another criticism—completely inconsistent with that described above—is that our factors are out of date by the time we use them. We get new factors each January and use them for the 12 months of that year. Instead of the factors we now use, we could use projected "year ahead" factors as shown in column 5. These have the advantage of incorporating the trends in seasonality, but they miss the mark when these trends change. They also magnify any cyclical movements picked up from the prior year's data if the separation of seasonal and cyclical movements is not complete. There is, however, no evidence yet to support the view that the present method fails in this respect.

Another possibility is to update the seasonal adjustments every month, using the most current monthly data available. This is a difficult and time-consuming task,

(8) *Duration*

Unemployment total is aggregated from 3 independently adjusted unemployment by/duration groups (0-4, 5-14, 15+).

(9) *Reasons*

Unemployment total is aggregated from 4 independently seasonally adjusted unemployment levels by reasons for unemployment—job losers, job leavers, new entrants, and re-entrants.

(10) *Unemployment and labor force levels adjusted directly*

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.

but it does yield the most up-to-date seasonally-adjusted number. We have followed this procedure during 1976 for the series that make up the unemployment rate, with the results shown in column 6. This procedure does raise the question, though, of how to handle the recent historical data. If the computer program is being run to get a new set of seasonal factors each month, an entirely new seasonally-adjusted series is also being developed with revisions of the historical data. Should one revise the previous month's rate each month? And the one previous to that? The question is, where should one stop revising? Frequent revisions are confusing and some have even suggested that our annual revisions come too often. Thus, while we have the capability to do this type of adjustment, such a policy would raise difficult questions of presentation. In applying this procedure, the best practice may be not to revise the historical data at all. That is the procedure used to develop the data in column 6: Each monthly figure stands as it was generated from the seasonal adjustment program using data up to that month.

Each of the above tests has assumed a normal aggregation procedure. However, some economic analysts have suggested that the seasonal fluctuations of the unemployment level would be reduced if adjusted unemployment were calculated by subtracting directly adjusted employment from directly adjusted labor force (the "residual" method, col. 11). The logic behind this method holds that the extreme fluctuations obtained by independently adjusting the unemployment series would be minimized if the dominant influence of the large and more stable employment and labor force series governed the result. Unfortunately, this is not true. Although the employment and labor force series are, themselves, very stable, they introduce a high degree of irregularity into the unemployment series. Therefore, given the present state of the art, the residual method does not appear to be the answer.

These comments should make it clear that while the X-11 procedure is extremely useful—because it is of high quality, fast, cheap, and provides many options—it still leaves many important conceptual problems for the analyst to resolve.

Work in this area is continuing at BLS. Among other things, we are seeking ways to develop projected data for the component series in order to get a better adjustment of the most recent data. We are investigating a method of estimating current factors called X-11 ARIMA (AutoRegressive Integrated Moving Average), developed by Statistics Canada, and we would be receptive to suggestions of other alternative methods.

While we have accorded a very high priority to research in this area, we believe that we are trying to improve what is already a very good system of seasonal adjustment.

Local area statistics

The Bureau of Labor Statistics has taken on new responsibility in recent years to measure unemployment at detailed geographic levels, such as cities and counties. Beginning with the Comprehensive Employment and Training Act of 1973, the Congress has enacted a series of legislation which ties program funding to local area unemployment. The recent enactment of the Public Works and Employment Act of 1976, for example, makes over 35,000 local governmental units potentially eligible for funds, based on local area unemployment rates. Because of this legislation, requests for development and certification of unemployment rates for small areas of the country have escalated markedly in recent months. Thus, we have begun to provide and publish data for all States and major labor market areas on a monthly basis. But for the smaller areas, accurate and timely data are difficult to produce.

There are several reasons why this is so. First, the data base is inadequate. The underlying data (primarily the number of persons drawing unemployment insurance) to be used in the calculation of unemployment rates cover only a portion of the labor force, and differ from State to State. Secondly, we are not able to obtain independent observations from the Current Population Survey to correct for systematic errors in the small area estimates prepared by the 50 State agencies. It is also to be noted in this context that many of the areas specified in legislation do not constitute labor market areas in the traditional sense.

With the objective of insuring the credibility of the official statistical system and minimizing the possible misinterpretation of the statistics thereby produced, the Bureau has conducted a careful review of the various types of local area unemployment statistics required for implementation of recent legislation. We have found that the area data can be divided according to the degree of reliability into three major groups. The best data are those for which there are independent estimates for both the employment and unemployment components and for which, on the employment side, there are official estimates of nonagricultural wage and salary employment. Within this group, we believe that the greatest confidence can

be placed in those States and large labor market areas which are independently benchmarked to the Current Population Survey.

The second group, in which less confidence can be placed, consists of individual cities and counties that are frequently parts of labor market areas and for which estimates are derived by applying fixed ratios or other similar techniques. Also included in this group are cities and counties that are not SMSAs, for which independent estimates may be prepared but for which there is no adequate sample-based nonagricultural wage and salary employment estimate.

The third group, in which the least confidence can be placed, consists of estimates for smaller cities and counties and for areas that are parts of other geo-political units.

Nonetheless, the legislative requirements are there and must be met for all areas. The BLS recognizes the difficulties faced by the Federal and State agencies and is attempting to cooperate to the greatest possible extent in providing data and technical advice in order to fulfill the legislative requirements. Therefore, we have decided to treat the data, all of which are produced by the co-operating State agencies according to BLS-prescribed methods, in the following ways.

1. *Data for all States and some 200 large labor market areas.* These are being issued monthly in a BLS press release and published as official BLS data in the Bureau's publication, *Employment and Earnings*.

2. *Data for areas of 50,000 inhabitants or more, other than the 200 large labor market areas.* These are produced monthly and are reviewed regularly for methodological consistency by the BLS. They are made available to other government agencies and the public with explanations as to the data limitations.

3. *Data for areas of smaller size.* These are produced only when required for program implementation. They are checked on a sample basis and only for methodological consistency by the BLS. They are made available to other government agencies and the public, as needed, with explanations of their limitations.

While the data vary in quality, even to some degree within each group, they are the best estimates available for the purposes of place-to-place comparisons of labor market conditions. The BLS has done a great deal since receiving responsibility for the program in 1972 to improve the methods used in preparation of local area estimates and to improve the data available for use in their development. The expansions in the Current Population Survey sample size will help to improve the situation still further. Research is being conducted both in the State employment security agencies and at BLS to improve present methodology. Nonetheless, the capability to turn out highly accurate estimates of employment and unemployment in local areas remains some years away.

Part II: Recent and Prospective Trends

Labor force

Among the most significant long-term social and economic trends documented by the Current Population Survey have been the changes in size and composition of the labor force. An understanding of these developments is extremely useful in the interpretation of the current unemployment situation.

In the past quarter century we have witnessed a dramatic increase in the participation rate for adult women and a slower but steady decline among men. Prior to the Second World War relatively few women worked after marriage. After World War II, it became more common for older married women—those whose children were generally grown—to enter or return to paid employment. Thus, between 1950 and 1960 the greatest gains in labor force participation were among women 45 to 60 years of age. In the next decade, however, the biggest change occurred among women under 45 years. Many women of these ages, constrained by marriage and child responsibilities, did not make the decision to enter the labor force until changing attitudes toward women's role in society became prominent.

Labor force changes among young women have revealed a very pronounced historical change in life styles. While women in both their early and late twenties have increased their labor force participation over the past quarter century, prior to 1970, many women who had worked in their early twenties left the labor market as they got older and assumed child rearing responsibilities. Thus, if we examine the cohort of women who were 20-24 years of age in 1955, we see that their participation declined substantially over the next 5 years. Now, in 1970, not only had there been an increase in the participation of the 20-to-24-year old women but, surprisingly, about the same proportion were in the labor force 5 years later, when, based upon the earlier experience mentioned above, we would have expected many of them to have left. (See table 2.) Contributing to this dramatic shift has been the growing acceptability of working mothers, even for those with pre-school children, as well as lower levels of birth rates. Moreover, desires for a higher standard of living and inflationary pressures have undoubtedly encouraged young wives to remain in the labor force and contribute to family income.

Labor force trends among men have also been affected by socio-economic change, though not as dramatically as for women. At the upper age spectrum, better pension programs, increased Social Security coverage and benefit levels, and the availability of disability coverage have all contributed to earlier retirement ages. Only about a fifth of the men over 65 years of age are currently in the labor force, compared with about two-fifths in 1955. Sizeable declines have also been registered among those 55 to 64

years old. Among men 35 to 54 years of age, the declines have been of exceedingly small magnitude, but they have also been steady throughout the period.

The size of the teenage labor force has grown considerably in the last quarter century, but this has primarily been the result of the increased population due to the post-war baby boom. Teenage labor force participation was on a generally declining course prior to the mid-1960's; this pattern has been generally reversed in the subsequent years.

In addition to these powerful secular trends, cyclical forces are also at work. Generally, the labor force grows at a much slower pace during recessionary periods and grows more vigorously in expansion times. In the past year, early in the recovery, the labor force grew at a faster rate than the long-term trend and much faster than for comparable stages of prior recoveries. This was particularly true for persons in the middle years—25 to 54 years of age.

Because of this rapid growth, civilian labor force participation in the third quarter of 1976 reached an alltime high of 61.8 percent. The rate for adult women was also at a record mark—47.3 percent. The rate for adult men was up from a dip recorded earlier this year but was still well below historical highs.

The overall labor force (a function of both participation and population growth of component demographic groups), is projected to grow over the 1975-80 period at roughly the same pace as it did in the prior 20 years. However, the components of change are projected differently. For example, the youth labor force is estimated to continue to grow in the late seventies, but at a much slower rate relative to the increase posted during the 1955-75 period. The labor force of adult women is estimated to continue to grow more rapidly than that of adult men.

Looking further into the future, to 1990 for example, one sees greater differences. The youth labor force is expected to decline during the 1980's, reflecting the sharp drop in births in the sixties (that continued into the seventies). The adult male and female labor force will continue to grow but at a slower pace, with the female growth rate continuing to surpass the male. Thus, by 1990, adult women are expected to comprise 40 percent of the civilian labor force (up from 35 percent in 1975), while adult men

Table 2. Labor force participation rates for women, in selected time periods

Cohort	20-24 years	25-29 years
Women born 1931-35	46.0 (1955)	35.7 (1960)
Women born 1946-50	57.8 (1970)	57.0 (1975)

will comprise 54 percent (compared with 55 percent in 1975). Underlying the growth in the adult labor force are two countervailing movements.

The prime age labor force is estimated to continue to grow rapidly, reflecting both the aging of the post-World War II baby boom as well as the increasing propensity of adult women to enter the job market. The older labor force is expected to decline during the late 1980's, due in part to the continued trend to early retirements.

On the other hand, for the year or so immediately ahead there is no reason to expect any change in the pattern of growth, with increasing participation rates of young women swelling the labor force totals.

The current and prospective economic situations

The employment situation has changed very little from July to October 1976 with employment, aggregate hours, and unemployment all at high levels. This standstill situation is consistent with the recent small declines in the leading indicator index and the slow growth recently shown by most broad measures of economic activity.

After rising sharply during the first half of 1976, the civilian labor force stood at 95.3 million in October, the same as in July. Similarly, total employment was reported at 87.8 million in July and 87.8 million in October. Payroll employment and aggregate hours have continued to go

up over this period, but manufacturing employment was virtually unchanged and aggregate hours in manufacturing were down (before adjusting for additions to the number of workers on strike). The unemployment rate has fluctuated between 7.8 percent and 7.9 percent after rising sharply from the May low of 7.3 percent. Over the last 3 months, the number of job losers has also been virtually unchanged—at 3.8 million in July and October. The number of new entrants and re-entrants rose slightly over these 3 months, while the number of job leavers showed little change.

During the past few months, our broadest measures of economic activity have moved sluggishly, with small rises in real GNP, industrial production, real personal income (less transfer payments), and real manufacturers' and trade sales. Similarly, the leading indicator index and most of the leading indicators have weakened, particularly the sensitive labor market indicators. Furthermore, some indicators which reflect excesses and imbalances (lagging indicators)—for example, unit labor costs in manufacturing, deflated manufacturing and trade inventories, and consumer installment debt as a percent of personal savings—have recently been rising, though only slightly. In the past, such patterns of sluggishness have sometimes been followed by renewed growth, as in 1951-52, 1956, and 1967. Usually, it has been only after these patterns have extended over a longer period, with deeper declines in the leading indicators and larger rises in measures of excesses and imbalances, that recession has followed.

Part III: The National Committee on Employment and Unemployment Statistics

Congress has passed, and the President has signed into law an Act which provides for the establishment of a National Commission on Employment and Unemployment Statistics (the "Emergency Jobs Programs Extension Act of 1976," PL 94-444). The Commission, following on the "Gordon Committee" appointed by President Kennedy in 1961, will have broad responsibility to examine the concepts, methods, and procedures involved in collecting, analyzing, and presenting the employment and unemployment data and to recommend ways to improve the current system. There is also considerable emphasis on data problems with respect to the occupational outlook. These are very broad terms of reference, and the findings presented by the Commission are expected to be very comprehensive.

The Commission will be composed of nine members appointed by the President, with the consent of the Senate. Seven of the members are to be chosen on the basis of their experience and knowledge of "the procedures, methodology, or use of employment and unemployment statistics and shall be broadly representative of labor, business and finance, education and training, economics and statistics, and State and local government." The other two members

are to be selected from the general public.

There will also be an advisory board of 13 high-level Administration and Congressional officials. Except when six of the nine Commission members vote to hold an executive session for a particular purpose, these persons are to assist and participate in the hearings, deliberations, and other activities of the Commission on an advisory basis.

Any recommendations for change and subsequent implementation, however, are several years away. Each of the members must be chosen, nominated, and confirmed. Then the Commission will have 18 months in which to compose their report. The Secretary of Labor will have 6 months to review the recommendations and report to the Congress on the desirability of their implementation. Then the Secretary will file a final report within 2 years of the submission of the Commission's original report with respect to the actions taken as a result of the Commission's recommendations. While the entire procedure may take a considerable period of time, we nonetheless welcome the establishment of an employment review commission and look forward to working with them, and to their ultimate findings and recommendations.

Representative BOLLING. Among the changes you are considering is an increase in the size of the sample used for the collection of unemployment data. Why is an increase in the sample size needed, and what improvements are you expecting it to have in the unemployment statistics?

Mr. SHISKIN. First of all, the funds for that have already been made available by the Congress. So what remains is for us actually to enlarge the size of the sample. We already enlarged the size of the sample substantially this year, 1976. And the results of that we will be seeing early in 1977. There will be another substantial increase in the size of the sample in 1977. Now, the basic objective of this expansion has been to improve the State and local area estimates of unemployment. as you know, large amounts of money—we estimate between \$8 billion and \$10 billion—were allocated this year, on the basis of the estimates that BLS makes of State and local area unemployment figures. And both the Administration, and especially the Congress, felt that we needed better State and local area data to base those estimates on. And that was the principal purpose of the expansion of the survey sample.

Incidentally, the sample expansion will also improve some of the national estimates. However, that was not the major objective, and the improvement in the national estimates will not be as great as they could have been if we had directed the sample enlargement to that objective. So you must bear in mind that the objective of this expansion is to improve the State and local areas of unemployment.

Representative BOLLING. Thank you very much.

And Mr. Shiskin, I apologize for my departure. But it is essential. Congressman Brown will take over.

Representative BROWN of Michigan [presiding]. Following up, Mr. Shiskin, on your colloquy with the chairman, the increase in the sampling for State and local areas has been almost mandated by the legislation we have been passing which requires those kinds of statistics for distribution and allocation of funds, is that not correct?

Mr. SHISKIN. That is correct.

Representative BROWN of Michigan. So that is the primary reason that you were doing more in the State and local area?

Mr. SHISKIN. That is correct. As a matter of fact, it was the House Appropriations Committee that took the initiative in expanding the BLS budget to improve those data. And 2 years ago, when we did not have a request for more money to improve those data in our budget, the House added \$5 million. And that was supported by the Senate and approved by the Senate. So we do have that \$5 million, and it is now in our base.

Representative BROWN of Michigan. We have already had the first distribution, I think—only one, I believe—under the counter-cyclical money in the Public Works Employment Act.

Mr. SHISKIN. Yes.

Representative BROWN of Michigan. That was about the first time you have had to come down pretty hard on local statistics. Have they appeared to be satisfactorily done as you have been able to observe?

Mr. SHISKIN. Well, they are not as good as the national ones, let me point out. Really the legislation that has been passed, and which requires the use of unemployment figures as a basis for allocating manpower revenue sharing, and other funds, is ahead of our ability to produce good figures in those areas. And we know that, and the Congress knows that. I have said it numerous times.

Let me say that one great advantage in putting the responsibility for these figures on the BLS is that everyone can be assured that, over time, the BLS will improve these data. The BLS is a statistical agency, we have high standards, and we would like to make the local area unemployment figures as good as our national figures, and we will work in that direction. But at the present time it must be stated that data for the smallest areas are not nearly up to the standards we use in appraising our national figures.

Representative Brown of Michigan. If we may shift gears a little bit, Mr. Shiskin, data released this week show larger declines in the index of leading indicators during August and September than have been previously reported. None of this ground apparently was regained in October, when the index remained constant. You have been very much involved in the development of a leading-indicator index for a long time, and are quite an expert on this subject. How do you interpret the data for the last 3 months? Does it foreshadow a new recession? Is the stabilization of the index in October good news or bad?

Mr. SHISKIN. Well, I think that those data must be interpreted to mean that more sluggish behavior is ahead. But, they are not forecasting a recession. What a decline in the leading indicators forecasts—and there is a decline—is weakness ahead, but not necessarily a recession. The declines that you saw in that index in the last 3 months are very much smaller than one would normally have in advance of a recession. So I think the most you can say is that this index signals some weakness ahead.

However, as I have done in earlier meetings of this committee, I want to point out some serious limitations in the index that has been published in recent months. The index of the leading indicators consists of 12 indicators, like new orders, where it is obvious new orders must precede, production and delivery and hours worked per week, where employers tend to make adjustments before they hire or fire employees. And another type of leading indicator is housing starts. And a housing start must take place before a house is completed. So the indicators tend to lead production and employment.

It just so happens that in the current leading indicator index, of the 12 series, 6 are rate of change series, that is, just half of them are based on rates of change.

A rate of change has no trend. The process of computing a rate of change automatically results in a crude trend adjustment.

On the other hand, the real GNP, which I think is the main thing you are trying to forecast, has a substantial upward trend in it. So from the data that were published in the last few months, which had no trend in them, or little trend in them, efforts are being made to forecast data with a trend. I think it is correct for me to say that years ago when I was in the Commerce Department I published the first Government leading indicator index. And I recognized this limitation, and put a trend in this index; I added a trend to it.

Now, the people who are in charge of the leading industry index in Commerce today discovered that there was a problem with the trend adjustment. And I won't go into the technicalities of that problem unless you want me to. And they have been working on revising that trend so that it would be more accurate.

The work is virtually finished. You may have noted in the publication that I am chairman of the Advisory Committee on that index to this day. I am, therefore, in a position to say that later this month the Commerce Department will issue a revised leading indicator index. There will be a whole revised publication with a new leading indicator index. The new leading indicator index will have a trend adjustment of this type, and it will be superior to the one that I had. Once that comes out, if we don't have any other changes, that would show a rise between September and October instead of no change, and it would show smaller declines in the two previous months.

Now, of course there will be other things happening. There will be perhaps other data available, and maybe some revisions in some of the series that they published earlier this week. However, the tendency will be to show smaller rises for the first 2 months of that decline, and a rise instead of a leveling off in the last month.

Representative BROWN of Michigan. And you feel that this new method will be more accurate than the present method?

Mr. SHISKIN. Definitely, because it is not sensible to forecast a series that has a rising trend from a series that has no trend. So in order to make a forecast of cyclical development, which is what I am talking about, you should equalize the trend. And that is what is going to be done here in a few weeks.

Representative BROWN of Michigan. I hate to keep using his name in vain, but let's go back to Mr. Greenspan's statement. In making his statement about the economic weakness expected, in his expectations was he using the old or new methods?

Mr. SHISKIN. He was using the old method on the leading index.

Representative BROWN of Michigan. The old method?

Mr. SHISKIN. I believe so. However, in fairness to Mr. Greenspan, I think we should also point out, all the other evidences of weaknesses that we have seen in the last few months. For real GNP, the rate of growth has been declining. What people have seen up to this morning is an employment level which has not changed for 3 or 4 months, rising unemployment, sluggish retail sales, and many other signs like that. And many of us were describing the period as a pause, as a lull in the expansion. I did say last month, as I recall it, that there have been such lulls in the past on numerous occasions. And the lulls have sometimes been followed by renewed growth. On the other hand, on other occasions the pattern that has just been described was continued for some more months, and eventually there was a recession. So it was a tossup before the new employment figures came out and probably still is. We can be hopeful that the present improvement in the employment indicators will continue for a few months, and will be accompanied by improvements in other sectors of the economy. I think it is premature to forecast general improvement right now on one months data on employment, especially with the troublesome, difficult problem of unemployment.

Representative BROWN of Michigan. If we are going to give a name to what we are describing as far as the economy today, we sometime back referred to it as a pause. Would you say that now we are seeing a more extended pause than we had anticipated?

Mr. SHISKIN. I wouldn't change the description on the basis of the figures that we released today. I think it would be premature. Now, next month if you see another rise in hours aggregate and employment—and these are accompanied by rises in industrial production and some of our other indicators—I think many forecasters will change their forecasts upward.

Representative BROWN of Michigan. May I rephrase what you are saying. You are saying that regardless of what unemployment does next month, that the pattern established this month of greater aggregate hours, and other indicators, is good for the economy, and its recovery, since the unemployment figure is so related to entrants into the labor force rather than those employed?

Mr. SHISKIN. Yes. But let me now amplify that. I think you have to distinguish the real growth as measured by GNP and the changes in the unemployment rate. Those are both very important. And I certainly wouldn't downgrade either one of them. Usually the unemployment rate is very heavily dependent upon real GNP growth, and I think that is still true. I think, however, that we now have to start thinking in terms of the impact on the unemployment figures of the exceptionally rapid growth in the labor force. On the other hand, I can see a situation in which both unemployment and real GNP continue to grow.

Representative BROWN of Michigan. It just happened to strike me, when we were talking about youth unemployment, I have seen several articles where college enrollments are down substantially this fall. Do you see any correlating of college enrollments and entrance into the labor force of college age people?

Mr. SHISKIN. May I turn that question over to Mr. Stein.

Mr. STEIN. Mr. Chairman, we do make a special study once a year in the month of October where we get a measurement of people who are in school and the number who have completed school and dropped out, and are able to estimate how many have joined the labor force. The October 1976 figures aren't ready yet, but we will have them available shortly.

Representative BROWN of Michigan. I presume that you will be reporting to us?

Mr. STEIN. We could include the special report for that month.

Representative BROWN of Michigan. I think it would be an interesting report.

Another thing that I am curious about. The steel companies have announced a 6-percent increase in their prices of flat rolled steel. There has always been discussion that even though there has been a 6-percent increase, the actual effective price to the purchaser will be discounted or can be. Which figures do you use in arriving at your price index?

Mr. SHISKIN. May I at this time turn to Mr. Layng?

Mr. LAYNG. The price we attempt to obtain is the discounted price. And we normally obtain what could be characterized as a normal discount. When there is unusual discounting, either on the up side or

the down side, they are more difficult to capture, and we don't feel that we captured them as well. Steel is one of the areas in the index that is probably the most difficult, and the weakest with respect to that particular issue, and one which we are working on trying to determine ways to get that information. It is not easy to get. I would say to the extent that there is discounting going on, and it is much larger than normal, we would not capture it all.

Representative BROWN of Michigan. So you attempt to get the actual purchase price unless there is a distortion which is accounted for by other than normal economic reasons?

Mr. LAYNG. We ask for the actual price that they sell the steel to consumers, including all discounts. We don't feel we always get reported to us discounting which takes place in the field on behalf of individual salesmen, for example. We don't capture that as well. If the sales force have some flexibility that would be a difficult thing to capture, exactly how much more additional discounting they would be doing. That is difficult. If it is a normal discount and the company makes a policy decision that we are going to cut steel prices by 10 percent, we would capture that. But if they say, you can cut them from 10 and 20 percent, and it depends on the individual customer you are dealing with how much you cut them, that is more difficult.

Representative BROWN of Michigan. Mr. Shiskin, earlier this year we discussed efforts you were undertaking to produce, shall we say, "fleshed out" figures as far as the statistics are concerned and to really analyze a little better the cost of the unemployed. Do you remember that conversation? You said you thought you were going to be able to describe better for us the circumstances of the individual who was unemployed.

Mr. SHISKIN. Yes.

Representative BROWN of Michigan. When do you expect that new analysis will be incorporated in your report on a monthly basis?

Mr. SHISKIN. Mr. Stein, please.

Mr. STEIN. Congressman Brown, we are looking toward early next year, perhaps February or March. We have been collecting now for the past 15 or 16 months information on the family situation of each unemployed person, that is to say, how many persons are in a family, whether another person or persons is employed, whether there is anyone else in the labor force, and so on. And it is kind of a difficult thing to portray in statistical tables. But we first of all wanted to be sure of the reliability of the information we are getting. And I think we would be in a position in a few months to begin to display that kind of information at least quarterly.

Representative BROWN of Michigan. I think it was our thought that in doing that you would be able to really reflect a little better the economic hardship experienced by a household.

Mr. STEIN. I think that is right. We would be able to indicate how many people were secondary earners, with a full-time worker in the family, how many household situations existed where there was an unemployed person and nobody else working, and so on.

Representative BROWN of Michigan. And you think it will be February or March when we will be getting those?

Mr. STEIN. Approximately.

Representative BROWN of Michigan. If there is any "filling in" you want to do, Mr. Shiskin, it would be appreciated. But let's see if I can summarize the report that you have made to us today. One, we are disturbed, of course, about the increase in unemployment. However, it should be tempered by a recognition that a substantial number entered the labor force. And we have now the greatest number employed.

Don't we have about the highest unemployment also?

Mr. SHISKIN. The highest unemployment rate since last December, and before that the peak in May 1975.

Representative BROWN of Michigan. In analyzing the employment rate of those employed now, we have found we have a greater improvement in the aggregate number of hours worked, which is a plus sign.

Mr. SHISKIN. Right.

Representative BROWN of Michigan. And we see economic indicators that do not look too good. However, under the improved indexes that you are going to come out with next month, probably those indicators will be somewhat adjusted up more favorably.

Mr. SHISKIN. You are referring to the leading indicators?

Representative BROWN of Michigan. Yes.

Mr. SHISKIN. Yes. The new data will be issued by the Commerce Department later this month. And I might say, just to keep the lines of authority straight, that I make this comment because I happen to be chairman of the committee that provides within the Government oversight on that activity.

Representative BROWN of Michigan. Mr. Shiskin, I appreciate very much your being with us this morning. I am sorry that Congressman Bolling couldn't stay with us a little longer to maybe balance out our colloquy. But it is always a pleasure having you with us.

Is there anything else that we haven't touched upon that you think we should?

Mr. SHISKIN. Thank you, sir. I think I have said at least as much as I know.

Representative BROWN of Michigan. Thank you again.

[Whereupon, at 12:12 p.m., the committee adjourned, subject to the call of the Chair.]

[The following questions and answers were subsequently supplied for the record:]

RESPONSE OF HON. JULIUS SHISKIN TO ADDITIONAL WRITTEN QUESTIONS POSED BY REPRESENTATIVE BOLLING

*Question 1. Wages—Union and non-Union—*The employment cost index for the third quarter was released by the BLS earlier this week. This relatively new index attempts to measure changes in wage rates for a standard "package" of labor services. Conceptually, it is the wage equivalent of the consumer price index. This index shows that the rate of wage increase dropped in the third quarter. Over the year ending in September wage costs rose 7.2 percent. This seems fairly moderate, given recent price inflation, and should contribute to diminution of inflation. Would you agree? I am struck, however, by the additional information that union wages rose 8.5 percent while non-union wages rose only 6.5 percent. Are we developing a widening spread between union and non-union wages? Is this likely to continue?

Answer. Virtually all measures of wage change, including the Employment Cost Index, generally indicate relatively moderate behavior over the last 12 months (although the 7.2 percent increase shown by the ECI is high by historical

standards). A continuation of such behavior should reduce inflationary pressures from this source.

With respect to the spread between union and nonunion wage increases over the 12-month period, the following points should be noted:

The measure of change is affected not only by the size of individual increases but by the number of workers receiving increases. The past year was a heavy bargaining year, as will be 1977.

There is generally a lag over the cycle between changes in wages under collective bargaining contracts, many of which are for three years. Normally, non-union workers' wages respond more quickly to changes in prices and employment.

Given these conditions, and the relatively short period over which we have the ECI, it is too early to say that a trend in the spread is developing.

Question 2. As you are well aware, the layoff rate has steadily increased since July. Ford and AMC just announced more layoffs yesterday. Has the BLS done any studies detailing the effect that layoffs in key industries, such as the automobile industry, have on the overall level of employment and unemployment? Obviously the effect would vary depending upon the industry where the initial layoff took place but has the BLS done any industry studies to determine how soon ripple effects are created and how great they might be?

Answer. We have not done any specific studies detailing the effect that layoffs in key industries, such as the automobile industry, have on the overall level of employment and unemployment, nor have we made any industry studies to determine how soon ripple effects are created and how great they might be.

However, there is an article titled "The Plunge of Employment During the Recent Recession" by Robert W. Bednarzik which appears in the December 1975 issue of the Monthly Labor Review that may be useful. In this article, there is some discussion of industries whose employment is most likely affected by demand changes in the housing and automobile industries, and the sensitivity of these two industries to demand. A copy of that article follows.

A 7-month drop in employment during the downturn was the most drastic since World War II, with declines generally larger and more pervasive for men than for women

ROBERT W. BEDNARZIK

The plunge of employment during the recent recession

IN JUST 7 MONTHS from September 1974, nonagricultural payroll employment dropped from a peak in its most rapid descent since the post-World War II readjustment in 1945. The decline totaled 2.4 million, with all of the reduction occurring in the private sector of the economy.¹ Even prior to this dramatic decline, nonagricultural employment growth had been very sluggish in the aftermath of the oil embargo of late 1973.²

A slowdown in the building and auto industries—where continued inflationary pressures and possible energy shortages affected consumers' perception of the market—produced widespread job curtailments, especially in durable goods manufacturing industries, which accounted for over 50 percent of the employment decline between September 1974 and April 1975. Nondurables were also hard hit, as a general weakening in demand caused substantial inventory adjustments that eventually led to sizable job reductions, particularly in the textile and apparel fields. Only State and local governments exhibited significant growth through the period, partly a reflection of the federally funded antirecessionary program of public service jobs.

Employment declines among men were generally larger and more pervasive than among women. In manufacturing industries, while the absolute decline was greater for men, proportionately more jobs held by women than by men were cut back during that 7-month span when total employment was moving sharply downward.

The focus of this article will be the sudden and pronounced employment plunge, which began in late 1974 and continued into the spring of 1975—specifically, the period from September through April, which was the largest consecutive monthly

drop since 1945. It is recognized, of course, that employment declines in some industries—especially in manufacturing and construction, whose cyclical movements will receive particular emphasis—initially began at an earlier date and, similarly, that employment recovery was not clearly visible in some industries even by early autumn of 1975.

Industrial developments

The private sector of the economy, which employs over 80 percent of nonagricultural payroll workers, bore the brunt of the 1974–75 cutbacks in nonagricultural payroll employment. From the September 1974 peak to April 1975, private payroll jobs decreased by 2.8 million, while the public sector had a gain of 400,000. (See table 1.) Virtually all private industries were affected adversely by the economic contraction, with the goods-producing sector clearly the hardest hit in terms of job cutbacks. Not unexpectedly, the largest absolute employment drop occurred in manufacturing, because of its size and cyclical sensitivities, but there was also a very sizable, and percentagewise the largest, reduction in contract construction. The degree to which major nonfarm industries were affected by the decline is shown in chart 1. Mining employment was not heavily affected by economic developments; in fact, the revitalized coal mining segment has been enjoying a boom in demand that stems, in large part, from energy shortages and the currently high and rising oil prices.

The industries experiencing the severest job reduction during the 1974–75 downturn were those directly engaged in marketing high-priced consumer products and, consequently, requiring relatively long-term financial commitments. Among them were general building contractors, and transportation and electrical equipment industries. Substantial cutbacks in jobs occurred also in industries such as blast

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furnace and steel mill products, fabricated metals, and railroad and truck transportation, which are related—most of them indirectly—to both car manufacturing and housing construction. These two groups of industries—directly or indirectly associated with marketing houses and automobiles—showed a combined drop in jobs of slightly over 1 million between September 1974 and April 1975. (See table 2.) Although they make up somewhat less than one-eighth of the private sector's employment, these industries accounted for nearly three-eighths of the decline in the sector's industrial jobs. These industries, and others likely to be responsive to demand changes in the automobile and housing industries, are shown in exhibit 1.

Housing. As the money market tightened, the sharp constriction in residential housing brought on a persistent decline in construction employment during the spring of 1974. By December, housing starts were at an annual rate of 880,000 (a 30-year low), and by April 1975, the employment in the industry was down 16 percent to 3.4 million from a February 1974 high of 4.1 million. The employment effect of the change in demand for housing (and for automobiles as well) was pervasive.

The estimated sensitivity ratio—a measure of the effect of demand changes in one industry on employment in that industry and other related industries—for housing is roughly 2.5 to 1. This means that for every job in the housing industry, there are 1.5 jobs

Table 1. Changes in the number of nonagricultural employees for the periods indicated, by industry, seasonally adjusted
(Numbers in thousands)

Industry division and group	Change from September 1974 to April 1975		Change from high to low month			
	Number	Percent	Number	Percent	High	Low
Total.....	-2,368	-3.0	-2,487	-3.0	Sept. 1974	June 1975
Goods producing.....	-2,386	-9.7	-2,893	-11.5	Dec. 1973	July 1975
Mining.....	24	3.4	(¹)	(¹)		
Contract construction.....	-461	-11.8	-724	-17.6	Feb. 1974	July 1975
Manufacturing.....	-1,949	-9.7	-2,283	-11.2	Dec. 1973	July 1975
Durable goods.....	-1,306	-10.9	-1,632	-13.5	Dec. 1973	July 1975
Ordinance and accessories.....	-2	-1.1	-26	-13.7	Feb. 1973	Sept. 1975*
Lumber and wood products.....	-82	-13.3	-116	-17.8	Mar. 1974	Apr. 1975
Furniture and fixtures.....	-82	-15.8	-104	-19.3	Nov. 1973	Mar. 1975
Stone, clay, and glass products.....	-78	-11.4	-105	-14.8	Dec. 1973	July 1975
Primary metal industries.....	-163	-12.1	-227	-16.7	Oct. 1973	July 1975
Fabricated metal products.....	-174	-11.6	-235	-15.3	Dec. 1973	July 1975
Machinery, except electrical.....	-144	-6.4	-244	-10.8	Oct. 1974	Aug. 1975
Electrical equipment.....	-277	-13.1	-371	-17.8	Dec. 1973	July 1975
Transportation equipment.....	-219	-11.8	-316	-16.5	Aug. 1973	Feb. 1975
Instruments and related products.....	-35	-6.7	-46	-8.8	June 1974	Aug. 1975
Miscellaneous manufacturing.....	-50	-11.2	-61	-13.3	Jan. 1974	Apr. 1975
Nondurable goods.....	-643	-7.9	-779	-9.4	Jan. 1974	Mar. 1975
Food and kindred products.....	-43	-2.5	-79	-4.5	Mar. 1974	Mar. 1975
Tobacco manufactures.....	-5	-6.3	-7	-8.5	Nov. 1973	Apr. 1975
Textile mill products.....	-124	-12.5	-185	-18.0	Mar. 1973	Mar. 1975
Apparel and other textile products.....	-148	-11.1	-238	-16.8	Apr. 1973	Mar. 1975
Paper and allied products.....	-77	-10.9	-84	-11.8	Nov. 1974	June 1975
Printing and publishing.....	-32	-2.9	-48	-4.3	Sept. 1974	July 1975
Chemicals and allied products.....	-64	-6.0	-68	-6.4	Sept. 1974	July 1975
Petroleum and coal products.....	-5	-2.5	(¹)	(¹)		
Rubber and plastics products.....	-116	-17.0	-125	-18.1	Jan. 1974	Mar. 1975
Leather and leather products.....	-29	-10.5	-50	-16.9	Jan. 1973	Mar. 1975
Service-producing.....	18	(¹)	(¹)	(¹)		
Transportation and public utilities.....	-175	-3.7	-269	-5.7	Feb. 1974	Sept. 1975*
Wholesale and retail trade.....	-296	-1.7	-307	-1.8	Oct. 1974	Apr. 1975
Wholesale trade.....	-63	-1.5	-93	-2.2	Oct. 1974	June 1975
Retail trade.....	-233	-1.8	-237	-1.8	Oct. 1974	Apr. 1975
Finance, insurance, and real estate.....	-15	-4	-27	-6	Dec. 1974	June 1975
Services.....	111	.8	(¹)	(¹)		
Government.....	393	2.7	(¹)	(¹)		
Federal.....	-15	-5	(¹)	(¹)		
State and local.....	408	3.5	(¹)	(¹)		

¹ Not applicable.

* Still declining as of this date.

[†] Less than 0.05 percent.

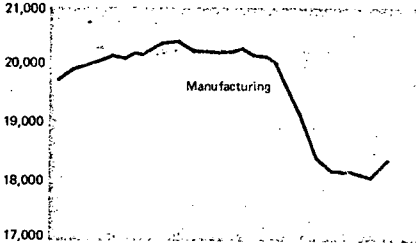
NOTE: August and September 1975 data are preliminary.

THE PLUNGE OF EMPLOYMENT IN RECESSION

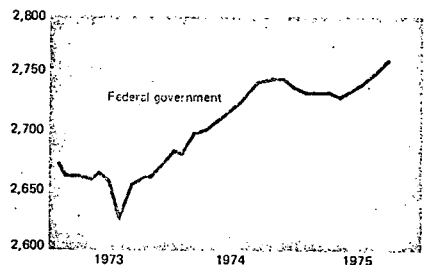
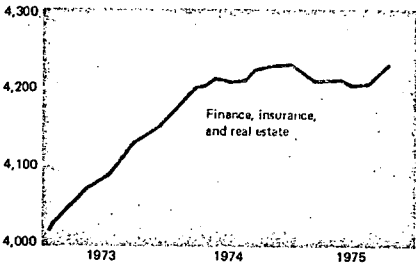
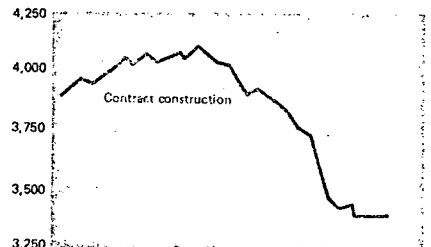
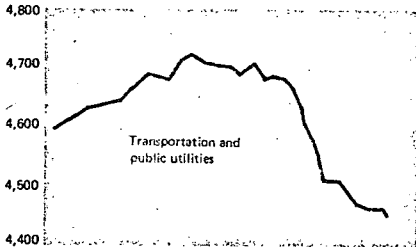
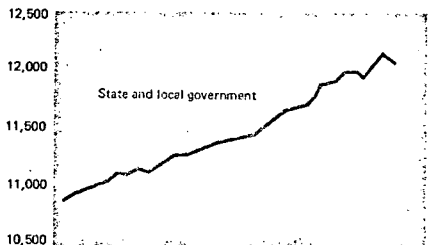
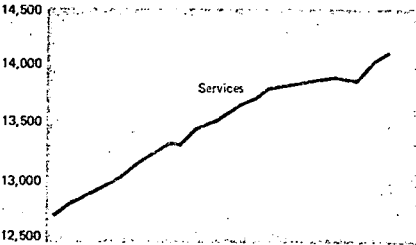
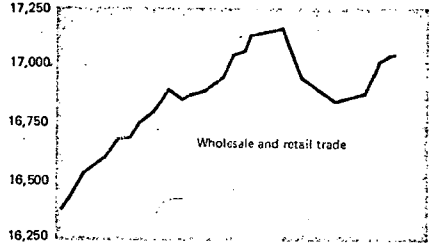
Chart 1.

Nonfarm payroll jobs, by industry, seasonally adjusted, 1973-75

Employment in thousands



Employment in thousands



Note: Data for August and September 1975 are preliminary.

Table 2. Payroll employment changes in selected industries during the 1974-75 economic downturn, seasonally adjusted

[Numbers in thousands]

SIC	Industry	Sep- tember 1974	April 1975	Change	
				Num- ber	Per- cent
15	General building contractors ¹	1,200	1,048	-152	-12.7
34	Fabricated metals.....	1,506	1,332	-174	-11.6
37	Transportation equipment.....	1,850	1,631	-219	-11.8
371	Motor vehicles and equipment ¹	906	759	-147	-16.2
36	Electrical equipment and supplies.....	2,023	1,746	-277	-13.7
33	Primary metal industries.....	1,352	1,189	-163	-12.1
331	Blast furnace and steel mill products ¹	614	554	-60	-9.8
40, 42	Railroad and truck transportation ¹	1,760	1,620	-140	-8.0

¹ Seasonally adjusted figures not regularly published.

elsewhere in the economy in related industries, or a total of 2.5 jobs affected.³ A partial list of businesses which are likely to be adversely affected by a drop in the housing market—and which, in fact, were so affected during this recession—include: industries engaged in the manufacture and sale of furniture, lumber, cement and concrete products, heating apparatus, and plumbing fixtures; firms involved in the production and selling of appliances, rugs, paint, wallpaper, and gardening equipment; and agencies dealing with credit, real estate, and appraisal matters.

Automobiles. One of the major contributory factors underlying the widespread cutbacks in payroll jobs was the weakness in automobile sales. This generated reductions throughout the durable goods sector where job declines occurred in every major manufacturing group. These effects carried over into the nondurable goods sector, as employment declines were visible in the auto-supplier industries such as rubber and plastics and textiles. The broad employment effect of a slump in the auto industry is evidenced by its fairly high sensitivity ratio—2.75 to 1. Other industries greatly influenced by the auto industry are those engaged in the production of pistons and valves, carburetors, metal forgings and stampings, auto maintenance equipment, wholesale and retail parts distributors, and gasoline service and repair stations. Smaller employment effects may be visible in instrument and electrical equipment industries as well as in credit and auto-leasing agencies.

Underscoring the slowdown in the automobile and housing markets, prolonged and sizable employment

declines occurred in both the construction and manufacturing industries. Cutbacks in durable goods industries, which accounted for roughly two-thirds of the reduction of factory jobs, totaled 1.3 million over the period of September 1974 to April 1975; in nondurables, payroll jobs were off 640,000.

Historically, the service-producing sector has been less affected by economic declines, as such interruptions have typically reduced the sector's growth rate but not employment.⁴ Such behavior continued in the current downturn, as total employment in the sector neither grew appreciably nor declined over the September 1974-April 1975 period. Job cutbacks, however, were still clearly visible within the service-producing sector, although not very severe. Jobs in transportation and public utilities—primarily in railroad and trucking and warehousing—and retail trade were off 175,000 and 230,000, respectively. These cutbacks reflected the pervasive impact of a substantial decline in consumer purchasing.

The only major industrial groups, besides government, to demonstrate a substantial growth over the September 1974-April 1975 period were medical and other health and educational services. Federal programs in the form of emergency job programs were instrumental in the rise in employment in State and local government—from 11.6 million in Septem-

Exhibit 1. Industries whose employment is most likely affected by demand changes in housing and automobile industries, and the sensitivity of these 2 industries to demand

Industry and its sensitivity ratio	Related industries
Housing (Sensitivity ratio=2.5)	Blast furnaces and steel mill products Fabricated metal products Railroad and truck transportation Lumber and wood products Stone, clay, and glass products Furniture and fixtures Finance, insurance, and real estate Wholesale and retail trade Miscellaneous business services Miscellaneous professional services
Automobiles (Sensitivity ratio=2.75)	Blast furnaces and steel mill products Fabricated metal products Railroad and truck transportation Machinery, except electrical Textile mill products Wholesale and retail trade Miscellaneous business services Automobile repair services

SOURCE: The Structure of the U.S. Economy in 1980 and 1985, Bulletin 1831 (Bureau of Labor Statistics, 1975), table B-16. The estimated sensitivity ratios here were developed from the input-output matrix of this table, which illustrates the extent of inter-industry relationships among 129 industries. (A sensitivity ratio is an industry's direct employment per billion dollars of demand divided by total—direct and indirect—employment per billion dollars.)

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ber 1974 to 12.0 million in April 1975. Federal employment itself declined slightly over this period.

Effect on men and women

The industrial employment statistics for men and women illustrate similar patterns over this period. Both groups lost jobs in the private sector but gained them, albeit to a lesser degree, in the public sector. Overall, the resulting net decline in payroll jobs for men was larger, both absolutely and proportionally, than that for women. (Data for women were seasonally adjusted especially for this study.) These employment changes, however, mask some interesting developments in the extent of male-female differential in job reductions by industry. For example, the proportional decline in factory jobs was greater for women (12.1 percent) than for men (8.7 percent). (See table 3.)

The staffing of payroll jobs in major industry groups with men and women (each as percent of an industry's total employment) in September 1974 was as follows:

	<i>Men</i>	<i>Women</i>
Mining	93.5	6.5
Contract construction	93.9	6.1
Manufacturing	70.9	29.1
Durable goods	78.0	22.0
Nondurable goods	60.6	39.4
Transportation and public utilities ..	78.6	21.4
Wholesale and retail trade	58.6	41.4
Wholesale trade	76.2	23.8
Retail trade	52.9	47.1
Finance, insurance, and real estate ..	46.4	53.6
Services	45.4	54.6
Government	55.3	44.7
Federal	70.5	29.5
State and local	51.6	48.4

Clearly, men were in the majority in the goods-producing industries—most notably in construction and mining. Women have made many advances into industries and occupations previously thought to be all male and have dramatically increased their participation in the labor force in recent years. However, only the finance, insurance, and real estate and service industries employ more women than men.

Men. Three out of every four nonagricultural payroll jobs for men cut back during the recent recession were in the goods-producing sector of the economy. Industries traditionally staffed by men were hit espe-

cially hard. This was particularly evident in construction, the industry with the largest proportion of male employees.

Moreover, men employed in the private service-producing sector were not left unscathed by the economic downturn, as nearly 400,000 of them lost jobs in this sector between September 1974 and April 1975; in contrast, there was a marginal increase over this period in the number of women employed in this sector. This differential impact by sex in the private services resulted, in large part, from the substantial job cutback in the predominantly male transportation and public utilities industry, where the proportional decline for men was more than twice that for women.

Women. Although the vast majority of women are employed in the private service-producing sector, the bulk of their job losses in private industries during the 1974-75 economic slide was in the goods-producing sector. The percentage decline for women in both durable and nondurable manufacturing sectors was higher than for men.

It was in the durables sector, not in the industries traditionally employing women, such as apparel and leather, that women have made recent employment gains. For example, over the 4½-year period between the September 1974 peak of payroll jobs and their last previous peak, factory jobs of women increased by 240,000, while those of women in apparel and leather declined. (Factory jobs of men during this period also declined.) The preponderance of the increases for women occurred in durable goods industries and in the rubber and plastic industry (nondurable). It was in these same industries that the largest percentage of drops in employment of women occurred during the recession. It is, therefore, probable that such cutbacks were a reflection of the seniority practice of most factory employers.⁹

All manufacturing jobs held by women dropped 710,000 to 5.1 million from September 1974 to April 1975, with large percentage cutbacks occurring in furniture and fixtures, and rubber and plastics—the same industries that exhibited rapid growth during the 4½-year peak-to-peak period in payroll employment. Sizable percentage reductions also occurred in fabricated metals and electrical equipment. Female employment in the service-producing sector—including both public and private—managed to post a slight gain of about 170,000 during the 1974-75

Table 3. Men and women employees on nonagricultural payrolls, by industry, seasonally adjusted, September 1974-April 1975

(Numbers in thousands)

Industry	Men				Women			
	September 1974	April 1975	Change		September 1974	April 1975	Change	
			Number	Percent			Number	Percent
Total, nonagricultural employment.....	48,434	46,612	-1,822	-3.8	30,396	29,850	-546	-1.8
Total private.....	40,530	38,471	-2,059	-5.1	24,091	23,259	-702	-2.9
Goods-producing.....	18,584	16,912	-1,672	-9.0	6,130	5,416	-714	-11.6
Mining.....	662	681	19	2.9	46	51	5	10.9
Contract construction.....	3,664	3,212	-452	-12.3	238	229	-9	-3.8
Manufacturing.....	14,258	13,019	-1,239	-8.7	5,846	5,136	-710	-12.1
Durable goods.....	9,130	8,398	-912	-9.8	2,633	2,239	-394	-15.0
Nondurable goods.....	4,948	4,621	-327	-6.6	3,213	2,897	-316	-9.8
Service-producing.....	29,850	29,700	-150	-0.5	24,266	24,434	168	0.7
Private service-producing.....	21,946	21,559	-387	-1.8	17,871	17,883	12	0.1
Transportation and public utilities.....	3,682	3,522	-160	-4.3	1,001	995	-6	-0.6
Wholesale and retail trade.....	10,052	9,874	-178	-1.8	7,091	6,913	-178	-2.5
Wholesale trade.....	3,232	3,176	-56	-1.7	1,007	1,000	-7	-0.7
Retail trade.....	6,820	6,698	-122	-1.8	6,084	5,973	-111	-1.8
Finance, insurance, and real estate.....	1,961	1,929	-32	-1.6	2,263	2,280	17	0.8
Services.....	6,251	6,234	-17	-0.3	7,516	7,644	128	1.7
Government.....	7,904	8,141	237	3.0	6,355	6,551	196	3.1
Federal.....	1,937	1,919	-18	-0.9	899	812	-87	-9.6
State and local.....	5,967	6,222	255	4.3	5,595	5,739	153	2.7

downturn. But even this advance was considerably below the average job gains achieved by women in this sector in recent years.

Aggregate weekly hours

At the outset of a slackening in the economy, employers generally shorten the workweek before resorting to job cuts. As changes in product demand continue, however, employers begin to alter their employment levels to better adjust to the deteriorating economic situation. A joint measure of the cutback in both hours and employment provides more insight into the severity of a particular recessionary period. One such measure—calculated specifically for this study—is illustrated in table 4, which shows the drop in aggregate weekly hours of production workers in the manufacturing and construction industries in the three *deepest* economic declines of the postwar period—1948-49, 1957-58, and 1974-75.

The total drop in aggregate weekly hours resulting from employment declines in the manufacturing and construction industries between September 1974 and April 1975 was 71 and 16 million, respectively. These were the most severe of any of the three economic interruptions here considered. Interestingly, aggregate weekly hours lost because of cutbacks in

Table 4. Peak-to-peak decline in aggregate weekly hours of production workers in manufacturing and contract construction in the 3 severest post-World War II recessions

(Aggregate hours in millions, seasonally adjusted)

Recession	Manufacturing		Contract construction	
	Hours	Percent of total effect	Hours	Percent of total effect
1948-49:				
Total effect.....	63,339	100.0	2,193	100.0
Employment ¹	59,939	94.6	1,617	73.7
Hours ²	3,851	6.1	589	26.9
Residual ³	-451	-0.7	-13	-0.6
1957-58:				
Total effect.....	68,814	100.0	7,432	100.0
Employment ¹	54,645	79.4	6,026	81.1
Hours ²	15,816	23.0	1,503	20.2
Residual ³	-1,648	-2.4	-97	-1.3
1974-75 ⁴ :				
Total effect.....	81,672	100.0	16,020	100.0
Employment ¹	71,331	87.4	16,255	101.7
Hours ²	11,722	14.4	-319	-2.0
Residual ³	-1,431	-1.8	44	0.3

¹ Employment effect (EE) is equal to the change in employment (ΔE) from peak to trough times the number of hours at peak. ($EE = \Delta E \times \text{Hours}$)

² Hours effect (HE) is equal to the change in the number of hours (ΔH) from peak to trough times employment at the peak. ($HE = \Delta H \times \text{Employment}$)

³ A small combination of employment and hours effect that cannot be allocated.

⁴ Defined as covering the period of most rapid employment decline, September 1974 to April 1975.

NOTE: The 1948-49 and 1957-58 recessions are defined by the National Bureau of Economic Research as follows: November 1948 to October 1949, and August 1957 to April 1958.

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the workweek alone over the 1974-75 period were not as large as in the 1957-58 recession, which emphasizes the depth of the employment effect. Employers in 1974-75 were more inclined to eliminate jobs rather than shorten the workweek in adjusting their production levels to shifts in demand. This was particularly true in the construction industry, where job cutbacks accounted for all the decline in worker hours over the period under study. In general, average weekly hours in contract construction do not respond as readily to cyclical forces as do the hours in manufacturing.

Recent developments

Signs that employment might be entering the recovery phase were clearly visible by late summer of 1975, with job gains occurring in all major industrial groups except mining. After the sharp September 1974-April 1975 decline, the employment level began to settle, indicating that the wave of job reductions had finally subsided. After showing very little

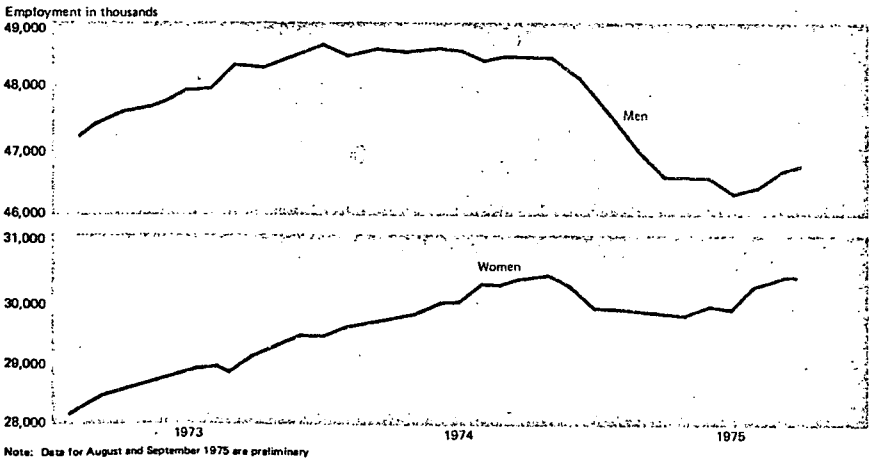
change in May and June, employment posted gains of nearly 900,000 in the subsequent 3 months. Furthermore, by spring, the factory workweek, traditionally regarded as a significant "leading indicator," had halted its rapid contraction and began moving upward. Moreover, the layoff rate in manufacturing has been dropping sharply since the beginning of 1975, while the accession rate, which reflects both new hires and recalls from layoff, turned around at the beginning of the year and has since risen substantially.⁶

Employment declines in the manufacturing and construction industries had finally stopped by July. In the service-producing sector, employment exhibited definite resumption of growth, rising 520,000 over the June-September period.

A positive development in the factory job picture in recent months has been a pickup in automobile and residential housing sales. The auto industry in particular has traditionally been a recovery segment of the economy. At present, however, it is experiencing structural problems—coping with the possi-

Chart 2.

Numbers of men and women on nonfarm payrolls, seasonally adjusted, 1973-75



bility of large-scale design changes—as a result of high and rising oil prices and increased foreign competition, which may reduce its potential for leading a revival. Nevertheless, recent increases in demand for goods and services have resulted in an expansion in the number of payroll jobs in the economy. Moreover, the economically depressed private sector of the economy has posted a job gain of 720,000 since a low in June. Finally, it appears as though the slide in durable goods employment has terminated, as it had in nondurables, where payroll jobs have been rising since March.

Employment increases in the service-producing sector were led by gains in services, retail trade, and State and local government. Employment in State and local government, however, faltered somewhat in September 1975, primarily because of the end of the federally funded summer youth jobs program⁷ and teachers' strikes.⁸ In retail trade, which has always been a large user of part-time help, employment has been on the rise since May, most likely in response to the increase in consumer spending (per-

sonal consumption expenditures have been rising since the first quarter of 1975):

Sex composition of recent employment gains. Given the uneven pattern of employment changes by industry, it is not surprising that some labor force groups experienced greater difficulties than others. The payroll employment situation for men, for example, turned upward in July, and by September, employment had grown by 400,000. On the other hand, the job situation for women had begun to show improvement earlier, as 580,000 more women held jobs in September than at the recessionary low in March. (See chart 2.)

The turnaround in automobile and other retail sales is reflected in job increases for both men and women in these areas. Women, in addition, registered prominent employment gains in food, apparel, and service industries over the April–September period. The job picture for men appeared brighter in homebuilding related industries such as lumber and wood products, and stone, clay, and glass. □

FOOTNOTES

¹ Although June 1975 was the low point of the total of payroll jobs, April was selected as the month for primary analytical concentration because it was the last month of a large, prolonged employment drop.

² The employment and hours data were collected through the monthly survey of business establishments. Seasonally adjusted data are used throughout this report. For a detailed explanation and discussion of establishment definitions and concepts, see *BLS Handbook of Methods for Surveys and Studies*, Bulletin 1711 (Bureau of Labor Statistics, 1971), ch. 2.

³ In the matrix used for the calculation of the sensitivity ratios shown here, housing (termed new residential buildings) includes parts of Standard Industrial Classification (SIC) codes 15 (Building construction—general contractors and operative builders), 16 (Construction other than building construction—general contractors), and 17 (Construction—special trade contractors); automobiles (termed motor vehicles) corresponds to SIC code 371 (Motor vehicles and motor vehicle equipment).

The limitations of using the input-output matrix to measure the impact of expenditures for goods and services on employment include the following: (1) the interindustry employment relationships are based on aggregation of all production activities into more than 80 industry groups, each of which may cover a broad range of products or services; (2) the matrix reflects interindustry relationships and employment conversion factors (that reflect the pro-

ductivity levels) of 1970; (3) the matrix assumes that increased demand and, therefore, increased output will require proportionate increases in employment—that is to say, increased output will not be met by an increase in productivity or hours worked; and (4) the matrix pertains more to long-term effects of interindustry relationships than to those of a short-term nature.

⁴ The only exception was the Great Depression, when service-producing industries' employment dropped by 18.2 percent, or 3.3 million between 1929 and 1933.

⁵ For a more general discussion of the effect of the recession on men and women, see *Job loss and other factors behind the recent increase in unemployment*, Report 446 (Bureau of Labor Statistics, 1975).

This study, utilizing data from the *Current Population Survey*, found there was a greater percentage increase in job loss among female than male blue-collar workers between the first quarters of 1974 and 1975. Explanations offered for this phenomenon included the relative lack of seniority for women employed as blue-collar workers in industries other than textiles and apparel.

⁶ For a more detailed discussion of labor turnover measures, see *BLS Handbook of Methods*, ch. 3.

⁷ *Summer job situation for youth, 1975*, Report 447 (Bureau of Labor Statistics, 1975).

⁸ Strikers are not counted in the establishment survey as employed.