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EMPLOYMENT-UNEMPLOYMENT

HEARINGS

BEFORE THE

JOINT ECONOMIC COMMITTEE

CONGRESS OF THE UNITED STATES

NINETY-FIFTH CONGRESS

FIRST SESSION

PART 9

JANUARY 12, FEBRUARY 4, MARCH 4, AND APRIL 1, 1977

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CONTENTS

WITNESSES AND STATEMENTS

WEDNESDAY, JANUARY 12, 1977

FRIDAY, FEBRUARY 4, 1977

FRIDAY, MARCH 4, 1977

FRIDAY, APRIL 1, 1977

SUBMISSIONS FOR THE RECORD

WEDNESDAY, JANUARY 12, 1977

FRIDAY, FEBRUARY 4, 1977

FRIDAY, MARCH 4, 1977

FRIDAY, APRIL 1, 1977

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WEDNESDAY, JANUARY 12, 1977

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

The committee met, pursuant to notice, at 11 a.m., in room 5302, Dirksen Senate Office Building, Hon. Richard Bolling (chairman of the committee) presiding.

Present: Representatives Bolling, Long, Brown of Michigan, and Rousselot; and Senator Proxmire.

Also present: John R. Stark, executive director; Louis C. Krauthoff II and Courtenay M. Slater, assistant directors; William R. Buechner, G. Thomas Cator, and Katie MacArthur, professional staff members; Michael J. Runde, administrative assistant; and Charles H. Bradford and M. Catherine Miller, minority professional staff members.

OPENING STATEMENT OF REPRESENTATIVE BOLLING, CHAIRMAN

Representative BOLLING. The committee will be in order.

We are pleased to welcome Commissioner Shiskin here today to give us some ideas about the significance of the unemployment and wholesale price figures released this morning by the Bureau of Labor Statistics.

The news is mixed. Unemployment is down, but wholesale prices rose significantly.

The unemployment rate for December was 7.9 percent, which certainly represents an improvement over the 8.1 percent unemployment rate for November. I know that a 1-month reduction in the unemployment rate doesn't portend a long-term trend, but I do hope that the news you brought us today represents just the beginning of a sustained downward movement that will bring unemployment well below 7 percent by the end of this year.

I note from your release of this morning that all of the December improvement took place among adult men, and that the jobless rate for adult women, teenagers, and blacks failed to improve. This is not good news, and I think we may want to explore it after your testimony.

The wholesale price index in December rose by 0.9 percent, the fourth large monthly increase in a row. Since September, the wholesale price index has been rising at an annual rate of almost 10 percent, which is not good news. The only silver lining I see in the figures you gave us this morning is in the Industrial Commodities index, which rose only 0.3 percentage points. We suffered a very large bulge in industrial prices during the last half of 1976, and I hope this small

December increase is the beginning of a period of stable industrial prices.

Senator Proxmire, I believe you have a statement.

Opening Statement of Senator Proxmire

Senator Proxmire. Yes, Mr. Chairman.

Mr. Chairman, I would like to say at the beginning that I think the statistics we have this morning are just classic examples of how important it is to go behind the statistics themselves to get their significance. There was a drop in unemployment from 8.1 to 7.9 percent, but there was no increase in the work force at all in December.

In fact, if we had had the same increase in the work force in December that we had on the average throughout the year a 200,000 per month increase, there would have been no change in the unemployment figure. It would have stayed at 8.1 percent. The number of discouraged workers sharply increased in the fourth quarter. Your table shows that extremely well. It shows an increase of about 300,000 in discouraged workers.

It also shows that the principal reason for the increase in the number of discouraged workers was job market factors because people could not get a job or felt a job was not available.

I think when we recognize this drop in unemployment among adult males, coupled with no growth in the civilian labor force, we can see the figures actually behind the surface show no really significant improvement, at least in my view, in the employment-unemployment situation.

On the other hand, I think the inflation figures are in fact favorable, although superficially they seem perverse. It it is true we have 0.9 percent increase in the wholesale price index, the biggest increase since September and the biggest increase except for September in any month in the past year.

Again, if we look at that as Chairman Bolling has pointed out, the far more significant factor is the industrial price movement, because food prices are erratic—go up 1 month and then down—1 month does not mean a great deal.

The increase in the industrial commodities index was the smallest increase since May. This is excellent news. It indicates we are making some progress in the fight against inflation. But we still need to make more progress in the unemployment area.

Representative Bolling. Thank you.

Mr. Shiskin, this is our last meeting on 1976. I hope we can get your ideas on 1976 and what to expect in 1977.

Would you proceed with your testimony?

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 L. STEIN, ASSISTANT COMMISSIONER, OFFICE OF CURRENT EMPLOYMENT ANALYSIS

Mr. Shiskin. I have Mr. Layng to my left to help me with questions on prices, and Mr. Stein to my right to help me with questions on employment.

I would like to make one comment on Senator Proxmire's statements and that is only to call attention to the fact that the discouraged worker figures are quarterly and cover October, November, and December; whereas the unemployment figures are monthly.

My own view is the change between November and December is significant—but it is true it is only 1 month.

Let me read this brief statement.

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.

Current economic conditions: Aggregate hours, employment and unemployment all improved in December 1976. Coming on top of the improvements in aggregate hours and employment in November, these indicate that the employment situation has broken out of the holding pattern which characterized it during the preceding several months.

The improvements in the employment indicators were accompanied by similar improvements in other strategic measures of economic performance. Retail sales rose sharply in December for the third month in a row, even after taking price changes into account. Industrial production and real personal income both increased in November, the latest month for which data are now available. The weekly seasonally adjusted insured unemployment rate shows a continuing drop through the end of December.

I would say, parenthetically, that the release covers the early weeks in the month, so the insured unemployment figures cover a later period.

All the major measures of economic performance reached levels in recent months that brought them above their previous peaks. Thus it seems likely that the economy has resumed an upward path after the pause during the summer and fall of 1976. Recent rises in the leading indicators suggest that expansion will continue in the months ahead.

The unemployment rate declined during the early months of 1976 and then rose unevenly until close to the end of that year. This pattern is shown by all variants of seasonal adjustments included in table 1. Most, including the "official" adjustment, show a decline in December, though the rate remains as an unprecedented high level for an expansion which has now completed 21 months.

Employment rose by more than a half-million workers over the past 2 months. Both total employment and nonfarm employment rose by about 3 million over the year (according to the household survey) and nonfarm employment rose 2.2 million over the same 12 months (according to the business survey). The index of aggregate hours also rose substantially over the past 2 months. The employment-population ratio continued at a high level, and more than 63 percent of the industries in the BLS diffusion index showed improvement in December.

Thus the economic indicators show a fairly typical economic expansion, marred by an unemployment rate which remains stubbornly high. How can the puzzle of continued economic growth with continued exceptionally high levels of unemployment be explained? Perhaps the analysis below will shed some light on this puzzle.

Now, I will talk about the number of jobs required to reduce unemployment.

How many jobs need to be created in the future in order to reduce unemployment by various specified targets, on various assumptions of labor force growth? A simple matrix illustrated in my prepared statement provides answers to this question.

Let me take a minute to explain this matrix. As you know, the newspapers and magazines are full of articles forecasting unemployment, making various assumptions. What I have tried to do here is to bring out some of the assumptions that are implicit in these forecasts and to relate at least one of the major assumptions to different targets.

If you look at this little table here, what you see—and let me suggest you look at the stub, for example, where I have assumed various annual rates of growth in the civilian labor force. I start with no growth and say, suppose the labor force grows by 1 million, 2 million; 9 million, and so on.

Across the top I have various target reductions in the unemployment rate, expressed as percentages, for example, no reduction, 1 percentage point, 2 percentage points, 3 percentage points.

In the body of the table I indicate how many jobs are needed to meet different targets on different assumptions of the increase in the labor force.

So this gives you, I think, a greater in-depth view of the problem of reducing unemployment.

For example, if the labor force increases by about 2 million in 1977 and that is the third row down, it would require 2.8 million new jobs to reduce the unemployment rate by only 1 percentage point, and about 3.8 million jobs to reduce the unemployment rate by 2 percent. These figures compare to average annual increases of 1.9 million in the labor force and 1.5 million in employment over the past 10 years. This is, they are really very high figures.

The table also shows that with a growth of 2 million in the labor force, 1.8 million jobs would be needed just to hold the unemployment rate steady. Similarly, if productivity increases at the post-World War II trend of about 3 percent, real annual growth rates of about 5.6 and 6.7 percent will be required to reduce unemployment by 1 and 2 percentage points, respectively.

A similar matrix for real GNP in a little more detail is attached to my prepared statement as table 3. I spell out the assumptions that are behind this table there, and then in table 4 I have a much more detailed matrix for employment.

So if you are interested in the implications of the reductions in unemployment, you will find them in the next table.

BLS projections indicate that the labor force will grow more slowly from 1975–90 than in recent years, mainly because there will be a smaller number of youths reaching working age as a result of the sharp drop in the birth rate of the 1960's. However, any slowdown in 1977 and 1978 from this source is expected to be small.

The rapid growth in the labor force last year—2.2 million on an average annual basis—was facilitated by strong employment gains in the service and trade industries, which encouraged the entrance of large numbers of women into the labor force.

On the other hand, the cyclically sensitive capital goods industries grew slowly. If manufacturing and construction were to rise vigorously in the next year or so, then the unemployment rate could be expected to drop to a greater extent than it has since the 1975 recession trough, in part because these industries would more likely be drawing on experienced, unemployed workers. Thus, if the industry mix were different, for example, suppose manufacturing and construction grew more rapidly relative to services and trade, then the employment and real GNP results displayed could take place with smaller labor force growth. On the other hand, the relatively rapid growth of the service and trade industries reflects a long-term trend.

A similar matrix showing the corresponding real growth figures associated with the employment growth is attached. This second matrix assumes for illustrative purposes a fixed 3 percent annual growth in labor productivity. It is to be noted that the entries in this table are sensitive to the productivity assumption. Thus, if labor productivity were to raise only 2½ percent per year, the real GNP growth rate required to reduce unemployment by 1 and 2 percent with a 2 million increase in the labor force would be 5.2 and 6.3 percent, compared to a 5.6 and 6.7 percent, respectively, shown in the table.

Let me again say, parenthetically, these are very simplistic tables, but I think they do point out clearly the problems involved today in the kind of labor force growth we have been having and difficulties in reducing unemployment rates.

I would like to make some comments now on our statistics, statistical notes, BLS methods of seasonal adjustment came under considerable discussion last year when we changed the methodology and updated the factors. As a result of the seasonal adjustment revisions of 1975 data, the unemployment rates were changed in 10 of the 12 months, with a total change equal to 1.6 percentage points, without regard to sign. That was the very big change and it was very disturbing to many people.

We realized that the method needed to be changed, and we changed it. We have had a year with the revised method and let me tell you what is happening with the revised method. Although we are not in a position to publish the vast array of revised data at this time, I am able to tell you that our routine annual revision of the seasonal factors for 1976, to be made public shortly, will be very small; only three of the months will be affected, each one by 0.1, with a total revision of only 0.3 in the unemployment rates for the 12 months.

This is one of the smallest revisions in seasonal adjustments of unemployment ever made and it is one indication that the changes we made last year worked very well. These revisions will first appear in the Economic Report of the President, which is to be released next week.

This month I am introducing, as a part of my prepared statement, a revised set of alternative seasonally adjusted total unemployment rates. The revised table presents a greater variety of seasonal adjustment techniques, including a stable seasonal computed for the period 1967–73, a "concurrent adjustment" which updates the factors each month up to the present, and a procedure utilizing projected factors for the year ahead which allows for part of the recent trend. To make

space, we are dropping several rates based on sums of multiplicative adjustments.

I would like also to note that next month we will make a few revisions in our "Employment Situation" press release: (1) employment-population ratios for all workers and the major demographic groups will be included in table A–1; (2) a new table, A–7, will show the array of unemployment measures U–1 to U–7 reported to this committee for the past 10 months; and (3) a two-page explanatory note will be added.

Among other things, this explanatory note will advise users that upon request they can get copies of the table showing unemployment rates by alternative seasonal adjustment methods which we have been making available each month to this committee. The charts previously attached to the release will be dropped to make room for the additions. These decisions to revise the release are supported by a survey we made of many principal users of the "Employment Situation" release, including the staff of the Joint Economic Committee.

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

[The prepared statement of Mr. Shiskin, together with the press release referred to follow:]

PREPARED STATEMENT OF HON. JULIUS SHISKIN

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.

1. CURRENT ECONOMIC CONDITIONS

Aggregate hours, employment and unemployment all improved in December 1976. Coming on top of the improvements in aggregate hours and employment in November, these indicate that the employment situation has broken out of the holding pattern which characterized it during the preceding several months.

The improvements in the employment indicators were accompanied by similar improvements in other strategic measures of economic performances. Retail sales rose sharply in December for the third month in a row, even after taking price changes into account. Industrial production and real personal income both increased in November, the latest month for which data are now available. The weekly seasonally-adjusted insured unemployment rate shows a continuing drop through the end of December. All the major measures of economic performance reached levels in recent months that brought them above their previous peaks. Thus it seems likely that the economy has resumed an upward path after the pause during the summer and fall of 1976. Recent rises in the leading indicators suggest that expansion will continue in the months ahead.

The unemployment rate declined during the early months of 1976 and then rose unevenly until close to the end of that year. This pattern is shown by all variants of seasonal adjustments included in table 1. Most, including the "official" adjustment, show a decline in December, though the rate remains at an unprecedented high level for an expansion which has now completed 21 months.

Employment rose by more than a half-million workers over the past two months. Both total employment and nonfarm employment rose by about 3 million over the year (according to the household survey) and nonfarm employment rose 2.2 million over the same 12 months (according to the business survey). The index of aggregate hours also rose substantially over the past 2 months. The employment-population ratio continued at a high level, and more than 63 percent of the industries in the BLS diffusion index showed improvement in December.

Thus the economic indicators show a fairly typical economic expansion, marred by an unemployment rate which remains stubbornly high. How can the puzzle of continued economic growth with continued exceptionally high levels of unemployment be explained? Perhaps the analysis below will shed some light on this puzzle.

2. JOBS REQUIRED TO REDUCE THE UNEMPLOYMENT RATE

How many jobs need to be created in the future in order to reduce unemployment by various specified targets, on various assumptions of labor force growth? The simple matrix below provides answers to this question.

REQUIRED INCREASES IN EMPLOYMENT UNDER VARIOUS TARGETS FOR DECREASES IN THE UNEMPLOYMENT RATE AND ASSUMED GROWTH IN THE CIVILIAN LABOR FORCE

[Numbers in millions]

	Target percentage point reduction in unemployment rate			
	0 percent	1 percent	2 percent	3 percent
Assumed annual growth of the civilian labor force:				
0	0	0.9	1.4	2.8
1,000,000	.9	1.9	2.8	3.8
2,000,000	1.8	2.8	3.8	4.8
3,000,000	2.8	3.7	4.7	5.7

Note: A more detailed employment matrix is shown in table 4.

As illustrated, if the labor force increases by about 2.0 million in 1977, it would require 2.8 million new jobs to reduce the unemployment rate by only 1 percentage point and 3.8 million jobs to reduce the unemployment rate by 2 percentage points. (These figures compare to average annual increases of 1.9 million in the labor force and 1.5 million in employment over the past 10 years.) The table also shows that with a growth of 2 million in the labor force, 1.8 million jobs would be needed just to hold the unemployment rate steady. Similarly, if productivity increases at the post-World War II trend of about 3 percent, real annual growth rates of about 5.6 and 6.7 percent will be required to reduce unemployment by 1 and 2 percentage points, respectively.

BLS projections indicate that the labor force will grow more slowly from 1975–90 than in recent years, mainly because there will be a smaller number of youths reaching working age as a result of the sharp drop in the birth rate of the 1960's. However, any slowdown in 1977 and 1978 from this source is expected to be small.

The rapid growth in the labor force last year—2.2 million on an average annual basis—was facilitated by strong employment gains in the service and trade industries, which encouraged the entrance of large numbers of women into the labor force. On the other hand, the cyclically sensitive capital goods industries grew slowly. If manufacturing and construction were to rise vigorously in the next year or so, then the unemployment rate could be expected to drop to a greater extent than it has since the 1975 recession trough, in part because these industries would more likely be drawing on experienced, unemployed workers. Thus, if the industry mix were different, for example, suppose manufacturing and construction grew more rapidly relative to services and trade, then the employment and real GNP results displayed could take place with smaller labor force growth. On the other hand, the relatively rapid growth of the service and trade industries reflects a long-term trend.

A similar matrix showing the corresponding real growth figures associated with the employment growth is attached. This second matrix assumes for illustrative purposes a fixed 3 percent annual growth in labor productivity. It is to be noted that the entries in this table are sensitive to the productivity assumption. Thus, if labor productivity were to rise only 2½ percent per year, the real GNP growth rate required to reduce unemployment by 1 and 2 percent with a 2 million increase in the labor force would be 5.2 and 6.3 percent, compared to 5.6 and 6.7 percent, respectively, shown in the table.

3. STATISTICAL NOTES

BLS methods of seasonal adjustment came under considerable discussion last year when we changed the methodology and updated the factors. As a result of the seasonal adjustment revisions of 1975 data, the unemployment rates were changed in 10 of the 12 months, with a total change equal to 1.6 percentage points (without regard to sign). Although we are not in a position to publish the vast

array of revised data at this time, I am able to tell you that our routine annual revision of the seasonal factors for 1976, to be made public shortly, will be very small; only three of the months will be affected, each one by 0.1, with a total revision of only 0.3 in the unemployment rates for the 12 months. These revisions will first appear in the Economic Report of the President, which is to be released next week.

This month, I am introducing as an attachment to my statement a revised set of alternative seasonally-adjusted total unemployment rates. The revised table presents a greater variety of seasonal adjustment techniques, including a stable seasonal adjustment computed for the period 1967–73, a "concurrent adjustment" which updates the factors each month up to the present, and a procedure utilizing projected factors for the year ahead which allows for apart of the recent trend. To make space, we are dropping several rates based on sums of multiplicative adjustments.

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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 1967–73	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	(1)	(1)	8.1	8.1	7.8	8.1	8.4	8.1	8.1	0.6
February	9.1	8.0	8.1	8.4	(1)	(1)	8.1	7.9	7.8	8.1	8.4	8.0	8.1	.6
March	9.1	8.5	8.5	8.7	(1)	(1)	8.6	8.4	8.3	8.5	8.7	8.5	8.5	.4
April	8.6	8.6	8.7	8.6	(1)	(1)	8.8	8.5	8.6	8.8	8.7	8.8	8.7	.3
May	8.3	8.9	9.0	8.7	(1)	(1)	9.2	8.8	9.0	9.2	8.7	9.3	9.0	.6
June	9.1	8.7	8.6	8.7	(1)	(1)	8.6	8.6	8.7	8.2	8.5	8.2	8.5	.5
July	8.7	8.7	8.6	8.6	(1)	(1)	8.6	8.6	8.8	8.4	8.5	8.5	8.6	.4
August	8.2	8.5	8.5	8.4	(1)	(1)	8.3	8.7	8.7	8.5	8.4	8.5	8.5	.4
September	8.1	8.6	8.6	8.4	(1)	(1)	8.3	8.8	8.8	8.5	8.4	8.5	8.5	.5
October	7.8	8.6	8.7	8.4	(1)	(1)	8.3	8.8	8.7	8.6	8.4	8.5	8.6	.5
November	7.8	8.5	8.5	8.2	(1)	(1)	8.2	8.7	8.6	8.5	8.3	8.5	8.4	.5
December	7.8	8.3	8.4	8.2	(1)	(1)	8.3	8.5	8.2	8.4	8.2	8.5	8.3	.3

See footnote at end of table.

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

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 1967–73	Duration	Reasons	Total	Residual			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
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
November	7.4	8.1	8.1	7.8	8.1	8.0	7.8	8.2	8.1	8.0	7.9	8.0	8.0	.4
December	7.4	7.9	7.9	7.7	7.9	7.8	7.9	8.0	7.8	8.0	7.8	8.0	7.9	.3

[1] Not applicable.

Note: An explanation of cols. 1–13 follows:

(1) Unemployment rate not seasonally adjusted.

(2) Official rate. This is the published seasonally adjusted rate. Each of 4 unemployed age-sex components—males and females, 16 to 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	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 to 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 to 19 yr 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 ½ 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 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 1974–75 period.

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

(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.

(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.

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

Source: U.S. Department of Labor, Bureau of Labor Statistics, Jan. 12, 1977.

TABLE 2.—RANGE OF UNEMPLOYMENT INDICATORS REFLECTING VALUE JUDGMENTS ABOUT SIGNIFICANCE OF UNEMPLOYMENT

[In percent]

U–1 through U–7	Annual averages		Seasonally adjusted estimates								
			October 1973 (cyclical low month)	May 1975 (cyclical high month)	Quarterly averages				Current months		
	1975	1976			I— 1976	II— 1976	III— 1976	IV— 1976	October 1976	November 1976	December 1976
U–1—Persons unemployed 15 weeks or longer as a percent of total civilian labor force	2.7	2.5	0.9	2.7	2.7	2.2	2.5	2.6	2.4	2.7	2.7
U–2—Job losers as a percent of civilian labor force	4.7	3.8	1.7	5.1	3.7	3.7	4.0	4.0	4.0	4.1	3.9
U–3—Unemployed household heads as a percent of the household head labor force	5.8	5.1	2.7	6.1	5.0	4.9	5.3	5.3	5.4	5.4	5.2
U–4—Unemployed full-time job seekers as a percent of the full-time labor force (including those employed parttime for economic reasons)	8.1	7.3	4.1	8.5	7.1	7.0	7.4	7.6	7.6	7.7	7.5
U–5—Total unemployed as a percent of civilian labor force (official measure)	8.5	7.7	4.7	8.9	7.6	7.4	7.8	8.0	7.9	8.1	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	10.3	9.4	5.9	10.9	9.3	9.1	9.4	9.8	9.8	10.0	9.6
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	11.5	10.3	[1] 6.6	[1] 12.0	10.3	10.0	10.3	10.8	[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 4th quarter 1976 rates are as follows: U–1, 2,493/95,717; U–2, 3,806/95,717; U–3, 2,899/54,252; U–4, 6,247/81,823; U–5, 7,632/95,717; U–6, 8,701/88,747; and U–7, 9,717/89,763.

Source: U.S. Department of Labor, Bureau of Labor Statistics, Jan. 12, 1977.

TABLE 3.—IMPLIED INCREASES IN REAL GNP GROWTH UNDER VARIOUS TARGETS FOR DECREASES IN THE UNEMPLOYMENT RATE AND ASSUMED GROWTH IN THE CIVILIAN LABOR FORCE

	Target reduction in unemployment rate (percentage points)					
	0	1.0	1.5	2.0	3.0	4.0
	Change in real GNP (1972 dollars)(average annual rate of change)					
Change in civilian labor force:						
1,000,000	3.3	4.5	5.0	5.6	6.7	8.8
1,500,000	3.9	5.0	5.6	6.1	7.2	8.3
2,000,000	4.4	5.6	6.1	6.7	7.8	8.9
2,500,000	5.0	6.1	6.7	7.2	8.3	9.4
3,000,000	5.5	6.7	7.2	7.8	8.9	9.0
3,500,000	6.1	7.2	7.8	8.3	9.4	10.5

ASSUMPTIONS

700,000 increase in civilian government jobs (600,000 in State and local government and 100,000 in Federal government) Assumptions about growth in government employment are necessary because of difference in public and private labor productivity.

100,000 reduction in Armed Forces.

0.4 percent decline in the private economy's average weekly hours.

3.0 percent growth in the private economy's labor productivity. This growth assumes a cyclical recovery in private labor productivity as it returns to its long-term trend.

These derivations do not consider potential capacity constraints; do not consider the fiscal or monetary policies necessary to generate the projected real GNP changes; nor do not consider the inflationary impacts of the projected real GNP changes.

Source: U.S. Department of Labor, Bureau of Labor Statistics, Jan. 12, 1976.

TABLE 4.—REQUIRED INCREASES IN EMPLOYMENT UNDER VARIOUS TARGETS FOR DECREASES IN THE UNEMPLOYMENT RATE AND ASSUMED GROWTH IN THE CIVILIAN LABOR FORCE

[Numbers in millions]

	No change in unemployment rate	Target percentage point reduction in unemployment rate				
		1 percent	1.5 percent	2 percent	3 percent	4 percent
Assumed growth of the civilian labor force:						
0	0	0.9	1.4	1.9	2.8	3.8
500,000	.5	1.4	1.9	2.4	3.3	4.3
1,000,000	.9	1.9	2.4	2.8	3.8	4.8
1,500,000	1.4	2.3	2.8	3.3	4.3	5.2
2,000,000	1.8	2.8	3.3	3.8	4.8	5.7
2,500,000	2.3	3.3	3.8	4.3	5.2	6.2
3,000,000	2.8	3.7	4.2	4.7	5.7	6.7
3,500,000	3.2	4.2	4.7	5.2	6.2	7.2
4,000,000	3.7	4.8	5.2	5.7	6.7	7.6
5,000,000	4.6	5.6	6.1	6.6	7.6	8.6
6,000,000	5.5	6.5	7.1	7.6	8.6	9.6
7,000,000	6.5	7.5	8.0	8.5	9.5	10.5
8,000,000	7.4	8.4	8.9	9.4	10.5	11.5
9,000,000	8.3	9.3	9.9	10.4	11.4	12.5
10,000,000	9.2	10.3	10.8	11.3	12.4	13.4

Note: 1976 annual averages were used as the bases for these calculations.

Source: U.S. Department of Labor, Bureau of Labor Statistics, Jan. 12, 1976.

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THE EMPLOYMENT SITUATION: DECEMBER 1976

Employment rose in December and unemployment declined, it was reported today by the Bureau of Labor Statistics of the U. S. Department of Labor. The unemployment rate was 7.9 percent, down from 8.1 percent in November and similar to rates prevailing over the July-October period.

Total employment--as measured by the monthly survey of households--rose by 220,000 to a new high of 88.4 million. After holding about steady from July to October, total employment advances in November and December have amounted to nearly 600,000.

Nonfarm payroll employment--as measured by the monthly survey of establishments--rose by nearly 260,000 in December to 80.0 million. Gains over the past 2 months have totaled nearly 500,000.

Unemployment

The number of persons unemployed fell by 210,000 in December to 7.6 million, seasonally adjusted, following an increase of nearly the same magnitude in the previous month. As a result, the unemployment rate returned to its October level of 7.9 percent, after rising to 8.1 percent in November. The average duration of unemployment was little changed in December at 15.7 weeks. (See tables A-1 and A-4.)

The over-the-month reduction took place almost entirely among adult men; their jobless rate fell 0.3 percentage point to 6.2 percent, as many left the labor force. This movement was paralleled by declines in unemployment among male household heads and married men. White workers also showed an improvement in unemployment, with their rate falling from 7.4 to 7.1 percent in December. The jobless rates for the other major demographic groups--adult women, teenagers, and blacks--have remained stable over the October-December period. (See table A-2.)

Contributing to the over-the-month decline in unemployment were decreases in both the number of job losers and persons reentering the labor force. The job-loser total stood at 3.7 million, the lowest level since last June. (See table A-5.)

Along with the reduction in total joblessness, there was also a drop in the number of persons working part time involuntarily. The 200,000 reduction, to 3.4 million, represented the first substantial decrease since last June. (See table A-3.)

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

Selected categories	Quarterly averages					Monthly data		
	1975	1976				1976		
	IV	I	II	III	IV	Oct.	Nov.	Dec.
	(Thousands of persons)							
Civilian labor force	93,153	93,553	94,546	95,341	95,717	95,342	95,899	95,910
Total employment	85,241	86,402	87,532	87,902	88,085	87,773	88,130	88,352
Adult men	47,540	47,998	48,504	48,646	48,767	48,716	48,768	48,817
Adult women	30,665	31,234	31,677	31,951	32,079	31,799	32,126	32,311
Teenagers	7,036	7,169	7,351	7,305	7,239	7,258	7,236	7,224
Unemployment	7,912	7,151	7,014	7,439	7,632	7,569	7,769	7,558
	(Percent of labor force)							
Unemployment rates:								
All workers	8.5	7.6	7.4	7.8	8.0	7.9	8.1	7.9
Adult men	7.0	5.7	5.7	6.0	6.3	6.3	6.5	6.2
Adult women	7.9	7.4	7.1	7.6	7.6	7.6	7.7	7.6
Teenagers	19.5	19.4	18.7	18.8	19.0	19.0	19.0	18.9
White	7.8	6.9	6.7	7.1	7.3	7.3	7.4	7.1
Black and other	14.0	13.1	12.8	13.1	13.6	13.5	13.6	13.6
Household heads	5.9	5.0	4.9	5.3	5.3	5.4	5.4	5.2
Married men	5.1	4.1	4.1	4.4	4.4	4.4	4.6	4.3
Full-time workers	8.2	7.1	7.0	7.4	7.6	7.6	7.7	7.5
	(Weeks)							
Average duration of unemployment	16.5	16.3	15.9	15.6	15.6	15.4	15.6	15.7
	(Thousands of persons)							
Nonfarm payroll employment	77,592	78,397	79,020	79,344	79,708p	79,467	79,700p	79,957p
Goods-producing industries	22,654	22,950	23,168	23,142	23,182p	23,081	23,218p	23,248p
Service-producing industries	54,938	55,447	55,852	56,202	56,526p	56,386	56,482p	56,709p
	(Hours of work)							
Average weekly hours:								
Total private nonfarm	36.3	36.3	36.2	36.1	36.2p	36.1	36.2p	36.3p
Manufacturing	40.0	40.3	40.0	39.9	40.0p	39.9	40.1p	40.1p
Manufacturing overtime	2.9	3.1	3.0	3.0	3.1p	2.9	3.1p	3.2p
	(1967=100)							
Hourly Earnings Index, private nonfarm:								
In current dollars	177.3	180.2	183.1	186.3	189.1p	188.2	189.2p	190.0p
In constant dollars	107.1	107.7	108.2	108.5	N.A.	108.7	109.0p	N.A.

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

Total Employment and the Labor Force

Total employment rose by 220,000 in December to 88.4 million, seasonally adjusted. This followed an even larger increase in the previous month, and, as in November, December's gain was concentrated among adult women. Since the March 1975 recession low, total employment has grown by 4.2 million, with nearly 3 million of the gain occurring over the past year alone. (See table A-1.)

The civilian labor force was virtually unchanged in December at 95.9 million, as the gain in employment was matched by a decline in unemployment. Since last December, the labor force has expanded by 2.8 million workers, including 1.5 million adult women, 1.1 million adult men, and nearly 200,000 teenagers.

The civilian labor force participation rate--the proportion of the civilian population either working or looking for work--rose from 61.1 to 61.9 percent over the year. The continued growth in the number of women participating in the labor market has accounted for most of this increase. (See table A-1.)

Discouraged Workers

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

Consistent with the rise in unemployment in the fourth quarter (table A), the number of discouraged workers also increased, halting a downtrend evident since late 1975. Discouragement averaged about 1 million persons during the quarter, the same level held a year earlier. (See table B.) About 800,000 (four-fifths) of the discouraged workers indicated job-market factors as their reason for not seeking work.

Industry Payroll Employment

Total nonagricultural payroll employment increased by 255,000 in December to 80.0 million, seasonally adjusted. Payroll employment has grown by 2.2 million since December a year ago and 3.5 million from the June 1975 low. Over-the-month gains occurred

Table B. Discouraged workers, seasonally adjusted quarterly averages

(In thousands)

Characteristics	1975				1976			
	I	II	III	IV	I	II	III	IV
Total.....	1,059	1,116	1,160	997	937	905	817	1,016
Job market factors[1]....	839	817	947	848	630	627	561	803
Personal factors[2].....	220	299	213	148	307	278	256	213

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

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

in 63 percent of the industries that comprise the BLS diffusion index of nonagricultural payroll employment. (See tables B-1 and B-6.)

In the service-producing sector, strong employment gains took place in trade (100,000) and services (55,000), while there were increases of about 25,000 each in government; finance, insurance, and real estate; and transportation and public utilities. Much of the job pickup in transportation stemmed from the settlement of the United Parcel Service strike. Over the past year, three-fourths of the increase in payroll employment has occurred in the service-producing sector.

In manufacturing, employment rose slightly, all of it in the durable goods industries. Most of the rise in durables occurred in three industries: fabricated metal products, electrical equipment, and transportation equipment. In nondurable goods, changes were small and generally offsetting. Elsewhere in the goods-producing sector, there were no substantive changes in either contract construction or mining.

Hours

The average workweek for private nonagricultural production or nonsupervisory workers edged up to 36.3 hours in December, seasonally adjusted. This marked the third consecutive monthly increase of 0.1 hour for this series. The workweek was about equal to

the level prevailing a year ago. (See table B-2.) The manufacturing workweek was unchanged at 40.1 hours, while overtime edged up 0.1 hour to 3.2 hours in December. These indicators were respectively 1.2 and 0.9 hour above recession lows posted in early 1975.

Reflecting increases in both employment and average hours, the index of aggregate hours of private nonagricultural production or nonsupervisory workers rose substantially to 112.4 in December (1967=100). The index increased by 2.8 percent over the past year and 5.9 percent from its spring 1975 low. (See table B-5.) The factory index was 94.6, only slightly above its November level; it was 9.2 percent above its March 1975 recession low.

Hourly and Weekly Earnings

Average hourly earnings of private nonagricultural production or nonsupervisory workers increased 0.4 percent over the month, seasonally adjusted. Average weekly earnings rose 0.7 percent in December, as a result of higher hourly earnings combined with a slightly longer workweek.

Before adjustment for seasonality, average hourly earnings were $5.01, up 1 cent from November. Average weekly earnings increased $1.86 over the month to $182.36. (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 190.0 (1967=100) in December, 0.4 percent higher than in November. The index was 6.7 percent above December a year ago. During the 12-month period ended in November, the Hourly Earnings Index in dollars of constant purchasing power rose 1.6 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*.

Table A-1. Employment status of the noninstitutional population

(Numbers in thousands)

Employment status	Not seasonally adjusted			Seasonally adjusted					
	Dec. 1975	Nov. 1976	Dec. 1976	Dec. 1975	Aug. 1976	Sept. 1976	Oct. 1976	Nov. 1976	Dec. 1975
TOTAL									
Total noninstitutional population[1]	154,700	157,006	157,176	154,700	156,367	156,595	156,788	157,006	157,176
Total labor force	94,888	97,786	97,662	95,286	97,634	97,348	97,489	98,048	98,056
Participation rate	61.3	62.3	62.1	61.6	62.4	62.2	62.2	62.4	62.4
Civilian noninstitutional population[1]	152,543	154,857	155,031	152,543	154,220	154,451	154,642	154,857	155,031
Civilian labor force	92,731	95,637	95,517	93,129	95,487	95,203	95,342	95,899	95,910
Participation rate	60.8	61.8	61.6	61.1	61.9	61.6	61.7	61.9	61.9
Employed	85,536	88,542	88,494	85,394	87,981	87,819	87,773	88,130	88,352
Agriculture	2,856	3,081	2,850	3,236	3,424	3,286	3,329	3,232	3,232
Nonagricultural industries	82,680	85,460	85,645	82,158	84,557	84,533	84,444	84,898	85,120
Unemployed	7,195	7,095	7,022	7,735	7,506	7,384	7,569	7,769	7,558
Unemployment rate	7.8	7.4	7.4	8.3	7.9	7.8	7.9	8.1	7.9
Not in labor force	59,812	59,220	59,514	59,414	58,733	59,248	59,300	58,958	59,121
Males, 20 years and over									
Total noninstitutional population[1]	65,643	66,699	66,835	65,643	66,384	66,491	66,598	66,699	66,835
Total labor force	52,453	53,542	53,550	52,651	53,436	53,563	53,682	53,869	53,747
Participation rate	79.9	80.3	80.1	80.2	80.5	80.6	80.6	80.8	80.4
Civilian noninstitutional population[1]	63,929	65,001	65,140	63,929	64,688	64,796	64,902	65,001	65,140
Civilian labor force	50,739	51,844	51,855	50,937	51,740	51,869	51,986	52,171	52,052
Participation rate	79.4	79.8	79.6	79.7	80.0	80.0	80.1	80.3	79.9
Employed	47,499	48,931	48,727	47,586	48,682	48,721	48,716	48,768	48,817
Agriculture	2,177	2,248	2,125	2,316	2,415	2,326	2,342	2,271	2,261
Nonagricultural industries	45,322	46,683	46,603	45,270	46,267	46,395	46,374	46,497	46,556
Unemployed	3,240	2,913	3,128	3,351	3,058	3,148	3,270	3,403	3,235
Unemployment rate	6.4	5.6	6.0	6.7	5.9	6.1	6.3	6.5	6.2
Not in labor force	13,190	13,158	13,285	12,992	12,948	12,927	12,916	12,830	13,088
Females, 20 years and over									
Civilian noninstitutional population[1]	72,251	73,401	73,445	72,251	73,078	73,196	73,288	73,401	73,445
Civilian labor force	33,627	35,227	35,168	33,415	34,639	34,505	34,396	34,790	34,952
Participation rate	46.5	48.0	47.9	46.2	47.4	47.1	46.9	47.4	47.6
Employed	31,271	32,683	32,831	30,755	31,988	31,907	31,799	32,136	32,311
Agriculture	385	512	452	483	546	524	562	554	567
Nonagricultural industries	30,887	32,172	32,379	30,272	31,442	31,383	31,237	31,572	31,744
Unemployed	2,355	2,544	2,337	2,660	2,651	2,598	2,597	2,664	2,641
Unemployment rate	7.0	7.2	6.6	8.0	7.7	7.5	7.6	7.7	7.6
Not in labor force	38,625	38,173	38,276	38,836	38,439	38,691	38,892	38,611	38,493
Both sexes, 16-19 years									
Civilian noninstitutional population[1]	16,363	16,455	16,446	16,363	16,454	16,458	16,452	16,455	16,446
Civilian labor force	8,366	8,565	8,493	8,777	9,108	8,829	8,960	8,938	8,906
Participation rate	51.1	52.1	51.6	53.6	55.4	53.6	54.5	54.3	54.2
Employed	6,765	6,927	6,935	7,053	7,311	7,191	7,258	7,236	7,224
Agriculture	294	321	273	437	463	436	425	407	404
Nonagricultural industries	6,471	6,606	6,663	6,616	6,848	6,755	6,833	6,829	6,820
Unemployed	1,600	1,638	1,558	1,724	1,797	1,638	1,702	1,702	1,682
Unemployment rate	19.1	19.1	18.3	19.6	19.7	18.6	19.0	19.0	18.9
Not in labor force	7,997	7,889	7,953	7,586	7,346	7,629	7,492	7,517	7,540
WHITE									
Civilian noninstitutional population[1]	134,480	136,336	136,475	134,480	135,822	136,005	136,165	136,336	136,475
Civilian labor force	82,190	84,570	84,521	82,474	84,503	84,371	84,595	84,837	84,767
Participation rate	61.1	62.0	61.9	57.1	62.2	62.0	62.1	62.2	62.1
Employed	76,345	78,877	78,889	76,223	78,468	78,365	78,402	78,572	78,743
Unemployed	5,845	5,693	5,632	6,251	6,035	6,006	6,193	6,265	6,024
Unemployment rate	7.1	6.7	6.7	7.6	7.1	7.1	7.3	7.4	7.1
Not in labor force	52,290	51,766	51,955	52,006	51,319	51,634	51,570	51,499	51,708
BLACK AND OTHER									
Civilian noninstitutional population[1]	18,063	18,521	18,555	18,063	18,398	18,445	18,476	18,521	18,555
Civilian labor force	10,541	11,067	10,996	10,653	11,003	10,930	10,923	11,127	11,111
Participation rate	58.4	59.8	59.3	59.0	59.8	59.3	59.1	60.1	59.9
Employed	9,190	9,664	9,605	9,188	9,505	9,538	9,448	9,619	9,601
Unemployed	1,351	1,402	1,390	1,465	1,498	1,392	1,475	1,508	1,510
Unemployment rate	12.8	12.7	12.6	13.8	13.6	12.7	13.5	13.6	13.6
Not in labor force	7,522	7,454	7,559	7,410	7,395	7,515	7,553	7,394	7,444

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

NOTE: Household data for December 1976 relate to the week of December 4-10 (week of the 5th) rather than the usual week containing the 12th day.

Table A-2. Major unemployment indicators, seasonally adjusted

Selected categories	Number of unemployed persons (in thousands)		Unemployment rates					
	Dec. 1975	Dec. 1976	Dec. 1975	Aug. 1976	Sept. 1976	Oct. 1976	Nov. 1976	Dec. 1976
Total, 16 years and over	7,735	7,558	8.3	7.9	7.8	7.9	8.1	7.9
Males, 20 years and over	3,351	3,235	6.6	5.9	6.1	6.3	6.5	6.2
Females, 20 years and over	2,660	2,641	8.0	7.7	7.5	7.6	7.7	7.6
Both sexes, 16-19 years	1,724	1,682	19.6	19.7	18.6	19.0	19.0	18.9
White, total	6,251	6,024	7.6	7.1	7.1	7.3	7.4	7.1
Males, 20 years and over	2,677	2,567	5.9	5.5	5.7	5.8	5.9	5.5
Females, 20 years and over	2,182	2,087	7.5	7.0	6.8	7.1	7.2	6.9
Both sexes, 16-19 years	1,392	1,370	17.8	17.3	16.5	16.7	17.1	17.2
Black and other, total	1,465	1,510	13.8	13.6	12.7	13.5	13.6	13.6
Males, 20 years and over	652	648	12.3	9.9	9.6	10.9	12.1	11.8
Females, 20 years and over	479	548	10.8	12.3	11.4	11.6	10.8	11.7
Both sexes, 16-19 years	334	314	35.2	40.2	38.5	38.4	35.5	33.7
Household heads, total	3,065	2,856	5.7	5.2	5.4	5.6	5.4	5.2
Males	2,347	2,167	5.2	4.5	5.0	5.0	5.1	4.8
With relatives	1,909	1,728	4.7	4.1	4.5	4.5	4.5	4.3
Without relatives	438	439	9.5	8.1	8.6	9.0	9.6	8.6
Females	727	696	8.6	8.0	7.9	8.2	7.5	7.9
With relatives	433	463	10.6	11.1	10.6	10.9	9.8	10.5
Without relatives	294	233	6.7	5.1	5.4	5.7	5.3	5.2
Married men, spouse present	1,918	1,716	4.8	4.2	4.6	4.4	4.6	4.3
Full-time workers	6,324	6,193	7.9	7.5	7.5	7.6	7.7	7.5
Part-time workers	1,402	1,355	10.5	9.9	9.3	10.2	10.5	9.8
Unemployed 15 weeks and over [1]	3,080	2,594	3.3	2.5	2.4	2.4	2.7	2.7
Labor force time lost [2]	--	--	8.9	8.2	8.4	8.8	8.8	8.5
OCCUPATION [3]								
White-collar workers	2,122	2,078	4.8	5.0	4.5	4.5	4.7	4.5
Professional and technical	416	438	3.1	3.1	3.0	3.1	3.6	3.2
Managers and administrators, except farm	276	308	3.0	3.5	3.2	2.8	3.0	3.1
Sales workers	355	321	6.3	5.9	5.4	5.4	5.9	5.3
Clerical workers	1,075	1,011	6.6	7.0	6.2	6.2	6.2	6.0
Blue-collar workers	3,398	3,115	10.7	9.8	9.8	9.7	9.8	9.7
Craft and kindred workers	871	837	7.2	7.0	7.0	6.8	7.2	6.9
Operatives	1,807	1,581	12.2	10.3	10.5	10.7	10.7	10.5
Nonfarm laborers	720	697	14.9	14.8	14.5	13.9	13.2	14.0
Service workers	1,200	1,180	9.2	8.5	8.6	9.5	9.2	9.0
Farm workers	130	196	4.5	3.5	3.7	4.0	5.0	6.6
INDUSTRY [3]								
Nonagricultural private wage and salary workers [4]	5,972	5,630	8.9	8.2	8.0	8.1	8.3	8.1
Construction	728	634	16.6	17.1	15.8	14.9	15.4	13.9
Manufacturing	2,030	1,816	9.6	8.2	8.0	8.2	8.3	8.5
Durable goods	1,246	1,060	9.9	7.7	7.4	8.1	7.7	8.3
Nondurable goods	784	756	9.2	8.9	8.9	8.2	9.1	8.7
Transportation and public utilities	251	249	5.1	4.7	5.4	5.6	5.7	5.1
Wholesale and retail trade	1,605	1,502	9.4	9.0	8.8	9.0	9.2	8.4
Finance and service industries	1,338	1,391	7.0	6.5	6.3	6.6	6.9	6.9
Government workers	671	680	4.4	4.4	3.8	4.4	4.4	4.4
Agricultural wage and salary workers	174	232	12.4	10.0	10.6	11.2	13.1	14.6
VETERAN STATUS								
Males, Vietnam-era veterans [5]:								
20 to 34 years	642	558	10.3	7.4	9.3	8.9	8.6	8.6
20 to 24 years	209	175	22.0	15.4	19.8	19.7	16.4	18.3
25 to 29 years	329	272	9.9	6.8	8.0	8.0	9.2	9.0
30 to 34 years	104	111	5.3	5.0	6.7	5.7	4.7	4.5
Males, nonveterans:								
20 to 34 years	1,339	1,425	9.2	8.8	8.1	8.9	9.4	9.2
20 to 24 years	818	863	12.6	11.4	10.4	11.9	12.1	12.5
25 to 29 years	298	349	6.8	8.1	7.0	7.9	8.3	7.2
30 to 34 years	223	213	6.0	5.0	5.5	5.0	5.9	5.7

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

Table A-3. Selected employment indicators

[In thousands]

Selected categories	Not seasonally adjusted		Seasonally adjusted					
	Dec. 1975	Dec. 1976	Dec. 1975	Aug. 1976	Sept. 1976	Oct. 1976	Nov. 1976	Dec. 1976
Total employed, 16 years and over	85,536	88,494	85,394	87,981	87,819	87,773	88,130	88,352
Males	50,993	52,369	51,390	52,655	52,564	52,613	52,631	52,771
Females	34,543	36,125	34,004	35,326	35,255	35,160	35,499	35,581
Household heads	50,364	51,582	50,332	51,170	51,234	51,176	51,351	51,530
Married men, spouse present	37,788	38,055	37,739	38,237	38,218	38,008	37,858	38,017
Married women, spouse present	20,371	20,996	19,859	20,444	20,536	20,421	20,489	20,464
OCCUPATION								
White-collar workers	42,955	45,212	42,326	43,782	44,183	44,067	44,150	44,557
Professional and technical	13,266	13,705	13,026	13,536	13,619	13,332	13,587	13,463
Managers and administrators, except farm	8,854	9,580	8,837	9,282	9,580	9,425	9,465	9,561
Sales workers	5,453	5,956	5,296	5,549	5,607	5,562	5,523	5,783
Clerical workers	15,382	15,970	15,167	15,415	15,377	15,768	15,575	15,750
Blue-collar workers	28,235	28,933	28,408	28,853	28,739	29,003	29,093	29,108
Craft and kindred workers	11,244	11,291	11,265	11,251	11,348	11,406	11,389	11,314
Operatives	13,089	13,554	13,043	13,273	13,091	13,203	13,267	13,500
Nonfarm laborers	3,902	4,088	4,100	4,329	4,300	4,394	4,437	4,294
Service workers	11,892	11,935	11,837	12,325	12,219	11,976	12,070	11,879
Farm workers	2,455	2,415	2,782	2,951	2,791	2,840	2,734	2,754
MAJOR INDUSTRY AND CLASS OF WORKER								
Agriculture:								
Wage and salary workers	1,043	1,150	1,231	1,363	1,329	1,321	1,263	1,358
Self-employed workers	1,590	1,456	1,663	1,709	1,606	1,683	1,624	1,523
Unpaid family workers	223	244	300	356	351	346	334	328
Nonagricultural industries:								
Wage and salary workers	76,562	79,420	76,038	78,469	78,584	78,444	78,782	78,894
Private households	1,331	1,383	1,309	1,401	1,410	1,379	1,449	1,360
Government	14,916	15,131	14,719	15,317	15,185	14,884	15,000	14,937
Other	60,315	62,906	60,010	61,751	61,989	62,181	62,333	62,597
Self-employed workers	5,645	5,779	5,683	5,662	5,714	5,596	5,816	5,820
Unpaid family workers	473	446	510	436	428	452	448	481
PERSONS AT WORK [1]								
Nonagricultural industries	79,588	82,583	77,380	78,931	79,921	79,572	80,030	80,293
Full-time schedules	65,067	67,297	63,730	64,622	65,064	65,013	65,648	65,913
Part time for economic reasons	3,028	3,166	3,243	3,047	3,348	3,469	3,604	3,400
Usually work full time	1,301	1,210	1,332	1,295	1,339	1,337	1,285	1,238
Usually work part time	1,727	1,954	1,911	1,752	2,009	2,132	2,319	2,162
Part time for noneconomic reasons	11,493	12,122	10,407	11,262	11,509	11,090	10,978	10,980

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

Table A-4. Duration of unemployment

[Numbers in thousands]

Weeks of unemployment	Not seasonally adjusted		Seasonally adjusted					
	Dec. 1975	Dec. 1976	Dec. 1975	Aug. 1976	Sept. 1976	Oct. 1976	Nov. 1976	Dec. 1976
Less than 5 weeks	2,431	2,563	2,648	2,829	2,828	3,010	2,739	2,768
5 to 14 weeks	3,197	3,314	3,244	2,427	2,453	2,355	2,608	2,364
15 weeks and over	2,548	2,145	3,080	2,387	2,314	2,330	2,556	2,594
15 to 26 weeks	1,120	935	1,413	1,143	1,123	1,066	1,211	1,182
27 weeks and over	1,428	1,210	1,667	1,244	1,191	1,264	1,345	1,412
Average (mean) duration, in weeks	16.9	15.6	17.0	15.5	15.4	15.4	15.6	15.7
PERCENT DISTRIBUTION								
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 5 weeks	34.1	36.5	33.2	37.0	37.2	39.1	34.7	35.8
5 to 14 weeks	30.5	33.0	28.1	31.8	32.3	30.6	33.0	30.6
15 weeks and over	35.4	30.5	38.6	31.2	30.5	30.3	32.3	33.6
15 to 26 weeks	15.6	13.3	17.7	15.0	14.8	13.9	15.3	15.3
27 weeks and over	19.8	17.2	20.9	16.3	15.7	16.4	17.0	18.3

Table A-5. Reasons for unemployment

[Numbers in thousands]

Reason	Not seasonally adjusted		Seasonally adjusted					
	Dec. 1975	Dec. 1976	Dec. 1975	Aug. 1976	Sept. 1976	Oct. 1976	Nov. 1976	Dec. 1976
NUMBER OF UNEMPLOYED								
Lost last job	3,970	3,730	3,955	3,781	3,756	3,778	3,925	3,715
Left last job	813	789	862	1,008	929	953	862	836
Reentered labor force	1,684	1,691	1,975	1,935	1,895	1,903	2,091	1,982
Seeking first job	728	812	865	951	932	894	922	949
PERCENT DISTRIBUTION								
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Job losers	55.2	53.1	51.7	49.3	50.0	50.2	50.3	49.7
Job leavers	11.3	11.2	11.3	13.1	12.4	12.7	11.1	11.2
Reentrants	23.4	24.1	25.8	25.2	25.2	25.3	26.8	26.5
New entrants	10.1	11.6	11.3	12.4	12.4	11.9	11.8	12.7
UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE								
Job losers	4.3	3.9	4.2	4.0	3.9	4.0	4.1	3.9
Job leavers	.9	.8	.9	1.1	1.0	1.0	.9	.9
Reentrants	1.8	1.8	2.1	2.0	2.0	2.0	2.2	2.1
New entrants	.8	.9	.9	1.0	1.0	.9	1.0	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						
	Dec. 1975	Dec. 1976	Dec. 1976	Dec. 1975	Aug. 1976	Sept. 1976	Oct. 1976	Nov. 1976	Dec. 1976
Total, 16 years and over	7,195	7,022	80.4	8.3	7.9	7.8	7.9	8.1	7.9
16 to 19 years	1,600	1,538	50.3	19.6	19.7	18.6	19.0	19.0	18.9
16 to 17 years	673	670	19.3	20.6	22.5	20.5	21.3	21.4	20.4
18 to 19 years	928	887	73.7	18.9	18.0	17.8	17.3	17.4	17.7
20 to 24 years	1,578	1,567	89.0	13.5	11.8	11.5	12.8	13.0	12.8
25 years and over	4,017	3,898	89.0	5.9	5.6	5.7	5.6	5.8	5.6
25 to 54 years	3,318	3,307	90.6	6.2	5.8	5.9	5.9	6.0	6.0
55 years and over	699	591	79.9	5.0	4.8	4.8	4.5	4.7	4.2
Males, 16 years and over	4,108	4,002	83.5	7.6	7.0	7.1	7.4	7.6	7.3
16 to 19 years	868	875	49.6	19.0	18.8	18.8	19.5	19.5	18.6
16 to 17 years	356	390	19.7	19.3	21.8	21.2	22.1	21.8	20.1
18 to 19 years	512	484	73.8	18.7	16.7	17.8	17.5	17.8	17.1
20 to 24 years	917	925	90.5	13.8	11.8	11.6	13.0	12.8	13.2
25 years and over	2,323	2,203	93.9	5.4	4.9	5.1	5.1	5.4	5.0
25 to 54 years	1,888	1,847	95.9	5.6	5.1	5.2	5.3	5.6	5.4
55 years and over	435	355	83.9	4.7	4.5	4.6	4.2	4.4	3.8
Females, 16 years and over	3,087	3,020	76.4	9.3	9.1	8.7	8.7	8.8	8.8
16 to 19 years	732	663	51.1	20.3	20.8	18.3	18.3	18.5	19.3
16 to 17 years	317	280	18.6	22.2	23.3	19.7	20.3	20.9	20.6
18 to 19 years	416	403	73.7	19.1	19.5	17.7	17.1	16.9	18.3
20 to 24 years	661	641	87.1	13.1	11.8	11.4	12.5	13.3	12.3
25 years and over	1,694	1,695	82.5	6.8	6.6	6.7	6.4	6.4	6.5
25 to 54 years	1,430	1,460	83.9	7.2	7.0	7.0	7.0	6.7	7.0
55 years and over	264	236	73.7	5.4	5.2	5.2	4.9	5.2	4.7

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

(In thousands)

Industry	Not seasonally adjusted				Seasonally adjusted					
	Dec. 1975	Oct. 1976	Nov. 1976[p]	Dec. 1976[p]	Dec. 1975	Aug. 1976	Sept. 1976	Oct. 1976	Nov. 1976[p]	Dec. 1976[p]
TOTAL	78,527	80,204	80,524	80,722	77,764	79,278	79,572	79,467	79,700	79,957
GOODS-PRODUCING	22,685	23,546	23,499	23,223	22,713	23,080	23,228	23,081	23,218	23,248
MINING	763	804	810	803	766	752	798	800	808	806
CONTRACT CONSTRUCTION	3,338	3,557	3,467	3,295	3,392	3,349	3,330	3,340	3,353	3,349
MANUFACTURING	18,584	19,185	19,222	19,125	18,555	18,979	19,100	18,941	19,057	19,093
Production workers	13,329	13,807	13,839	13,746	13,293	13,627	13,749	13,575	13,674	13,707
DURABLE GOODS	10,735	11,131	11,223	11,210	10,709	11,083	11,146	11,018	11,134	11,181
Production workers	7,625	7,941	8,032	8,018	7,593	7,911	7,975	7,833	7,938	7,985
Ordnance and accessories	163.6	156.0	156.5	156.1	163	157	156	155	157	155
Lumber and wood products	569.5	622.5	616.7	613.5	581	605	613	613	620	625
Furniture and fixtures	475.8	498.4	496.4	493.5	473	486	495	491	489	491
Stone, clay, and glass products	608.1	641.8	639.7	623.7	614	628	630	630	635	629
Primary metal industries	1,152.5	1,192.6	1,181.3	1,182.9	1,153	1,215	1,216	1,194	1,185	1,183
Fabricated metal products	1,350.7	1,406.5	1,414.1	1,415.1	1,345	1,394	1,404	1,387	1,399	1,409
Machinery, except electrical	2,038.4	2,072.2	2,112.5	2,129.5	2,024	2,090	2,115	2,078	2,108	2,115
Electrical equipment	1,785.1	1,868.9	1,880.5	1,884.0	1,773	1,843	1,848	1,849	1,862	1,871
Transportation equipment	1,691.2	1,722.1	1,780.7	1,780.9	1,679	1,737	1,737	1,695	1,753	1,769
Instruments and related products	495.0	514.0	517.2	518.6	494	510	512	511	514	517
Miscellaneous manufacturing	405.5	435.8	427.1	412.5	410	418	420	415	412	417
NONDURABLE GOODS	7,849	8,054	7,999	7,915	7,846	7,896	7,954	7,923	7,923	7,912
Production workers	5,704	5,866	5,807	5,728	5,700	5,716	5,774	5,742	5,736	5,722
Food and kindred products	1,674.7	1,777.9	1,725.6	1,680.6	1,690	1,715	1,711	1,706	1,703	1,696
Tobacco manufactures	83.7	84.2	81.4	78.1	79	78	76	76	75	74
Textile mill products	957.4	964.8	964.1	963.8	952	969	971	961	959	958
Apparel and other textile products	1,295.0	1,295.7	1,293.2	1,259.2	1,299	1,292	1,281	1,273	1,275	1,263
Paper and allied products	660.5	681.9	685.7	683.1	657	679	681	677	680	680
Printing and publishing	1,081.6	1,090.4	1,094.4	1,100.7	1,073	1,082	1,086	1,087	1,090	1,092
Chemicals and allied products	1,016.3	1,037.5	1,036.8	1,038.9	1,018	1,040	1,035	1,032	1,035	1,041
Petroleum and coal products	200.2	204.6	203.8	201.9	201	202	202	202	203	203
Rubber and plastics products, nec.	608.7	652.6	649.1	645.7	606	572	643	645	640	643
Leather and leather products	271.3	264.2	264.8	262.7	271	267	268	264	263	262
SERVICE-PRODUCING	55,842	56,658	57,025	57,499	55,051	56,198	56,344	56,386	56,482	56,709
TRANSPORTATION AND PUBLIC UTILITIES	4,477	4,538	4,537	4,537	4,477	4,501	4,528	4,506	4,510	4,537
WHOLESALE AND RETAIL TRADE	17,737	17,707	17,894	18,336	17,084	17,554	17,625	17,610	17,585	17,685
WHOLESALE TRADE	4,215	4,322	4,327	4,327	4,194	4,272	4,283	4,292	4,297	4,305
RETAIL TRADE	13,522	13,385	13,567	14,009	12,890	13,282	13,342	13,318	13,288	13,380
FINANCE, INSURANCE, AND REAL ESTATE	4,243	4,355	4,368	4,385	4,260	4,312	4,338	4,359	4,381	4,403
SERVICES	14,158	14,811	14,829	14,823	14,229	14,709	14,758	14,781	14,844	14,897
GOVERNMENT	15,227	15,247	15,397	15,418	15,001	15,122	15,095	15,130	15,162	15,187
FEDERAL	2,771	2,711	2,720	2,755	2,753	2,732	2,728	2,730	2,734	2,736
STATE AND LOCAL	12,456	12,536	12,677	12,663	12,248	12,390	12,367	12,400	12,428	12,451

[p]preliminary.

ESTABLISHMENT DATA

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

Industry	Not seasonally adjusted				Seasonally adjusted					
	Dec. 1975	Oct. 1976	Nov. 1976[p]	Dec. 1976[p]	Dec. 1975	Aug. 1976	Sept. 1976	Oct. 1976	Nov. 1976[p]	Dec. 1976[p]
TOTAL PRIVATE	36.5	36.2	36.1	36.4	36.4	36.1	36.0	36.1	36.2	36.3
MINING	42.9	43.8	43.6	43.7	42.9	41.2	43.5	43.3	43.3	43.7
CONTRACT CONSTRUCTION	36.7	38.2	36.8	36.8	37.2	36.8	35.9	37.3	37.4	37.3
MANUFACTURING	40.8	40.0	40.3	40.7	40.3	40.0	39.7	39.9	40.1	40.1
Overtime hours	3.1	3.2	3.2	3.3	3.0	3.0	3.0	2.9	3.1	3.2
DURABLE GOODS	41.4	40.6	40.9	41.4	40.7	40.8	40.2	40.5	40.8	40.6
Overtime hours	3.1	3.2	3.3	3.6	2.9	3.1	3.0	3.0	3.2	3.4
Ordnance and accessories	41.9	40.6	41.0	42.6	41.3	40.7	40.1	40.6	40.8	42.0
Lumber and wood products	40.2	40.6	39.9	40.7	40.1	40.2	39.8	40.3	40.3	40.6
Furniture and fixtures	40.1	38.8	38.8	39.3	39.4	38.5	38.0	38.4	38.6	38.6
Stone, clay, and glass products	41.3	41.8	41.4	41.3	41.2	41.1	40.9	41.4	41.3	41.2
Primary metal industries	40.6	40.1	40.3	40.5	40.2	40.9	40.3	40.2	40.3	40.1
Fabricated metal products	41.7	40.6	41.0	41.4	41.0	41.0	40.6	40.4	40.8	40.7
Machinery, except electrical	42.1	41.2	41.8	42.6	41.0	41.4	40.8	41.2	41.6	41.5
Electrical equipment	40.7	40.2	40.6	40.8	40.0	40.1	39.7	40.0	40.3	40.1
Transportation equipment	43.4	41.4	42.0	42.7	41.9	41.9	41.1	41.2	42.0	41.2
Instruments and related products	40.9	40.3	40.8	41.2	40.3	40.4	39.9	40.3	40.4	40.6
Miscellaneous manufacturing	39.4	38.9	39.3	39.3	39.0	38.5	38.2	38.7	39.0	38.9
NONDURABLE GOODS	40.0	39.2	39.4	39.6	39.7	38.9	39.0	39.1	39.2	39.3
Overtime hours	3.2	3.0	3.0	3.0	3.2	2.8	2.9	2.8	3.0	3.0
Food and kindred products	40.9	40.4	40.4	40.6	40.5	40.1	40.2	40.3	40.4	40.2
Tobacco manufactures	38.8	38.7	38.1	37.5	38.0	36.8	37.1	37.5	36.9	36.7
Textile mill products	41.5	39.5	40.0	40.6	41.2	39.3	39.0	39.4	39.8	40.3
Apparel and other textile products	36.5	35.3	35.4	35.2	36.5	35.2	34.9	35.0	35.1	35.2
Paper and allied products	43.3	42.3	42.5	42.8	42.8	42.1	42.2	42.1	42.3	42.3
Printing and publishing	38.1	37.6	37.7	38.3	37.5	37.5	37.4	37.5	37.5	37.7
Chemicals and allied products	42.0	41.6	41.9	42.2	41.6	41.3	41.9	41.6	41.8	41.8
Petroleum and coal products	41.8	42.5	42.4	42.5	41.9	42.3	42.2	42.0	42.0	42.6
Rubber and plastics products, nec	41.0	41.1	41.4	41.9	40.6	40.0	40.5	41.1	41.2	41.5
Leather and leather products	39.1	36.3	36.6	36.6	38.8	36.7	36.5	36.4	36.5	36.3
TRANSPORTATION AND PUBLIC UTILITIES	39.9	40.0	39.9	40.1	39.9	40.0	39.9	39.8	39.9	40.1
WHOLESALE AND RETAIL TRADE	34.2	33.4	33.3	33.9	33.9	33.6	33.6	33.5	33.5	33.7
WHOLESALE TRADE	39.2	38.7	38.7	39.0	38.8	38.9	38.8	38.7	38.7	38.6
RETAIL TRADE	32.7	31.8	31.7	32.5	32.4	32.0	32.1	32.0	32.0	32.2
FINANCE, INSURANCE, AND REAL ESTATE	36.4	36.7	36.6	36.7	36.4	36.8	36.7	36.7	36.7	36.7
SERVICES	33.6	33.5	33.4	33.5	33.7	33.5	33.5	33.6	33.5	33.6

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

p=preliminary.

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

Industry	Average hourly earnings				Average weekly earnings			
	Dec. 1975	Oct. 1976	Nov. 1976[p]	Dec. 1976[p]	Dec. 1975	Oct. 1976	Nov. 1976[p]	Dec. 1976[p]
TOTAL PRIVATE	$4.68	$4.98	$5.00	$5.01	$170.82	$180.28	$180.50	$182.36
Seasonally adjusted	4.68	4.95	4.99	5.01	170.35	178.70	180.64	181.86
MINING	6.17	6.56	6.60	6.66	264.69	278.33	287.76	291.04
CONTRACT CONSTRUCTION	7.51	7.85	7.86	7.91	275.62	299.87	289.25	291.09
MANUFACTURING	5.00	5.28	5.34	5.41	204.00	211.20	215.20	220.19
DURABLE GOODS	5.38	5.62	5.68	5.78	222.73	228.17	232.31	239.29
Ordnance and accessories	5.54	5.89	5.98	6.00	232.13	239.13	245.18	255.60
Lumber and wood products	4.43	4.87	4.87	4.87	178.09	197.72	194.31	198.21
Furniture and fixtures	3.85	4.06	4.07	4.14	154.39	157.53	157.92	162.70
Stone, clay, and glass products	5.06	5.43	5.45	5.48	208.98	226.97	225.63	226.32
Primary metal industries	6.48	6.90	6.94	6.96	263.09	276.69	279.68	281.88
Fabricated metal products	5.29	5.49	5.54	5.63	220.59	222.89	227.14	233.08
Machinery, except electrical	5.62	5.83	5.90	5.98	236.60	240.20	246.62	254.75
Electrical equipment	4.78	5.03	5.07	5.17	194.55	202.21	205.84	210.94
Transportation equipment	6.39	6.58	6.69	6.92	277.33	272.41	280.98	295.48
Instruments and related products	4.74	4.95	4.99	5.08	193.87	199.49	203.59	209.30
Miscellaneous manufacturing	3.94	4.06	4.08	4.16	155.24	157.93	160.34	163.49
NONDURABLE GOODS	4.48	4.80	4.84	4.88	179.20	188.16	190.70	193.25
Food and kindred products	4.75	5.04	5.09	5.14	194.28	203.62	205.64	208.68
Tobacco manufactures	4.54	4.69	4.86	5.14	176.15	181.50	185.17	192.75
Textile mill products	3.55	3.79	3.80	3.81	147.33	149.71	152.00	154.69
Apparel and other textile products	3.27	3.49	3.50	3.53	119.36	123.20	123.90	124.26
Paper and allied products	5.23	5.57	5.62	5.63	226.46	235.61	238.85	240.96
Printing and publishing	5.50	5.77	5.81	5.86	209.55	216.95	219.04	224.44
Chemicals and allied products	5.61	6.04	6.08	6.10	235.62	251.26	254.75	257.42
Petroleum and coal products	6.67	7.20	7.25	7.29	278.81	306.00	307.40	309.83
Rubber and plastics products, nec	4.51	4.86	4.90	4.97	184.91	199.75	202.86	208.24
Leather and leather products	3.31	3.47	3.50	3.53	129.42	125.96	126.10	129.20
TRANSPORTATION AND PUBLIC UTILITIES	6.18	6.63	6.64	6.65	246.58	265.20	264.94	266.67
WHOLESALE AND RETAIL TRADE	3.81	4.07	4.09	4.07	130.30	135.94	136.20	137.97
WHOLESALE TRADE	5.03	5.28	5.30	5.33	197.18	204.34	205.11	207.87
RETAIL TRADE	3.40	3.64	3.65	3.64	111.18	115.75	115.71	118.30
FINANCE, INSURANCE, AND REAL ESTATE	4.23	4.41	4.41	4.43	153.97	161.85	161.41	162.58
SERVICES	4.23	4.44	4.49	4.51	142.13	148.74	149.97	151.09

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

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

(1967=100)

Industry	Dec. 1975	July 1976	Aug. 1976	Sept. 1976	Oct. 1976	Nov. P 1976	Dec. F 1976	Percent change from: Dec. 1975–Dec. 1976	Percent change from: Nov. 1976–Dec. 1976
TOTAL PRIVATE NONFARM:									
Current dollars	178.0	185.2	186.4	187.2	188.2	189.2	190.0	6.7	0.4
Constant (1967) dollars	107.0	108.4	108.5	108.5	108.7	109.0	N.A.	(2)	(3)
MINING	190.4	199.7	202.9	204.4	206.1	205.0	205.6	8.0	.3
CONTRACT CONSTRUCTION	180.1	187.7	187.1	186.5	187.9	189.0	189.9	5.4	.4
MANUFACTURING	177.6	185.4	186.6	188.1	188.4	189.7	190.5	7.3	.5
TRANSPORTATION AND PUBLIC UTILITIES	190.5	200.5	201.5	202.2	203.1	204.0	203.8	7.0	-.1
WHOLESALE AND RETAIL TRADE	172.6	178.8	180.0	180.8	182.2	183.0	184.0	6.6	.5
FINANCE, INSURANCE, AND REAL ESTATE	165.2	170.8	173.1	172.0	173.5	173.3	173.0	4.7	-.2
SERVICES	182.6	189.2	190.6	190.9	192.2	193.7	194.8	6.7	.6

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

[2] Percent change was 1.6 from November 1975 to November 1976, the latest month available.

[3] Percent change was 0.3 from October 1976 to November 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 workers[1] on private nonagricultural payrolls, by industry, seasonally adjusted

(1967 = 100)

Industry division and group	1975	1976											
	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov. P	Dec. P
TOTAL	109.3	110.1	110.4	110.4	110.8	111.3	110.9	111.1	111.0	111.4	111.3	111.8	112.4
GOODS-PRODUCING	94.0	95.2	95.2	95.2	94.8	96.3	95.9	95.6	94.8	94.9	94.9	96.1	96.1
MINING	124.9	125.2	125.0	125.7	125.9	124.7	125.0	127.7	115.6	131.7	131.1	132.8	132.9
CONTRACT CONSTRUCTION	98.1	99.6	98.5	94.1	99.0	97.8	97.6	97.2	95.9	92.8	97.2	97.9	97.2
MANUFACTURING	92.2	93.4	93.6	94.3	93.0	95.1	94.6	94.2	93.9	94.0	93.2	94.5	94.6
DURABLE GOODS	89.6	91.0	91.4	92.4	90.9	94.0	93.8	93.5	93.6	93.2	92.0	94.0	94.1
Ordnance and accessories	42.1	41.5	41.0	41.0	39.9	41.0	40.7	40.0	39.8	38.6	38.5	38.7	39.9
Lumber and wood products	93.2	97.0	96.0	95.8	96.0	96.6	96.1	98.6	97.6	98.2	99.4	100.8	102.5
Furniture and fixtures	100.7	101.3	103.1	103.6	102.7	105.1	103.3	102.3	101.2	102.4	102.2	102.5	102.5
Stone, clay, and glass products	96.5	97.7	97.4	96.5	98.6	99.5	99.7	99.2	98.6	98.9	99.7	100.1	98.9
Primary metal industries	82.8	83.6	84.8	86.0	86.8	88.3	89.2	90.1	89.8	88.8	86.2	85.6	85.3
Fabricated metal products	94.5	95.3	96.4	97.2	94.9	98.7	98.4	98.0	98.6	98.6	96.5	98.3	99.2
Machinery, except electrical	91.8	92.8	93.0	93.3	91.7	94.9	94.5	95.9	95.9	95.9	94.0	97.1	97.6
Electrical equipment and supplies	87.2	88.6	89.3	90.4	89.0	92.2	91.9	90.5	92.2	91.5	92.1	93.6	93.5
Transportation equipment	87.4	89.2	89.2	91.8	86.9	92.8	92.6	90.3	90.7	89.1	86.1	92.0	91.2
Instruments and related products	103.0	104.7	105.2	106.7	105.7	109.6	109.1	110.3	108.1	107.2	107.9	108.5	110.1
Miscellaneous manufacturing, ind.	91.2	94.4	94.3	95.4	93.1	95.4	94.7	93.1	91.8	92.2	92.0	91.8	92.4
NONDURABLE GOODS	95.9	96.8	96.8	97.1	96.0	96.6	95.8	95.2	94.2	95.2	95.0	95.3	95.3
Food and kindred products	95.5	96.7	96.8	96.0	96.1	96.6	96.8	97.0	96.5	96.4	96.2	96.0	95.0
Tobacco manufactures	88.1	89.0	88.1	84.9	85.4	85.4	83.4	82.3	84.0	82.1	83.0	80.3	78.6
Textile mill products	98.5	99.1	99.0	99.3	96.1	99.9	98.6	98.0	95.5	95.2	95.0	95.6	96.7
Apparel and other textile products	91.9	92.7	92.2	92.6	89.3	92.0	91.4	88.9	87.6	86.2	85.7	86.2	85.6
Paper and allied products	94.5	95.2	95.8	96.1	95.9	98.1	97.3	96.9	96.1	96.5	95.7	96.7	96.9
Printing and publishing	92.9	93.1	92.6	92.7	92.3	93.6	93.1	93.6	92.9	93.1	93.4	93.5	94.2
Chemicals and allied products	97.5	98.4	99.4	99.4	100.1	100.0	99.0	99.4	99.8	100.3	99.4	99.9	100.2
Petroleum and coal products	111.4	113.6	114.2	113.9	115.6	113.9	111.6	112.2	112.4	112.2	112.5	113.4	115.0
Rubber and plastics products, nec	115.9	117.7	117.9	121.7	121.3	108.8	107.0	106.2	105.2	124.3	125.6	125.2	126.8
Leather and leather products	78.3	79.7	79.2	79.3	78.4	79.8	76.0	74.7	72.5	72.1	71.0	70.5	69.8
SERVICE-PRODUCING	119.9	120.5	120.9	121.0	121.9	121.6	121.2	121.8	122.2	122.8	122.7	122.8	123.7
TRANSPORTATION AND PUBLIC UTILITIES	101.9	101.3	102.3	102.5	102.4	101.9	101.6	102.1	102.5	102.9	102.0	102.1	103.0
WHOLESALE AND RETAIL TRADE	115.5	116.6	116.8	117.0	118.4	117.5	117.0	117.8	117.6	118.3	117.9	117.6	118.6
WHOLESALE TRADE	112.4	113.2	113.4	113.2	114.3	114.3	114.1	115.3	114.7	114.9	114.8	115.0	114.7
RETAIL TRADE	116.6	117.9	118.0	118.4	120.0	118.8	118.1	118.8	118.7	119.6	119.0	118.6	120.0
FINANCE, INSURANCE, AND REAL ESTATE	124.5	125.1	125.4	125.5	126.1	126.3	126.3	126.6	127.3	127.7	128.3	129.1	129.8
SERVICES	132.8	133.3	133.9	133.7	134.3	134.9	134.6	135.0	136.2	136.8	137.2	137.4	138.4

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

P=preliminary.

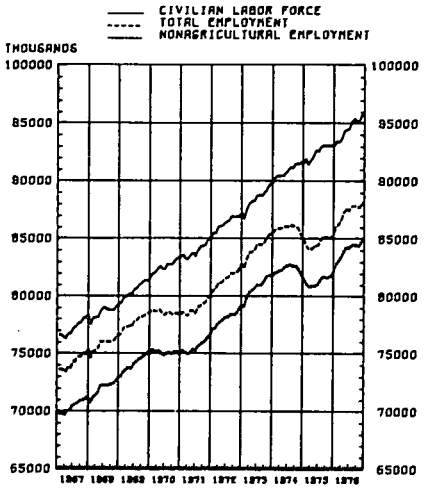
Table B-6. Indexes of diffusion: Percent of industries in which employment[1] increased

Year and month	Over 1-month span	Over 3-month span	Over 6-month span	Over 12-month span
1974				
January	58.7	61.6	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	73.5
May	63.4	70.6	71.5	75.6p
June	47.1	57.0	70.9	75.9p
July	52.9	47.4	55.2	
August	49.1	65.1	52.6p	
September	68.9	54.9	58.1p	
October	39.0	57.8p		
November	62.5p	53.2p		
December	63.4p			
1977				
January				
February				
March				
April				
May				
June				
July				
August				
September				
October				
November				
December				

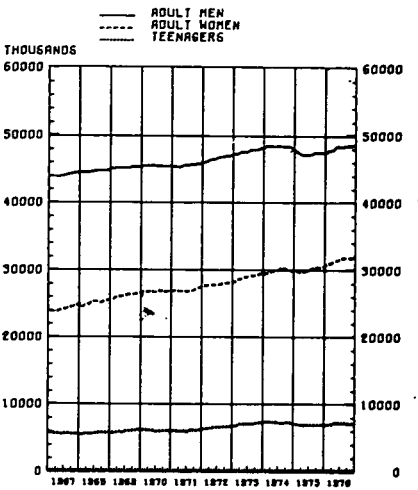
[1] Number of employees, seasonally adjusted, on payrolls of 172 private nonagricultural industries.
p = preliminary.

LABOR FORCE, EMPLOYMENT, UNEMPLOYMENT
HOUSEHOLD DATA - SEASONALLY ADJUSTED

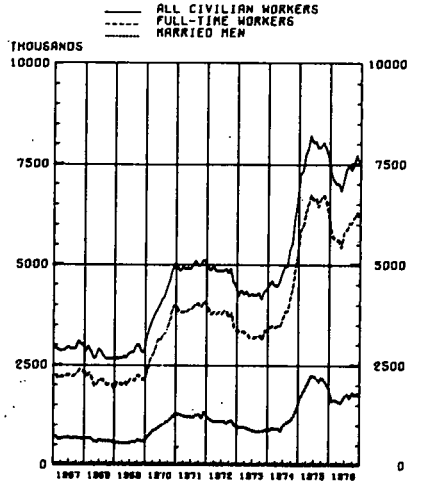
1. LABOR FORCE AND EMPLOYMENT



2. TOTAL EMPLOYMENT



3. UNEMPLOYMENT



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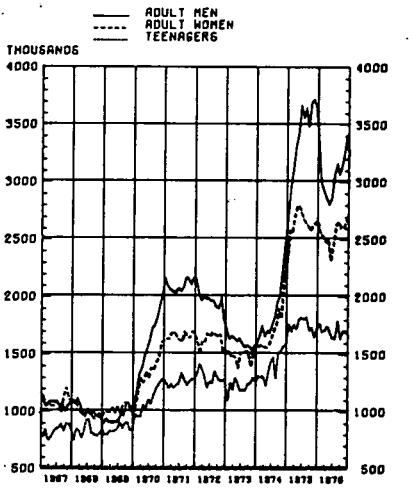
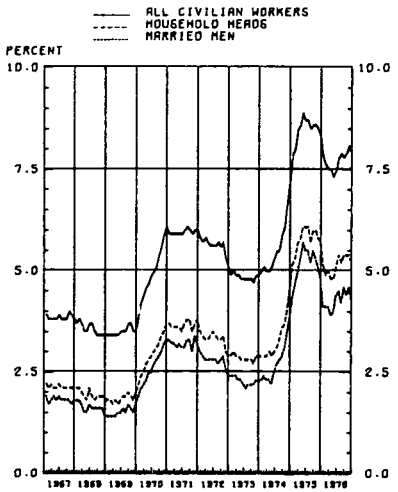
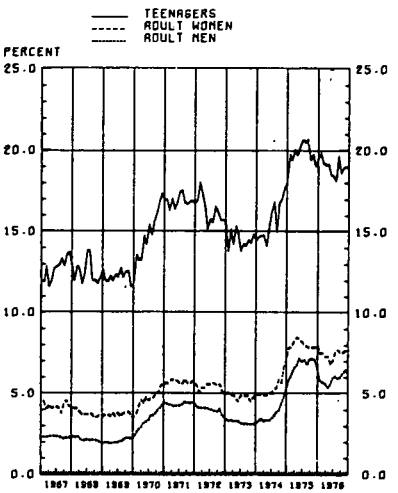


UNEMPLOYMENT RATES
HOUSEHOLD DATA - SEASONALLY ADJUSTED

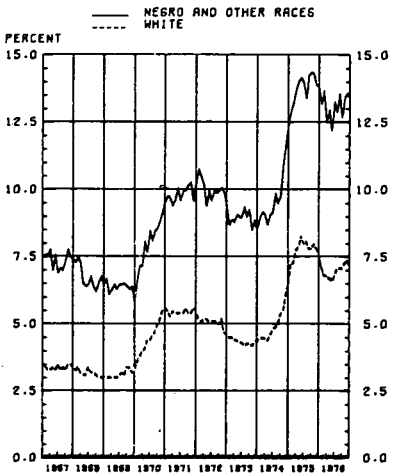
5. UNEMPLOYMENT RATES



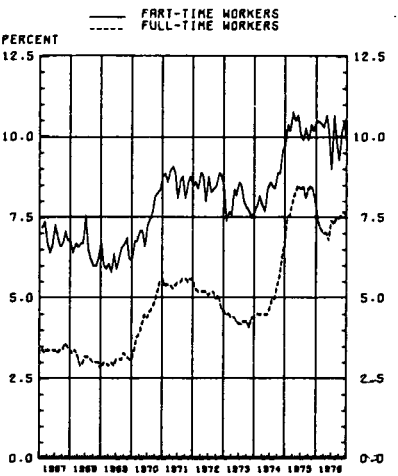
6. UNEMPLOYMENT RATES



7. UNEMPLOYMENT RATES

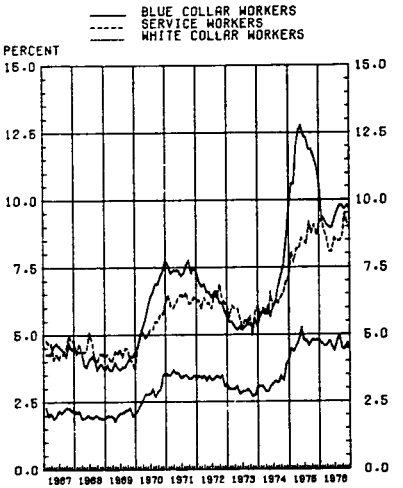


8. UNEMPLOYMENT RATES

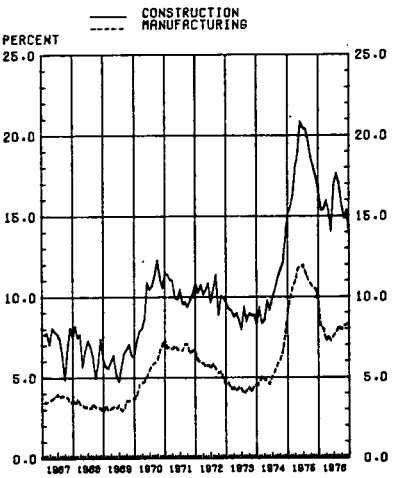


UNEMPLOYMENT
HOUSEHOLD DATA - SEASONALLY ADJUSTED

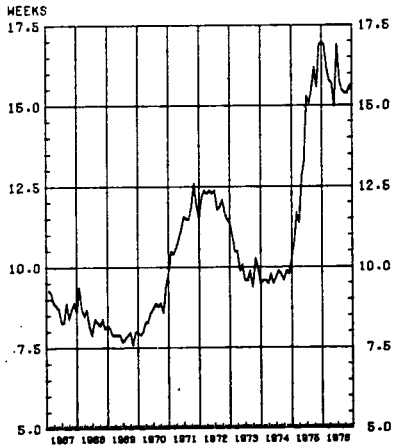
9. UNEMPLOYMENT RATES



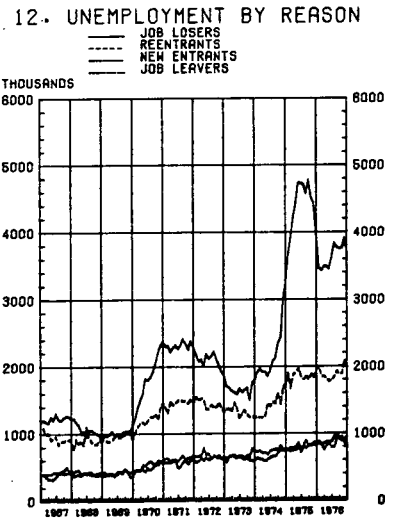
10. UNEMPLOYMENT RATES



11. AVERAGE DURATION OF UNEMPLOYMENT

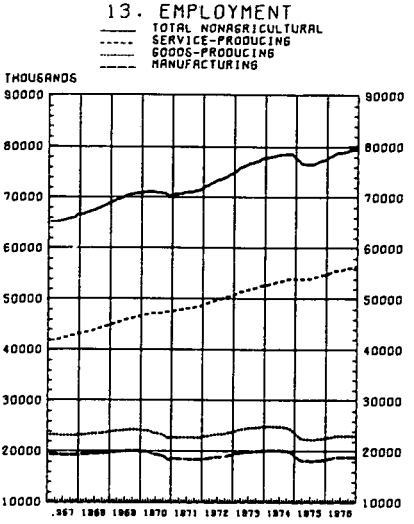


12. UNEMPLOYMENT BY REASON

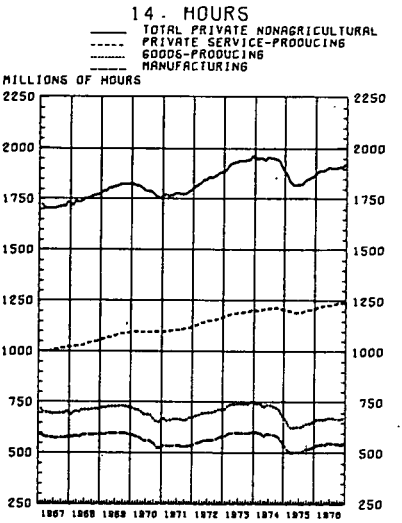


NONAGRICULTURAL EMPLOYMENT AND HOURS
ESTABLISHMENT DATA - SEASONALLY ADJUSTED

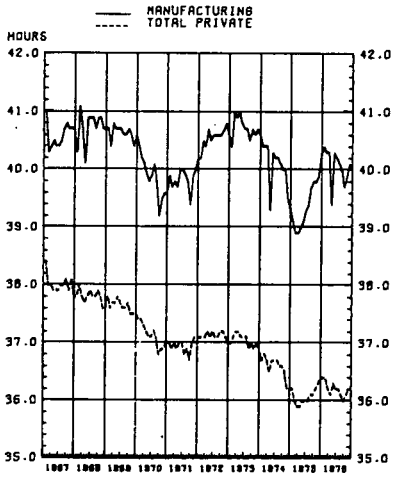
13. EMPLOYMENT



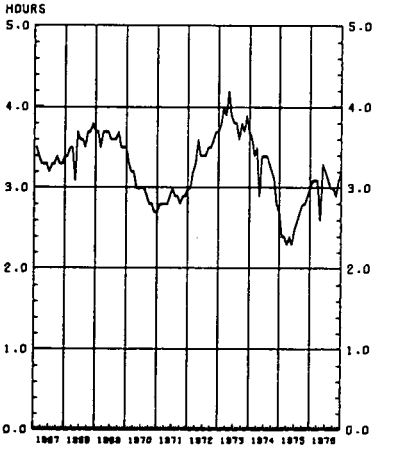
14. HOURS



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. Thank you.

Senator Proxmire.

Senator PROXMIRE. I want to commend you for your concern with the statistics and your alertness to criticism. Frankly, I think you do a superb job. I have heard criticism of the statistics because people don't like what the figures show, but from what I have seen our statistics are the best in the world; and we can't be smug about that, because we and business rely on these statistics.

I think you do a commendable job and I think you are sensitive to constantly improving them; that is most welcome.

Let me get back to my statement made at the beginning. I disagree with you very strongly in your opening remark that you think today's unemployment figures indicate the economy is moving ahead. I think it is stalled as far as employment is concerned.

I think that is the case because while there was a significant reduction in unemployment, that reduction was largely because the labor force failed to grow in December. It remained at the same level. If it had grown, unemployment would still be at 8.1.

You referred to the quarterly figures and I did too, because I thought your table was excellent. If you look at table A–1, the household data, you have a drop from 62.3 in November of 1976 to 62.1 in December of 1976 in labor participation. That means a smaller proportion of the people in this country in the labor force were seeking work or were at work. On the basis of what you told us and on the basis of that statistic, I concluded the decline in unemployment was very largely the result of a combination of a lack of growth in the labor force, and of people who had been seeking work who are not doing so.

What is wrong with that conclusion?

Mr. SHISKIN. You may be right. I keep saying this, and so do you. We have to wait.

My own view, and I base this not only looking at the unemployment figures, but looking at a large array of figures, is that there is substantial evidence the economy is improving in all directions.

As I said, you look at some of the figures we don't compile, but which are very important, like retail sales—they are roughly 30 percent of GNP. We have had very substantial improvements in retail sales.

Personal income, including disposable personal income, shows significant improvement.

Industrial production shows improvement.

The table I used to attach to my prepared statement showing the relative cyclical standing of measures of economic performance, shows that except for unemployment, we are at an alltime high.

So there is a lot of evidence the economy is improving.

Senator PROXMIRE. With respect to the alltime high argument, I think you would agree in a country with a growing population and with the kind of demographic situation we have, with more and more people looking for work, you would always have an expanding work force; and if we fail to employ substantially more each year and for that matter, each month, we are going to lose ground.

We are going to increase the amount of unemployment.

Mr. SHISKIN. That is absolutely true. That is why we decided, and many of our users have supported this, that the employment-popula-

tion ratios should be included in our monthly release. The employment-population ratio, which does take into account the growth of the country, is also close to an alltime high. The December figures are one of the highest we have ever had. The employment situation is very strong.

When you come to unemployment, it is quite true that we have only a 1-month decline; but my optimism on that figure is based on the figures I see for all of the other indices, including the most recent figures for the weekly insured unemployment rate.

I recognize, as you must realize from part of my statement, the great difficulty in making a substantial reduction in the unemployment rate, but I think it is underway.

Senator PROXMIRE. I think we are all properly concerned with using our fundamental economic resources—manpower—if we have real growth, but if the real growth rate is not high enough to provide more jobs, then the economy will stall at seven or eight percent unemployment, and obviously, we will not make the type of progress everyone would like us to achieve.

Based on what you know about retail sales, employment, and so forth, do you feel Gross National Product in the fourth quarter exceeded the third quarter?

Mr. SHISKIN. That is my guess, yes.

Senator PROXMIRE. By how much?

Mr. SHISKIN. I have not made that calculation. I made the observation last month, and I don't believe you were at that hearing, that if you look at the forecasts, for example the DRI, the Wharton School, and so on, you see a very interesting pattern over September, October, November, and December last year. During the cyclical pause, each month when these forecasters came out with a new forecast, the forecasts for the first quarter of 1977, and the fourth quarter of 1976 were lower than the forecasts for those same periods made a little earlier. I said last month that I thought as more forecasts come out, the new ones would be a little higher, not a little lower; we do have one, and it is higher for the fourth quarter.

I think they will keep getting higher. What I would say is the evidence, and again the leading indicators need to be mentioned, is that the economy will grow in the months ahead.

Senator PROXMIRE. The economy can grow quite well, as you point out, and also based on past experience, but with a 3-percent increase in productivity. In view of the labor force we can expect and predict with considerable confidence, we won't get much improvement unless it grows more rapidly in the fourth quarter. We have to have continuing expansion here; don't we?

Mr. SHISKIN. Yes, and I can see a situation where we have growth in the physical volume of production and related measures without much of an impact on the related unemployment rates.

Senator PROXMIRE. Yesterday, Mr. Schultze, the Chairman-designate of the Council of Economic Advisers, indicated to us that he expected that the package that was put together at Plains and announced over the weekend would tend to increase growth in the economy about 1 percent or so.

While that is not very much, nevertheless, it is the margin that we are concerned about. If it does increase the growth in the economy by

1 percent, how would you translate that into increased jobs, assuming that productivity increases remain the same?

Mr. SHISKIN. Shall we do an exercise? I have a table here. Let's look at table 3.

In table 3 I have made estimates of the amount of real GNP——

Senator PROXMIRE. Table 3——

Mr. SHISKIN. Table 3 in my prepared statement.

Let me again say for the economists sitting at the head table and beyond the head table, I realize this is a very simplistic table, but I think it does illustrate the difficulties we have in trying to reduce the unemployment rate.

Let us take a look at the 1 percent. I guess what Mr. Schultze was saying was that this would increase the GNP from about 4 to 5.

Senator PROXMIRE. Something like that, yes.

Mr. SHISKIN. This table indicates—I am now looking in the body of table 3—increases by 5 percent over the year—that the unemployment rate will go down by 1 percent provided the labor growth force is 1½ million.

Senator PROXMIRE. Provided it is what?

Mr. SHISKIN. One and a half million.

If you look at the tables, if you look at the third column under 1 percent, you see a 5.0, and that is where I am. Do you see that?

Senator PROXMIRE. I see it.

Mr. SHISKIN. If you go up the table that column covers the 1 percent target reduction, so you can get a 1 percentage point reduction in unemployment, if you have a 1½ percent——

Senator PROXMIRE. Again on the assumption which I understand the Budget Office again indicated there would be a small change in the unemployment rate, a change from 7.1 to 7.9 percent if nothing were done to stimulate the economy. There would be a decline of about a percentage point in unemployment, too, if the real rate of growth is 1 percent.

Mr. SHISKIN. Suppose our labor force grows 2 million, then you need 5.6 percent in real GNP to get the unemployment rate down by 1 percentage point. In the matrix, there is a figure of a 2 million increase in the labor force. If you run your eye across that row under 1 percent, you get 5.6.

This is new material and I am sure there are errors in it and people will find flaws, but, hopefully, it is illustrative. It just indicates with the present industry mix it is a tough job to get the unemployment rate down.

Senator PROXMIRE. You make some assumptions of what is necessary to achieve this and one of the assumptions is unusual—that is a 4 percent decline in the private economy's average weekly hours.

Mr. SHISKIN. There are two forces at work there.

Senator PROXMIRE. It would be more than——

Mr. SHISKIN. This is consistent with the long-term trend, though if it is an expansion year you have something bucking the tide. I would not defend every assumption, sir, and I may have missed that one; but the average work week has been declining, and we are assuming continuation of the secular decline in average weekly hours in the private economy.

Senator PROXMIRE. Isn't it true we have a strong history that in a recovery period the hours do not decline?

Mr. SHISKIN. They usually rise, particularly in manufacturing, and I may be wrong on this assumption.

Senator PROXMIRE. If you are wrong, that would substantially reduce the amount of employment?

Mr. SHISKIN. Right, and I think you could raise similar questions about the productivity assumption.

Senator PROXMIRE. As you recover, productivity tends to increase more rapidly, and, therefore, the number of jobs do not increase as rapidly?

Mr. SHISKIN. That is right. There are a lot of assumptions but this technique indicates the difficulties of reducing unemployment. Without trying to defend every assumption in the table, which I will say for the third time is a very simplistic table, I think you will find it useful.

You can multiply these——

Senator PROXMIRE. Let me try something shorter and quicker.

What is your expectation as to what this 2-year package that the administration is proposing is likely to do to unemployment?

Mr. SHISKIN. Let me just say I did not read Schultze's statement in full, but I think what was reported in the Washington Post this morning was very significant; it will change the tone of the economy. I think it will. The fact that steps are being taken to cope with this difficult problem is important. So I am optimistic on the favorable effect.

Senator PROXMIRE. I am trying to find out how favorable the effect will be. Should Congress go further, or not as far? We would like your expert advice.

Do we need a bigger tax cut, a bigger public works program?

Mr. SHISKIN. I always cop out on these questions because they belong to different agencies of government.

Senator PROXMIRE. I am just asking for your opinion under these circumstances.

Mr. SHISKIN. I think it would be helpful in promoting GNP, but I think unless directed heavily at the capital goods industries, the unemployment rate will remain high. It is not going to have much impact.

Senator PROXMIRE. I did not get the last part of your statement?

Mr. SHISKIN. Unless it is directed to the capital goods industries.

Senator PROXMIRE. You say——

Mr. SHISKIN. And part of it is, I don't know if enough is. Investment credit is directed to capital goods. Also, here is a point you have been watching, Senator Proxmire, in these figures: One of the points that we have all been observing is that "job losers" remain at a very high level. What has been going on is we have this large number of job losers who came out of the capital goods industries—manufacturing, construction—during the 1974–75 recession. A great many people have been getting jobs in the service industries, which has been growing rapidly.

Senator PROXMIRE. The philosophy behind the proposed cut is what you need to stimulate the capital goods market, is what is needed to stimulate demand. Until you get that up, people are not—there is no point building machinery if you can't use it.

Do you thing that is unsound? Do you think to get the increase you will have to have a more directed effort?

Mr. SHISKIN. I have watched this and the growth of the economy. We have had an inventory adjustment, and a lot of Government money that everyone thought would be spent was not being spent, but it now is. I think the economy will begin to grow, and now we have a little stimulation; and I think I would watch that for a while.

I am way beyond where I ought to be, Senator Proxmire; and I think I ought to stop at that point, because otherwise I won't be able to face my BLS colleagues this afternoon.

Senator PROXMIRE. Let me ask you about the price figures here.

Can you give us a little more information on the significance of this sharp improvement in industrial price increases. Maybe I was wrong in saying I thought the food price increase was a temporary increase. Food price increases are erratic, and may not be of the same significance.

Mr. SHISKIN. No; I think you put it very well. I can't add much to what you said, but let me try to summarize it in my own words.

We had a very large rise in the price of foods in December. If you look at our tables and the charts, you see that food prices are very erratic. You get very big rises for a while and then you get small rises, and occasionally even declines.

On the other hand, a lot of us have been wondering whether, in a sense, the large rises in industrial prices, we have seen in the previous few months could stick. There have been a lot of explanations around that some companies were raising prices for fear that there would be some type of price freeze, and so on.

Hopefully, the small rise in industrial prices is the beginning of a new trend, so I would tend to give that greater relative weight.

I don't know if that is true or not. But the fact is——

Senator PROXMIRE. Let me ask you specifically about that: When the steel companies made their announcement, there was specific discussion as to whether these could be made to stick in a slack market.

The December market shows 2 percent increase for steel mill products. Does that give us the answer? Does that tell us these price increases are holding?

Mr. SHISKIN. It looks as though they have held for 1 month. I asked John Layng about this yesterday, and you might as well hear it directly from him.

Mr. LAYNG. It is a little bit early to tell, but in December it seems like the went into effect in the marketplace, and they were reflected pretty much fully. The expectation, at least from the steel side, is that there is some increase in demand. Scrap prices did go up reflecting increased demand. If that continues, it is possible that the increases would stick.

Senator PROXMIRE. On the basis of your experience, do you feel it is likely to continue to stick, or is that 1 month the testing period that gives us the answer; or do we have to wait a couple of months more?

Mr. LAYNG. I think the bottom line will be the demand situation. If demand drops off——

Senator PROXMIRE. In the past when they have made these increases have they had to walk away from them right at the beginning, or if they are able to stick for a month, do they stick permanently?

Mr. LAYNG. It is varied a great deal over time. Sometimes it is very quick. In the fall last year it was almost instantaneous, it seemed, up

and down. It is very difficult to tell because it depends on the situation they are facing, and their expectations that influence what they do.

Senator PROXMIRE. In steel, how significant is the world situation? Is this situation one that if we recovered but other steel manufactures don't, other countries that buy steel don't recover, that it is harder to make it stick? Are we pretty insulated from that?

Mr. LAYNG. I think we are less insulated today than we were years ago. I have not followed the foreign situation in recent months. I know Japan is active on the west coast in scrap markets, but I don't think we are, on the export-import side, as insulated as we used to be.

Senator PROXMIRE. Isn't all of the other evidence that other economies are likely to recover as well as ours?

Mr. LAYNG. In general that is what I have read. A few countries might be coming along well, but I have not followed it all that closely.

Mr. SHISKIN. One comment I would like to add on the overall situation is that the price changes in 1975 and 1976 are larger than before 1972, but they are nothing like what took place in 1973 and 1974. I think people remember the very rapid, rises in prices in 1973 and especially 1974. The pattern that I see suggests that we are not going to have such rapid rises in the period immediately ahead.

Senator PROXMIRE. Mr. Shiskin, I would like to ask you something I have been waiting to ask. The Morgan Guaranty survey of October last year printed by Business Week in November says the Labor Department's estimate of real spendable earnings of a family of four is grossly underestimated according to Geoffrey Moore, who was your predecessor.

He says the underestimate is in the area of 40 to 45 percent. Based on annual survey of the Labor Department, May 1976 shows median weekly earnings, male head of household, $245. The comparable monthly figure is $174. The assumption by Moore is the Labor Department average worker who supports a family of four has the same earnings as all workers, which includes teenagers, part-time workers, the downward bias has gotten worse.

Monthly surveys show no increase in real after tax earnings, and there is a 10-percent rise.

Now, is there a distortion?

Mr. SHISKIN. Yes, sir, there is.

Let me make a few observations on that: First, there was a tremendous amount of pressure on the Bureau of Labor Statistics many years ago to come up with a real spendable earnings series. I was not here at the time.

I believe that the pressure came from Senator Paul Douglas.

The series that was put together then is the one we have now.

Now, numerous Commissioners have been tempted to discontinue the series. Moore, himself, was; and I was. But there is an old saying, you can't replace something with nothing. There is a genuine need for data on real spendable earnings, so we have been doing two things:

One is we have been explaining more exactly the limitations of that series, and I think the best criticism you will find anywhere of that series appears in our release.

Now, what it says, in effect, is that real spendable earnings apply to only a worker with three dependents who earned the average weekly

earnings. That figure applies to about 15 percent of household heads in production and nonsupervising jobs. So one thing we have done is explain that series and its limitations, more carefully.

Another thing we have done is issue new data on average annual earnings, which are based on the household survey. These have been published for numerous years and they have been published under the direction of Bob Stein, to my right.

Now, these new data are the very data Moore is using to make his criticism. These data—and I once had a chart at this hearing which I waved in my hand and showed the numbers of this committee—which, showed the earnings of male household heads with three dependents. That chart gives a very different picture of the trend in real earnings of male household heads with three dependents.

Now, may I just add this, Senator: If you look at female household heads, it is a dismal picture. For male household heads with three dependents, if you look at our annual earnings data, you get a very different picture from that of the average female household head.

Then let me finally say these data on annual earnings were recently supplemented by hourly and weekly earnings data. They are data based on the household survey. They have many limitations, but they are very revealing.

Now we have in the mill, and I expect it will be out, in a week or two, a fairly comprehensive paper describing the new series. We will be happy to make it available.

In summary, let me say that information is needed on real spendable earnings, but the present series has very serious limitations and needs to be interpreted with care.

To provide a fuller picture, we are providing other kinds of data, which will also show earnings of male household heads, earnings of blacks, and earnings of whites. So we are pursuing these areas.

Senator PROXMIRE. We certainly want the information on the earnings, I think everyone would agree, of female household heads and blacks.

But it seems to me that the statistics Mr. Moore points to and the Morgan Guaranty Newsletter points to, and if they are what you seem to confirm their contention that they are grossly understated, that the income of the male household heads is indeed $245 a week, not $174; that that should be corrected.

Mr. SHISKIN. I don't have a copy of that release with me, but the release explains exactly what that series is and that it applies to a worker with three dependents—it does not say male or female—and it says, "earning the average income." So the series is defined exactly.

Senator PROXMIRE. The point is, the average household head does not earn the average.

Mr. SHISKIN. About 15 percent do.

Senator PROXMIRE. What percent?

Mr. SHISKIN. About 15 percent, and it is a low percentage.

Senator PROXMIRE. Why not give the income they do earn?

Mr. SHISKIN. We do. We give it another release, the release based on the household survey.

Mr. STEIN. The problem is, we can't provide the income that they actually do earn on a regular monthly basis until we get this new series going and that is what we are in the process of doing.

Even on that basis, we would have it only on a quarterly basis.

Senator PROXMIRE. If you have it only on a quarterly basis, it would seem to me as one Member of Congress, it would be desirable to issue it on a quarterly basis; otherwise you do get a misunderstanding, an understatement of what is actually earned by the male head of household.

Mr. SHISKIN. We don't have it on a quarterly basis, we have it on an annual basis, and we are hoping to start getting it on a quarterly basis.

So what we are trying to do is describe the limitations of the real spendable earnings series in detail and, to provide better data. We are working along both these fronts. I am not bragging about the situation, Senator Proxmire. I wish it were a lot better.

As I said the other day, the demands on the part of the data-using public are way ahead of our ability to produce.

Senator PROXMIRE. A few moments ago you said you continued publication despite recognized weaknesses because you said you can't replace something with nothing.

Why doesn't that same logic apply to the job vacancy series and the GNP potential series? Both of these represent vitally needed data, and both have been dropped.

Mr. SHISKIN. The job vacancy series was dropped. I know about that one, because so far as I could see, we had another series; namely, the conference Board series on help wanted advertising, provide data just as good as the old-job vacancy series did, at no expense to the Government. They were were doing that series anyway.

The job vacancy survey was costing us $1 million a year, and it was not meeting the needs of the data users; so that was our rationale for dropping it.

Senator PROXMIRE. You say the Conference Board series is adequate?

Mr. SHISKIN. It is adequate to meet the purposes of a macroeconomic indicator on job vacancies.

Senator PROXMIRE. What I am talking about is the fact that we have gone over this again and again and again; and it is a reasonably stated position. We have unemployment statistics, but not statistics on the jobs, seeking people.

Mr. SHISKIN. We have it at the national level, though it does not show occupational breakdowns.

Senator PROXMIRE. In the Conference Board statistics?

Mr. SHISKIN. You asked about why we dropped the job vacancy series. and I said it was because it had serious limitations.

Let me explain, that more fully. The kinds of data you need on job vacancies are occupational data by geographic region. That is, you need to know for carpenters, for bricklayers, for plumbers how many vacancies there are for those jobs in different regions of the country.

What you need to do is match those up against similar data on the unemployed, to determine whether you have a problem of structural unemployment.

Senator PROXMIRE. That is not all you need it for, as you know.

Mr. SHISKIN. Then you need it as a general indicator as demand for jobs.

Senator PROXMIRE. The demand for people to fill jobs.

Mr. SHISKIN. You are quite right.

I think the series that the Conference Board puts out was as good as the old national job vacancy series we were putting out. The one we were putting out cost $1 million a year, and I did not think it was worth it.

Senator PROXMIRE. How often does that come out?

Mr. SHISKIN. Once a month. I used to be in charge of BCD——

Senator PROXMIRE. I was not aware of that. The staff tells me that is not satisfactory.

Mr. SHISKIN. For the purposes of determining whether the large unemployment we have today is due to structural or macroeconomic problems, it is not adequate.

Senator PROXMIRE. I will tell you what we want. We want an answer to people who approach me and say, "Proxmire, you talk about the unemployed and I have been trying to get people to come in and drive a truck, pick berries, wash dishes." Now, where are these unemployed? I realize there are mobility problems and so on, but I think if we had side by side with the unemployment figures, job vacancy figures that were reliable, that came out every month, I could answer the question. I say it is a legitimate point—maybe not; maybe they are wrong.

Maybe these jobs are not available. I think we have a right to know.

Mr. SHISKIN. You are right, and we agree with you. We have been making steady efforts for years to get such a series, but we have been unsuccessful.

Senator PROXMIRE. Does that mean you think the Conference Board does not provide what I am talking about?

Mr. SHISKIN. No; it does not answer the question your friend asked you; namely, we have a lot of unemployed but I have a job open for a mechanic or an electronic engineer, and why can't——

Senator PROXMIRE. What would it take to get that? Do you need appropriations from Congress?

Mr. SHISKIN. We will need an appropriation from Congress.

Senator PROXMIRE. How much do you need?

Mr. SHISKIN. This is a ballpark estimate. When the survey is in full swing, it will cost a lot of money, somewhere around $25 million to $50 million a year.

You see, you have to get job vacancy data by region and by occupation, and that is expensive.

Senator PROXMIRE. How much a year?

Mr. SHISKIN. $25 to $50 million a year. The reason is you have to get the data by geographic region and by occupation; otherwise, you can't answer that question.

Senator PROXMIRE. How much would it cost to get the overall figures?

Mr. SHISKIN. We have the overall figures. They are called help-wanted advertisements and issued by the Conference Board. It is an index.

Senator PROXMIRE. You don't argue the help-wanted advertising gives you the full job figure?

Mr. SHISKIN. It gives you a national figure on demand for jobs.

Senator PROXMIRE. It gives you a figure——

Mr. SHISKIN. But it does not tell you the kinds of jobs.

Senator PROXMIRE. Not only that, it does not give you a complete listing. Not everybody advertises.

Mr. SHISKIN. As far as I can see, that is pretty close to it. Let me make it clear, we recognize the great limitations of what we have had in the past from the survey of job vacanices. I, for one, strongly agree with you that we should have a better job vacancy survey.

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

Representative BOLLING. Mr. Rousselot.

Representative ROUSSELOT. Mr. Shiskin, you have a great deal of input into preparing the figures used by the Joint Economic Committee. In studying the unemployment figure that we have before us each month in the charts, we always notice that people are unemployed on the average of 14 weeks or less.

In other words, there is usually around 30 percent that are unemployed for 14 weeks or less, 34 percent for five weeks or less, and when we get up to 15–26 weeks as a percentage of distribution of duration employment, it comes down to 15 percent.

What is your guess or reason as to why the duration of unemployment drops off so markedly after 14 weeks?

Mr. SHISKIN. There is a lot of turnover. People who are unemployed are unemployed for spells, then they get jobs; some keep them and some get laid off again and quit. So most people are not unemployed for long periods, but there is a hard-core group that is.

I hope that is responsive to your question.

Representative ROUSSELOT. I wonder when we constantly throw up the percentage of workers unemployed, of which a good percentage are going back to work or presumably are going back to work after 14 weeks, which I realize is a fairly long time; I wonder if we are really adequately, as a Congress, addressing ourselves to the real problem of unemployment, which is really the people who can't get back into the work force after 14 weeks.

Mr. SHISKIN. Sir, I recognize this problem, and my answer is that various people have different attitudes about what constitutes real unemployment.

Now, on one end of the spectrum, one group is thinking of the potential labor supply. They ask for a very broad definition of unemployment. They would include as unemployed not only the ones that we actually do include, those that are actively seeking work, but they would include many others.

Another thing they would do is count as unemployed half the people who are part-timers, and they would come out with a much bigger figure.

We have such a table in the report that I turn out to this group every month, and we will have it in our regular release every month starting next month.

The unemployment rate shown there is 10.8 percent for the quarter as compared to our figure of 8 for the quarter.

Now, on the other hand, there are many people who think our measure of unemployment is too broad, that we ought to have a more restrictive measure, that we ought not to count, for example, persons who are unemployed but who, let say, are teenagers who have one or more parents working. They don't think people who quit jobs should

be counted as unemployed. They don't think women whose husbands are working should be counted, nor those who have been unemployed for short periods.

We started to put out such different measures of unemployment 10 months ago, in table 2, of my statement. If you look at that sir, it starts off with what I call U–1, persons unemployed 15 weeks or longer, which is exactly what you are talking about; and the rate is 2.7 percent.

Representative ROUSSELOT. I am not saying we shouldn't have the percentage count of the total people unemployed at any given time, but Congress should recognize that many of these people are really in transition. Some of them have voluntarily left jobs. We are trying to reach out to them when talking about curing the unemployment problem. In my judgment, after I have watched these figures for some time and as you have shown here, the real unemployed are the people who have been unemployed 15 weeks or longer and are having a difficult time reentering the job market.

My own district, Cal Poly, which is in Pomona, has done a study of people actually unemployed and found the people who are unemployed for 2, 3, or 4 weeks don't consider themselves unemployed. They say, "Gee, I am just in transit."

I am wondering if it would be helpful if we do not take into consideration people who are in transition; if there is some way to show the unemployment figure of those who actually expect to be unemployed for 2 or 3 or 4 weeks. Would that not be a more realistic way to appraise that unemployment figure?

Mr. SHISKIN. Sir, my job as I interpret it, is to meet the needs of people who look at unemployment the way you do, but there are others who look at it differently.

This table as well as many others in the release provide the different information that different people want—here it is.

Representative ROUSSELOT. You have actually analyzed it. I just feel as a Congress we have made a real mistake in constantly emphasizing the overall figure, though it is important, as to who we try to help. When we talk about putting 600 new jobs in place, they are not going to some of these people who are unemployed for 2 or 3 or 4 weeks. They are going to go onto other jobs anyway.

Mr. SHISKIN. If you want to know the number of people unemployed for 15 weeks or longer, there it is. It is provided among the figures we publish every month.

Also, this table 2 of my statement will be published every month in our regular press release starting in February.

Representative ROUSSELOT. Maybe we can pay more attention to it. I hope we do.

I have no more questions, Mr. Chairman.

Representative BOLLING. Mr. Brown.

Representative BROWN of Michigan. In the employment situation release that came out today this sentence appears.

The over-the-month reduction took place almost entirely among adult men. Their jobless rate fell 0.3 of 1 percent to 6.2 percent as many left the labor force.

Can you explain the latter part of that sentence, "as many left the labor force"? Where did they go?

Mr. SHISKIN. They are not looking for jobs.

Bob, do you have anything more to say? As you know, this has been a pattern in recent years. A lot of men are dropping out of the labor force.

Mr. STEIN. I don't have anything more to add on it.

I don't think we can explain that specific movement. There is a lot of turnover in the labor force every month and there has been a general downtrend among older men, a tendency toward earlier retirement. Whether that is reflected in this particular month, we really could not say.

Representative BROWN of Michigan. What was the total increase in the labor force in December?

Mr. SHISKIN. Virtually none.

Representative BROWN of Michigan. It just points out the thing we have been discussing all last year, that entrants into the labor force primarily determine unemployment figures.

Mr. SHISKIN. As a matter of fact, Congressman Brown, I hope the others who were here earlier will forgive me if I ask you to take a look at a matrix I provided in my prepared statement. I try to explain or show how many new jobs would be required to reduce the unemployment rate by various target percentages, 1 percentage point, 2 percentage points, 3 percentage points, under various assumptions with respect to the increase in the labor force.

Obviously, the labor force growth makes a tremendous amount of difference.

For example, suppose you have a target of reducing the unemployment rate by 1 percentage point. If the labor force increases by 1 million next year, you will need 1.9 million new jobs.

If it increases by 2 million, you will need 2.8 million.

If it increases by 3 million, if it should—and it is a very high figure—you would need 3.7 million jobs; a figure we probably could not attain in the year or two ahead.

So this table points out the difficulties and complexities of making a judgment on what your goals ought to be. You have to know something about what is going to happen in the labor force, as you just pointed out, and that is difficult.

I might add—and my staff has been warning me about this—at this point we turn out every year forecasts of labor force change, but the record shows they are not very accurate. It is very difficult to forecast the labor force.

Representative BROWN of Michigan. Total employment increased by 220,000 in December and then the employment situation release indicates nonfarm payroll increased by 260,000.

Is it oversimplistic to say the farm payroll is reduced by 40,000?

Mr. SHISKIN. Yes. We have two different surveys and they don't exactly give us the same results every month. We have two estimates of nonfarm employment. I think that is a very good thing, but now partly because of discrepancies, in these two series which have been discussed before this committee numerous times, we have been making

very intensive efforts to reconcile the series, and we couldn't explain the 400,000 discrepancy which we could not explain several months ago. We tried to explain it to a New York Times reporter, a good reporter, and he has a fairly good story on it.

He said we found 400,000 new jobs. We were not getting all the new businesses.

Let me come back to your point: we have two estimates of employment and they don't give us the same results. We think we have them pretty well reconciled. They are pretty close but they are not exactly the same.

Representative BROWN of Michigan. You have said the employment situation release next month will include employment-population ratios for all workers, and the major demographic groups will be included in table 1?

Mr. SHISKIN. Yes.

Representative BROWN of Michigan. Sometime back we also discussed that you were going to include in effect a test of economic hardship, as to what other workers were employed in the same household by, and analyzing the unemployed in that way. Was it to be in March you thought you would be able to provide such information?

Mr. STEIN. One is we do have a table designed, and we plan to start publishing it in the quarterly report; and it should come out the first quarter report for 1977.

But in addition to that I think Mr. Shiskin began to allude to an article in the Monthly Labor Review which reviewed the data we have compiled up to this point, and in some detail. I can't remember exactly what issue it is.

Mr. SHISKIN. It is the current issue. I think it says if you take families with an unemployed person, 68 percent have another family member working.

Representative BROWN of Michigan. Sixty-eight percent of those who are unemployed?

Mr. SHISKIN. In families that have someone unemployed, 68 percent also have someone who is employed.

Representative BROWN of Michigan. I am not sure I heard you correctly.

Of the unemployed, the families where there is an unemployed person, 68 percent had another person employed in the same family or household?

Mr. SHISKIN. Yes.

Representative BROWN. of Michigan. Is that a part time, full time or don't you make that analysis of the other person?

Mr. STEIN. If we would restrict other persons' employment to full time, the figure would drop to about 60 percent.

In other words, in about three-fifths of the families with an unemployed worker, there is also a full-time worker present.

Representative BROWN of Michigan. Does your employment situation release indicate the number of weeks unemployed, for instance, for construction workers?

Mr. SHISKIN. No, we just have an overall figure.

Representative BROWN of Michigan. Do you have an estimate of the average unemployment in the construction trades, year in and year out?

Mr. STEIN. Yes; do you mean over the course of the entire year, or at any given point?

Representative BROWN of Michigan. I guess I am referring to what you call noncyclical, but as restricted to the construction trade.

Mr. STEIN. We don't have such a figure, but we could probably develop it.

Representative BROWN of Michigan. This noncyclical unemployed rate in the construction trades is probably greater than in any other pursuit.

Mr. STEIN. Than in any other industry.

Representative BROWN of Michigan. Yes.

Mr. STEIN. I don't know, but it is certainly high.

Mr. SHISKIN. Sir, may I add another point?

Earlier in the discussion we mentioned that we will be revising our payroll employment series next month because we made a new benchmark adjustment based on the fourth quarter of 1975. As a result of that, we will be adding about 400,000 employees.

Representative BROWN of Michigan. 400,000 employees to the labor force?

Mr. SHISKIN. No, to the number of employees reported by business concerns. So the figure will be 400,000 higher; 400,000 as a percentage of 80 million is not a big figure, but if you are discussing change or studying the discrepancy between two series, it is significant.

Well, over half of those added—almost 200,000—will be in the construction industry, so our construction figures on employment have consistently been too low in the last year or so.

Representative BROWN of Michigan. Your figures have been too low?

Mr. SHISKIN. Yes.

Representative BROWN of Michigan. In other words, your figures regarding unemployment have been too high, then?

Mr. SHISKIN. It is a very complicated world we live in, particularly those of us who have to put these figures together and those who have to understand them. Unemployment comes from one survey, and we think that the results are pretty good for national figures. But we have a lot of problems when it comes to State and local unemployment figures.

Representative BROWN of Michigan. In effect you will be adding the 400,000 to the labor force and to the figure of those unemployed?

Mr. SHISKIN. These are our "B" tables in the release, the payroll tables.

Please take a look at the release and the "B" tables, table B–1 shows employees on nonagricultural payrolls.

Representative BROWN of Michigan. Where are you?

Mr. SHISKIN. In the official BLS release. There are two sets of tables attached. The "A" tables refer to the household survey, and the "B" tables to the payroll survey.

If you look at the top of table B–1, it says total employment. Next month when we revise these figures, we will be adding approximately 400,000 to 79,957, the figure for December now in that table. What I said in this context is that almost half of the 400,000 will be added to the construction industry employment figures.

If you look at construction employment, we will be adding about 200,000 to that.

Representative BROWN of Michigan. That is basically because you are using a different method?

Mr. SHISKIN. No, it is because we use a sample survey. We have two problems with that sample survey.

One of the problems has been that the sample in some of the industries has not been very good, and one such industry is construction; but another problem has been that we have to make each month an estimate of the new businesses, and that has been off.

We test it every year usually, though we couldn't last year, by adjusting to a benchmark. We have a very comprehensive survey which we can't tabulate every month, but we tabulated it for the fourth quarter of 1975, and that indicated we were too low.

We did not have a good birth adjustment and we had defective samples. One of the problem industries was construction, so we will be making an upward revision in the construction figures.

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

Senator PROXMIRE. On that last point made by Mr. Brown, there was an article in the New York Times this morning indicating that this was a pretty big mistake. It said you found 400,000 jobs by some kind of statistical correction which is half of what the new administration would hope to achieve by the stimulative package. They want 800,000 jobs and you got 400,000 for them by revising the statistics.

That is what Mr. Shiskin's remarks indicated.

Representative BROWN of Michigan. I would say that is a statistical windfall for the Carter Administration.

Senator PROXMIRE. Come in a month later. Ford gets credit for it.

It has been implied there is a different kind of unemployment than we had in the thirties. There is no march on Washington. Some people have gone a long, long time with excessive unemployment. There has been a lot of pain, unhappiness and frustration with that unemployment; but it has been of a different kind. We all want to put these people back to work because it is a terrible loss. Levitan and Taggert, as you know, have proposed an adequacy index as a substitute for the earnings figure we have now. They vigorously attack it, saying it is obsolete. They say if you have an earnings index, you show people facing incomes and earnings problems. They would include the unemployed not over 65, students over 21, they would include discouraged workers, involuntary part-time workers and they would also include low wage earners. It filters out working wives and other job seekers from families with substantial incomes.

It is an attempt to get at what Mr. Brown and Mr. Rousselot were talking about, the fact that unemployment does not measure distress. They want to measure distress.

They point out from 1974 to 1975 the index of economic hardship, which is another name for the inadequacy index, rose only 25 percent compared to a 76-percent increase for unemployment.

In the boom year 1969 unemployment was only 3.5 percent compared to 8.9 percent, almost 9 percent in 1975; but the employment and earnings adequacy index stood at 9.8 percent in 1969, and only 13.2 percent in 1975.

In other words, it did not rise nearly as much as the unemployment rates. It increased by about 1.4 percent while the unemployment rate increased by about 2.5 percent.

What practicality is there for developing such an index? Would it be very expensive to do it? Could we get it on a regular basis?

We don't want to ask for something that will cost millions of dollars, but if this would be a reasonably inexpensive index, it might be very useful to us.

Incidentally, I would disagree with their position criticizing unemployment. I think we have to have that, too.

Mr. SHISKIN. Levitan and Taggert are very good, and they want to get a measure of the unemployment hardship. I don't think the unemployment figures today easily lend themselves to the computation of such a measure. Just take a look at the Levitan-Taggert measure; it is extremely complex. I have studied that and all the different manipulations that they have to make and they have to use last year's data for some of it, and it is out of date. I think it is a poor way to accomplish their objective.

I have on numerous occasions suggested if you want a measure of economic hardship you should get it directly. The way to do that is get more data on income distribution. That is what you want to know about, total income distribution.

You need income distributions for the low-income group more frequently. We have them annually. We need deflators for them, and we need them quarterly.

We already have data of the kind Levitan and Taggert are aiming at in our classification of the annual data on the distribution of income.

So, what I am saying is that we have studied very carefully the measure you suggest; we have approved the objective; we don't think the use of unemployment figures directly will do it. We suggest another way to do it because it is so important, and that is to get more frequent, more detailed, and more comprehensive deflated data on income.

Senator PROXMIRE. How much would that cost?

Mr. SHISKIN. I really don't know. We get them annually.

Let me put it this way: Bob, would it be fair to say it would cost less than the job vacancy survey?

Mr. STEIN. Yes.

Senator PROXMIRE. I would hope so. The figure you gave for that was colossal.

Mr. SHISKIN. It depends on what you compare it with. You compare that with the money spent on military intelligence, and I have been very impressed with that comparison.

Senator PROXMIRE. I saw an article in Fortune magazine that indicated that 48 percent of the people in this country involving 53 percent of our gross national product works simply to gather and disseminate information. I mean newspapers, telephone companies, the great number of people in almost every corporation, banks, what they primarily do is gather intelligence, understanding.

That is the way we operate in our society, gathering these fundamental figures that are so very important for effectual policy, public and private, we should not be hesitating if the figures are at all reasonable.

Mr. SHISKIN. I recognize I am a prejudiced source, but I agree completely with that.

Senator PROXMIRE. Did I understand you to say you feel we can refine the income data and come in with data that would be simpler, clearer——

Mr. SHISKIN. And more direct.

Senator PROXMIRE. [continuing]. Than this adequacy index?

Mr. SHISKIN. If I were in charge of the whole business and had all the money I needed, I would do it the other way.

Senator PROXMIRE. Would you take another look and tell us what it would cost so that we could get it in some way that would not be highly expensive? Could you pull together what you have now?

Mr. SHISKIN. I have in mind a quarterly survey of income. We have annual surveys, of course.

Senator PROXMIRE. See what you can give us at the next meeting.

Let me conclude by saying I am still convinced, as I said at the beginning, that we have had no significant improvement in the employment situation; that the drop in the unemployment from 8.1 to 7.9 is pretty much of an illusion because of the fact that we had no growth in the labor force which is what we would expect now, and what we are going to get. So I don't think that is significant. But there is a significant improvement in the inflation situation.

Mr. SHISKIN. Do you feel there has been no improvement in employment?

Senator PROXMIRE. The figures have gone up 200,000 a month. If we had the kind of increase in the work force this last month that we had over the last year on the average, there would have been no improvement in the unemployment figures. Also, I think there has been a substantial improvement in the inflation situation because the industrial price figures are so much more appropriate.

Thank you very much.

Representative BOLLING. The wholesale price index increased precipitously primarily because of the sharp increase in the cost of farm products; the index for industrial commodities rose 3 percent; OPEC, however, has just announced, albeit tenuous, price increases.

Can you tell us approximately when that price increase will show up in the industrial commodities index, and then in the consumer price index?

Mr. SHISKIN. May I turn this over to Mr. Layng?

Mr. LAYNG. I guess one of the best ways to answer that is to begin by indicating that crude oil component of the wholesale price index does not now include imported petroleum; so the first level, to be imparted in the wholesale price index would be the refined petroleum index. And that works very quickly and pretty much as soon as the crude oil enters this country at the higher price, it will show up in the refined petroleum component.

That is the first place where we will see it.

In the consumer price index, it will be mainly reflected in the gasoline and heating oil fuel. That can depend a great deal on the time of the year it occurs, and energy regulations in effect at the time it occurs.

It is not necessarily a direct 1-for-1 passthrough.

As I understand, petroleum companies now have considerable reserves built up in terms of price increases that could be put into effect, but have not done so because of the demand-supply situation that exists. Whether or not they will absorb part of the increase or pass it on, will depend on the situation that they face at the time prices increase.

Representative BOLLING. Are we talking about 1, 2, 3 months?

Mr. LAYNG. The initial impact will come in quickly in terms of the refined petroleum index. We expect to see it in a few months at the most.

Representative BOLLING. Do you have any way of giving us an estimate of the effect the price would have on the indexes?

Mr. LAYNG. Yes; we do. Last month we did prepare a somewhat normative or hypothetical analysis of what the increase would be from the October levels which were the levels we were dealing with at the time.

I have a copy of that here. The increases were based on different percentage increases at that time in the OPEC crude oil price increase. For example, an increase of 10 percent in imported crude oil prices would affect all commodities wholesale price index by 0.3 percent.

That is just the direct impact. It does not include any of the indirect impacts via transportation costs or increased fuel costs in manufacturing establishments that use fuel as an energy source for manufacturing or heating. It just includes the direct impact on refined petroleum products pretty much assuming a straight passthrough of the crude oil to all refined products—gasoline, jet fuel, residual fuel oil, and heating fuel.

At the consumer level, and I indicated there we are dealing with mainly gasoline and fuel oil, and once again, only the direct impact, which does not include, for example, the impact on airline fares of an increase in jet fuel.

Mr. SHISKIN. We have that in the form of a memorandum for the record.

Representative BOLLING. Without objection, it will be included in the record.

[The memorandum referred to follows:]

EFFECTS OF OPEC PRICE INCREASES ON THE WPI AND CPI

If OPEC were to raise its crude petroleum prices, there would be four potential price effects: (1) a change in the price of imported crude petroleum, (2) a change in the price of domestic crude petroleum, (3) a change in the price of refined petroleum products and (4) a change in the price of other products which rely on petroleum as an energy source or as a basic raw material.

Since imported crude petroleum prices are not currently collected for the WPI, there will be no direct effect of the price increase on the WPI. However, the average price of all imported crude oil can have an effect on both domestic crude oil and refined petroleum products, which *are* priced for the WPI. The latest average imported crude oil price available from FEA is for August 1976—$13.67 per barrel. By raising that price by various assumed OPEC price increases (5, 10, 15 and 20 percent), one can estimate the average price of imported crude oil under each assumption.

As already mentioned, an increase in imported crude oil prices may produce a direct increase in the price of domestic crude oil. The regulation of crude domestic oil provides for three tiers, each with a different price: upper, lower and stripper. The stripper price is set equal to the imported price less the import fee. Consequently, unless there is a change in FEA policy, the price of stripper oil will rise one cent for every one cent rise in the price of the imported oil. If one assumes that stripper oil continues to constitute 14 percent of domestic produc-

tion, as it did in August 1976, then it is possible to estimate the impact of alternative OPEC price increases on the average price of all domestic crude oil.

If one assumes that imported oil continues to constitute 46 percent of all crude oil consumed in the U.S., as it did in August 1976, then one can estimate the average price of all crude oil consumed for each assumed OPEC increase. The consequent price increases for all crude oil are presented in the attached table.

If one takes the increase in the average price of all crude oil per barrel and divides it by the number of gallons per barrel (42), the result is the average price per gallon increase in the raw materials used to produce refined petroleum products. In order to use these numbers to estimate the price changes for refined petroleum products at both the producer and retail levels, it is necessary to make three important assumptions:

(1) that the increase in raw material prices is evenly spread among all refined products—thus, an increase of $1.00 per barrel would result in a 2.4 cent ($1.00/42=$0.024) per gallon increase in the prices of gasoline, fuel oil, jet fuel, lubricating oil and all other refined petroleum products;

(2) that there are no other changes in price arising from other cost factors such as labor cost, profit or retail mark-ups; and

(3) that consumers will pay the higher price without any change in the amount demanded.

The average price increases per gallon of refined petroleum product are given as the last row in the attached table for each assumed OPEC increase. These price increases were added to the average October 1976 prices for each refined product to produce the estimated price levels under the above assumptions.

The percent changes for prices in gasoline and No. 2 fuel oil calculated under the above procedure are presented in the attached table at both the producer (WPI) and consumer (CPI) levels. In addition to these two products, price changes for all other refined petroleum products in the WPI were also calculated, except for greases and waxes which are not sold on a per-gallon basis. The effects of all these products on the refined petroleum products price index are presented in the attached table. The combined effects of the refined products and domestic crude oil price changes on the All Commodities and Industrials WPI are given in the table. The effects of the OPEC increases on the CPI All Items index include only the increases in gasoline and fuel oil; motor oil is not included.

It is important to note that the estimated effects on the WPI and CPI of various OPEC price increases include only the direct effects of higher prices for the specific crude and refined petroleum products. They do not include secondary effects such as those which increased fuel costs will have on goods and services and which increased feed stock prices will have on chemicals and plastics.

Attachment:

THE EFFECTS OF OPEC INCREASES IN CRUDE PETROLEUM PRICES ON THE WPI AND CPI, UNDER STATIC ASSUMPTIONS

[In percent change]

	Assumed OPEC price increase			
	5 percent	10 percent	15 percent	20 percent
Crude petroleum	3.4	6.8	10.1	13.5
Imported [1]	5.0	10.0	15.0	20.0
Domestic	1.1	1.3	3.4	4.5
Wholesale price index:				
All commodities	.14	.28	.41	.55
Industrials	.18	.35	.53	.70
Domestic crude petroleum	1.1	2.3	3.4	4.5
Refined petroleum products [2]	2.4	4.9	7.3	9.7
Gasoline	2.2	4.4	6.6	8.8
Fuel oil No. 2	2.7	5.5	8.2	11.0
Consumer price index:				
All items	.07	.13	.20	.26
Gasoline	1.4	2.8	4.2	5.7
Fuel oil No. 2	2.1	4.1	6.2	8.2
Change in average price per gallon of all refined products (dollars)	.0087	.0174	.0261	.0349

[1] No prices for this item collected for the WPI.
[2] Includes effects of other refined petroleum products not shown separately.

Source: Office of Prices and Living Conditions, Bureau of Labor Statistics, Nov. 24, 1976.

Representative BOLLING. We were all disturbed to see these. Would you look back on 1976 and give us your own evaluation of what went wrong, what happened.

Mr. SHISKIN. In 1976, there was an economic "pause." There was no absolute decline in the economy. The GNP slowed down. Real GNP growth was down, but the level continued up.

I think that there were two principal factors that were responsible for this pause and they are very common in business expansions. One is that we had a very minor inventory adjustment. There was a leveling off in inventory accumulation in the middle of the year and a decline in the fourth quarter.

The other is that there was a considerable amount of government funds that were expected to be spent but weren't. So I think these two factors slowed down the economy and led to a general slowdown, a pause, a standstill situation for employment as I have described it and a rise in unemployment. As is also well known, the usual rise of new investment during expansions did not take place.

So that is my interpretation.

Representative BOLLING. Given what seems probable, what do you see for the year ahead?

Mr. SHISKIN. I am always very cautious in looking ahead because we don't do too well in that either.

Representative BOLLING. Nobody else does either.

Mr. SHISKIN. Well, the way I describe the economy in the first page or two of my prepared statement, it looks as though all of the measures of economic performance are doing well, everything is improving, retail sales were especially strong in December. I mention retail sales because they are 30 percent of our GNP.

Other measures have also improved for example, industrial production and employment.

The leading indicators have improved. So I think things look better. I think we can be reasonably optimistic.

Representative BOLLING. You would not want to quantify that?

Mr. SHISKIN. I am less likely to do badly if I stay with what I said.

Representative BOLLING. Almost half of those unemployed are youths under the age of 25. For teenagers the unemployment rate is triple the rate for adults. For young adults, 20 to 24, it is double the adult rate. This obviously is a tremendous waste of our Nation's young people in a variety of ways, not just that they don't have jobs and don't have an opportunity to be productive, but the impact on them is probably a good deal more important than just that objective set of facts.

Can you give us some background information on the kinds of jobs the young people are seeking, how many are family heads, how many qualify for unemployment compensation, and how many are still in schools and what are the job prospects for young workers?

Mr. SHISKIN. We have done some studies on that and I would like Mr. Stein to respond to that.

Mr. STEIN. Since that is at least a five-part question, it would require a little bit of research. We could provide some information on these subjects.

Representative BOLLING. We would be delighted.

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

TABLE 1.—UNEMPLOYED YOUTH RECEIVING UNEMPLOYMENT INSURANCE BENEFITS, 1975 ANNUAL AVERAGES

[In thousands]

Age	Total unemployed	Number receiving unemployment insurance	Percent of the unemployed
Both sexes, 16 to 21	2,581	432	16.7
Both sexes, 22 to 24	999	472	47.2

TABLE 2.—PROPORTION OF FAMILY HEADS IN THE 16-24-YEAR-OLD CIVILIAN NONINSTITUTIONAL POPULATION, 1976 ANNUAL AVERAGES

[In thousands]

Age	Civilian noninstitutional population, total	Family heads	Family heads as a percent of the total
Both sexes, 16 to 19	16,426	310	1.9
Males, 16 to 19	8,139	216	2.7
Females, 16 to 19	8,287	94	1.1
Both sexes, 20 to 24	18,660	3,665	19.6
Males, 20 to 24	8,995	3,054	34.0
Females, 20 to 24	9,665	611	6.3

Source: U.S. Department of Labor, Bureau of Labor Statistics February 1977.

TABLE 3.—EMPLOYED 16-24-YR-OLDS BY OCCUPATION AND SEX, 1976 ANNUAL AVERAGES

[In thousands]

Occupations	Males 16-19 yr	Percent distribution	Females 16-19 yr	Percent distribution	Males 20-24 yr	Percent distribution	Females 20-24 yr	Percent distribution
Total employed	3,904	100.0	3,365	100.0	6,742	100.0	5,534	100.0
White-collar workers	634	16.2	1,652	49.1	2,033	30.1	3,731	67.4
Professional and technical	80	2.0	93	2.8	681	10.1	842	15.2
Managers and administrators, except farm	59	1.5	23	.7	404	6.0	169	3.1
Sales workers	244	6.3	389	11.6	396	5.9	339	6.1
Clerical workers	251	6.4	1,147	34.1	551	8.2	2,381	43.0
Blue-collar workers	2,070	53.0	385	11.4	3,750	55.6	708	12.8
Craft and kindred workers	375	9.6	38	1.1	1,319	19.6	72	1.3
Operatives, except transport	592	15.2	248	7.4	1,153	17.1	546	9.9
Transport equipment operatives	169	4.3	15	.4	450	6.7	19	0.3
Nonfarm laborers	934	23.9	84	2.5	827	12.3	72	1.3
Service workers	896	23.0	1,274	37.9	714	10.6	1,056	19.1
Private household workers	11	.3	257	7.6	2	-------	74	1.3
Service workers, except private household	885	22.7	1,017	30.2	712	10.6	981	17.7
Farm workers	304	7.8	54	1.6	245	3.6	39	.7

Source: U.S. Department of Labor, Bureau of Labor Statistics, February 1977.

Table 1. Employment status of persons 16 to 24 years old, by school enrollment status, educational attainment, sex, and race, October 1974 and 1975

[Numbers in thousands]

Characteristics	Civilian noninstitutional population		Civilian labor force									
			Number		Percent of population		Employed		Unemployed			
									Number		Percent of labor force	
	1974	1975	1974	1975	1974	1975	1974	1975	1974	1975	1974	1975
Total, 16 to 24 years old	33,968	34,700	21,818	21,833	64 2	62 9	19,306	18,564	2,514	3,268	11.5	15.0
Enrolled in school	14,482	15,284	6,562	6,730	45 3	44 0	5,702	5,716	862	1,012	13.1	15.0
16 to 19 years	10,666	11,163	4,434	4,551	41 6	40 8	3,750	3,772	684	778	15.4	17.1
20 to 24 years	3,816	4,121	2,128	2,179	55 8	52 9	1,952	1,944	178	234	8.4	10.7
Men	7,648	8,085	3,605	3,598	47 1	44 5	3,162	3,061	445	536	12.3	14.9
Women	6,835	7,198	2,958	3,130	43.3	43 5	2,544	2,655	417	476	14.1	15.2
White	12,405	13,077	5,912	6,096	47.7	46.6	5,236	5,241	677	855	11.5	14.0
Black and other[1]	2,077	2,207	651	633	31.3	28.7	469	478	182	156	28.0	24.6
Elementary and high school	7,862	8,063	3,311	3,279	42.1	40.6	2,759	2,641	552	636	16.7	19.4
Men	4,094	4,270	1,831	1,801	44.7	42 2	1,557	1,464	274	336	15.0	18.7
Women	3,768	3,793	1,480	1,478	39 3	39 0	1,202	1,177	278	300	18.8	20.3
White	6,549	6,710	2,972	2,997	45.4	44 7	2,538	2,450	434	546	14.6	18.2
Black and other	1,313	1,350	339	283	25.8	21.0	221	192	118	92	34.8	32.5
College	6,620	7,221	3,252	3,448	49.1	47 7	2,942	3,074	310	376	9.5	10.9
Men	3,554	3,816	1,772	1,796	49 9	47 1	1,609	1,597	172	201	9.7	11.2
Full time	3,021	3,245	1,286	1,283	42.6	39 6	1,132	1,126	154	158	12.0	12.3
Part time	533	571	486	513	91.2	90.0	468	471	18	43	3.7	8.4
Women	3,066	3,405	1,480	1,652	48 3	48 5	1,342	1,477	138	175	9.3	10.6
Full time	2,506	2,813	998	1,156	39 8	41.1	889	1,008	109	149	10 9	12.9
Part time	560	592	482	496	86.1	83.8	453	469	29	26	6.0	5.2
White	5,857	6,366	2,942	3,101	50 2	48 7	2,694	2,792	248	310	8.4	10.0
Men	3,162	3,434	1,603	1,644	50 7	47 9	1,461	1,471	142	176	8.9	10.7
Women	2,695	2,932	1,339	1,457	49.7	49.7	1,233	1,321	106	134	7.9	9.2
Black and other	763	856	310	350	40.6	40.9	249	284	62	63	20.0	18.0
Men	392	382	169	153	43.1	40.1	140	128	30	23	17.8	15.0
Women	371	474	141	197	38.0	41.6	109	156	32	40	22.7	20.3
Not enrolled in school	19,486	19,416	15,256	15,103	78.2	77.8	13,604	12,848	1,652	2,256	10.8	14.9
High school graduates, no college	10,350	10,366	8,371	8,379	80 9	80.8	7,553	7,238	818	1,141	9.8	13.6
Men	4,477	4,568	4,256	4,319	95.1	94.5	3,869	3,730	387	589	9.1	13.6
Women	5,871	5,798	4,112	4,060	70.0	70.0	3,683	3,508	429	552	10.4	13.6
White	9,078	9,124	7,354	7,417	81.0	81.3	6,717	6,508	637	909	8.7	12.3
Black and other	1,270	1,242	1,014	962	79.8	77.5	835	730	179	232	17.7	24.1
High school dropouts	4,847	4,824	3,108	2,969	64.1	61.5	2,514	2,219	594	750	19.1	25.3
Men	2,343	2,247	2,028	1,898	86.6	84.5	1,701	1,477	327	421	16.1	22.2
Women	2,504	2,577	1,080	1,071	43.1	41.6	813	742	267	329	24.7	30.7
16 to 19 years	2,079	2,001	1,380	1,230	66.4	61.5	1,042	862	338	368	24.5	29.9
20 to 24 years	2,769	2,822	1,728	1,740	62.4	61.7	1,472	1,358	256	382	14.8	22.0
White	3,866	3,742	2,525	2,382	65.3	63.7	2,115	1,840	410	542	16.2	22.8
Black and other	982	1,082	582	588	59.3	54.3	398	380	184	208	31.6	35.4
College graduates	1,452	1,373	1,339	1,290	92.2	94.0	1,272	1,183	67	107	5.0	8.3
Men	673	635	655	615	97.3	96.9	621	555	34	60	5.2	9.8
Women	779	738	684	675	87.8	91.5	651	628	33	47	4.8	7.0
White	1,313	1,275	1,219	1,208	92.8	94.7	1,167	1,107	52	101	4.3	8.4
Black and other	140	99	121	81	86.4	81.8	105	76	16	5	13.2	6.2
College, 1 to 3 years	2,837	2,851	2,438	2,465	85.9	86.5	2,265	2,207	173	258	7.1	10.5
Men	1,367	1,388	1,311	1,316	95.9	94.8	1,226	1,183	85	133	6.5	10.1
Women	1,470	1,463	1,127	1,149	76.7	78.5	1,039	1,024	88	125	7.8	10.9
White	2,537	2,527	2,195	2,209	86.5	87.4	2,055	2,003	140	206	6.4	9.3
Black and other	300	324	244	256	81.3	79.0	210	204	34	52	13.9	20.3

[1] Persons identified as black or Negro make up 89 percent of the population other than white. The remaining 11 percent are mostly American Indians and persons of Asian origin.

Representative BOLLING. For more than 1 year, the Bureau of Labor Statistics has been involved in revising the Consumer Price Index. Since the Consumer Price Index is used to measure price changes, to deflate other economic series and to adjust the transfer payments for changes in the cost of living, your revision of the CPI is, to say the least, an important task.

Would you give the committee a progress report on this and some idea as to when the new index would be ready?

Mr. SHISKIN. Yes.

First of all, let me say this process has been underway for several years. It is the most expensive operation BLS has. It has been up to now a decennial revision.

It is hard for me to believe, but it was three-and-one-faced with the problem of determining what the deadline date should be on releasing these data and how much money we could spend on it. I said at that time we would get the index out in April 1977. That is 3 months from now.

I also fixed a dollar amount. I said I would not go to Congress for more real dollars than the current figure.

Well, we are not far off.

The reason I mention those two constraints is I think they help.

It is touch and go whether we will make the April date. We are not sure. At this moment, we do not have the revised index. We would like to have a revised index for some months to be able to insure that it is a solid index.

We don't have one today. I don't know when we will have one. It is touch and go. My Layng is sitting to my left and I hope you don't mind my quoting you, John, but he doesn't think we will make it by April; others think we will.

Considering the magnitude of the project and the long time it has been underway, I think we are roughly on target.

Let me also add, if I may, that I think that the proposal we have made for improving our revision methods is a very good one and I was delighted to see it had strong support from Congress, particularly from the House Appropriations Committee.

In my first session there, the question was raised should we change the decennial revision program to a continuous revision process with a continuous consumer expenditure survey, which provides the basis for changing the market basket an getting the expenditure weights paid. I am very happy this has been approved all the way so far.

A new budget will be out in a week and we will see what is there. We are confident the Congress as a whole will support it, and I think it will give us a very superior way of compiling the index so that the future Commissioners will not have the traumatic experiences I have had.

But, in a word, we are roughly on time.

Representative BOLLING. Tell me. Mr. Commissioner, is what you have just described the way we will deal with CPI updating in the future, and is that in effect saying it will constantly be updated?

Mr. SHISKIN. No; we will probably not update it more frequently than we do now, but we have had this enormous program ongoing for quite a few years. When we finally come out in April or June, the

weights will be based on 1972–73 data, for the most part. So when we come out with a new index, in a sense, it will already be out of date.

We took a consumer survey in 1972, and the first half of 1974. The new method will have a small quarterly survey, so that when it becomes clear that the weights need to be changed and the market basket needs to be changed, we will be able to do it very quickly. It will be a much prompter method.

In addition, it is a very difficult experience to carry out these expenditure surveys. I know a lot about these kinds of problems because I spent most of my professional life at the Bureau of the Census. Large-scale surveys, such as the economic census and the decennial CPI revision, are just a terrible way to get the information needed.

I have had a lot of support for the new method, which will yield more up-to-date information.

Representative BOLLING. What you are going to be doing constantly in effect is updating some of the components, not the whole——

Mr. SHISKIN. What we will have is a quarterly survey of consumer expenditures based on a smaller sample. We may have to supplement that for the year that we decide to make the revision, but we will have a continuous smaller survey conducted quarterly. This will provide the expenditure weights and the market basket more promptly.

In addition, we will update 20 percent of the retail sample every year. So we will have a continuous updating program. When the time comes for us to make the revision, we will be on top of it; and we will have the same people doing it who are doing the current surveys.

I don't believe there is a single person today in a high-level position in BLS working on this revision who was working in a high-level position in a previous revision. We have had a complete top-level turnover.

Let me say, we will get better results, and it has been wonderful that we have been able to convince the administration and the Congress that this is a better way of doing the CPI revision program.

Representative BOLLING. In other words, once every 10 years.

Mr. SHISKIN. It depends on how the economy changes. If you have a stable economy, you don't need to revise the weights every 10 years. You want to keep the weights fixed.

Representative BOLLING. How can you meet that problem? If 10 years is too long under one set of circumstances, and too short under another set of circumstances, shouldn't there be some flex in there?

Mr. SHISKIN. We can make tests. We can try to set the criteria for change in advance, and say this is what we consider a sufficiently large change in consumer buying patterns to change the CPI weights. We will try to establish the criteria in advance. As time goes on, we will make tests every few years and we will have the ability to make revisions when they are needed.

Representative BOLLING. My old instincts as a former chairman of the Subcommittee on Statistics came out on this, sir.

Thank you, sir, very much.

We are very appreciative of your appearance, as we always are; and we look forward to seeing you again.

The committee stands adjourned.

[Whereupon, at 12:35 p.m., the committee adjourned, subject to the call of the Chair.]

EMPLOYMENT-UNEMPLOYMENT

FRIDAY, FEBRUARY 4, 1977

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

The committee met, pursuant to notice, at 11:02 a.m., in room 1202, Dirksen Senate Office Building, Hon. Richard Bolling (chairman of the committee) presiding.

Present: Representatives Bolling and Heckler; and Senators Humphrey and Proxmire.

Also present: John R. Stark, executive director; Louis C. Krauthoff II and Courtenay M. Slater, assistant directors; Richard F. Kaufman, general counsel; William R. Buechner, G. Thomas Cator, and Kent H. Hughes, 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 REPRESENTATIVE BOLLING, CHAIRMAN

Representative BOLLING. The committee will be in order.

Commissioner Shiskin, we are very pleased to have you here once again to testify on the employment and unemployment statistics for January.

Your news that the unemployment rate in January declined by half a percentage point to 7.3 percent is very welcome news, but it is also very perplexing. A 1-month reduction in unemployment of half a percentage point or 500,000 workers is very unusual.

We had that kind of reduction only once before during the recovery, between December and January of last year; but the underlying reasons were much different.

Last year the improvement was real, because the number of workers went up by 800,000. This year the improvement seems much more a will-o-the-wisp because the improvement is due primarily to a labor force reduction of 440,000.

Before this can be considered a real improvement and long before Congress can use it as the basis for an economic policy, we will need a good explanation for it.

In addition, as the employment situation release points out, the January survey took place before the natural gas shortage began to close factories and businesses; and right now we don't know exactly how many million people, if that's not too large a figure, have been forced into unemployment, short hours, or what have you, before the gas shortage.

We would like to have some discussion from you concerning the effect of this on the unemployment situation either during your prepared statement or as the discussion period proceeds.

Will you proceed?

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 L. STEIN, ASSISTANT COMMISSIONER, OFFICE OF CURRENT EMPLOYMENT ANALYSIS

Mr. SHISKIN. Thank you, Mr. Chairman.

As usual, I do have a brief statement, and as usual I have Mr. Layng and Mr. Stein with me.

I will now read my statement.

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.

At the outset, it should be pointed out that, as usual, the surveys upon which "The Employment Situation" release is based covered the week including the 12th, January 9 through 15. That week was one of below normal temperatures in most of the United States, but it occurred before the severe shortages of fuel. Therefore, the figures may be helpful in gaging the underlying trend in the economy through the first half of January.

The data available indicate that the economy expanded in December and probably continued to expand through the first half of January. Nonagricultural employment and unemployment improved and the improvements were widespread. The weekly seasonally adjusted insured unemployment rate has declined unevenly from 5 in mid-September to 4.1 to the end of January.

However, average hours worked per week dropped sharply, in fact so sharply that aggregate hours declined despite the rise in employment. Most measures of economic performance rose in December, the latest month for which data are now available; for example, deflated retail sales, industrial production, and deflated personal income all were up. The leading indicator index also rose sharply in December, suggesting continued expansion in the months ahead.

The severe weather has, of course, put a crimp in the expansion. There are no hard figures yet on the impact upon income and unemployment; however, several categories tabulated for the employment situation release are enlightening with respect to the early effects. The increase between December and January in both the number of employed persons with a job but not at work due to bad weather and the number of full-time persons working less than 35 hours, also because of bad weather, was almost double that of any increase in the past 5 years. The decline in hours, and particularly the large drop in average hours per week in construction, is also noteworthy.

One incidental effect of the bad weather in recent weeks has been the difficulty experienced by BLS in collecting data for the business

survey. As a result, the sample used for January for this survey is unusually small.

The labor force also declined by almost as much as the decline in the number of unemployed—440,000 compared to 560,000—and could explain most of the decline in unemployment, in the sense that many unemployed workers might have dropped out of the labor force because they gave up their efforts to find jobs. However, this explanation is hard to reconcile with the widespread character of the decline in unemployment. including improvement in such categories as job losers, household heads, and married men with spouse present. One possible explanation—and this is speculation without any supporting data—is that many job seekers discontinued their efforts to find employment because of the unusually cold weather.

The sharp drop in the unemployment rate in January may raise the question as to whether it is due to a faulty seasonal adjustment, particularly since there was also a large drop in January last year. Seasonal adjustment is an imperfect art, and this is certainly a possibility. However, this explanation seems unlikely, in view of the fact that other methods of adjustment, particularly those with substantially different approaches, for example, the additive and the stable seasonal methods, also show sharp declines, though not quite so large as that shown by the "official" method.

It is also to be noted in this context that the decline in the labor force last month was not matched by a decline in January 1976; in that month the labor force rose by 250,000. It is also to be noted that the seasonal adjustment procedure corrects for average weather, but not abnormal weather.

I have a few statistical notes. I think they are all important, so I would like to read them.

First, several changes were made in the employment release this month: (1) Employment-population ratios were added for all workers and the major demographic groups; (2) a table was added showing the array of unemployment measures ranging from U–1, the most restrictive category—persons unemployed 15 weeks or longer—to the broadest category, U–7—unemployed full-time job seekers, discouraged workers, and half the part-time workers; and (3) more detail is shown for job losers. Much of this information has been attached to this statement prior to this month. A technical 2-page explanatory note on sources of data, definitions, and so on, will be included in the release every month.

Second, corrections were made in the data released this month for the nonfarm payroll employment survey because the employment levels of a few industries did not adequately reflect the formation of new businesses during the recent recovery phase of the economy. Revised levels are based on December 1975 universe counts, the latest available at this time. The result is to raise the level of nonfarm payroll employment by about 380,000 with increases of about 260,000 in construction; 220,000 in retail trade, and 40,000 in services, and a decrease of about 140,000 in State and local government. These changes will be described more fully in the February issue of the BLS periodical, Employment and Earnings.

Third, the completion of the comprehensive program to revise the Consumer Price Index will be delayed beyond the previously announced date of April 1977. Although much of the work required for the revision has been completed, serious problems have been encountered, principally in the design and operation of the new computer system required to process and calculate the indexes and in data validation. We now estimate that the additional time required will delay completion of the revised program and publication of a revised Consumer Price Index for urban wage earners and clerical workers as well as a new Consumer Price Index for all urban consumers until the fall of 1977.

Until these revised indexes are officially introduced, the Bureau will, of course, continue to publish the present CPI. In accordance with the previously announced plans, the Bureau also will continue the present CPI for a 6-month overlap period to allow time for adjustments in bargaining agreements and other contracts containing escalator clauses.

The Wholesale Price Index is normally released on Thursday of the third week following the pricing date. The pricing date is Tuesday of the week including the 13th of the month. Twice every year—during the processing of the January and July indexes—new items are added to the index and obsolete ones are deleted. This process is part of the continuing BLS effort to make the indexes truly representative of the current market structure and to expand their coverage of the economy. The extra work required to update the index sample consumes an extra week or so of staff and computer time. The January WPI will be released on February 11, 1977.

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

[The attachments to Mr. Shiskin's statement follow:]

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 1967–73	Duration	Reasons	Total	Residual			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1976														
January	8.8	7.8	7.8	8.0	(1)	(1)	8.1	8.0	7.8	7.8	8.2	7.9	7.9	0.4
February	8.7	7.6	7.6	7.8	(1)	(1)	7.7	7.5	7.5	7.6	7.7	7.6	7.6	.3
March	8.1	7.5	7.5	7.6	(1)	(1)	7.7	7.3	7.4	7.5	7.6	7.5	7.5	.4
April	7.4	7.5	7.5	7.5	(1)	(1)	7.6	7.4	7.5	7.5	7.4	7.5	7.5	.2
May	6.7	7.3	7.4	7.2	(1)	(1)	7.5	7.2	7.4	7.5	7.2	7.5	7.4	.3
June	8.0	7.6	7.5	7.5	(1)	(1)	7.5	7.5	7.5	7.3	7.4	7.3	7.5	.3
July	7.8	7.8	7.8	7.7	(1)	(1)	7.7	7.6	7.8	7.7	7.7	7.7	7.7	.2
August	7.6	7.9	7.9	7.8	(1)	(1)	7.7	8.0	8.0	7.9	7.8	8.0	7.9	.3
September	7.4	7.8	7.8	7.7	(1)	(1)	7.6	8.0	7.9	7.8	7.8	7.8	7.8	.4
October	7.2	7.9	8.0	7.8	(1)	(1)	7.7	8.0	7.9	8.0	7.9	7.9	7.9	.3
November	7.4	8.0	8.0	7.8	(1)	(1)	7.8	8.1	8.0	8.0	7.8	8.0	7.9	.3
December	7.4	7.8	7.9	7.8	(1)	(1)	7.9	7.9	7.8	7.8	7.8	7.9	7.8	.1
1977														
January	8.3	7.3	7.3	7.5	7.3	7.4	7.5	7.4	7.4	7.4	7.6	7.4	7.4	.3
February														
March														
April														
May														
June														
July														
August														
September														

See footnotes at end of table.

UNEMPLOYMENT RATE BY ALTERNATE SEASONAL ADJUSTMENT METHODS—Continued

Month	Unadjusted rate (1)	Official adjusted rate (2)	Alternative age-sex procedures					Other aggregations (all multiplicative)				Direct adjustment rate (12)	Composite (13)	Range (cols. 2–13) (14)
			All multiplicative (3)	All additive (4)	Year ahead (5)	Concurrent (6)	Stable 1967–73 (7)	Duration (8)	Reasons (9)	Total (10)	Residual (11)			
October														
November														
December														

[1] Not applicable.

Note: An explanation of cols. 1–13 follows:

(1) Unemployment rate not seasonally adjusted.

(2) Official rate. This is the published seasonally adjusted rate. Each of 4 unemployed age-sex components—males and females, 16–19 and 20 yr of age and over—is independently adjusted. The teenage unemployment 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 columns (3)–(9). The current "implicit" factors for the total unemployment rate are as follows: January, 113.8; February, 113.7; March, 108.1; April, 98.7; May, 92.2; June, 105.2; July, 100.2; August, 96.1; September, 94.6; October, 90.1; November, 93.0; December, 93.8.

(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) 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 ½ 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 reseasonally adjusted incorporating the experience through the current month, i.e., the rate for March 1976 is based on adjustment of data for the period, January 1967–March 1976.

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

(8) 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 reentrants.

(10) Unemployment and labor force levels adjusted directly.

(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.

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

Source: U.S. Department of Labor, Bureau of Labor Statistics, Feb. 4, 1977.

News United States Department of Labor

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TRANSMISSION OF MATERIAL IN THIS RELEASE IS EMBARGOED UNTIL 10:00 A. M. (EST), FRIDAY, FEBRUARY 4, 1977

THE EMPLOYMENT SITUATION: JANUARY 1977

Employment continued to rise in January and unemployment declined sharply, it was reported today by the Bureau of Labor Statistics of the U. S. Department of Labor. The unemployment rate was 7.3 percent, down from revised levels of 7.8 and 8.0 percent in December and November, respectively, and equal to the 1976 low of last May.

The period covered by the statistics in this release relate to the calendar week including the 12th. For January, this was the week of the 9th through the 15th, which preceded most of the economic problems associated with the extremely bad weather and consequent fuel shortages. The impact as far as the data reported for January are concerned was limited primarily to reduced workweeks.

Total employment--as measured by the monthly survey of households--rose slightly in January to 88.6 million, as an increase in nonagricultural employment more than offset a cutback in farm employment. Since the March 1975 low, the employed total has risen by 4.3 million. The civilian labor force dropped by 440,000 in January to 95.5 million persons but was 2 million above its year-ago level.

Nonfarm payroll employment--as measured by the monthly survey of establishments--increased by 230,000 to 80.6 million. Payroll jobs have advanced by 4.1 million since the June 1975 recession low point.

As is usual at this time of year, seasonally-adjusted data from the household survey have been revised; the current revisions are based upon experience through December 1976. This release also introduces some corrections in the establishment survey. A note on these revisions appears on page 5. Finally, some changes in table structure and content for household survey data and an explanatory note are being introduced.

Unemployment

The number of persons unemployed declined by 560,000 in January to 7.0 million, seasonally adjusted. As a result, the overall jobless rate fell by half a percentage point from December's revised figure of 7.8 percent to 7.3 percent, equaling the May 1976 low. The rate had been as high as 9.0 percent (also revised) at the height of the recession (May 1975).

The over-the-month decline in joblessness occurred almost entirely among adult workers. The unemployment rate for adult men fell from 6.2 to 5.6 percent, while the rate for adult women dropped from 7.4 to 6.9 percent. Paralleling these reductions

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

Selected categories	Quarterly averages					Monthly data		
	1975	1976				1976		1977
	IV	I	II	III	IV	Nov.	Dec.	Jan.
HOUSEHOLD DATA	Thousands of persons							
Civilian labor force	93,103	93,644	94,544	95,261	95,711	95,871	95,960	95,516
Total employment	85,247	86,514	87,501	87,804	88,133	88,220	88,441	88,558
Unemployment	7,855	7,130	7,043	7,457	7,578	7,651	7,519	6,958
Not in labor force	59,216	59,327	59,032	58,963	59,132	58,986	59,071	59,732
Discouraged workers	977	940	903	827	992	N.A.	N.A.	N.A.
	Percent of labor force							
Unemployment rates:								
All workers	8.4	7.6	7.4	7.8	7.9	8.0	7.8	7.3
Adult men	6.9	5.8	5.7	6.0	6.2	6.3	6.2	5.6
Adult women	7.9	7.4	7.1	7.7	7.6	7.6	7.4	6.9
Teenagers	19.6	19.2	18.8	18.8	19.1	19.2	19.0	18.7
White	7.7	6.9	6.8	7.1	7.2	7.3	7.1	6.7
Black and other	13.9	13.1	12.9	13.1	13.4	13.5	13.4	12.5
Household heads	5.8	5.0	4.9	5.3	5.3	5.3	5.1	4.8
Full-time workers	8.1	7.1	7.0	7.4	7.5	7.6	7.5	6.7
ESTABLISHMENT DATA	Thousands of jobs							
Nonfarm payroll employment	77,779	78,674	79,333	79,683	80,082p	80,106	80,322p	80,553p
Goods-producing industries	22,803	23,142	23,380	23,372	23,442p	23,489	23,514p	23,549p
Service-producing industries	54,976	55,532	55,953	56,311	56,640p	56,617	56,808p	57,004p
	Hours of work							
Average weekly hours:								
Total private nonfarm	36.3	36.3	36.2	36.1	36.2p	36.2	36.2p	35.8p
Manufacturing	40.0	40.3	40.0	39.9	40.0p	40.1	40.0p	39.7p
Manufacturing overtime	2.9	3.1	3.0	3.0	3.1p	3.1	3.2p	3.3p

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

were sizeable decreases in the jobless rates for household heads (both male and female), married men and women, and full-time workers. The rate for teenagers, at 18.7 percent, has shown little change since last September. (See table A-2.)

Both white and black workers experienced reduced joblessness in January. The rate for white workers dropped from 7.1 to 6.7 percent, and the black worker rate moved from 13.4 to 12.5 percent. Rates for both groups were at or near their May 1976 lows. Among the major occupational groups, there was a sharp decline among blue-collar workers, whose rate fell from 9.6 to 8.4 percent. The jobless rate for manufacturing workers also dropped from 8.2 to 6.9 percent.

The average (mean) duration of unemployment, which usually lags behind movements in total unemployment, remained essentially unchanged in January at 15.5 weeks, despite a substantial decline in the number of persons seeking work for 15 weeks or longer. There was also a sharp reduction in the number unemployed 5-14 weeks, while those jobless for less than 5 weeks was unchanged over the month. (See table A-4.)

The January decline in unemployment occurred almost exclusively among workers who had lost their last job and was equally distributed among those who had been laid off and those who had experienced job terminations. (See table A-5.)

Total Employment and the Labor Force

Total employment increased slightly in January to 88.6 million, seasonally adjusted. This advance was confined almost entirely to adult men in nonagricultural industries. Since October, total employment has risen by 820,000, while the increase over the past year was 2.4 million. (See table A-1.)

The civilian labor force declined by 440,000 in January to 95.5 million, as the sharp decline in unemployment outweighed the advance in employment. Since last January, the civilian labor force has grown by 2.0 million workers--900,000 adult men and 1.1 million adult women.

The civilian labor force participation rate--the proportion of the civilian noninstitutional population either working or seeking jobs--dropped from 61.9 to 61.5 percent over the month but remained somewhat above the level of a year earlier. Declines took place among both adult men and women. (See table A-1.)

Industry Payroll Employment

Total nonagricultural payroll employment increased for the third straight month, advancing by 230,000 from the revised December level to 80.6 million (seasonally adjusted). Payroll employment has grown by 2.1 million over the past year and 735,000 since last October. Over-the-month gains occurred in two-thirds of the industries that comprise the BLS diffusion index of nonagricultural payroll employment. (See tables B-1 and B-5.)

December-January increases were posted in all major industry divisions except contract construction and State and local government. The largest increase occurred in manufacturing (95,000), primarily among workers in durable goods industries. In the service-producing sector, strong pickups took place in services (85,000) and retail trade (70,000). Jobs in contract construction declined by 65,000, the result of the unusually bad weather conditions in many parts of the country.

Hours

The average workweek for private nonagricultural production or nonsupervisory workers declined by 0.4 hour in January to 35.8 hours (seasonally adjusted). The substantial cutback in hours was a direct result of reduced operations in a large number of establishments caused by weather conditions. Average hours in contract construction were down 2.1 hours to 35.2 hours. The manufacturing workweek was down 0.3 hour, over the month. (See table B-2.)

As a result of the cutback in average hours, the index of aggregate hours for private nonagricultural production or nonsupervisory workers declined sharply from its December 1976 high of 113.1 to 112.2 in January (1967=100). Despite the drop, the index was 1.4 percent above its year-ago level and 5.7 percent above the spring 1975 low. The factory index was 94.4, down slightly from the December level; it was 9.0 percent above its March 1975 recession low. (See table B-4.)

Hourly and Weekly Earnings

Average hourly earnings of private nonagricultural production or nonsupervisory workers increased 0.8 percent in January, seasonally adjusted. Due to the cutback in hours worked, however, average weekly earnings declined 0.3 percent over the month.

Before adjustment for seasonality, average hourly earnings were $5.06, up 4 cents from December. Average weekly earnings declined $3.61 over the month to $179.12. (See table B-3.)

Hourly Earnings Index

(Not available in time for this release.)

NOTE ON REVISIONS IN HOUSEHOLD AND ESTABLISHMENT DATA

Household Data

At the beginning of each calendar year, the Bureau of Labor Statistics routinely revises the seasonally-adjusted labor force series derived from the Current Population Survey to take into account data from the previous year. This year's revisions, which incorporate experience through December 1976, did not affect the previously published 1976 seasonally-adjusted overall unemployment rate for 9 months of the year and altered it by only 0.1 percentage point in the other 3 months. (See table B.) These revisions, of course, do not affect the 1976 annual average rate, which was 7.7 percent.

New seasonal adjustment factors for the 12 component series comprising the civilian labor force, revised data since 1972 for nearly 500 series, and an explanation of the seasonal adjustment methodology will appear in the February 1977 issue of Employment and Earnings.

Table B. Seasonally adjusted unemployment rates in 1976

Month	As originally published	As revised
January	7.8	7.8
February	7.6	7.6
March	7.5	7.5
April	7.5	7.5
May	7.3	7.3
June	7.5	7.6
July	7.8	7.8
August	7.9	7.9
September	7.8	7.8
October	7.9	7.9
November	8.1	8.0
December	7.9	7.8

Establishment Data

Effective with January 1977 data, the BLS is introducing an adjustment in the employment estimates from the establishment survey. These revisions are necessary in order to correct the employment levels of a few industries that did not adequately reflect the formation of new businesses during the recovery phase of the 1973-75 recession. Revisions are limited to four major industries: contract construction, retail trade, services, and State and local government. Data series for these components and totals derived from them have been revised from July 1975 forward. A detailed description of the revisions and the revised data will also appear in the February 1977 issue of Employment and Earnings.

Explanatory Note

This release presents and analyzes statistics from two major surveys. Data on labor force, total employment, and unemployment (A tables) are derived from the Current Population Survey, a sample survey of households conducted by the Bureau of the Census for the Bureau of Labor Statistics. The sample consists of about 47,000 households selected to represent the U.S. civilian noninstitutional population 16 years of age and over.

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

Comparability of household and payroll employment statistics

Employment data from the household and payroll surveys differ in several basic respects. The household survey provides information on the labor force activity of the entire population 16 years of age and over, without duplication, since each person is classified as employed, unemployed, or not in the labor force.

The payroll survey relates only to paid wage and salary employees (regardless of age) on the payrolls of nonagricultural establishments. The household survey counts employed persons in both agriculture and in nonagricultural industries and, in addition to wage and salary workers (including private household workers), includes the self-employed, unpaid family workers, and persons "with a job but not at work" and not paid for the period absent. Persons who worked at more than one job during the survey week or otherwise appear on more than one payroll are counted more than once in the establishment survey. Such persons are counted only once in the household survey and are classified in the job at which they worked the greatest number of hours.

Unemployment

To be classified in the household survey as unemployed an individual must: (1) have been without a job during the survey week, (2) have made specific efforts to find employment sometime during the prior 4 weeks, and (3) be presently available for work. In addition, persons on layoff and those waiting to begin a new job (within 30 days) are also classified as unemployed. The unemployed total includes all persons who satisfactorily meet the above criteria, regardless of their eligibility for unemployment insurance benefits or any kind of public assistance. The unemployment rate represents the unemployed as a proportion of the civilian labor force (the employed and unemployed combined).

To meet the extensive needs of data users, the Bureau regularly publishes data on a wide variety of labor market indicators—see, for example, the demographic, occupational, and industry detail in tables A-2 and A-3. A special grouping of seven unemployment measures is set forth in table A-7. Identified by the symbols U-1 through U-7, these measures represent a range of possible definitions of unemployment and of the labor force, extending from the most restrictive (U-1) to the most comprehensive (U-7). The official rate of unemployment appears as U-5.

Seasonal adjustment

Nearly all economic phenomena are affected to some degree by seasonal variations. These are recurring, predictable events which are repeated more or less regularly each year—changes in weather, school vacations, major holidays, industry production schedules, etc. The cumulative effects of these events are often large. For example, on average over the year, they explain about 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. At the beginning of each year, current seasonal adjustment factors for unemployment and other labor force series are calculated taking into account the prior year's experience, and revised data are introduced in the release containing January data.

All seasonally-adjusted civilian labor force and unemployment rate statistics, as well as the major employment and unemployment estimates, are computed by aggregating independently adjusted series. The official unemployment rate for all civilian workers is derived by dividing the estimate for total unemployment (the sum of four seasonally-adjusted age-sex components) by the civilian labor force (the sum of 12 seasonally-adjusted age-sex components). Several alternative methods for seasonally adjusting the overall unemployment rate are also used on a regular basis in order to illustrate the degree of uncertainty that arises because of the seasonal adjustment procedure. Among these alternative methods are five different age-sex adjustments,

including a concurrent adjustment and one based on stable factors and four based on other unemployment aggregations. Alternative rates for 1976 are shown in the table at the end of this note. (Current alternative rates and an explanation of the methods may be obtained fro.n BLS upon request.)

For establishment data, the seasonally-adjusted series for all employees, production workers, average weekly hours, and average hourly earnings are adjusted by aggregating the seasonally-adjusted data from the respective component series. These data are revised annually, usually in conjunction with the annual benchmark adjustments (comprehensive counts of employment).

Sampling variability

Both the household and establishment survey statistics are subject to sampling error, which should be taken into account in evaluating the levels of a series as well as changes over time. Because the household survey is based upon a probability sample, the results may differ from the figures that would be obtained if it were possible to take a complete census using the same questionnaire and procedures. The standard error is the measure of sampling variability, that is, the variations that might occur by chance because only a sample of the population is surveyed. Tables A-E in the "Explanatory Notes" of *Employment and Earnings* provide standard errors for unemployment and other labor force categories.

Although the relatively large size of the monthly establishment survey assures a high degree of accuracy, the estimates derived from it also may differ from the figures obtained if a complete census using the same schedules and procedures were possible. Moreover, since the estimating procedures employ the previous month's level as the base in computing the current month's level of employment (link-relative technique), sampling and response errors may accumulate over several months. To remove this accumulated error, the employment estimates are adjusted to new benchmarks, usually annually. In addition to taking account of sampling and response errors, the benchmark revision adjusts the estimates for changes in the industrial classification of individual establishments. Employment estimates are currently projected from March 1974 benchmark levels. Measures of reliability for employment estimates are provided in the "Explanatory Notes" of *Employment and Earnings*, as are the actual amounts of revisions due to benchmark adjustments (tables G-L).

Unemployment rate by alternative seasonal adjustment methods

Month	Unadjusted rate	Official Adjusted Rate	Alternative age-sex procedures					Other aggregations (all multiplicative)				Direct adjustment	Composite	Range (cols. 2-13)
			All multiplicative	All additive	Year-ahead	Concurrent	Stable 1967-73	Duration	Reasons	Total	Residual			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1976														
January	8.8	7.8	7.8	8.0	7.8	7.8	8.1	8.0	7.8	7.8	8.2	7.9	7.9	0.4
February	8.7	7.6	7.8	7.8	7.6	7.6	7.7	7.5	7.5	7.6	7.7	7.6	7.6	.3
March	8.1	7.5	7.5	7.6	7.5	7.5	7.7	7.3	7.4	7.5	7.6	7.5	7.5	.4
April	7.4	7.5	7.5	7.5	7.4	7.4	7.6	7.4	7.5	7.5	7.4	7.5	7.5	.2
May	6.7	7.3	7.4	7.2	7.2	7.2	7.5	7.2	7.4	7.5	7.2	7.5	7.3	.3
June	8.0	7.6	7.5	7.5	7.5	7.6	7.5	7.5	7.5	7.3	7.4	7.3	7.5	.3
July	7.8	7.8	7.8	7.7	7.8	7.8	7.7	7.6	7.8	7.7	7.7	7.7	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	8.0	7.9	3
September	7.4	7.8	7.8	7.7	7.8	7.8	7.6	8.0	7.9	7.8	7.8	7.8	7.8	4
October	7.2	7.9	8.0	7.8	7.9	7.9	7.7	8.0	7.9	8.0	7.9	7.9	7.9	.3
November	7.4	8.0	8.0	7.8	8.1	8.0	7.8	8.1	8.0	8.0	7.8	8.0	8.0	.3
December	7.4	7.8	7.9	7.8	7.9	7.8	7.9	7.9	7.8	7.8	7.8	7.9	7.8	.1

Table A-1. Employment status of the noninstitutional population

[Numbers in thousands]

Employment status	Not seasonally adjusted			Seasonally adjusted					
	Jan. 1976	Dec. 1976	Jan. 1977	Jan. 1976	Sept. 1976	Oct. 1976	Nov. 1976	Dec. 1976	Jan. 1977
TOTAL									
Total noninstitutional population[1]	154,915	157,176	157,381	154,915	156,595	156,788	157,006	157,176	157,381
Armed Forces[1]	2,140	2,146	2,133	2,140	2,145	2,147	2,149	2,146	2,133
Civilian noninstitutional population[1]	152,775	155,031	155,248	152,775	154,450	154,641	154,857	155,031	155,248
Civilian labor force	92,665	95,517	94,704	93,473	95,242	95,302	95,871	95,960	95,516
Participation rate	60.7	61.6	61.0	61.2	61.7	61.6	61.9	61.9	61.5
Employed	84,491	88,494	86,856	86,226	87,794	87,738	88,220	88,441	88,558
Employment-population ratio[2]	54.5	56.3	55.2	55.7	56.1	56.0	56.2	56.3	56.3
Agriculture	2,853	2,850	2,672	3,305	3,278	3,310	3,248	3,257	3,090
Nonagricultural industries	81,638	85,645	84,184	82,921	84,516	84,428	84,972	85,184	85,468
Unemployed	8,174	7,022	7,848	7,247	7,448	7,564	7,651	7,519	6,958
Unemployment rate	8.8	7.4	8.3	7.8	7.8	7.9	8.0	7.8	7.3
Not in labor force	60,110	59,514	60,544	59,302	59,208	59,339	58,986	59,071	59,732
Men, 20 years and over									
Total noninstitutional population[1]	65,739	66,835	66,930	65,739	66,491	66,598	66,699	66,835	66,930
Civilian noninstitutional population[1]	64,055	65,140	65,250	64,055	64,796	64,902	65,001	65,140	65,250
Civilian labor force	50,829	51,855	51,718	50,944	51,851	51,912	52,066	52,078	51,842
Participation rate	79.4	79.6	79.3	79.5	80.0	80.0	80.1	79.9	79.5
Employed	47,136	48,727	48,174	47,941	48,701	48,684	48,773	48,859	48,961
Employment-population ratio[2]	73.7	72.9	72.0	72.9	73.2	73.1	73.1	73.1	73.2
Agriculture	2,163	2,125	2,030	2,353	2,341	2,334	2,283	2,273	2,209
Nonagricultural industries	44,973	46,603	46,144	45,588	46,360	46,350	46,490	46,586	46,752
Unemployed	3,693	3,128	3,544	3,003	3,150	3,228	3,293	3,219	2,881
Unemployment rate	7.3	6.0	6.9	5.9	6.1	6.2	6.3	6.2	5.6
Not in labor force	13,226	13,285	13,532	13,111	12,945	12,990	12,935	13,062	13,408
Women, 20 years and over									
Total noninstitutional population[1]	72,433	73,535	73,642	72,433	73,286	73,378	73,491	73,535	73,642
Civilian noninstitutional population[1]	72,354	73,445	73,550	72,354	73,196	73,288	73,401	73,445	73,550
Civilian labor force	33,746	35,168	34,829	33,660	34,540	34,444	34,848	34,938	34,740
Participation rate	46.6	47.9	47.4	46.5	47.2	47.0	47.5	47.6	47.2
Employed	31,002	32,831	32,205	31,141	31,906	31,811	32,208	32,340	32,331
Employment-population ratio[2]	42.8	44.6	43.7	43.0	43.5	43.4	43.9	44.0	43.9
Agriculture	408	452	394	505	520	553	558	573	488
Nonagricultural industries	30,595	32,379	31,811	30,636	31,386	31,258	31,650	31,767	31,843
Unemployed	2,744	2,337	2,623	2,519	2,634	2,633	2,640	2,598	2,409
Unemployment rate	8.1	6.6	7.5	7.5	7.6	7.6	7.6	7.4	6.9
Not in labor force	38,608	38,276	38,721	38,694	38,656	38,844	38,553	38,507	38,810
Both sexes, 16-19 years									
Total noninstitutional population[1]	16,743	16,806	16,810	16,743	16,819	16,812	16,816	16,806	16,810
Civilian noninstitutional population[1]	16,366	16,446	16,448	16,366	16,458	16,451	16,455	16,446	16,448
Civilian labor force	8,090	8,493	8,157	8,869	8,851	8,946	8,957	8,944	8,934
Participation rate	49.4	51.6	49.6	54.2	53.8	54.4	54.4	54.4	54.3
Employed	6,353	6,935	6,477	7,144	7,187	7,243	7,239	7,242	7,266
Employment-population ratio[2]	37.9	41.3	38.5	42.7	42.7	43.1	43.0	43.1	43.2
Agriculture	282	273	248	447	417	423	407	411	393
Nonagricultural industries	6,071	6,663	6,229	6,697	6,770	6,820	6,832	6,831	6,873
Unemployed	1,737	1,558	1,680	1,725	1,664	1,703	1,718	1,702	1,668
Unemployment rate	21.5	18.3	20.6	19.4	18.8	19.0	19.2	19.0	18.7
Not in labor force	8,276	7,953	8,291	7,497	7,607	7,505	7,498	7,502	7,514
WHITE									
Total noninstitutional population[1]	136,453	138,253	138,415	136,453	137,782	137,944	138,117	138,253	138,415
Civilian noninstitutional population[1]	134,668	136,475	136,654	134,668	136,006	136,166	136,336	136,475	136,654
Civilian labor force	82,125	84,521	83,839	82,713	84,313	84,511	84,816	84,854	84,616
Participation rate	61.0	61.9	61.4	61.4	62.0	62.1	62.2	62.2	61.9
Employed	75,439	78,889	77,450	76,878	78,276	78,384	78,647	78,828	78,923
Employment-population ratio[2]	55.3	57.1	56.0	56.3	56.8	56.8	56.9	57.0	57.0
Unemployed	6,686	5,632	6,389	5,835	6,037	6,127	6,169	6,026	5,693
Unemployment rate	8.1	6.7	7.6	7.1	7.2	7.2	7.3	7.1	6.7
Not in labor force	52,543	51,955	52,814	51,955	51,693	51,655	51,520	51,621	52,038
BLACK AND OTHER									
Total noninstitutional population[1]	18,462	18,923	18,966	18,462	18,813	18,844	18,889	18,923	18,966
Civilian noninstitutional population[1]	18,107	18,555	18,594	18,107	18,445	18,476	18,520	18,555	18,594
Civilian labor force	10,540	10,996	10,864	10,706	10,906	10,910	11,114	11,109	11,030
Participation rate	58.2	59.3	58.4	59.1	59.1	59.0	60.0	59.9	59.3
Employed	9,052	9,605	9,406	9,298	9,508	9,444	9,618	9,623	9,648
Employment-population ratio[2]	49.0	50.8	49.6	50.4	50.5	50.1	50.9	50.9	50.9
Unemployed	1,488	1,390	1,458	1,408	1,398	1,466	1,496	1,486	1,382
Unemployment rate	14.1	12.6	13.4	13.2	12.8	13.4	13.5	13.4	12.5
Not in labor force	7,567	7,559	7,730	7,401	7,539	7,566	7,406	7,446	7,564

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

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

Table A-2. Major unemployment indicators, seasonally adjusted

Selected categories	Number of unemployed persons (in thousands)		Unemployment rates					
	Jan. 1976	Jan. 1977	Jan. 1976	Sept. 1976	Oct. 1976	Nov. 1976	Dec. 1976	Jan. 1977
Total, 16 years and over	7,247	6,958	7.8	7.8	7.9	8.0	7.8	7.3
Men, 20 years and over	3,033	2,891	5.9	6.1	6.2	6.3	6.2	5.6
Women, 20 years and over	2,519	2,409	7.5	7.6	7.6	7.6	7.4	6.9
Both sexes, 16-19 years	1,725	1,668	19.4	18.8	19.0	19.2	19.4	18.7
White, total	5,835	5,693	7.1	7.2	7.2	7.3	7.1	6.7
Men, 20 years and over	2,406	2,312	5.3	5.7	5.7	5.7	5.5	5.0
Women, 20 years and over	2,021	1,901	6.9	6.9	7.2	7.0	6.8	6.3
Both sexes, 16-19 years	1,408	1,480	17.7	16.6	16.8	17.2	17.2	18.1
Black and other, total	1,403	1,382	13.2	12.8	13.4	13.5	13.4	12.5
Men, 20 years and over	583	557	11.1	9.8	10.9	11.6	11.3	10.2
Women, 20 years and over	492	503	10.9	11.4	11.5	11.0	11.5	10.8
Both sexes, 16-19 years	313	322	35.0	38.3	38.0	36.5	34.8	36.1
Household heads, total	2,776	2,677	5.2	5.4	5.4	5.3	5.1	4.8
Men	2,069	1,955	4.6	4.9	4.9	5.0	4.8	4.3
With relatives	1,669	1,536	4.1	4.4	4.4	4.5	4.3	3.8
Without relatives	400	419	8.6	8.5	8.8	9.0	8.4	8.2
Women	675	620	8.0	8.0	8.1	7.4	7.6	7.0
With relatives	420	392	10.1	10.7	10.7	9.8	10.2	9.0
Without relatives	255	228	5.9	5.4	5.6	5.2	5.1	5.1
Married men, spouse present	1,636	1,510	4.1	4.5	4.4	4.5	4.3	3.8
Married women, spouse present	1,526	1,415	7.1	7.3	7.3	7.2	7.0	6.5
Full-time workers	5,813	5,507	7.3	7.5	7.6	7.6	7.5	6.7
Part-time workers	1,414	1,431	10.3	9.6	10.3	10.5	9.8	10.2
Unemployed 15 weeks and over[1]	2,781	2,283	3.0	2.4	2.5	2.6	2.6	2.4
Labor force time lost[2]	--	--	8.4	8.4	8.6	8.6	8.4	8.0
OCCUPATION[3]								
White-collar workers	2,065	2,100	4.6	4.6	4.6	4.7	4.5	4.5
Professional and technical	412	459	3.0	3.0	3.2	3.4	3.3	3.3
Managers and administrators, except farm	269	294	2.9	3.2	3.0	3.1	3.1	3.0
Sales workers	342	343	6.1	5.6	5.4	5.7	5.0	5.7
Clerical workers	1,042	1,004	6.4	6.2	6.2	6.3	6.1	6.0
Blue-collar workers	2,980	2,706	9.4	9.8	9.8	9.7	9.6	8.4
Craft and kindred workers	815	758	6.8	6.9	6.8	7.0	7.0	6.1
Operatives, except transport	1,173	1,049	10.4	11.5	11.6	11.3	11.0	9.2
Transport equipment operatives	294	260	8.5	8.0	8.3	8.2	8.1	7.2
Nonfarm laborers	698	639	14.3	14.6	14.0	13.5	13.9	12.9
Service workers	1,177	1,121	9.0	8.7	9.4	9.3	9.0	8.6
Farm workers	124	132	4.2	4.0	4.2	5.1	6.1	4.8
INDUSTRY[3]								
Nonagricultural private wage and salary workers[4]	5,486	5,124	8.1	8.1	8.2	8.2	7.9	7.4
Construction	670	660	15.7	15.7	15.1	15.4	14.1	14.9
Manufacturing	1,738	1,472	8.2	8.1	8.2	8.2	8.2	6.9
Durable goods	1,048	826	8.3	7.6	8.0	7.7	8.0	6.5
Nondurable goods	690	646	8.0	8.9	8.5	8.9	8.6	7.4
Transportation and public utilities	241	232	4.9	5.4	5.6	5.7	5.2	4.7
Wholesale and retail trade	1,473	1,495	8.6	8.9	8.9	9.0	8.2	8.4
Finance and service industries	1,328	1,236	6.9	6.4	6.7	6.8	6.8	6.2
Government workers	657	675	4.3	3.9	4.4	4.3	4.4	4.3
Agricultural wage and salary workers	163	180	11.2	11.2	11.5	13.2	14.0	12.6
VETERAN STATUS								
Vietnam-era veterans, men:[5]								
20 to 34 years	498	491	8.0	8.9	8.7	8.5	8.3	7.6
20 to 24 years	167	162	18.3	19.2	19.0	16.8	16.8	16.8
25 to 29 years	235	236	7.1	7.9	7.9	8.6	8.7	7.9
30 to 34 years	96	93	4.8	6.2	5.7	5.0	4.7	3.6
Nonveterans, men:								
20 to 34 years	1,294	1,262	8.9	8.2	8.9	9.3	9.1	8.2
20 to 24 years	794	731	12.1	10.5	11.9	12.1	12.4	10.6
25 to 29 years	316	374	7.2	7.2	7.6	7.9	7.2	7.7
30 to 34 years	184	157	5.1	5.4	5.1	5.8	5.4	4.2

[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.

Table A-3. Selected employment indicators

[Numbers in thousands]

Selected categories	Not seasonally adjusted		Seasonally adjusted					
	Jan. 1976	Jan. 1977	Jan. 1976	Sept. 1976	Oct. 1976	Nov. 1976	Dec. 1976	Jan. 1977
CHARACTERISTICS								
Total employed, 16 years and over	84,491	86,856	86,226	87,794	87,738	88,220	88,441	88,558
Men	50,474	51,618	51,789	52,546	52,576	52,643	52,799	52,918
Women	34,017	35,238	34,437	35,248	35,162	35,577	35,642	35,640
Household heads	50,020	51,038	50,660	51,185	51,159	51,356	51,525	51,710
Married men, spouse present	37,502	37,737	37,955	38,140	37,989	37,895	37,998	38,195
Married women, spouse present	20,025	20,490	20,042	20,470	20,384	20,482	20,498	20,511
OCCUPATION								
White-collar workers	42,844	44,527	42,836	44,023	44,207	44,297	44,648	44,521
Professional and technical	13,284	13,578	13,150	13,581	13,427	13,597	13,544	13,444
Managers and administrators, except farm	8,990	9,546	9,057	9,446	9,436	9,491	9,564	9,613
Sales workers	5,161	5,509	5,274	5,555	5,551	5,597	5,815	5,633
Clerical workers	15,409	15,894	15,355	15,441	15,793	15,612	15,725	15,831
Blue-collar workers	27,478	28,376	28,706	28,745	28,921	29,001	29,150	29,636
Craft and kindred workers	10,860	11,234	11,222	11,340	11,352	11,353	11,302	11,626
Operatives, except transport	9,798	10,010	10,126	9,820	9,885	9,970	10,231	10,341
Transport equipment operatives	3,133	3,321	3,166	3,275	3,297	3,258	3,283	3,358
Nonfarm laborers	3,687	3,792	4,192	4,310	4,387	4,420	4,334	4,309
Service workers	11,725	11,685	11,910	12,165	11,972	12,026	11,880	11,874
Farm workers	2,444	2,267	2,826	2,772	2,829	2,743	2,791	2,624
MAJOR INDUSTRY AND CLASS OF WORKER								
Agriculture:								
Wage and salary workers	1,075	1,033	1,296	1,309	1,310	1,285	1,380	1,246
Self-employed workers	1,552	1,405	1,646	1,608	1,671	1,627	1,530	1,490
Unpaid family workers	225	233	341	344	343	342	340	354
Nonagricultural industries:								
Wage and salary workers	75,607	78,093	76,662	78,440	78,498	78,766	78,957	79,205
Government	14,971	15,223	14,764	15,143	14,998	15,045	14,967	15,013
Private industries	60,637	62,870	61,898	63,297	63,500	63,721	63,990	64,192
Private households	1,219	1,299	1,306	1,400	1,377	1,448	1,384	1,391
Other industries	59,418	61,571	60,592	61,897	62,123	62,273	62,606	62,801
Self-employed workers	5,551	5,695	5,707	5,701	5,637	5,771	5,798	5,853
Unpaid family workers	481	397	507	433	448	449	460	419
PERSONS AT WORK [1]								
Nonagricultural industries	78,400	79,819	78,325	79,796	79,469	79,940	80,369	79,832
Full-time schedules	63,954	65,437	64,190	64,965	64,955	65,385	65,846	65,700
Part time for economic reasons	3,233	3,159	3,336	3,376	3,448	3,545	3,454	3,320
Usually work full time	1,513	1,260	1,335	1,378	1,339	1,289	1,234	1,112
Usually work part time	1,720	1,899	2,001	1,998	2,109	2,256	2,220	2,208
Part time for noneconomic reasons	11,213	11,223	10,799	11,455	11,066	11,010	11,069	10,812

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

Table A-4. Duration of unemployment

[Numbers in thousands]

Weeks of unemployment	Not seasonally adjusted		Seasonally adjusted					
	Jan. 1976	Jan. 1977	Jan. 1976	Sept. 1976	Oct. 1976	Nov. 1976	Dec. 1976	Jan. 1977
DURATION								
Less than 5 weeks	3,017	3,163	2,635	2,852	2,952	2,759	2,765	2,762
5 to 14 weeks	2,403	2,425	2,065	2,426	2,367	2,494	2,319	2,083
15 weeks and over	2,754	2,260	2,781	2,311	2,360	2,517	2,514	2,283
15 to 26 weeks	1,221	1,081	1,165	1,118	1,094	1,188	1,130	1,038
27 weeks and over	1,532	1,180	1,616	1,193	1,266	1,329	1,384	1,245
Average (mean) duration, in weeks	15.8	14.5	16.9	15.4	15.3	15.5	15.6	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	36.9	40.3	35.2	37.6	38.4	35.5	36.4	38.7
5 to 14 weeks	29.4	30.9	27.6	32.0	30.8	32.1	30.5	29.2
15 weeks and over	33.7	28.8	37.2	30.5	30.7	32.4	33.1	32.0
15 to 26 weeks	14.9	13.8	15.6	14.7	14.2	15.3	14.9	14.6
27 weeks and over	18.7	15.0	21.6	15.7	16.5	17.1	18.2	17.5

Table A-5. Reasons for unemployment

[Numbers in thousands]

Reasons	Not seasonally adjusted		Seasonally adjusted					
	Jan. 1976	Jan. 1977	Jan. 1976	Sept. 1976	Oct. 1976	Nov. 1976	Dec. 1976	Jan. 1977
NUMBER OF UNEMPLOYED								
Lost last job	4,588	4,073	3,611	3,727	3,756	3,802	3,736	3,207
On layoff	1,529	1,247	970	1,222	1,107	1,067	1,057	791
Other job losers	3,059	2,823	2,641	2,505	2,649	2,735	2,679	2,416
Left last job	863	953	845	934	936	858	831	932
Reentered labor force	1,983	2,043	1,933	1,912	1,927	2,061	1,957	1,991
Seeking first job	740	779	866	926	894	920	942	905
PERCENT DISTRIBUTION								
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Job losers	56.1	51.9	49.8	49.7	50.0	49.8	50.0	45.6
On layoff	18.7	15.9	13.4	16.3	14.7	14.0	14.2	11.2
Other job losers	37.4	36.0	36.4	33.4	35.3	35.8	35.9	34.3
Job leavers	10.6	12.1	11.6	12.5	12.5	11.2	11.1	13.2
Reentrants	24.3	26.0	26.6	25.5	25.6	27.0	26.2	28.3
New entrants	9.1	9.9	11.9	12.3	11.9	12.0	12.6	12.9
UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE								
Job losers	4.9	4.3	3.9	3.9	3.9	4.0	3.9	3.4
Job leavers	.9	1.0	.9	1.0	1.0	.9	.9	1.0
Reentrants	2.1	2.2	2.1	2.0	2.0	2.1	2.0	2.1
New entrants	.8	.8	.9	1.0	.9	1.0	1.0	.9

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

Sex and age	Number of unemployed persons (in thousands)		Unemployment rates					
	Jan. 1976	Jan. 1977	Jan. 1976	Sept. 1976	Oct. 1976	Nov. 1976	Dec. 1976	Jan. 1977
Total, 16 years and over	7,247	6,958	7.8	7.8	7.9	8.0	7.8	7.3
16 to 19 years	1,725	1,668	19.4	18.8	19.0	19.2	19.0	18.7
16 to 17 years	781	777	20.9	20.6	21.3	21.6	20.7	21.1
18 to 19 years	953	901	18.4	17.5	17.5	17.6	17.7	17.0
20 to 24 years	1,723	1,617	12.6	11.7	12.6	12.7	12.5	11.4
25 years and over	3,808	3,681	5.4	5.8	5.7	5.6	5.5	5.1
25 to 54 years	3,166	3,090	5.6	5.9	6.0	5.9	5.9	5.3
55 years and over	634	583	4.5	4.8	4.6	4.6	4.2	4.1
Men, 16 years and over	3,949	3,714	7.1	7.2	7.4	7.5	7.3	6.6
16 to 19 years	946	833	19.7	19.1	19.6	19.7	19.1	17.4
16 to 17 years	431	386	21.2	21.3	22.3	22.2	21.0	19.5
18 to 19 years	523	457	18.9	17.3	17.7	18.1	17.4	16.1
20 to 24 years	959	892	12.8	11.7	12.7	12.6	12.9	11.3
25 years and over	2,057	2,002	4.7	5.2	5.1	5.2	5.0	4.6
25 to 54 years	1,699	1,656	4.9	5.2	5.3	5.4	5.2	4.7
55 years and over	366	354	4.2	4.6	4.4	4.4	3.9	4.0
Women, 16 years and over	3,298	3,244	8.7	8.8	8.8	8.7	8.6	8.3
16 to 19 years	779	835	19.1	18.4	18.3	18.5	18.9	20.1
16 to 17 years	350	393	20.6	19.8	20.1	20.8	20.2	23.0
18 to 19 years	430	444	17.9	17.6	17.3	17.1	18.0	18.1
20 to 24 years	764	725	12.4	11.8	12.4	12.8	11.9	11.4
25 years and over	1,751	1,679	6.4	6.7	6.6	6.4	6.4	5.9
25 to 54 years	1,467	1,434	6.6	7.1	7.1	6.7	6.9	6.2
55 years and over	268	229	5.0	5.2	4.9	5.1	4.7	4.3

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

[Percent]

Measures	Quarterly averages					Monthly data		
	1975	1976				1976		1977
	IV	I	II	III	IV	Nov.	Dec.	Jan.
U-1—Persons unemployed 15 weeks or longer as a percent of the civilian labor force	3.1	2.7	2.2	2.4	2.6	2.6	2.6	2.4
U-2—Job losers as a percent of the civilian labor force	4.6	3.8	3.7	3.9	3.9	4.0	3.9	3.4
U-3—Unemployed household heads as a percent of the household head labor force	5.8	5.0	4.9	5.3	5.3	5.3	5.1	4.8
U-4—Unemployed full-time jobseekers as a percent of the full-time labor force	8.1	7.1	7.0	7.4	7.5	7.6	7.5	6.7
U-5—Total unemployed as a percent of the civilian labor force (official measure)	8.4	7.6	7.4	7.8	7.9	8.0	7.8	7.3
U-6—Total full-time jobseekers plus ½ part-time jobseekers plus ½ total on part time for economic reasons as a percent of the civilian labor force less ½ of the part-time labor force	10.2	9.3	9.1	9.5	9.7	9.8	9.6	8.9
U-7—Total full-time jobseekers plus ½ part-time jobseekers plus ½ total on part time for economic reasons plus discouraged workers as a percent of the civilian labor force plus discouraged workers less ½ of the part-time labor force	11.2	10.2	10.0	10.3	10.7	N.A.	N.A.	N.A.

N.A.—not available.

Table B-1 Employees on nonagricultural payrolls, by industry

(In thousands)

Industry	Not seasonally adjusted				Seasonally adjusted					
	Jan. 1975	Nov. 1976	Dec. 1976 p	Jan. 1977 p	Jan. 1976	Sept. 1976	Oct. 1976	Nov. 1976	Dec. 1976p	Jan. 1977 p
TOTAL	77,334	80,943	81,074	79,465	78,406	79,918	79,619	80,106	80,322	80,553
GOODS-PRODUCING	22,479	23,781	23,483	22,966	23,066	23,463	23,323	23,489	23,514	23,549
MINING	756	807	805	803	767	798	800	805	[illegible]	814
CONTRACT CONSTRUCTION	3,228	3,742	3,548	3,180	3,595	3,565	3,582	3,619	3,[illegible]	3,541
MANUFACTURING	18,495	19,232	19,130	18,983	18,704	19,100	18,941	19,065	19,100	19,194
Production workers	13,243	13,839	13,739	13,617	13,433	13,749	13,575	13,675	13,761	13,809
DURABLE GOODS	10,717	11,218	11,191	11,126	10,810	11,146	11,018	11,128	11,163	11,224
Production workers	7,604	8,021	7,992	7,936	7,689	7,975	7,833	7,929	7,959	8,024
Ordnance and accessories	162.8	156.3	157.2	157.4	162	156	155	156	157	157
Lumber and wood products	569.1	617.0	613.7	598.6	591	613	613	621	626	622
Furniture and fixtures	476.5	498.1	495.5	491.2	477	495	491	491	493	492
Stone, clay, and glass products	595.6	640.9	625.5	619.1	617	630	630	636	631	642
Primary metal industries	1,156.3	1,182.8	1,181.4	1,177.8	1,159	1,216	1,194	1,186	1,181	11,180
Fabricated metal products	1,347.1	1,411.4	1,410.6	1,403.7	1,357	1,404	1,387	1,396	1,405	1,414
Machinery, except electrical	2,041.0	2,110.6	2,121.3	2,130.1	2,035	2,115	2,078	2,106	2,107	2,124
Electrical equipment	1,779.8	1,878.6	1,876.6	1,869.3	1,782	1,848	1,849	1,860	1,864	1,871
Transportation equipment	1,693.0	1,776.9	1,778.5	1,753.8	1,714	1,737	1,695	1,749	1,766	1,775
Instruments and related products	495.4	517.4	518.6	520.3	497	512	511	514	517	522
Miscellaneous manufacturing	399.9	427.9	411.9	405.1	419	420	415	413	416	425
NONDURABLE GOODS	7,778	8,014	7,939	7,857	7,894	7,954	7,923	7,937	7,937	7,970
Production workers	5,639	5,818	5,747	5,681	5,744	5,772	5,742	5,746	5,742	5,785
Food and kindred products	1,637.2	1,733.5	1,693.7	1,657.8	1,698	1,711	1,706	1,711	1,709	1,720
Tobacco manufactures	79.1	81.8	78.4	73.6	79	76	76	75	74	73
Textile mill products	955.6	964.6	964.0	962.9	958	971	961	960	958	965
Apparel and other textile products	1,284.7	1,293.6	1,266.8	1,250.9	1,311	1,281	1,273	1,276	1,271	1,276
Paper and allied products	659.6	685.8	683.3	673.4	664	681	677	680	680	677
Printing and publishing	1,068.6	1,093.6	1,097.2	1,091.2	1,070	1,086	1,087	1,099	1,088	1,092
Chemicals and allied products	1,016.3	1,039.9	1,040.5	1,034.6	1,024	1,035	1,032	1,038	1,043	1,042
Petroleum and coal products	197.8	203.7	202.3	200.9	203	202	202	203	203	206
Rubber and plastics products, nec	608.6	651.9	650.1	650.4	612	643	645	642	648	654
Leather and leather products	270.3	265.1	262.8	260.9	275	268	264	263	263	265
SERVICE-PRODUCING	54,855	57,162	57,591	56,499	55,340	56,455	56,496	56,617	56,808	57,004
TRANSPORTATION AND PUBLIC UTILITIES	4,440	4,546	4,538	4,500	4,489	4,520	4,506	4,519	4,538	4,550
WHOLESALE AND RETAIL TRADE	17,205	18,122	18,556	17,785	17,388	17,839	17,824	17,808	17,895	17,975
WHOLESALE TRADE	4,189	4,321	4,327	4,287	4,214	4,283	4,292	4,291	4,305	4,313
RETAIL TRADE	13,016	13,801	14,229	13,498	13,174	13,556	13,532	13,517	13,590	13,662
FINANCE, INSURANCE, AND REAL ESTATE	4,223	4,368	4,384	4,375	4,266	4,338	4,359	4,381	4,402	4,419
SERVICES	14,084	14,858	14,843	14,734	14,342	14,798	14,819	14,873	14,918	15,004
GOVERNMENT	14,903	15,268	15,270	15,105	14,855	14,952	14,988	15,036	15,055	15,056
FEDERAL	2,724	2,720	2,725	2,714	2,749	2,728	2,730	2,734	2,720	2,739
STATE AND LOCAL	12,179	12,548	12,545	12,391	12,106	12,224	12,258	12,302	12,335	12,317

p preliminary.

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

Industry	Not seasonally adjusted				Seasonally adjusted					
	Jan. 1976	Nov. 1976	Dec. 1976[p]	Jan. 1977[p]	Jan. 1976	Sept. 1976	Oct. 1976	Nov. 1976	Dec. 1976[p]	Jan. 1977[p]
TOTAL PRIVATE	36.0	36.1	36.4	35.4	36.4	36.0	36.1	36.2	36.2	35.8
MINING	42.5	43.6	43.4	41.4	43.0	43.5	43.3	43.3	43.4	41.9
CONTRACT CONSTRUCTION	36.0	36.8	36.8	33.7	37.6	35.9	37.3	37.4	37.3	35.2
MANUFACTURING	39.9	40.3	40.6	39.3	40.4	39.7	39.9	40.1	40.0	39.7
Overtime hours	2.8	3.2	3.3	3.0	3.1	3.0	2.9	3.1	3.2	3.3
DURABLE GOODS	40.3	40.9	41.3	39.8	40.8	40.2	40.5	40.8	40.5	40.3
Overtime hours	2.7	3.3	3.5	3.1	2.9	3.0	3.0	3.2	3.3	3.4
Ordnance and accessories	41.2	40.8	41.8	41.0	41.3	40.1	40.6	40.6	41.2	41.1
Lumber and wood products	39.7	39.9	40.4	38.7	40.9	39.8	40.3	40.3	40.3	39.9
Furniture and fixtures	38.7	38.8	39.1	36.6	39.3	38.0	38.4	38.6	38.4	37.2
Stone, clay, and glass products	40.4	41.3	41.2	39.3	41.4	40.9	41.4	41.2	41.1	40.2
Primary metal industries	40.3	40.3	40.3	39.7	40.3	40.3	40.2	40.3	39.9	39.7
Fabricated metal products	40.4	41.0	41.3	39.7	40.9	40.6	40.4	40.8	40.6	40.2
Machinery, except electrical	41.1	41.7	42.5	41.2	41.2	40.8	41.2	41.5	41.4	41.3
Electrical equipment	40.0	40.6	41.0	39.5	40.3	39.7	40.0	40.3	40.3	39.8
Transportation equipment	40.9	42.0	42.7	40.9	41.7	41.1	41.2	42.0	41.2	41.7
Instruments and related products	40.1	40.8	41.4	39.8	40.4	39.9	40.3	40.4	40.7	40.1
Miscellaneous manufacturing	38.4	39.3	39.2	37.7	39.0	38.2	38.7	39.0	38.9	38.3
NONDURABLE GOODS	39.4	39.4	39.7	38.5	39.8	39.0	39.1	39.2	39.3	38.9
Overtime hours	3.0	3.0	3.1	2.9	3.3	2.9	2.8	3.0	3.1	3.1
Food and kindred products	40.3	40.4	40.5	39.4	40.6	40.2	40.3	40.4	40.1	39.7
Tobacco manufactures	38.6	38.1	38.2	35.4	39.0	37.1	37.5	36.9	37.4	35.8
Textile mill products	40.8	40.0	40.4	39.4	41.2	39.0	39.4	39.8	40.1	39.8
Apparel and other textile products	35.8	35.4	35.3	33.8	36.5	34.9	35.0	35.1	35.3	34.5
Paper and allied products	42.5	42.6	43.0	41.8	42.6	42.2	42.1	42.4	42.5	41.9
Printing and publishing	37.2	37.8	38.3	37.2	37.7	37.4	37.5	37.6	37.7	37.7
Chemicals and allied products	41.4	41.8	42.3	41.2	41.6	41.9	41.6	41.7	41.9	41.4
Petroleum and coal products	41.7	42.3	42.4	43.0	42.4	42.2	42.0	41.9	42.5	43.7
Rubber and plastics products, nec	40.6	41.4	41.7	40.3	40.8	40.5	41.1	41.2	41.3	40.5
Leather and leather products	38.1	36.5	36.9	35.2	38.8	36.5	36.4	36.4	36.6	35.8
TRANSPORTATION AND PUBLIC UTILITIES	39.3	40.2	40.3	39.6	39.6	39.9	39.8	40.2	40.3	39.9
WHOLESALE AND RETAIL TRADE	33.4	33.2	33.9	32.7	33.8	33.6	33.5	33.4	33.6	33.1
WHOLESALE TRADE	38.7	38.7	39.0	38.2	38.9	38.8	38.7	38.7	38.6	38.4
RETAIL TRADE	31.8	31.6	32.4	31.1	32.3	32.1	32.0	31.9	32.1	31.6
FINANCE, INSURANCE, AND REAL ESTATE	36.5	36.6	36.7	37.0	36.5	36.7	36.7	36.7	36.7	37.0
SERVICES	33.5	33.4	33.4	33.2	33.7	33.5	33.6	33.5	33.5	33.4

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

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

Industry	Average hourly earnings				Average weekly earnings			
	Jan. 1976	Nov. 1976	Dec. 1976[p]	Jan. 1977[p]	Jan. 1976	Nov. 1976	Dec. 1976[p]	Jan. 1977[p]
TOTAL PRIVATE	$4.72	$5.00	$5.02	$5.06	$169.92	$180.50	$182.73	$179.12
Seasonally adjusted	4.72	5.00	5.02	5.06	171.81	181.00	181.72	181.15
MINING	6.27	6.62	6.70	6.74	266.48	288.63	290.78	279.04
CONTRACT CONSTRUCTION	7.50	7.86	7.89	7.97	270.00	289.25	290.35	268.59
MANUFACTURING	5.02	5.34	5.42	5.44	200.30	215.20	220.05	213.79
DURABLE GOODS	5.38	5.68	5.79	5.80	216.81	232.31	239.13	230.84
Ordnance and accessories	5.49	5.98	6.01	5.93	226.19	243.98	251.22	243.13
Lumber and wood products	4.46	4.86	4.88	4.98	177.06	193.91	197.15	192.73
Furniture and fixtures	3.86	4.07	4.14	4.12	149.38	157.92	161.87	150.79
Stone, clay, and glass products	5.05	5.45	5.47	5.50	204.02	225 09	225.36	216.15
Primary metal industries	6.51	6.94	6.99	6.97	262.35	279.68	281.70	276.71
Fabricated metal products	5.29	5.53	5.62	5.65	213.72	226.73	232.11	224.31
Machinery, except electrical	5.61	5.91	6.00	5.97	230.57	246.45	255.00	245.96
Electrical equipment	4.77	5.07	5.16	5.16	190.80	205.84	211.56	203.82
Transportation equipment	6.35	6.69	6.97	6.92	259.72	280.98	297.62	283.03
Instruments and related products	4.75	4.99	5.09	5.08	190.48	203.59	210.73	202.18
Miscellaneous manufacturing	3.97	4.08	4.17	4.25	152.45	160.34	163.46	160.23
NONDURABLE GOODS	4.53	4.84	4.89	4.93	178.48	190.70	194.13	189.81
Food and kindred products	4.81	5.09	5.15	5.20	193.84	205.64	208.58	204.88
Tobacco manufactures	4.84	4.87	5.08	5.18	186.82	185.55	194.06	183.37
Textile mill products	3.57	3.81	3.82	3.82	145.66	152.40	154.33	150.51
Apparel and other textile products	3.33	3.50	3.52	3.49	119.21	123.90	124.26	117.96
Paper and allied products	5.25	5.62	5.65	5.69	223.13	239.41	242.95	237.84
Printing and publishing	5.53	5.82	5.86	5.93	205.72	220.00	224.44	220.60
Chemicals and allied products	5.66	6.09	6.12	6.20	234.32	254.56	258.88	255.44
Petroleum and coal products	6.96	7.26	7.29	7.38	290.23	307.10	309.10	317.34
Rubber and plastics products, nec	4.50	4.94	5.00	5.03	182.70	204.52	208.50	202.71
Leather and leather products	3.37	3.50	3.53	3.58	128.40	127.75	130.26	126.02
TRANSPORTATION AND PUBLIC UTILITIES	6.23	6.65	6.65	6.68	244.84	267.33	268.00	264.53
WHOLESALE AND RETAIL TRADE	3.89	4.08	4.07	4.16	129.93	135.46	137.97	136.03
WHOLESALE TRADE	5.05	5.31	5.34	5.37	195.44	205.50	208.26	205.13
RETAIL TRADE	3.47	3.65	3.65	3.73	110.35	115.34	118.26	116.00
FINANCE, INSURANCE, AND REAL ESTATE	4.26	4.40	4.42	4.51	155.49	161.04	162.21	166.87
SERVICES	4.26	4.49	4.52	4.61	142.71	149.97	150.97	153.05

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

ESTABLISHMENT DATA

Table B-4. Indexes of aggregate weekly hours of production or nonsupervisory workers[1] on private nonagricultural payrolls, by industry, seasonally adjusted

[1967 = 100]

Industry division and group	1976												1977
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec. P	Jan. P
TOTAL	110.7	111.1	111.1	111.5	112.0	111.6	111.8	111.8	112.2	112.2	112.8	113.1	112.2
GOODS-PRODUCING	96.0	96.1	96.0	95.6	97.2	96.8	96.5	95.7	95.9	96.0	97.2	97.0	95.6
MINING	125.2	125.0	125.7	125.9	124.7	125.0	127.7	115.6	131.7	131.1	132.6	133.1	128.7
CONTRACT CONSTRUCTION	105.1	104.1	99.6	105.0	104.0	104.0	103.7	102.5	99.4	104.2	105.7	104.5	95.8
MANUFACTURING	93.4	93.6	94.3	93.0	95.1	94.6	94.2	93.9	94.0	93.2	94.5	94.5	94.4
DURABLE GOODS	91.0	91.4	92.4	90.9	94.0	93.8	93.5	93.6	93.2	92.0	93.8	93.7	93.8
Ordnance and accessories	41.5	41.0	41.0	39.9	41.0	40.7	40.0	39.8	38.6	38.5	38.5	39.7	40.7
Lumber and wood products	97.0	96.0	95.8	96.0	96.6	96.1	98.6	97.6	98.2	99.4	100.8	101.9	100.4
Furniture and fixtures	101.3	103.1	103.6	102.7	105.1	103.3	102.3	101.2	102.4	102.2	102.8	103.0	98.8
Stone, clay, and glass products	97.7	97.4	96.5	98.6	99.5	99.7	99.2	98.6	98.9	99.7	100.2	98.8	98.6
Primary metal industries	83.6	84.8	86.0	86.8	88.3	89.2	90.1	89.8	88.8	86.2	85.7	84.6	84.3
Fabricated metal products	95.3	96.4	97.2	94.9	98.7	98.4	98.0	98.6	98.6	96.5	98.1	98.5	98.1
Machinery, except electrical	92.8	93.0	93.3	91.7	94.9	94.5	95.9	95.9	95.9	94.0	96.7	96.5	97.8
Electrical equipment and supplies	88.6	89.3	90.4	89.0	92.2	91.9	90.5	92.2	91.5	92.1	93.4	93.5	92.4
Transportation equipment	89.2	89.2	91.8	86.9	92.8	92.6	90.3	90.7	89.1	86.1	91.5	90.8	93.2
Instruments and related products	104.7	105.2	106.7	105.7	109.6	109.1	110.3	108.1	107.2	107.9	108.5	110.4	109.4
Miscellaneous manufacturing, ind.	94.4	94.3	95.4	93.1	95.4	94.7	93.1	91.8	92.2	92.0	92.1	91.9	93.6
NONDURABLE GOODS	96.8	96.8	97.1	96.0	96.6	95.8	95.2	94.2	95.2	95.0	95.4	95.6	95.2
Food and kindred products	96.7	96.8	96.0	96.1	96.6	96.8	97.0	96.5	96.4	96.2	96.6	95.5	95.9
Tobacco manufactures	89.0	88.1	84.9	85.4	85.4	83.4	82.3	84.0	82.1	83.0	81.6	80.1	75.4
Textile mill products	99.1	99.0	99.3	96.1	99.9	98.6	98.0	95.5	95.2	95.0	95.6	96.2	96.1
Apparel and other textile products	92.7	92.2	92.6	89.3	92.0	91.4	88.9	87.6	86.2	85.7	86.1	86.4	84.8
Paper and allied products	95.2	95.8	96.1	95.9	98.1	97.3	96.9	96.1	96.5	95.7	97.0	97.4	96.4
Printing and publishing	93.1	92.6	92.7	92.3	93.6	93.1	93.6	92.9	93.1	93.4	93.6	93.7	93.7
Chemicals and allied products	98.4	99.4	99.4	100.1	100.0	99.0	99.4	99.8	100.3	99.4	100.0	100.6	100.1
Petroleum and coal products	113.6	114.2	113.9	115.6	113.9	111.6	112.2	112.4	112.2	112.5	113.1	115.6	119.7
Rubber and plastics products, nec	117.7	117.9	121.7	121.3	108.8	107.0	106.2	105.2	124.3	125.6	125.7	127.2	126.5
Leather and leather products	79.7	79.2	79.3	78.4	79.8	76.0	74.7	72.5	72.1	71.0	70.4	70.4	70.1
SERVICE-PRODUCING	120.9	121.6	121.6	122.6	122.3	121.8	122.5	123.0	123.6	123.5	123.5	124.3	123.8
TRANSPORTATION AND PUBLIC UTILITIES	101.3	102.3	102.5	102.4	101.9	101.6	102.1	102.5	102.9	102.0	103.2	103.8	102.4
WHOLESALE AND RETAIL TRADE	117.3	118.0	118.0	119.8	118.9	118.1	118.9	119.0	119.7	119.3	118.9	119.8	118.8
WHOLESALE TRADE	113.2	113.4	113.2	114.3	114.3	114.1	115.3	114.7	114.9	114.8	114.8	114.8	114.3
RETAIL TRADE	118.9	119.8	119.8	121.8	120.6	119.6	120.3	120.6	121.6	121.0	120.4	121.6	120.4
FINANCE, INSURANCE, AND REAL ESTATE	125.1	125.4	125.5	126.1	126.3	126.3	126.6	127.3	127.7	128.3	129.1	129.8	131.3
SERVICES	133.6	134.2	134.0	134.6	135.3	135.0	135.4	136.6	137.2	137.6	137.7	138.2	138.2

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

Table B-5. Indexes of diffusion: Percent of industries in which employment[1] increased

Year and month	Over 1-month span	Over 3-month span	Over 6-month span	Over 12-month span
1974				
January	58.7	61.6	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	29.6
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	73.5
May	63.4	70.6	71.5	79.7
June	47.1	57.0	70.9	79.7p
July	52.9	47.4	55.2	74.4p
August	49.1	65.1	55.2	
September	68.9	54.9	62.2p	
October	39.0	59.9	69.8p	
November	64.2	52.9p		
December	67.2p	74.7p		
1977				
January	66.6p			
February				
March				
April				
May				
June				
July				
August				
September				
October				
November				
December				

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

Representative BOLLING. Thank you, Mr. Commissioner.

First, I would like to say on the record that I appreciate very much your call with regard to the difficulties with the new CPI.

You told me about this problem as soon as you recognized it. I appreciate very much that call.

Senator Proxmire.

Senator PROXMIRE. Mr. Shiskin, these figures were disclosed to, I understand, some members of the administration the day before or somewhat earlier than others?

Mr. SHISKIN. Yes.

Senator PROXMIRE. When did Arthur Burns know about this?

Mr. SHISKIN. To the best of my knowledge he did not know about it.

Senator PROXMIRE. He did not know about it before he made his statement yesterday?

Mr. SHISKIN. Sir, I can only tell you what I did. I shall tell you that in the next sentence or two. Wednesday, I was at a meeting at the Old Executive Office Building. The meeting broke up about 5:30. I went around to see the new chairman of the Council of Economic Advisers to give him the figures.

He wasn't there. I left my telephone number and he called me about 8:30 Wednesday evening. I gave him the figures. At that time we did not have, or weren't sure of the final payroll figures.

I had to call him back the next morning with them.

Senator PROXMIRE. The household data, the principal unemployment data was available on Wednesday night?

Mr. SHISKIN. Wednesday evening, about 8:30.

He called me at home exactly at 8:30. Then we also had another important bit of information by Thursday morning; namely, the alternative seasonal adjustments which is the table attached to my prepared statement.

So, I gave them to him Thursday morning. By yesterday afternoon, we finally got all the figures. We didn't get the diffusion index until close to the time we held the press clearance meeting.

At 4 o'clock we had the release finished and it went to press.

Senator PROXMIRE. You told Mr. Burns when?

Mr. SHISKIN. I didn't tell him. The OMB rules say that I should tell the chairman of the Council of Economic Advisers for the President, and that's all I did.

You can imagine what an awkward situation that is, because I don't tell the Secretary of Labor. It is very awkward for me. I hope he understands that I am operating under OMB rules.

Senator PROXMIRE. I just wanted to be sure. This is good news. It is good news that unemployment has dropped so sharply.

I appreciate very, very much your statement because you put it in the proper perspective.

You point out there was a drop in the labor force, a very big drop, an extraordinary drop in view of the fact that over the last 12 months there has been an increase of 2 million; yet, we have a 400,000 drop in the labor force in January.

And, as you say in your statement, total employment increased slightly, only slightly. The reason we have this big drop in unemployment is because there are fewer people in the work force; is that correct?

Mr. SHISKIN. Well, I am not really sure it is a one-to-one relationship. You know, there are a lot of gross flows; but that sounds reasonable.

Senator PROXMIRE. Let me ask you, Do you have any estimate as to how many of the labor force dropouts have stopped looking for work because of the cold?

Do you have a way of telling that?

Mr. SHISKIN. No, sir, I have no information on that at all.

Senator PROXMIRE. Any experience from the past years to give us any light on that?

Mr. SHISKIN. No, sir.

Senator PROXMIRE. Would you expect on the basis of your experience that most of these 400,000 discouraged workers will be back in the work force in the coming months?

Mr. SHISKIN. Sir, I don't really know why they dropped out. I have no hard evidence.

Senator PROXMIRE. When do we get the discouraged worker data?

Mr. SHISKIN. Those will be available in April.

Senator PROXMIRE. As we look at the encouraging drop in unemployment in December and January together—2 months are more significant than 1 month certainly—still it is the result of an overall drop in the work force during those 2 months which contradicts the increase in the work force over the preceding year.

The employment increase in December and January would have barely met the increase in the work force with no drop in unemployment if we had the same continuation of growth in the work force we had over the past year.

In other words, an additional 200,000 people in each of those months would have wiped out most of the gain we got from employment.

You said the work week dropped—which is most unusual at a time when unemployment drops—your estimate is because of the cold weather?

Mr. SHISKIN. That's a reasonably easy one to understand.

Senator PROXMIRE. How do you tell that? Have you been able to get statistics which indicate the number of plants closed down for shorter hours because of the colder weather in this week and January?

Mr. SHISKIN. No. Let me try to answer that question not quite directly because I don't have a direct answer to your question.

If you study the table on hours worked, which is by industry, it is clear that the industries which involve mostly outdoor work are the ones that got hit hardest.

For example, there was a decline of more than 2 hours a week in construction. We also had a big decline in the number employed in construction.

That kind of thing suggests that the declines are weather related. Now we also have other data which I mentioned in my statement as follows:

We have a question on the form which asks if people were employed but not at work; and if they were not at work, why not.

There are numerous reasons why people who are employed are not at work. For example, they are sick or they are on vacation. We also have, thanks to somebody's foresight many years ago, a category, "bad weather."

Now, the number of people who reported they were employed but not at work because of bad weather was more than double any figure we got in the past 5 years.

Now also, we have a question on——

Senator PROXMIRE. Can you tell us, then, how much that is, more than double? How many hundreds of thousands of people were not at work because of the cold weather?

Mr. SHISKIN. I can tell you what was reported to us.

These data are not seasonally adjusted. They are published in Employment and Earnings, not in the release. They are not seasonally adjusted.

What I have in front of me is the change between December and January. These are employed persons with a job but not at work because of bad weather.

That's what they reported. Between December and January 1972–73, the number was plus 600,000.

I am rounding. The next year it was also plus 600,000. In 1974–75, where we had a very mild winter, it was 60,000; in 1975–76, again, a mild winter, it was 100,000.

This month, January, it was over 1 million.

Senator PROXMIRE. Over 1 million?

Mr. SHISKIN. Yes, sir.

Senator PROXMIRE. That would be reflected not in unemployment figures, of course?

Mr. SHISKIN. No, these people are employed.

Senator PROXMIRE. In hours of work?

Mr. SHISKIN. Yes, sir.

Senator PROXMIRE. Do you have any way of telling now—or do we have to wait until the first Friday in March—what the unemployment results of this latest cold snap are now?

I have heard rumors there are a million people out of work because of that, out of work, unemployed, wanting to work but they can't because the work isn't available because of the cold weather.

Can you give us any guidance on that at all?

Mr. SHISKIN. I have no figures, sir.

Senator PROXMIRE. Where do these figures come from?

Mr. SHISKIN. I will explain that to you. I attended a meeting this week—in fact, just before I went to see Mr. Schultze—to try to round up what knowledge we have on the impact of the bad weather on unemployment.

There are numerous agencies and departments in Washington who are making telephone surveys to find out how many new layoffs there are every single day, and these are done mostly by going to field offices and asking the field offices to telephone plants in the area.

Now, this effort has just started. I don't think we have hard data yet; but these are the sources.

Now, I don't know the figures. I don't want to know them. I think at this stage they are very soft figures.

Senator PROXMIRE. Let me ask you one other question. My time is up. You say on page—not in your statement but in the press release—on page 3 under "Total employment and the labor force," you say, "Total employment increased slightly in January * * * sea-

sonally adjusted. This advance was confined almost entirely to adult men * * *."

That suggests that women and teenagers had no more jobs in January than they had in December, yet there was a sharp drop in women unemployed in January.

Is it fair to conclude that entire drop was due to fewer women seeking work?

That's the only explanation for it?

Mr. SHISKIN. That's the most obvious explanation.

Senator PROXMIRE. Why isn't it fair to conclude then that this was in effect discouraged workers or workers prevented from seeking work because of the bitter cold?

Mr. SHISKIN. That's a reasonable explanation. But, you know, we don't ask that kind of question in the survey.

We don't have what we call hard information. It is certainly reasonable. I ventured to make such a statement in my release over the protests of some members of my staff.

Representative BOLLING. Mrs. Heckler.

Representative HECKLER. Thank you, Mr. Chairman.

Mr. Shiskin, I want to thank you for your testimony and I want to thank you for the spirit of cooperation that you exhibited.

I had a long session with three of your associates who were very helpful and the session was very fruitful. I know they were sent at your request and I appreciate that very much.

I would like to pose some of the questions I raised with them now. These relate to the issue of unemployment statistics on the local community level.

As you know, the Congress has begun to appropriate billions of dollars in the CETA program. I think the projected figure for 1977 is $3.3 billion, and the countercyclical revenue sharing program, the funding will be allocated to communities based on—in part—their unemployment figure; and we have just gone through a very upsetting experience in the dispensation of the limited grants under the Public Works Employment Act of 1976.

I happen to represent a district in which we have major chronic long-term unemployment and yet two of my most severely distressed communities—Fall River and Taunton—did not receive one thin dime under the funding; and in part the reason that they were not considered eligible was because there were no accurate unemployment figures for those specific communities.

As a result of this, the major in one of these cities has conducted his own telephone survey based on population figures, census figures in the community, and the police rolls.

He finds that the unemployment rate that he is able to discover through this survey—which is admittedly not a professional survey, nonetheless done by staff members in his office—the unemployment rate is almost double that which is published for that city.

Now, this particular community lost funding by tenths of a point under the EDA grants, so that the system which is accurate for the country and later revised for a State and retrospectively becomes more accurate, as your staff explained to me, through this benchmarking

process, this system does not approach accuracy for the community and the Congress.

On the other hand, it is assessing and allocating its funds based on unemployment figures.

Now we are at cross purposes; and somehow, since we are going to expect more from the BLS, I wonder what it would take for your agency to produce figures for the local communities which will be accurate so that the funding can be dispensed on a just basis?

Obviously, your agency is going to have to gear up to a much more extensive statistical computation.

You are going to have to have surveys on the community level, et cetera.

How can this be done? How quickly can it be done? What will it take?

To ignore this basic problem is to really allow one of the building blocks of the whole unemployment response by Congress to be very fatally defective.

Mr. SHISKIN. Well, Congresswoman Heckler, I would agree with everything you said. I will try to be responsive to your question.

Let me also say that you probably know more about this than I do because you probably have spent more time with my staff than I have during the past few days.

I have made repeated public statements, Congresswoman, that the congressional legislation requiring us to produce local area data are far ahead of our ability to put together accurate data.

For example, at the present time—this will be improved slightly in a little while—we have a household survey that has 47,000 reports.

We publish data for 5,500 units. So, that means that you are talking about something like, what is it, less than 10 families per statistic.

Many of them have a high margin of error. On the other hand, we recognize congressional responsibility. You have responsibilities to allocate funds, you feel. That is entirely up to the Congress.

We are trying our best to be responsive.

Now you have to give us time. I think one great advantage of assigning this job to BLS is that we recognize limitations in data and, over time, can make them better and better and better.

Let me come more directly to your question. It is going to take a quantum jump in the money we have and in the analysis of this work to produce the kind of detailed data that is required at the local area level.

Really, to get accurate data for very small places, you have to take a census.

To take a census is an extremely large undertaking. If I remember correctly, the 1970 census cost about one-quarter of a billion dollars.

With the price rises that have taken place, you are talking about one-half a billion dollars for that alone. That's the census.

Now you know there is no use talking about a census, because we couldn't process the data fast enough. It takes over a year to get any census data in any detail, and we would have to take a census every month.

So, we have to find shortcut ways to do it.

We are seeking them. One thing we are thinking of doing is greatly expending our control survey, the survey from which we get the national unemployment data (the CP's).

We have under consideration a plan to expand the survey so that we cover every State with a reliable figure every month. We have problems as to whether we should do the same thing for other areas, for example, standard metropolitan statistical areas.

We can't possibly do it for these very small areas that you are talking about. We have to find another way to do it.

What we are working with, to do that, is the State data. Now, the State unemployment insurance data have to be adjusted because each of the 50 States and the District of Columbia has a different law.

We are working with them to try to find ways of making all of the State data consistent with each other. They would fit in so they can all be—let me start that sentence again—so they can all be benchmarked or adjusted to these control totals and be consistent throughout the country.

As far as we are concerned, we have to be consistent all over the country. This is a very formidable job.

There is no hope of doing it in the next year or two. It is a long-range job.

We are gearing up to it and we are doing the best we can.

Representative HECKLER. Would you explain to me why is it, since I understand Massachusetts has this benchmarking system, that when our rate was published it was 6.7 percent; but now the commissioner of the department of employment security in Massachusetts says that the figure is really closer to 8 percent. Therefore, for the last quarter of 1976, the new benchmark figure will be 8 percent. If the Congress had known when the EDA grants were going to be allocated that EDA had known that the unemployment rate was 8 percent, we would have received literally millions more of the money.

Mr. SHISKIN. We are at fault, I know that. I wish I could do somethink about it. At the time we published the figure of 6.7 percent, that was the best estimate we could make; but now we have the State benchmark. We have the control total from the CPS; what I might in short call the unemployment survey. We know that the early figure was too low.

Now, we know that. We can give you the right figure now. At the time we issued the 6.7 percent, we didn't know. What we do in every single case is issue the best estimate we know how to issue.

Representative HECKLER. How many benchmarking experiences is a State supposed to be involved in? As I understand it, Massachusetts had the benchmarking system and the first figure was a benchmark figure. Now we are told that there's going to be another benchmark figure which corrects the first. Well, is benchmarking one and the same process at all times? Or what are the differences?

Mr. SHISKIN. Last year when we benchmarked with control totals, based on the unemployment survey approach, we didn't have all States. We had 27 States. We expanded the sample this year; and by March, hopefully, we will be able to benchmark all the States because we have better data for all 50 States.

So these will be better benchmarks than we could ever get before. We are improving the system, Congresswoman Heckler. We are recognizing your complaints. You know, you are not the only Congressperson who has called us and pointed out if only we had provided a more accurate figure earlier, they would have gotten more money. You

know, I wish I could have provided the figure earlier. You know Congress passed the legislation in response to very important needs. We are doing our best to catch up.

I have been in the Federal statistical system for—I hate to mention the number of years—it's over 30; but I can't think of a better agency into which to put this responsibility than the BLS. It is a highly professional organization devoted and committed to get out better statistics.

We will be getting out the best statistics all the time that can possibly be produced in the United States. You have to be patient with us. We recognize your complaint. I wish I could do something.

Representative HECHLER. Thank you.

Mr. SHISKIN. You know, you have to be patient with us. It's a tremendous task the Congress has imposed upon us. We are doing our best to be responsive to it.

Representative HECKLER. Mr. Commissioner, I am not critical of you. I know how very responsible and responsive you have been.

I wonder if the appropriate committees of Congress have called you in to testify so that you could make them aware of the fact that you couldn't provide accurate data for these communities; were the committees cognizant of this problem?

Mr. SHISKIN. Well, there were two committees in the Congress who did ask me about these figures. One is our Appropriations Committee. We have made this point again and again. If you want to read a very good criticism of our State and local area unemployment statistics, probably the best one, look at our budgeting committees. Second, there is this committee, the JEC.

My staff—and they are here again today—the Deputy Commissioner and other people—have talked to various congressional groups over time. This afternoon at 4:30 I am meeting with a delegation from the Senate Labor and Welfare Committee. They have been calling me all week to ask if they could bring more people along with them. We are doing our best to make them aware of the problem.

Congresswoman Heckler, let me emphasize: Money won't cure this problem overnight. In the end we are going to need a lot of money, but it also takes time.

For example, the Census Bureau, which is responsible for the unemployment surveys, has to expand their sample. That takes a lot of time. We have been expanding the sample. We expanded by roughly 9,000 last year and another 9,000 or so this year. That's taken 2 years to add something like 18,000 households. I am sure the Census can go faster, and they will; but it's not the kind of problem that can be solved by money alone. We need time. We also need know-how.

We tried a technique and discovered it didn't work so well. It's one thing to be in the laboratory trying techniques, see that a mistake has been made and correct it. This goes on for a few years, and you come out with something pretty good.

But we are in the public eye. Money is riding on these issues. When we make a mistake, as we often do, everybody knows about it and I sit here like this trying my best to explain it away.

The data are deficient and will continue to be deficient for many years, several years. I don't know how to do better—we are making the figures better as fast as we possibly can.

Representative HECKLER. Then the Congress is participating in a charade if we seek to address the problems of unemployment and we are doing so on the basis of data that will be deficient for years. We can't approximate justice if we don't have accuracy in our building blocks.

Mr. SHISKIN. Congresswoman Heckler, it isn't a question of—I am not trying to take on your problems, I have enough of my own—but, isn't it a question of alternatives?

What are the alternative ways of distributing the funds? This may be the best one.

Representative HECKLER. If I might leave you with a thought, Mr. Commisioner. I wish you would think of a way in which a telephone survey could be conducted in communities by reliable sources, either through the trade professional interviewers of the Department of Employment Security or other professional interviewers. This could give us another input, yet not to be the sole figure upon which unemployment is determined, and provide an extra dimension of more recent figures that could supplement and perhaps give the picture a little more accuracy.

Mr. SHISKIN. Well, we will certainly do our best with working with the States. Two years ago at the initiative of the House Appropriations Committee, $5 million was added to our budget, of which a substantial proportion went to the States to improve their own estimating. We are working closely with them. We welcome their suggestions. We welcome your suggestions.

You can be assured that the whole BLS professional staff are doing their very best to be responsive and accurate. We recognize the problems.

Representative HECKLER. Thank you, Mr. Chairman.

Representative BOLLING, Senator Proxmire.

Senator PROXMIRE. I understand Senator Humphrey will be back. I will be glad to yield to him as soon as he returns.

Mr. Shiskin, the unemployment rate, as you have indicated, does not reflect the whole effect of the bad weather and the fuel shortage; but we can see the impact on average hours worked and total hours worked. Table B–4, of the release, presents an index of total production hours worked in the entire economy. I understand that analysts use this data as an aid in making rough estimates of what may be happening to the gross national product.

Mr. SHISKIN. And industrial production.

Senator PROXMIRE. The January index dropped sharply and is now back to its October level. That's rather a stagnant level which persisted from May through October before the economy began to pick up in May or December. Does this suggest we have lost all the production gains of November and December; and is there any possibility of making up this lost ground during the next 2 months given the continuing cutbacks in natural gas which may prevent many factories from reopening before April or at least reopening on a full-time basis?

Mr. SHISKIN. Let me respond to that by asking you to look at a few lines. One is "Contract construction." That industry experienced a very sharp decline: 104.5 to 95.8.

Senator PROXMIRE. You are referring to what table?

Mr. SHISKIN. Table B–4, the one you mentioned. The aggregate hours index for construction dropped from 104.5 to 95.8. Manufacturing showed practically no change at all during January. Manufacturing has been at a standstill for 3 months.

So it looks as though the weather hit the outdoor industries very hard.

In more direct reply to your question, normally when you have a big movement, a decline or a rise, it's offset very quickly. For example, when there is a strike, it doesn't take long before industry usually gets back the lost production. This situation appears to be a little different because—I am told—and again all I know is what I read in the papers—that the shortages of natural gas and fuel will continue for several months. So it may take quite a while to get back what we lost and we may have some permanent losses.

Senator PROXMIRE. Is there a possibility that the real GNP may decline this quarter in view of the cold weather.

Mr. SHISKIN. It's very early in the quarter. These are the first figures for the quarter.

Senator PROXMIRE. I understand. But recognizing the very, very serious cold weather we have had, the expectation that it may get worse, the cutbacks that have been necessitated.

Mr. SHISKIN. It's too early to tell. You know, we have very little hard data. These are the first data that have come out. We have a lot of speculation about the present situation. I think anyone you talk to who is working on these figures that are floating around will admit they are very soft figures.

Senator PROXMIRE. You see, what this leads to——

Mr. SHISKIN. No one knows what the weather will be like the rest of the quarter.

Senator PROXMIRE. What this leads to is the prospect we will have little or any real growth in this quarter, and the next quarter we will have a number of things working in favor of growth. No. 1, the catch-up from the slowdown because of the cold weather. No. 2, the stimulus that we hope will be enacted by that time and will be at least in part effective, at least rebates may be effective by then, if we pass that; and other tax reductions.

What guidance can you give us on how to interpret the underlying strength of the economy in this kind of confusing situation?

Mr. SHISKIN. Well, I will tell you, here is what I would say. Let me try very briefly to describe the situation, the unfolding events. You know, we had a very severe recession in 1974–75, the worst recession since the big depression of the thirties. No question about that in my book.

For most measures of economic activity we have recovered now—we had recovered back to the previous peak levels. We had a pause which started in the spring of last year, 1976. It lasted maybe until November or maybe until December. Then the economy began to perk up.

But, of course, now we have had another interruption, due to the bad weather. That is the way it looks now.

However, there is one area of the economy that has not recovered much and it's the most sensitive area of the economy. That is the unemployment situation. That is, whereas employment has grown, GNP

has improved, and industrial production has improved, retail sales are improving, unemployment—at least until this month—showed virtually no improvement. It is a very serious problem and continues to be.

Senator PROXMIRE. Well, you say there has been such a recovery except for unemployment. There hasn't been much of a recovery in manufacturing, or overall in the total production. On the basis of your own statistics here, manufacturing was 95.1 in May and in January is 94.4. Total production was 112 in May, 112.2 now. You pointed to the fact there has been an extraordinary drop in construction.

Mr. SHISKIN. In January.

Senator PROXMIRE. But if you look at this overall, production simply has not been recovering over the last—since May—over the last 7 or 8 months.

Mr. SHISKIN. What I said is that we had a standstill situation for a couple of months. Then we had improvement in maybe November, a little bit, December, and probably early January. Now at the end of January, we are back in difficulty. Retail sales as you know have been improving greatly. Personal income, less transfer payments, has been improving, industrial production has been improving.

These are what we call measures of economic performance. They have all been improving.

Unemployment still hangs very, very high. That is the element that mars the picture of expansion which I described.

Senator PROXMIRE. Let me ask you a question about seasonal adjustment. You did discuss that to some extent. I would like to get a little more definitive response. The table showing alternative seasonal adjustment methods gives a range of unemployment rates for January ranging from 7.3, the official rate, upwards of 7.6.

In other words, unlike most months, all of the effect of the alternative seasonal adjustment is upward. Doesn't this suggest that part—though certainly not all—of the drop in the rate could be a faulty seasonal adjustment?

Mr. SHISKIN. Sure. You know, the composite measures, shown at the end of the table is 7.4, so we may be off to a 10th or so. We may have exaggerated the decline a little bit. You know, you can't measure economic changes that exactly, Senator Proxmire.

Senator PROXMIRE. Now I had a letter from you, a very helpful letter as always, very thoughtful. I was delighted to get it in response to my question at the January 12 hearing on the economic hardship indexes that have been developed. You say that to develop an index for this would cost something like perhaps $20 million.

Mr. SHISKIN. Yes.

Senator PROXMIRE. But the reason it costs so much is because you would interview 45,000 to 50,000 homes 4 times a year?

Mr. SHISKIN. Yes.

Senator PROXMIRE. Why do you have to have that many? Why can't you have a so-called, alleged scientific polling such as a Gallup, Harris, and so forth?

Mr. SHISKIN. Sure, they do 1,000 or 1,200 interviews. If all you want is one figure, two figures, for the United States as a whole, that's

all we need; but you take a look at our unemployment figures; there are endless breakdowns.

Senator PROXMIRE. So every Senator wants a breakdown for his State. Congressmen want as much as they can get for their district. You are under pressure on that.

It seems to me we were not asking, at least to begin with, for such an ambitious figure.

Mr. SHISKIN. If we have a smaller sample just for the United States we can do it for less; but, sir, you know what we feel we have to do, to do this right. What I am talking about is income distribution data with detailed breakdowns deflated, and published quarterly. These would be the basis of what I think would be very good measures of economic hardship.

Now, we have one such survey each year. That's the measure of poverty. The measure of poverty has been put out traditionally by the Census Bureau, but this year the CBO put out an alternative estimate which took into account estimates of payments in kind, such as food stamps, medicare, and so on. I think that that was a sensible thing to do.

What I am talking about is doing that kind of survey four times a year.

Senator PROXMIRE. Why can't you do it as part of your unemployment inquiry? You have a 45,000 household, or 50,000 households that are interviewed; you have the people going out. They are professionals; they are trained. Why couldn't they simply ask about this hardship?

Mr. SHISKIN. There is a limit to how many questions you can ask at one time. There is a limit to what the data collectors can do in one interview, but that is a possibility. What we have run into immediately when we started to investigate this question is that the HEW is preparing a similar program to the one we talked about. The data on economic hardship are basically needed, primarily needed, I believe for two kinds of programs. One is the welfare programs, and the others are the various programs that the Secretary of Labor uses to improve the lot of the unemployed.

There is a tremendous amount of money involved in these programs. The figure I was looking at, where the unemployment figure was used last year, in part, or in all, as the basis for allocations is between $8 and $10 billion. It will be more this year because of President Carter's program.

There is a lot more money involved in the welfare programs.

We are in a very preliminary stage of studying the data requirements for these programs. The thinking is that we ought to get data somehow to be able to cope with all these problems. If you want to have data just for the United States, you can do it with a much smaller sample.

Representative BOLLING. Will the Senator yield?

Senator PROXMIRE. Yes, indeed.

Representative BOLLING. What techniques are used in OMB? I have been out of touch with this field for a while. What efforts were made and what techniques were used in coordinate statistical problems for the Federal Government?

Mr. SHISKIN. As you know, as I said to you, I sometimes sat in the back of the room while you were interrogating Ray Bowman, and for 4 years I held the job which Bowman left.

In those days, his office was called the Office of Statistical Standards. I changed the name to the Office of Statistical Policy. Joe Duncan is now head of that. They discuss our programs with us frequently.

They have the OMB staff coming around, checking, investigating. As a matter of fact, I have spent several moments—maybe an hour altogether—talking to them about the coordination of the efforts on measuring impact of the bad weather on unemployment.

So that office is still interested and in existence. They still review the activities of the statistical agencies, including the BLS. We have to submit our report forms to them for clearance. We can't mail out a form without an OMB approval. That is, I believe, the answer to your question. That office still exists today and is doing the best to coordinate statistical activities.

Representative BOLLING. You said something about HEW doing a survey.

Mr. SHISKIN. They are not doing it. They are planning it.

Representative BOLLING. They are planning it.

Mr. SHISKIN. Yes, sir.

Representative BOLLING. That is what triggered your office. What is the coordination there?

Mr. SHISKIN. Well, we have been in touch with people at HEW and the OMB; and there's a coordinated review going on with respect to the need for these data, the best way to do it, and how much money is involved.

Representative BOLLING. OK. How much money do we waste because we are not, for a variety of reasons which I will call grossly political, able to better coordinate statistical data? I don't really expect you to answer that with a figure, but is there a substantial amount of money wasted because it is impossible to get really effective coordination on a series like this? There is a considerable demand on the part of a variety of agencies and perhaps a demand on you and BLS; and the difficulty that the committee in OMB has of holding it down is very substantial.

Is that the significant factor?

Mr. SHISKIN. Yes. Maybe this is responsible. If not, I will try again.

First, what the OMB people try to do is to make a cost-benefit analysis. They try to figure out whether the addition of $10 million for statistical programs is better than a $10 million increase in some other program. That is one thing to do. In the end, the President decides what the whole budget should be.

The OMB is forced to make a budget add up to the President's number. Now, in that process, which goes on during a very hectic week, the last week before the budget comes down, many budgets are cut. I have been in on that process. Sometimes you can assume—if you are careless or optimistic—that you are going to get, say, $10 million and it turns out to be 8 or 7. An awful lot of tough decisions are being made in terms of the cost-benefit analysis.

Is that responsive?

Representative BOLLING. That is responsive. It means, in addition to a variety of other things, that we are in effect leaving to the chance of a very, very complicated and highly pressurized budget process a statistical program, in effect, an overall statistical program, that very clearly needs to be coordinated in the national interest.

Mr. SHISKIN. That's right. Of course, let me hasten to say——

Representative BOLLING. I am not trying to suggest that the fault lies downtown alone. I am sure, on this kind of thing, it is much more often up here than downtown.

Mr. SHISKIN. May I just add this, Mr. Chairman?

Representative BOLLING. All right.

Mr. SHISKIN. We have been talking for quite a while about these kinds of problems. The phrase we have used is "quantum jump." You know, Congresswoman Heckler represents a very important and legitimate concern. We recognize that. We are talking about a lot of money. You are not talking about an increase in the budget of $2 million or $3 million. It is maybe, 30, 40, 50 times that that you are talking about—somewhere in that neighborhood.

Senator Proxmire has raised two questions with me in recent months. One is on job vacancies and it is a very reasonable question. In a world without money and endless resources, we would certainly be collecting job vacancy statistics.

My estimate is, it is going to cost $25 million a year to collect job vacancy data. Now we are talking about income data. There are a lot of other data requests around. When I started off in statistics many years ago—in economics—the data were being used by universities, professors for research. They were also being used for market analysis by business concerns.

Then later on, starting, I think, in the early 1950's, we began to use them for economic policy decisions more. Then we tried fine tooling. That needed better and better statistics.

Now, by gosh, we are using these data to allocate billions and billions of dollars. We have to reorient our thinking. There are some very important judgments to be made by the top policy people in the country.

Representative BOLLING. I want very much to yield to Senator Humphrey. Before I do, I want to state one man's opinion. I haven't been involved directly in the statistical aspect of things for awhile. For a long while I was on a statistical subcommittee of the Joint Economic Committee. I happen to believe—and am prepared to state without enough information—that you are precisely correct and we are not going to be capable of making adequate judgments about an economy that we don't understand anyway unless we very largely improve our statistical series.

The next question, which I am not going to ask today, because I am going to defer to Senator Proxmire in this connection, and we are going to discuss this some more, is to try to figure out what we need to do to get the material, money, and manpower available to the people like you who do the work, so that we can begin to have the statistical series that we need to make the kind of economic judgments that we are making anyway. There are billions involved in one, and a relatively small number of billions in the other.

Senator Humphrey.

Senator HUMPHREY. Mr. Shiskin, first let me thank you for including in your report the information shown that we requested some time ago on the range of unemployment measures based on various definitions of unemployment and the labor force seasonally adjusted. That is the topic you address yourself to, where, for example, the so-called official unemployment rate is 7.3, but when you get at it with part-time unemployment, and those unemployed, it rises to 8.9.

Of course, you have not as yet been able to properly ascertain the number of discouraged workers who can be statistically evaluated.

Mr. SHISKIN. We have those for the fourth quarter. If you cast your eye to the bottom line on the left——

Senator HUMPHREY. But not monthly?

Mr. SHISKIN. Not monthly.

We have 10.7 for the fourth quarter.

Senator HUMPHREY. In other words, when you put it together, for the fourth quarter, it is 10.7. The monthly data is not yet broken out. I want to thank you. I think that is much more helpful and gives us a much clearer picture.

Your figures this morning are going to be heartening for a number of people. We want to see this unemployment rate come down, coming down from the official rate of 7.8 1 month ago to 7.3.

My concern is, No. 1, as Senator Proxmire so well pointed out that there was a very substantial drop in the so-called labor force, about 450,000, 440,000—450,000?

Mr. SHISKIN. 440,000.

Senator HUMPHREY. That is undoubtedly due to weather factors, or at least if not undoubtedly, there is some reason to believe it is due to weather factors. We have all these incredible reports which I placed in the record at the time Mr. Schultze was before us to the effect that certain of our news agencies and their surveys had estimated unemployment from the cold weather being as high as 1½ million to 2 million. In some States, 500,000; in Ohio, over 1 million; in New York, over 500,000, and so forth.

Of course, these figures as yet are not involved in your most recent analysis; is that correct?

Mr. SHISKIN. That is correct.

Senator HUMPHREY. Yes.

Mr. SHISKIN. We have something, but not much.

Senator HUMPHREY. I sent you a letter yesterday—I don't know whether it has come to your attention yet——

Mr. SHISKIN. No.

Senator HUMPHREY [continuing]. Because I think it is important that we have as solid information as possible on the number of people that are unemployed and may continue to be unemployed for some weeks as a result of the bitter, cold winter which has afflicted much of our Nation.

The reason for it is that the crucial decisions are having to be made in the Congress, in the budget committees, on the so-called quarter economic package. It is my personal judgment—and I have so stated—that as a result of the survey that was made by the Congressional Research Service of the Library of Congress that much of the economic

stimulus potential of the tax rebate has already been consumed by the increased fuel costs.

Therefore, I have suggested rather directly to the Council of Economic Advisers to the President, to the Director of the Budget and others that they ought to review their package as to whether it is adequate.

Yesterday, we had Mr. Burns testifying before the House Budget Committee; and as usual, his testimony was most interesting, and he covered lots of ground. I wasn't quite sure as I was reading it just where he was going to come out, because it appeared for a while that we were going to need an economic stimulus, and all at once, he came on down that the economy was doing much better.

As you indicated, he didn't have these figures before him yesterday. He didn't think there was a need for economic stimulus. That is what worries me. When I see these figures of 7.3, that is 7-million American plus, unemployed.

When you also look at them, you will find that amongst black men, it is 10.2; black women, 10.8; among black teenagers, 36.1; and those figures would be conservative because it is very difficult at times to get accurate information particularly among black teenagers.

If the word goes out of here that all things are just warming up, like the temperature in Washington today—they tell me it is going up to 45 or something like that—well, it may be 45 degrees in Washington which is occasionally afflicted with a blast of hot air but it certainly is not 45 degrees in other parts of the country.

I think it is imperative that we do not go away from this meeting simply because the official statistic drop was 7.3 feeling that things are reasonably beginning to blossom, that the warmth of economic recovery is beginning to take over. I hope that it is; but when I see 440,000 people disappear from the labor force, when I know that unemployment benefits are being exhausted by a large number of workers, and, therefore, they are no longer even listed, then I can't be that happy with Mr. Burns yesterday, and 7.3 today.

I think it may give aid and comfort to those who want to drag their feet on economic recovery; and might I say that those who want to drag their feet on it have got good jobs. They are not suffering from unemployment, not a bit; but the country is; and if anybody doesn't believe it, all they need to do is go around the country.

I get so weary, Mr. Shiskin, hearing these things in Washington. I get reports everyday from my home State of Minnesota. Business stinks. I will tell you it is so cold out there that people don't even get a chance to go to their supermarkets except out of sheer necessity at the end of the week.

Take a look at what is happening to our farmers. That, of course, is something that doesn't appear in Washington except once a year. We kind of pay our respects to the agricultural people in case they forget to produce and we all start to starve. We are beginning to feel the effects of dust storms; at least the "Today" show knows it, and CBS and ABC. I don't want to cut out any networks here. [Laughter.]

You boys should have your cameras on for that. [Laughter.] But this is a serious matter. Unemployment figures are only one part of the economy. I think this is important for us to know, that from the

Mississippi River west, it is a solid drought area. In parts of Illinois, Indiana, with the severe cold, and back down into the South and Southwest where the winter wheat crop is, there is serious winter wheat crop damage. Our livestock herds are being liquidated at a rate faster than the Soviet Union ever liquidated theirs. Over 40 percent of the livestock has been liquidated in this country. That is a capital investment that has been liquidated. In the days ahead that will be felt on the economy.

I only point this out because I can just see the commentary that is going to come. It is going to kind of give us a feeling of everything is jolly; like when I get one of those pills out of my drug store that peps you up for about 4 hours and you say "Oh, I feel great today," and tomorrow you feel like you were run over by a 10-ton truck.

But the fact of the matter is that not only is there 7.3 official unemployment, which is a national disaster, but we are getting accustomed to it.

We get unemployment down to 4.5 percent, then we can start to say things are looking better.

The last time I heard a witness from the previous administration, they were trying to get me to believe that 5 percent was normal employment; 5 percent was full employment. When I came to Washington, 3 percent was considered to be full employment; 3 percent unemployment was considered to be full employment. I was here 10 years and they got it up to 4 percent unemployment; that was considered to be full employment.

Now I am at the year 1977, and Mr. Greenspan came before us and said that 4.9 or 5 percent of unemployment is considered to be full employment.

Just as sure as my name is Hubert Humphrey, 10 years from now they will have it up to 6.

Representative BOLLING. Senator, would you yield for 1 minute?

Senator HUMPHREY. Yes.

Representative BOLLING. I had a very encouraging experience before this committee yesterday. I heard the Secretary of the Treasury—I never thought I would hear this—say that he could not find any level of unemployment satisfactory. Then he proceeded to expand on this concept. I think we have a new force around as well as the old force.

Senator HUMPHREY. Thank God.

I just want to make it clear for the record once again so nobody thinks Hubert Humphrey is deviating from his original position. When I hear figures like 7.5, 7.3, 7.8, comforting as they may be to statisticians or to somebody who wants to comment on it, to me this is a national disaster.

Still, if you take into consideration the fact that about half of that is youth unemployment, then I repeat that it is even worse. So let's not get too happy.

I know you are not too happy, Mr. Shiskin.

Mr. SHISKIN. I just want to say also we report these figures fully. We have been trying and succeeding in recent years in expanding our coverage in many ways so that you can quote these different categories of unemployed.

Now, as you pointed out earlier, for the first time, we have a table which shows the numerous measures of unemployment including unemployment of part-time workers and which includes the discouraged workers.

Senator HUMPHREY. I just wanted to put in what I considered to be part of the total economic malaise that afflicts us. When I see the one-two punch coming that my dear friend, Mr. Burns, saying we don't really need that economic stimulus, and No. 2, today 7.3——

Mr. SHISKIN. I feel very uncomfortable with what that implies, sir.

Senator HUMPHREY. I feel it, too. I start to shake a little and shiver. I thought I would express it to you.

Mr. Friedman, in last week's "Newsweek," attributed the high rate of unemployment during the past year to the fact that Congress extended unemployment benefits to a maximum of 65 weeks to cover a number of new workers. His argument is that a number of the unemployed would have naturally dropped out of the labor force actually remained in the labor force to stay eligible for unemployment benefits.

Question, is there any solid evidence that any of the January labor force dropouts were benefit exhaustees? And will you comment on Friedman's idea? What evidence has the BLS developed on this?

Mr. SHISKIN. We have no evidence. I read Friedman's article and I thought about it a lot. If I thought there was any evidence, I would have put it in my statement. I don't think there is any evidence. It may be true. A lot of things are true that you can't provide evidence for. We have no evidence.

Senator HUMPHREY. You have no evidence to justify that conclusion?

Mr. SHISKIN. No.

I might also take this opportunity to say that we have been hearing from Mr. Friedman on and off. One of the things he has been arguing for is the inclusion of the employment population ratio in our report. You know, there is a very good case to be made for it. In fact, at this hearing recently, someone pointed out to me that the employment figures I was citing, which keep increasing, can't be explained just that simply, because the population is also increasing. This month for the first time, the employment population ratio figures are published for the major demographic groups in table A–1. We keep expanding our information.

Senator HUMPHREY. You have done, may I say, a great service for all of us, Mr. Shiskin, in improving your data. We have gone over this from time to time in the last 2 or 3 years. I for one want to thank you very much for the cooperation that you have extended not only to this committee, but also to improve the whole statistical analysis of the unemployment picture in the country.

I want you, if you will—you have your associates with you today—to take a look at the letter we sent to your office. I imagine it just arrived this morning. I have been pressing the administration to take a hard look at their economic package; I think the package in the main was basically sound. It is a 2-year package. I was one of those who met when we discussed it, but the problem is that we discussed the package in the first part of January. Since the first part of January, things have changed a great deal.

Average increased costs of fuel for an American family of four is $139. The average increase in the stimulus is $117, for the same family. That leaves you with about a $32 stimulus. I will tell you, you don't get much stimulation or excitement out of $32.

I might add that if you put a few other things in there, it isn't just the fuel bills that have gone up; but how many people have had to go out and get their car towed. To me, there are a lot of things that happen with cold weather.

Mr. SHISKIN. I am one of them.

Senator HUMPHREY. There are extra costs, particularly for a work force that wants to get on out. I have the feeling, too, there are extra costs that come to the Government: Food stamps, welfare, and so forth.

Thank you very much, Doctor.

Representative BOLLING. Mrs. Heckler.

Representative HECKLER. Just one further question, Doctor. You probably have heard of the proposals of the Senate and House that suggest as one of the facets of an economic stimulus package addressing the problem of teenage unemployment that there be an employment tax credit, a wage subsidy of $1 an hour for the first 6 months and 50 cents an hour for the next 6 months. These would apply to workers who have been unemployed for 26 weeks or longer. Do you have any opinion as to the merits of that proposal?

Mr. SHISKIN. Congresswoman Heckler, as I have explained many times to this committee, we avoid making statements on policy. We feel that is the responsibility of somebody else. We do our best to provide accurate data that will help people make policy judgments.

Now, in explanation, we feel that if we get involved in policy judgments, we are apt to become prejudiced in the compilation of data. We think it is wise to separate those two functions. That is what BLS has been doing for 92 years now. I follow that.

Representative HECKLER. I can appreciate that.

Representative BOLLING. Senator Proxmire.

Senator PROXMIRE. Mr. Shiskin, I would like to ask you about the wage settlement situation and how it is affecting inflation. The Bureau of Labor Statistics released information on wages in 1976 that shows a very sharp decline, an encouraging decline in the average rate of increases and wages negotiated under collective bargaining settlements. The drop was, as I recall, something like from 8 to 6 percent. They found it pretty consistent throughout the spectrum of industries; but there is a possible omission here that makes it a little hard to interpret it. The possible future cost of living escalators is not, as I understand it, included in the pricing out of these settlements; is that correct?

Mr. SHISKIN. That is correct.

Senator PROXMIRE. As more and more unions adopt cost-of-living clauses, this can be more and more misleading?

Mr. SHISKIN. That is right.

Senator PROXMIRE. What can we do to get a clearer picture of the inflationary effects such as it is in the wage settlements?

Mr. SHISKIN. In our release on wage statistics, we published a table which does make estimates of the amount of the total effective wage

increase. We call it effective wage increase that can be attributed to the various factors, including the cost-of-living adjustments. These are necessarily behind the times, because at the time the wage settlements are made, they are not included; but as the wage settlements unfold, as the payments are made over time, then the cost-of-living adjustments are known and they are added to the effective wages paid.

Senator PROXMIRE. That does not show for the future what the projections will be?

Mr. SHISKIN. We don't have projections. You are in effect projecting the CPI. We don't do that.

Senator PROXMIRE. Can you give us any information of the effect of this in view of the much more widespread inclusion in the cost-of-living escalators?

Mr. SHISKIN. No; about all that I can say, you know, is that there is a steady advance in the amount of income payments that are adjusted by the CPI. That is having a greater and greater impact on the economy. I have made an estimate that more than half of the income payments today are adjusted by the CPI.

Senator PROXMIRE. I remember a couple of years ago it was about a quarter.

Mr. SHISKIN. Now, it is more than half of the people in the United States, if you take dependents into account, who have their income payments adjusted by the CPI.

Senator PROXMIRE. We are talking not only about negotiated settlements for the labor unions, you are talking about more than half the people in the United States?

Mr. SHISKIN. This is somewhere in the neighborhood of 12 to 15 percent of the income, because what gets the number up to such a high figure are the social security and the food stamp recipients and the lunch subsidies. There are about 8 to 8.5 million employees, union employees now, which is about half of the number of union members whose contracts are directly adjusted by the CPI.

Senator PROXMIRE. Now you may have noticed that William Nordhaus has been nominated by the President, and the confirmation has been held up because the clear answer hasn't been secured. Our committee voted unanimously to recommend him. He is a brilliant economist and made a very good impression on the Banking Committee when he came before us for confirmation.

He made the astounding statement to me that because of double and triple counting of some farm prices in the WPI, it was as much as 50 percent too high, compared to what it was a few years ago when we had this double-digit inflation. He thought it grossly distorted the figures and therefore, might have distorted our policies.

Mr. SHISKIN. We are very familiar with that problem. We had a meeting several years ago with a group of experts including Bill Nordhaus, his colleague, Shovan, Dick Ruggles, and others to discuss the limitations of the WPI and how we could improve it. We commissioned various papers. We are very familiar with Mr. Nordhaus' views. What we have done is to change our release in such a way as to give much greater emphasis to the unduplicated data. In our release published every month—I have a copy with me if you wish to have it—we have a relevant table on the second page. This table was not in our release 2 years ago at all. It shows data, for example, for total

finished goods, consumer-finished goods, producer-finished goods, and so on. We do have unduplicated data in the table. We have also developed a program for improving the WPI. So you see, we have tried to be responsive to Mr. Nordhaus' criticisms.

The reason we have not moved more vigorously on it is that we have been devoting most of our price data resources to the CPI revision. As you know, we have a great many troubles with that program. We are coming in for a larger budget to improve the WPI this year. As we phase out the CPI revision work, we will be coming in for more and more requests to improve the WPI. Unfortunately, this isn't of the same magnitude of the programs we were talking about before.

Senator PROXMIRE. You are agreeing that Mr. Nordhaus' estimate is about right?

Mr. SHISKIN. I am not agreeing with that estimate, but I am saying we have unduplicated data here. I want to say also that we keep discussing questions like this. Why don't we abolish it? Why don't we discontinue the WPI? It is widely used in escalation. That is why we don't.

You know, we publicize the limitations of this index. Again, let me say exactly what I said before, that I think probably the best criticisms of this index, as well as some of our other series, are in the budget documents we submit. We are aware of this problem. We are trying our best to correct it. We publish unduplicated indexes every single month.

Senator PROXMIRE. Then, is it your judgment that in view of the corrections you have made that the index henceforth will be reasonably accurate, maybe 10 percent out of line?

Mr. SHISKIN. What will be accurate are our data on finished goods prices.

Senator PROXMIRE. Why can't you eliminate double and triple counting? Just don't do it?

Mr. SHISKIN. As I said, that index is widely used in escalation. People know the index. We provide alternative indexes without double accounting. Our thrust, our emphasis now in the WPI, is to provide more complete coverage.

Senator PROXMIRE. What you are saying is that people look at the components——

Mr. SHISKIN. Not the components. Not the components, sir. They can do that; but in addition, we have a separate approach. We have series in the release which are based on stage of processing classifications. We have raw materials, intermediate materials, and finished goods categories. We encourage people to use that breakdown. We now have, I would say, as much or more text on that as we have on total WPI. We have now been doing that for 2½ years. We are slowly making progress. We can't give up the WPI overall index because it is very widely used in escalation. When we get the data improved, when we have better coverage, we will call together this group we had before plus some others. We will discuss with the administraton people, with you, the best kind of an overall measure to compile.

Senator PROXMIRE. Is it possible that the Federal Reserve Board with their expertise, their sophistication, their knowledge still might have tightened the money supply, for example, on the basis of the

overall figure of a very sharp increase in the WPI? Or would they go behind it in your judgment?

Mr. SHISKIN. Oh, no. They are very knowledgeable about it. That is a very sophisticated and knowledgeable staff. I can't believe that they are not fully aware of this. They sit on our committees.

Senator PROXMIRE. We are belabored by editorials in leading papers and by economists that tell us that if inflation was proceeding at such a tremendous rate, we had to adopt policies of cooling the economy down, and slowing things down. You say that figure, you agree, was very seriously exaggerated?

Mr. SHISKIN. John, why don't you comment on that?

Mr. LAYNG. The only comment I have is that it wasn't only the WPI. The CPI, which doesn't suffer from these deficiencies, was increasing at a very high rate by historical standards as well. Granted the size of the increases in the wholesale area were larger. We tried to point out to people what we call the stage of processing framework for analyzing price behavior which eliminates much of the double counting to which you refer.

Senator PROXMIRE. The staff has suggested to me that it might be wise under the circumstances, in view of the limited use of the WPI in collective bargaining settlements and so forth that you might discontinue publishing the overall.

Mr. SHISKIN. Well, I will take that under advisement; but I thought I had a perfect case for abolishing the series on job vacancies. That was 3 years ago.

I have heard nothing but flack since then. Sir, every series has its constituents; and once you publish a series——

Senator PROXMIRE. I don't know how you could be a constituent of a series that is far out of line.

Mr. SHISKIN. Sir, if you have a contract that says you have to adjust your payments——

Senator PROXMIRE. Are there many contracts based on the WPI?

Mr. SHISKIN. Yes; we don't know how many. It is not like the CPI.

Senator PROXMIRE. I am not talking about CPI. I am talking about the WPI.

Mr. SHISKIN. I understand. Suppose you are building a ship, making something that takes a long time. When you order parts, paying for a ship, you make a contract with the paint company for 3 years for them to deliver paint to paint the ship. Then you are going to——

Senator PROXMIRE. Think of the injustice of this, Mr. Shiskin. The injustice of having the settlement made on the basis of a distorted index which is 50 percent out of line.

Mr. SHISKIN. We don't decide—you know, I think that some day somebody can get wealthy just setting themselves up as an adviser on what indexes to use to escalate.

Senator PROXMIRE. That would explain some of the military cost overruns, too.

Mr. SHISKIN. I hadn't thought about that. Possibly. [Laughter.]

Senator PROXMIRE. I just have one more question. What has happened to the proposed commission to evaluate the unemployment statistics?

Mr. SHISKIN. We have——

Senator PROXMIRE. Have the members been appointed?

Mr. SHISKIN. We have submitted a list of names to Secretary Marshall. We have submitted a budget to Secretary Marshall. A member of his staff has been doing some independent checking on names. The Secretary made a commitment to Congress that he would appoint such a commission. I expect some announcement fairly soon.

Senator PROXMIRE. I can see why you have constituents for that wholesale price index when they get that kind of a ripoff of the taxpayer by getting their military contracts.

Mr. SHISKIN. Sir, it isn't really fair to look at the index levels. You should look at rates of change. Those rates of change aren't much off.

Senator PROXMIRE. There was a period when they were.

Mr. SHISKIN. That is true, but I have a chart that shows the WPI rates of change and those for the CPI; in the period 1973–74, the WPI went up a lot more, but then it went down a lot more. So, you know, I think in terms of the rates of change, which the escalation is really based on, it doesn't make much difference.

Representative BOLLING. Senator Humphrey.

Senator HUMPHREY. I just have a general comment, Mr. Shiskin. The number of employed actually increased from December to the period of January, the period your study covers, by about 117,000; while in December the number of employed increased 221,000.

So that insofar as the increased employment is concerned, there's been a slowdown, isn't that correct?

Mr. SHISKIN. I would look on it a little differently. The agricultural employment figure is a less reliable figure. It fluctuates a lot more. I think it is better to look at nonag employment. That's been increasing consistently for the past few months somewhere in the neighborhood of a quarter of a million.

Senator HUMPHREY. What did it do last month?

Mr. SHISKIN. It increased from—according to the household survey—from 85.2 to 85.4 and a half. That's about a quarter of a million. Our other survey that we can check, the increase was from 80.3 to 80.6, a quarter of a million again.

By the way, Senator, I think as a result of what we have been calling, probably incorrectly, an interim benchmark, we are bringing these two surveys closer together. The employment figures show an increase of roughly—nonag—about a quarter of a million.

Senator HUMPHREY. Let me say to you city fellows around here that nonagriculture doesn't tell the story in this country at all. I consider the figures we get on this committee to be derelict and misleading, because they do not reflect what is happening in the biggest sector of the economy.

General Motors, I.T. & T., and A.T. & T. look like pipsqueaks compared to American agriculture. American agriculture is treated in these reports like, "How did it happen? How did you get around here? Why are you bothering us?"

Then you have these general statistics. Why don't we have charts to show us, for example—I see you have price rises in food; and you look down here at green peas, or green coffee, or something like that. When I look at the things that affect my constituents, and this country's balance of payments, and the income of millions of people, what

do I find? Price of wheat from $4.75 to $2.24; price of hogs is down; price of beef is down; price of cotton is down; price of rye is down, barley, oats, soybeans. Those are all things that people produce for income.

Yet I look in here and I just read all the time about finished goods, or, among farm products, prices were higher for green coffee. We didn't need any information on that, we knew that.

Prices were higher for eggs. Where were they before? I mean if prices were higher.

I am looking at it from not only the CPI, but I am looking at these statistics in terms of the economy. I am simply telling you here that the parity ratio that American farmers are getting today a year ago was 73. Today it is 68. That means it is 32 percent off from being fair, as compared to industrial products and industrial workers, the so-called nonagricultural workers.

So that somewhere along the line we have to get a better emphasis. I have been hollering about this and pounding about it. Of course, again, I didn't get a chance to work upon Mr. Schultze. I don't think he has an agricultural economist over there. Really, it is pathetic.

We go around worrying about oil imports. The only thing we have to pay for them—the only way we can pay for them is agricultural exports. What is it that most people equate with inflation? Not what happens to some green peas or green coffee or something, it is what they get when they go into that supermarket, the average person thinks of inflation on the basis of the grocery bill; their doctor bill; their automobile repair bill.

Those are things that hit people day in and day out. I say this because I want to get you now moving in the way you have been moving before. You have been doing such a marvelous job improving our statistical information.

The next time I see you around here, I would like to see a report on the last year of prices of agricultural products; raw materials, intermediary, wholesale, and retail. Let's get some stuff on that.

Then we begin to find out why people are complaining. If you really want to find out what people think about the economy, stand out in front of a supermarket. Don't go interview those economists. They are getting paid well; but stand out there and visit Mr. and Mrs. Housewife or go to the garage. When a person drives the car out, and gets that automobile repair bill, he thought he bought a new car.

Or go to the doctor's office, stand out in front of a doctor's office.

Now I learn a lot by going and standing in the doorway of the welfare office in Hennepin County and talking to people. When I go home, I do that. I say, "What is happening to your budget, why are you here? What is your income?"

You know what I learn? I learn so much that I don't learn down here. These general statistics just bug me. I know they are important. I know we have to use them for purposes of the cost-of-living increases, and all of that sort of thing; but when I see that the average workweek, as Senator Proxmire noted, is down, most people are hourly workers. When they are getting 35—what is it, 35, 36 hours a week, and very little overtime in the winter, when food is more expensive, when clothing is more expensive, when medicine always is—there is much more medication sold, by the way, and many more doctor

bills than in the summertime, when automobile repair and maintenance is more expensive, all the things are more expensive in these cold months unless you happen to live down in San Diego.

Most of what I see in San Diego are golf tournaments. They look so beautiful on Sunday, I almost want to get up and leave town. Everybody can't live in San Diego.

Mr. SHISKIN. The last time I was in San Diego, they had their first hurricane in 35 years. [Laughter.]

That's the only time I have ever been there.

Senator HUMPHREY. Mr. Shiskin, I appeal to you and your associates to get together with the Department of Agriculture crowd. We never get them up here, by the way. Mr. Chairman. Maybe we ought to do that.

Representative BOLLING. We are going to have the new Secretary up one of these days soon.

Senator HUMPHREY. That will be good.

If you will bring to us, as you are doing now, all this information, I think we would be in much better condition.

Mr. SHISKIN. We will try to do this.

Senator HUMPHREY. I am kind of a crank on this.

Mr. SHISKIN. I realize I shouldn't have made that distinction. Let me so amplify it this way:

Agriculture is normally a very productive industry. One of the reasons our rate of——

Senator HUMPHREY. Very productive, but not too profitable.

Mr. SHISKIN. One of the reasons our productivity rates have been so high is that agriculture has such a high productivity rate. Because of the high productivity, today we have 3 million employees in agriculture compared to about 85 million in other industries.

Senator HUMPHREY. I understand from the employment figures. I do appreciate that. When you bring in all the things that make up the wholesale price index, the CPI, I just want a little bit more on that information over here, what the real product sells for; and not some fictitious number. Even those numbers that come in will be subject to change, for example; most prices are quoted in Chicago. Everybody doesn't live in Chicago.

What is the price in Blue Earth? That is where they produce soybeans. They haven't produced soybeans in Chicago since I don't know when. Those are the figures that count for me.

I am trying to get Government statistics to be more reliable and more practical. When I go home and talk to my constituents and they look at what I am reading, they say what are folks drinking down there? These figures frequently have no relationship to what is happening where people live; and where people live is where they vote.

Where people live is where they spend their money and where they earn their money. This is why these figures, while they are very helpful, have got to be somehow flushed out.

I am not going to let this committee, if I can help it, be less than aware of the economics that take place, the economic factors of the agricultural sector of our economy.

Some way, somehow, in Washington—unless it is exports to the Russians—people don't think about it except that they think eggs are

too high priced because somebody manipulated the egg market; or potatoes are too high priced because somebody manipulated the potato market. The producer is the fellow, that is, the man that puts the money in the bank, at the local bank, borrows the money at the local bank.

I just read the figures. Farm indebetedness is going up tremendously. The ability to finance farm indebtedness, pay the interest, is becoming very, very difficult. Now the reason I bring this up is that this is a part of the economic package that we have to deal with. This is the part my dear friend, Mr. Burns, from the Federal Reserve Board doesn't understand.

This is the part that most of the people who come down here don't understand because they got their training at Harvard, Yale, some place, and forgot where this stuff is produced.

I am going to insist that these statistics come to us and relate the facts of life. I say to these people that are in this room that what happens in the farm economy is more important to you than what is going to happen out here in the automobile industry. We get a little problem in the automobile industry and we have a conniption fit around here.

I am sympathetic to the automobile industry and automobile workers; but I want to tell you that what can happen in the Dust Bowl in this country in 1977, the summer crop year, is going to be a lot more devastating than anything that happens in any industry in this country, outside of agriculture.

We have to have some prognosis on that, at least some relationship of the statistical evidence as to what is happening.

For example, I just read in the press that we have lost $5 billion worth of topsoil. I don't know how they estimate topsoil. Somebody made a wild guess, maybe. Maybe it is only two, or one.

I know this: We haven't had snowstorms. We had duststorms. I lived through it once before. That's what we called the Great Depression.

I want to be sure that our statistics reflect that.

Representative BOLLING. Thank you, Senator.

Mr. Commissioner, could you supply for the record of this year your latest comparison of unemployment rates in other major countries adjusted to U.S. definitions?

Mr. SHISKIN. Yes. I have that here. I will provide it either to a member of the staff or to the man reporting the hearing.

Representative BOLLING. The staff can get it, I think. We will get it into the record. I guess we can get that on a regular basis?

Mr. SHISKIN. You can have it every month, if you wish.

Representative BOLLING. Every 3 months is the request.

Mr. SHISKIN. We have it every month.

Representative BOLLING. You do? OK. We will take it every month.

Mr. SHISKIN. We may not be the worst country any more. We may have gotten below Canada in terms of the unemployment rate, and maybe possibly below the United Kingdom.

Representative BOLLING. Good. Thank you.
[The information referred to follows:]

TABLE 1.—UNEMPLOYMENT RATES IN 8 COUNTRIES, ADJUSTED TO U.S. CONCEPTS, SEASONALLY ADJUSTED, 1970–76

Period	United States	Canada	Japan	France	Germany	Italy [1]	Sweden	United Kingdom [2]
1970	4.9	5.7	1.2	2.8	0.8	3.5	1.5	3.1
19 1	5.9	6.2	1.3	3.0	.8	3.5	2.6	3.9
1972	5.6	6.2	1.4	[3] 3.0	.8	4.0	2.7	4.2
1973	4.9	5.6	1.3	[3] 2.9	.8	3.8	2.5	3.2
1974	5.6	5.4	1.4	[3] 3.1	1.7	3.2	2.0	[3] 3.2
1975	8.5	6.9	1.9	[3] 4.3	[3] 3.8	3.7	1.6	[3] 4.7
I	8.1	6.7	1.7	3.9	3.0	3.3	1.5	3.7
II	8.8	7.0	1.8	4.3	3.8	3.9	1.7	4.3
III	8.6	7.1	2.0	4.4	4.2	3.7	1.6	5.1
IV	8.4	7.1	2.2	4.6	4.0	3.8	1.7	5.7
1976	7.7	7.1	----	4.7	3.8	4.0	----	6.4
I	7.6	6.9	2.0	4.6	3.8	3.7	1.6	6.1
II	7.4	7.2	2.1	4.7	3.7	4.0	1.6	6.5
III	7.8	7.2	2.1	4.7	3.7	4.2	1.6	6.6
IV	7.9	7.5	----	4.6	3.6	4.1	----	6.6
October	7.9	7.6	2.0	4.6	3.7	4.1	1.7	6.5
November	8.0	7.3	2.1	4.6	3.8	--------	1.5	6.7
December	7.8	7.5	----	4.6	3.5	----	----	6.7

[1] Quarterly rates are for the 1st month of the quarter.
[2] Great Britain only.
[3] Preliminary.

Note: Quarterly and monthly figures for France, Germany, Italy, and Great Britain are calculated by applying annual adjustment factors to current published data, and therefore should be viewed as only approximate indicators of unemployment under U.S. concepts. Published data for Canada, Japan, and Sweden require little or no adjustment.

Source: Bureau of Labor Statistics, U.S. Department of Labor, February 1977.

TABLE 2.—LABOR FORCE, EMPLOYMENT, AND UNEMPLOYMENT IN 8 COUNTRIES, ADJUSTED TO U.S. CONCEPTS, 1970–75

[In thousands]

Year	United States	Canada	Japan	France	Germany	Italy	Sweden	United Kingdom [1]
Civilian labor force:								
1970	82,715	8,399	50,730	21,040	26,240	19,090	3,884	24,270
1971	84,113	8,644	51,030	21,270	26,350	19,010	3,932	24,020
1972	86,542	8,920	51,140	[2] 21,490	26,310	18,800	3,939	24,240
1973	88,714	9,322	52,310	[2] 21,710	26,420	18,930	3,952	24,530
1974	91,011	9,700	52,080	[2] 21,900	26,220	19,230	4,013	[2] 24,610
1975	92,013	10,000	32,070	[2] 21,950	[2] 25,850	19,450	4,097	[2] 24,840
Employment:								
1970	78,627	7,919	50,140	20,460	26,040	18,430	3,830	23,520
1971	79,120	8,107	50,390	20,640	26,130	18,350	3,831	23,090
1972	81,702	8,363	50,410	[2] 20,840	26,090	18,050	3,832	23,230
1973	84,409	8,802	51,650	[2] 21,090	26,200	18,210	3,854	23,750
1974	85,936	9,185	51,350	[2] 21,220	25,770	18,030	3,933	[2] 23,830
1975	84,783	9,363	51,080	[2] 21,010	[2] 24,880	18,740	4,030	[2] 23,670
Unemployment:								
1970	4,088	480	590	580	200	660	59	750
1971	4,993	538	640	630	220	660	101	930
1972	4,840	557	730	[2] 650	220	750	107	1,010
1973	4,304	520	670	[2] 620	220	720	98	780
1974	5,076	521	730	[2] 680	450	610	80	[2] 780
1975	7,830	697	990	[2] 940	[2] 970	710	67	[2] 1,170

[1] Great Britain only.
[2] Preliminary estimates.

Source: Bureau of Labor Statistics, U.S. Department of Labor, February 1977.

TABLE 3.—CONSUMER PRICES IN 8 COUNTRIES, PERCENT CHANGE FROM SAME PERIOD OF PREVIOUS YEAR, 1970–76

Period	United States	Canada	Japan	France	Germany	Italy	Sweden	United Kingdom
1970	5.9	3.3	7.7	5.2	3.4	4.9	7.0	6.4
1971	4.3	2.9	6.3	5.5	5.3	4.8	7.4	9.4
1972	3.3	4.8	4.9	6.2	5.5	5.7	6.0	7.1
1973	6.2	7.5	11.7	7.3	6.9	10.8	6.8	9.2
1974	11.0	10.9	23.2	13.7	7.0	19.1	9.9	16.0
1975	9.1	10.8	11.7	11.8	6.0	17.0	9.8	24.2
I	11.0	11.7	15.2	13.9	5.9	22.5	8.6	20.3
II	9.7	10.5	13.3	12.2	6.2	19.7	10.1	24.3
III	8.7	10.9	10.3	10.9	6.1	15.1	11.5	26.6
IV	7.3	10.2	8.7	9.9	5.5	11.5	8.9	25.3
July	9.7	11.0	11.0	11.1	6.2	17.1	11.7	26.3
August	8.6	11.1	9.7	11.0	5.9	15.3	11.8	26.9
September	7.8	10.6	10.3	10.7	6.1	13.0	11.1	26.6
October	7.6	10.6	9.7	10.2	5.8	12.1	8.9	25.9
November	7.3	10.4	8.4	9.9	5.4	11.3	9.0	25.2
December	7.0	9.5	7.9	9.6	5.4	11.2	8.9	24.9
1976	5.8	7.5	----------	[1]9.6	[1]4.6	[1]16.6	----------	[1]16.6
I	6.4	9.3	8.9	9.6	5.4	12.2	10.9	22.5
II	6.1	8.5	9.4	9.4	4.9	16.1	11.2	10.0
III	5.5	6.5	9.7	9.6	4.2	17.1	9.5	13.7
IV	5.0	5.9	----------	10.0	[1]3.8	[1]21.1	----------	[1]14.9
January	6.8	9.6	8.7	9.6	5.3	11.0	10.9	23.4
February	6.3	9.1	9.3	9.5	5.5	11.8	10.7	22.9
March	6.1	9.0	8.7	9.6	5.4	13.9	11.1	21.2
April	6.1	8.9	9.4	9.6	5.2	15.4	11.7	18.9
May	6.2	8.9	9.2	9.5	5.0	16.7	10.9	15.4
June	5.9	7.8	9.6	9.2	4.5	16.3	11.1	13.8
July	5.4	6.8	9.9	9.4	4.1	16.5	9.9	12.9
August	5.6	6.2	9.4	9.5	4.6	17.0	9.4	13.8
September	5.5	6.5	9.8	9.7	4.0	18.0	9.3	14.3
October	5.3	6.2	8.7	9.9	3.8	20.1	9.7	14.7
November	5.0	5.6	----------	10.1	3.7	[1]21.4	----------	15.0
December	4.8	5.8	----------	9.7	[1]3.7	[1]21.8	----------	[1]15.1

[1] Preliminary estimate.

Source: Bureau of Labor Statistics, U.S. Department of Labor, February 1977.

Representative BOLLING. The latest issue of the Statistical Reporter features an article on the BLS employment cost index. This index measures the actual cost to employers of hiring workers.

Would you explain this index to the committee including how it relates to inflation and unemployment and how it might relate to our measurement of productivity?

Mr. SHISKIN. Do you wish me to do it for the record or now?

Representative BOLLING. I would like to hear it unless you are in a rush.

Mr. SHISKIN. I am not in a rush, but I would like to have Mr. Victor J. Sheifer, who wrote that article, or Mr. Norman Samuels, who is head of our Office of Wages and Industrial Relations, do it. If you will bear with us until next month, I can do it.

Representative BOLLING. That's perfectly satisfactory.

Congress is in the midst of considering a third budget resolution that will provide more economic stimulus. It appears now that some or even much of the $31.2 billion stimulus proposed by the Carter administration may be eroded by the bitterly cold winter experienced by the Eastern part of the country with higher fuel bills and lost wages amounting to as much as $10 billion, according to the Library of Congress.

I know the BLS is preparing to take a survey determining how the winter has affected unemployment. Would you describe the survey for us and in particular tell us whether you will have any information for us in time to have an effect upon the third budget resolution?

I wish I could tell you exactly when the third budget resolution is going to be finished, but it is going very quickly. One of the dilemmas that we are sure we see in the initial action of Congress in dealing with stimulation, is the problem of the budget process and its dynamics which tends to be rather rigid. The dynamics of the budget process internally tend to become rigid—once you get a resolution adopted, it is very difficult to increase it, or has been.

So this particular point is very important, and I would be interested to hear that.

Mr. SHISKIN. I can tell you just where we stand on that.

In response to the obvious needs for more information on impact of the weather on the economy, we prepared a special survey form, program, and plan. This plan calls for a survey of about 4,000 establishments and it would provide data on employment, layoffs, hours worked, in addition to hours paid for, and the reason for curtailments.

In many different parts of the country, there are gas, fuel, coal, electricity, road problems, water problems, frozen facility problems, and so on.

Now we have this special survey ready to go. We need about 4 or 5 days notice to do it. So there it is. OMB has a copy of this form.

Representative BOLLING. Who has it?

Mr. SHISKIN. The Office of Management and Budget has a copy and we have also distributed it to the new Council of Economic Advisers and others.

However, this will cover 1 week. We can do it periodically.

However, next week is our survey week. We will get almost the same information for a much bigger sample next week. There is no point having the survey for next week. At one time we thought we might have taken it to cover this week. We haven't had any support for that—I shouldn't say that. We haven't had authorization. We have had sympathy for it, but no authorization. We would go into the field on Tuesday.

We have it and we can do it whenever it is required.

Now on timing. The regular survey which covers next week will be out 3 weeks later on March 4. We will make that a better survey in this respect than ever before, because we will ask the respondents to give us information on causes of layoffs. We have a whole series of possible causes that we are asking reports for.

We will also make a more intensive effort to find out about nonresponses. That is, if a plant doesn't respond, we will go back—as we always do, but more intensively this time—to find out why not, and particularly if it is closed because of cold weather.

Hopefully we can come out a little earlier, but that I must express only as a hope.

The special survey, if the policy people in the Government think it is worthwhile, we can do that after the survey week. There is a turnaround time for that of 2 weeks. That's our schedule.

Representative BOLLING. Thank you.

Yesterday Treasury Secretary Blumenthal testified that the administration wants to make a countercyclical revenue sharing program more responsive to changes in the unemployment rate by altering the funding formula.

Right now the funding formula adds $62.5 million quarterly for every half percentage point of unemployment above 6 percent.

The proposal is to change that so that there is an additional $30 million for each tenth of a percentage point of unemployment.

Are the monthly unemployment figures accurate enough to permit that fine a responsiveness in this program or in any others?

Mr. SHISKIN. Well, the error margin for the national unemployment rate is 0.2. The sampling errors for the States, for the local areas, are much larger. I guess that is an answer to your question.

Representative BOLLING. I guess it certainly is.

Between the end of 1975 and the end of 1976, consumer prices rose less than 5 percent. This is broken down between food and other commodities. The food index shows an increase from December of 1975 to December of 1976 of only 0.6 percent, while the index for other commodities rose 5.1 percent.

In light of the weather that we have had so far this winter, and the drought situation in the upper Middle West, and the Far West, what can we expect in the way of food prices for 1977?

Mr. SHISKIN. Well, it is hard to say. The only thing I know about—and I will ask John Layng to comment further on that—is the impact of the Florida problems on prices. That seems to have a very small impact on CPI. The stories I hear, the reports I have had about Florida prices of foods is that so far the orange crop is not lost because the frozen oranges can be squeezed, if they can get there fast enough to squeeze them before it gets warm.

The tomato and pepper crops have been ruined, but they have a very small impact upon the overall CPI. In the spring we will get similar foods from elsewhere. So in Florida at least, it will not have much effect upon the CPI. Can you expand upon that, John?

Mr. LAYNG. No.

Representative BOLLING. Thank you very much.

Mr. Commissioner, somewhere along the line, I suspect that all this diverse interest by individual members in statistical series and their improvement and so on is going to result in our attempting to find out what it would cost to do the job better somewhere along the lines of the statement you made earlier about spending more and more money using some series or another as a trigger or a mechanism so that we will not make the mistake of saving some millions of dollars while we waste billions.

I detected today for the first time what seemed to me adequate support for that kind of an effort within the committee. I suspect that we will refine it and come up with some sort of an approach to that.

I would personally welcome any suggestions, and I may encourage those by letter some time in the future.

Mr. SHISKIN. We would be very glad to cooperate. It must be clear that my thinking and yours follow the same line.

Representative BOLLING. Thank you very much, sir, for again being very helpful to us.

The committee stands adjourned.

[Whereupon, at 12:50 p.m., the committee adjourned, subject to the call of the Chair.]

EMPLOYMENT-UNEMPLOYMENT

FRIDAY, MARCH 4, 1977

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

The committee met, pursuant to notice, at 11:02 a.m., in room 1202, Dirksen Senate Office Building, Hon. Hubert H. Humphrey (vice chairman of the committee) presiding.

Present: Senators Humphrey, Javits, and McClure.

Also present: John R. Stark, executive director; Louis C. Krauthoff II and Courtenay M. Slater, assistant directors; Richard F. Kaufman, general counsel; William R. Buechner, G. Thomas Cator, and Kent H. Hughes, 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 HUMPHREY, VICE CHAIRMAN

Senator HUMPHREY. I will call to order the meeting of the Joint Economic Committee for the purpose of the monthly report on the employment situation. We are always pleased, of course, to have Mr. Shiskin with us to give us the report and also to elucidate some of the statistical evidence.

Mr. Commissioner, we are delighted to have you here again to discuss the employment situation for February.

After the very large decline in the unemployment rate from 7.8 percent in December to 7.3 percent in January, the February rise in unemployment to 7.5 was not unexpected. It certainly is not welcome, but it was not a surprise. The rise in unemployment reflected a very sharp increase in the labor force of 630,000 workers, following a decline in January of 440,000. These are very large swings, and are clearly related to the cold weather and energy problems of January.

Today, we want to make some sense out of the confusing unemployment figures we have had in January and February. In just a couple of weeks, the House and Senate Budget Committees will begin preparing their first resolutions on the fiscal 1978 budgets, and they will need a good idea about employment and unemployment trends for this year as soon as possible. I hope you can begin to give us some ideas today.

I was very disturbed to read your sentences on page 3 of "The Employment Situation" release that agriculture employment in February was at an all-time low. The farm sector is being devastated by the

weather this year, and I would like you to give us some idea about what is happening to farm workers and what should be done to help them.

I would also like you to talk about the consumer price situation for January. Consumer prices rose more in January than during any single month in 1976. We made great progress on inflation last year, and I am very disappointed by the January figures. We are going to have a very difficult problem with prices this year—with increases in energy and food prices very likely—and I want to be sure that these price increases are not used as an excuse to thwart the continued growth of our economy.

So, if you would put the January price situation in some perspective, Mr. Shiskin, the committee would be appreciative.

Please proceed with your prepared statement, and then we will have some questions.

Senator Javits, do you have an comments?

Senator JAVITS. No; I think the chairman has covered it adequately.

Senator HUMPHREY. You may proceed.

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 L. STEIN, ASSISTANT COMMISSIONER, OFFICE OF CURRENT EMPLOYMENT ANALYSIS

Mr. SHISKIN. As usual, I have Mr. Stein and Mr. Layng to help in answering any questions.

I have a brief statement covering the employment situation. Perhaps the best way to cope with your questions is to answer them in the question and answer period.

Senator HUMPHREY. Proceed as you wish.

Mr. SHISKIN. I have a very brief statement which I should like to read.

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.

The bad weather has distorted some of the underlying economic trends this winter and especially in January. The weather during the survey week in February was much better than a month earlier and about normal for that time of the year.

The labor force bounced back in February with an increase of 629,000, following a decline of 444,000 in January. The February increase in the labor force was made up of an increase of 404,000 in employment and 225,000 in unemployment. The total unemployment rate rose slightly, from 7.3 percent to 7.5 percent.

The business survey showed that nonfarm employment rose by about 260,000 in February; special information collected in February indicated that the rise in employment during the survey week would have been greater—by somewhere in the neighborhood off 100,000—

if it weren't for energy problems that existed. You will recall last month we talked about the special survey we were going to do.

We made an extensive study of the weather and fuel shortage impact this month and I am now going to give a brief report on what we found. What we found in a nutshell was, at least for the survey week, that the impact of the weather was not great. It was a fairly normal week for February and almost entirely the problems that we faced in February arose from difficulties in earlier months.

The sharp decline in the average workweek in January was more than reversed in February when it exceeded November–December levels. With the combined rises in employment and average hours, aggregate hours rose very sharply to a new alltime high.

The rise in unemployment this month can be explained at least in part by the same energy problems that limited the rise in nonfarm employment. This seems reasonable on the basis of reports to BLS on the impact of fuel shortages on employment last month, together with the fact that almost the whole rise in unemployment took place among job losers who had been laid off (210,000 out of 225,000). Unemployment among other groups held steady. Finally, there was a substantial rise in the number of persons on involuntary part-time schedules who usually work full-time, and nearly all of this increase was attributed to material shortages.

Since October 1976, was the last month of the economic pause, it would appear useful to compare economic trends between October 1976 and February 1977 with trends during the preceding 4 months.

As can be seen from an attached table, the most recent 4 months showed a substantial improvement in the unemployment situation over the previous 4 months. Thus, in the most recent period, total employment rose by a monthly average of a little more than 300,000 compared with only 50,000 in the previous 4 months, and it is significant that the employment-population ratio rose considerably during the past 4 months in contrast to a decline during the previous 4 months. The pattern of recent improvements in nonfarm employment, aggregate hours, and average weekly hours was similar.

The unemployment rate declined from 7.9 to 7.5 over the recent 4 months after rising from 7.6 to 7.9 in the prior 4 months. Similarly, the unemployment rates for job losers, the long-term unemployed, household heads, and most other categories declined after rising during the previous 4 months.

The pace of expansion during the past 4 months is only a little slower than in the same 4 months a year ago (October 1975 to February 1976) when the recovery was still in its early stages.

In summary, employment has risen vigorously over the past 4 months. Over this same period, unemployment has been declining slowly though unevenly, but has remained at unprecedented high levels for an expansion which has lasted almost 2 years.

My colleagues and I would be glad to try to answer your questions.

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

TABLE 1.—UNEMPLOYMENT RATE BY ALTERNATE SEASONAL ADJUSTMENT METHODS

Month	Unadjusted rate [1]	Official adjusted rate [2]	Alternative age-sex procedures					Other aggregations (all multiplicative)				Direct adjustment rate [12]	Composite [13]	Range (cols. 2–13)
			All multiplicative [3]	All additive [4]	Year ahead [5]	Concurrent [6]	Stable 1967–73 [7]	Duration [8]	Reasons [9]	Total	Residual [11]			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1976														
January	8.8	7.8	7.8	8.0	NA	NA	8.1	8.0	7.8	7.8	8.2	7.9	7.9	0.4
February	8.7	7.6	7.6	7.8	NA	NA	7.7	7.5	7.5	7.6	7.7	7.6	7.6	.3
March	8.1	7.5	7.5	7.6	NA	NA	7.7	7.3	7.4	7.5	7.6	7.5	7.5	.4
April	7.4	7.5	7.5	7.5	NA	NA	7.6	7.4	7.5	7.5	7.4	7.5	7.5	.2
May	6.7	7.3	7.4	7.2	NA	NA	7.5	7.2	7.4	7.5	7.2	7.5	7.4	.3
June	8.0	7.6	7.5	7.5	NA	NA	7.5	7.5	7.5	7.3	7.4	7.3	7.5	.3
July	7.8	7.8	7.8	7.7	NA	NA	7.7	7.6	7.8	7.7	7.7	7.7	7.7	.2
August	7.6	7.9	7.9	7.8	NA	NA	7.7	8.0	8.0	7.9	7.8	8.0	7.9	.3
September	7.4	7.8	7.8	7.7	NA	NA	7.6	8.0	7.9	7.8	7.8	7.8	7.8	.4
October	7.2	7.9	8.0	7.8	NA	NA	7.7	8.0	7.9	8.0	7.9	7.9	7.9	.3
November	7.4	8.0	8.0	7.8	NA	NA	7.8	8.1	8.0	8.0	7.8	8.0	7.9	.3
December	7.4	7.8	7.9	7.8	NA	NA	7.9	7.9	7.8	7.8	7.8	7 9	7.8	.1

See footnotes at end of table.

1977														
January	8.3	7.3	7.3	7.5	7.3	7.4	7.5	7.4	7.4	7.4	7.6	7.4	7.4	.3
February	8.5	7.5	7.5	7.7	7.5	7.5	7.6	7.4	7.4	7.5	7.6	7.5	7.5	.3
March														
April														
May														
June														
July														
August														
September														
October														
November														
December														

[1] Unemployment rate not seasonally adjusted.

[2] Official rate. This is the published seasonally adjusted rate. Each of 4 unemployed age-sex components—males and females, 16–19 and 20 yr of age and over—is independently adjusted. The teenage unemployment 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 col. (3)–(9). The current "implicit" factors for the total unemployment rate are as follows: January, 113.8; February, 113.7; March, 108.1 April, 98.7; May, 92.2; June, 105.2; July, 100.2; August, 96.1; September, 94.6; October, 90.1; November, 93.0; December, 93.8.

[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] 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 ½ 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 reseasonally adjusted incorporating the experience through the current month, i.e., the rate for March 1976 is based on adjustment of data for the period, January 1967–March 1976.

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

[8] 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 reentrants.

[10] Unemployment and labor force levels adjusted directly.

[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.

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

Source: U.S. Department of Labor, Bureau of Labor Statistics, Mar. 4, 1977.

TABLE 2.—CHANGES IN MAJOR LABOR FORCE INDICATORS, 3 4-MO PERIODS

Major labor force indicators	Changes		
	October 1975–February 1976	June–October 1976	October 1976–February 1977
(1)	(2)	(3)	(4)
Average monthly change:			
Noninstitutional population	213,000	216,000	199,000
Civilian labor force	116,000	150,000	211,000
Total employment	346,000	51,000	306,000
Nonfarm employment	394,000	52,000	361,000
Total unemployment	−231,000	98,000	−95,000
Nonfarm employment (business survey)	260,000	113,000	250,000
4-mo change:			
Employment-population ratio	.5	−.1	.5
Unemployment rates:			
Total	−1.0	.3	−.4
Household heads	−1.0	.3	−.5
Job losers	−1.1	.1	−.4
Unemployed 15 wk and over	−.2	.2	−.2
Aggregate hours index (business survey)	2.3	.6	2.5
Average weekly hours (business survey)	.2	0	.3

Source: U.S. Department of Labor, Bureau of Labor Statistics, Mar. 4, 1977.

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THE EMPLOYMENT SITUATION: FEBRUARY 1977

Both employment and unemployment rose in February, it was reported today by the Bureau of Labor Statistics of the U. S. Department of Labor. The unemployment rate moved up to 7.5 percent, after declining from 8.0 percent last November to 7.3 percent in January. Nearly all of the 225,000 rise in unemployment from January to February reflected increased layoffs, probably the result of energy shortages.

Total employment--as measured by the monthly survey of households--continued to advance in February, posting an over-the-month gain of 400,000 to 89.0 million. The employed total was 2.5 million above a year ago.

Nonfarm payroll employment--as measured by the monthly survey of establishments--rose by 260,000 in February to 80.8 million. In addition, hours of work recovered from January levels adversely affected by unusually bad weather. As a result of these two developments, aggregate worker hours registered an unusually large gain over the month.

Unemployment

The number of persons unemployed increased by 225,000 in February to 7.2 million, seasonally adjusted, following a decrease of more than half a million in January. The over-the-month rise resulted from job losses due to layoffs. (See tables A-1 and A-5.) The overall unemployment rate rose from 7.3 percent in January to 7.5 percent. This followed a decline of 0.5 percentage point in the previous month and leaves the unemployment rate half a point below the 1976 high recorded in November.

The February increase took place among both adult men and women, whose rates moved to 5.8 and 7.2 percent, respectively. Jobless rates for most other major demographic groups--including teenagers (18.5 percent), whites (6.7 percent), and blacks (13.1 percent)--showed little or no change from January. (See table A-2.)

There was a decline in the number of long-term unemployed, workers who had been seeking jobs for 15 weeks or longer. The average (mean) duration of unemployment fell from 15.5 weeks, a level around which it had fluctuated since last July, to 14.7 weeks, the lowest in 21 months. (See table A-4.)

The number of persons who usually work full time but whose working hours had been reduced because of economic factors rose by 220,000 in February to 1.3 million. (See table A-3.) Nearly all of this increase was attributed to material shortages stemming from energy and weather-related problems.

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

Selected categories	Quarterly averages					Monthly data		
	1975	1976				1976	1977	
	IV	I	II	III	IV	Dec.	Jan.	Feb.
HOUSEHOLD DATA	Thousands of persons							
Civilian labor force	93,103	93,644	94,544	95,261	95,711	95,960	95,516	96,145
Total employment	85,247	86,514	87,501	87,804	88,133	88,441	88,558	88,962
Unemployment	7,855	7,130	7,043	7,457	7,578	7,519	6,958	7,183
Not in labor force	59,216	59,327	59,032	58,963	59,132	59,071	59,732	59,302
Discouraged workers	977	940	903	827	992	N.A.	N.A.	N.A.
	Percent of labor force							
Unemployment rates:								
All workers	8.4	7.6	7.4	7.8	7.9	7.8	7.3	7.5
Adult men	6.9	5.8	5.7	6.0	6.2	6.2	5.6	5.8
Adult women	7.9	7.4	7.1	7.7	7.6	7.4	6.9	7.2
Teenagers	19.6	19.2	18.8	18.8	19.1	19.0	18.7	18.5
White	7.7	6.9	6.8	7.1	7.2	7.1	6.7	6.7
Black and other	13.9	13.1	12.9	13.1	13.4	13.4	12.5	13.1
Household heads	5.8	5.0	4.9	5.3	5.3	5.1	4.8	4.9
Full-time workers	8.1	7.1	7.0	7.4	7.5	7.5	6.7	6.9
ESTABLISHMENT DATA	Thousands of jobs							
Nonfarm payroll employment	77,779	78,674	79,333	79,683	80,090	80,344	80,559p	80,818p
Goods-producing industries	22,803	23,142	23,380	23,372	23,440	23,508	23,574p	23,658p
Service-producing industries	54,976	55,532	55,953	56,311	56,650	56,836	56,985p	57,160p
	Hours of work							
Average weekly hours:								
Total private nonfarm	36.3	36.3	36.2	36.1	36.2	36.2	35.9p	36.4p
Manufacturing	40.0	40.3	40.0	39.9	40.0	40.0	39.6p	40.4p
Manufacturing overtime	2.9	3.1	3.0	3.0	3.1	3.2	3.2p	3.3p

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

Total Employment and the Labor Force

Total employment rose for the fourth consecutive month, advancing by 400,000 in February to a record high of 89.0 million, seasonally adjusted. This pickup was about evenly distributed among adult men, adult women, and teenagers and took place entirely among workers in nonagricultural industries. Agricultural employment remained at an alltime low of 3.1 million. Over the past year, total employment has risen by 2.5 million, with the increase since October totaling 1.2 million. (See table A-1.)

The over-the-month increases in employment and unemployment resulted in a gain of 630,000 in the civilian labor force to 96.1 million. This sharp advance followed a reduction of 440,000 in the previous month and was most pronounced among adult workers. Since last February, the labor force has grown by more than 2.5 million, with adult men and women each adding more than a million workers.

The civilian labor force participation rate--the proportion of the civilian noninstitutional population either working or seeking work--was 61.9 percent, up from 61.5 percent in January and well above the level of a year earlier. (See table A-1.)

Industry Payroll Employment

Total nonagricultural payroll employment also increased for the fourth straight month, advancing by 260,000 from the January level to 80.8 million, seasonally adjusted. There is evidence that the February job gain would have been greater in the absence of energy-related problems, though the specific impact cannot be precisely determined at this time. Over-the-month gains occurred in 62 percent of the industries that comprise the BLS diffusion index of nonagricultural payroll employment. Over the past year, payroll employment has grown by 2.2 million with almost half occurring since October. (See tables B-1 and B-6.)

Employment gains were posted in all major industry divisions except manufacturing and government. In the service-producing sector, strong gains took place in wholesale and retail trade (115,000) and services (50,000). Contract construction employment increased by 70,000, recovering from the depressed January level which had been caused by bad weather conditions. Manufacturing employment remained unchanged at 19.2 million, as small increases in nondurable goods industries offset small declines in durables.

Durable goods industries were affected the most by the February energy-related cutbacks in plant operations.

Hours

With a return to more normal weather conditions, the average workweek rose by 0.5 hour in February to 36.4 hours, seasonally adjusted. The manufacturing workweek increased even more markedly, rising 0.8 hour to 40.4 hours, while factory overtime edged up 0.1 hour to 3.3 hours. Average hours in contract construction more than recovered from the depressed January level, increasing 2.6 hours to 37.8 hours. (See table B-2.)

Reflecting increases in both employment and average hours, the index of aggregate hours for private nonagricultural production or nonsupervisory workers rose substantially, from 112.6 to 114.7, an alltime high. The index was 3.2 percent above its year-ago level and 8.1 percent above the spring 1975 low. The factory index was 96.3, up sharply from the January level; the index was 11.2 percent above its March 1975 recession low. (See table B-5.)

Hourly and Weekly Earnings

Average hourly earnings of private nonagricultural production or nonsupervisory workers increased 0.4 percent in February, seasonally adjusted. Due to the strong gain in average hours, average weekly earnings rose 1.8 percent over the month.

Before adjustment for seasonality, average hourly earnings were $5.06, up 1 cent from January. Average weekly earnings rose $2.88 over the month to $182.16. (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 proportion of workers in high-wage and low-wage industries--was 192.2 (1967=100) in February, 0.1 percent higher than in January. The index was 6.6 percent above February a year ago. During the 12-month period ended in January, the Hourly Earnings Index in dollars of constant purchasing power rose 1.9 percent. (See table B-4.)

Explanatory Note

This release presents and analyzes statistics from two major surveys. Data on labor force, total employment, and unemployment (A tables) are derived from the Current Population Survey, a sample survey of households conducted by the Bureau of the Census for the Bureau of Labor Statistics. The sample consists of about 47,000 households selected to represent the U.S. civilian noninstitutional population 16 years of age and over.

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

Comparability of household and payroll employment statistics

Employment data from the household and payroll surveys differ in several basic respects. The household survey provides information on the labor force activity of the entire population 16 years of age and over, without duplication, since each person is classified as employed, unemployed, or not in the labor force.

The payroll survey relates only to paid wage and salary employees (regardless of age) on the payrolls of nonagricultural establishments. The household survey counts employed persons in both agriculture and in nonagricultural industries and, in addition to wage and salary workers (including private household workers), includes the self-employed, unpaid family workers, and persons "with a job but not at work" and not paid for the period absent. Persons who worked at more than one job during the survey week or otherwise appear on more than one payroll are counted more than once in the establishment survey. Such persons are counted only once in the household survey and are classified in the job at which they worked the greatest number of hours.

Unemployment

To be classified in the household survey as unemployed an individual must: (1) have been without a job during the survey week, (2) have made specific efforts to find employment sometime during the prior 4 weeks, and (3) be presently available for work. In addition, persons on layoff and those waiting to begin a new job (within 30 days) are also classified as unemployed. The unemployed total includes all persons who satisfactorily meet the above criteria, regardless of their eligibility for unemployment insurance benefits or any kind of public assistance. The unemployment rate represents the unemployed as a proportion of the civilian labor force (the employed and unemployed combined).

To meet the extensive needs of data users, the Bureau regularly publishes data on a wide variety of labor market indicators—see, for example, the demographic, occupational, and industry detail in tables A-2 and A-3. A special grouping of seven unemployment measures is set forth in table A-7. Identified by the symbols U-1 through U-7, these measures represent a range of possible definitions of unemployment and of the labor force, extending from the most restrictive (U-1) to the most comprehensive (U-7). The official rate of unemployment appears as U-5.

Seasonal adjustment

Nearly all economic phenomena are affected to some degree by seasonal variations. These are recurring, predictable events which are repeated more or less regularly each year—changes in weather, school vacations, major holidays, industry production schedules, etc. The cumulative effects of these events are often large. For example, on average over the year, they explain about 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. At the beginning of each year, current seasonal adjustment factors for unemployment and other labor force series are calculated taking into account the prior year's experience, and revised data are introduced in the release containing January data.

All seasonally-adjusted civilian labor force and unemployment rate statistics, as well as the major employment and unemployment estimates, are computed by aggregating independently adjusted series. The official unemployment rate for all civilian workers is derived by dividing the estimate for total unemployment (the sum of four seasonally-adjusted age-sex components) by the civilian labor force (the sum of 12 seasonally-adjusted age-sex components). Several alternative methods for seasonally adjusting the overall unemployment rate are also used on a regular basis in order to illustrate the degree of uncertainty that arises because of the seasonal adjustment procedure. Among these alternative methods are five different age-sex adjustments,

including a concurrent adjustment and one based on stable factors and four based on other unemployment aggregations. Alternative rates for 1976 are shown in the table at the end of this note. (Current alternative rates and an explanation of the methods may be obtained from BLS upon request.)

For establishment data, the seasonally-adjusted series for all employees, production workers, average weekly hours, and average hourly earnings are adjusted by aggregating the seasonally-adjusted data from the respective component series. These data are revised annually, usually in conjunction with the annual benchmark adjustments (comprehensive counts of employment).

Sampling variability

Both the household and establishment survey statistics are subject to sampling error, which should be taken into account in evaluating the levels of a series as well as changes over time. Because the household survey is based upon a probability sample, the results may differ from the figures that would be obtained if it were possible to take a complete census using the same questionnaire and procedures. The standard error is the measure of sampling variability, that is, the variations that might occur by chance because only a sample of the population is surveyed. Tables A-E in the "Explanatory Notes" of *Employment and Earnings* provide standard errors for unemployment and other labor force categories.

Although the relatively large size of the monthly establishment survey assures a high degree of accuracy, the estimates derived from it also may differ from the figures obtained if a complete census using the same schedules and procedures were possible. Moreover, since the estimating procedures employ the previous month's level as the base in computing the current month's level of employment (link-relative technique), sampling and response errors may accumulate over several months. To remove this accumulated error, the employment estimates are adjusted to new benchmarks, usually annually. In addition to taking account of sampling and response errors, the benchmark revision adjusts the estimates for changes in the industrial classification of individual establishments. Employment estimates are currently projected from March 1974 benchmark levels. Measures of reliability for employment estimates are provided in the "Explanatory Notes" of *Employment and Earnings*, as are the actual amounts of revisions due to benchmark adjustments (tables G-L).

Unemployment rate by alternative seasonal adjustment methods

Month	Unadjusted rate	Official Adjusted Rate	Alternative age-sex procedures					Other aggregations (all multiplicative)				Direct adjustment	Composite	Range (cols. 2-13)
			All multiplicative	All additive	Year-ahead	Concurrent	Stable 1967-73	Duration	Reasons	Total	Residual			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1976														
January	8.8	7.8	7.8	8.0	7.8	7.8	8.1	8.0	7.8	7.8	8.2	7.9	7.9	0.4
February	8.7	7.6	7.6	7.8	7.6	7.6	7.7	7.5	7.5	7.6	7.7	7.6	7.6	.3
March	8.1	7.5	7.5	7.6	7.5	7.5	7.7	7.3	7.4	7.5	7.6	7.5	7.5	.4
April	7.4	7.5	7.5	7.5	7.4	7.4	7.6	7.4	7.5	7.5	7.4	7.5	7.5	.2
May	6.7	7.3	7.4	7.2	7.2	7.2	7.5	7.2	7.4	7.5	7.2	7.5	7.3	.3
June	8.0	7.6	7.5	7.5	7.5	7.6	7.5	7.5	7.5	7.3	7.4	7.3	7.5	.3
July	7.8	7.8	7.8	7.7	7.8	7.8	7.7	7.6	7.8	7.7	7.7	7.7	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	8.0	7.9	.3
September	7.4	7.8	7.8	7.7	7.8	7.8	7.6	8.0	7.9	7.8	7.8	7.8	7.8	.4
October	7.2	7.9	8.0	7.8	7.9	7.9	7.7	8.0	7.9	8.0	7.9	7.9	7.9	.3
November	7.4	8.0	8.0	7.8	8.1	8.0	7.8	8.1	8.0	8.0	7.8	8.0	8.0	.3
December	7.4	7.8	7.9	7.8	7.9	7.8	7.9	7.9	7.8	7.8	7.8	7.9	7.8	.1

Table A-1. Employment status of the noninstitutional population

[Numbers in thousands]

Employment status	Not seasonally adjusted			Seasonally adjusted					
	Feb. 1976	Jan. 1977	Feb. 1977	Feb. 1976	Oct. 1976	Nov. 1976	Dec. 1976	Jan. 1977	Feb. 1977
TOTAL									
Total noninstitutional population[1]	155,106	157,381	157,584	155,106	156,788	157,006	157,176	157,381	157,584
Armed Forces[1]	2,146	2,133	2,137	2,146	2,148	2,149	2,146	2,133	2,137
Civilian noninstitutional population[1]	152,960	155,248	155,447	152,960	154,641	154,857	155,031	155,248	[illegible]
Civilian labor force	92,798	94,704	95,340	93,597	95,302	95,871	95,960	95,516	96,145
Participation rate	60.7	61.0	61.3	61.2	61.6	61.9	61.9	61.5	61.9
Employed	84,764	86,856	87,231	86,471	87,738	88,220	88,441	88,558	88,962
Employment-population ratio[2]	54.6	55.2	55.4	55.7	56.0	56.2	56.3	56.3	56.5
Agriculture	2,802	2,672	2,709	3,198	3,310	3,248	3,257	3,090	3,090
Nonagricultural industries	81,963	84,184	84,522	83,273	84,428	84,972	85,184	85,468	85,872
Unemployed	8,033	7,848	8,109	7,126	7,564	7,651	7,519	6,958	7,183
Unemployment rate	8.7	8.3	8.5	7.6	7.9	8.0	7.8	7.3	7.5
Not in labor force	60,163	60,544	60,106	59,364	59,339	58,986	59,071	59,732	59,302
Men, 20 years and over									
Total noninstitutional population[1]	65,821	66,930	67,025	65,821	66,598	66,699	66,835	66,930	67,025
Civilian noninstitutional population[1]	64,133	65,250	65,342	64,133	64,902	65,001	65,140	65,250	65,342
Civilian labor force	50,850	51,718	51,940	51,017	51,912	52,066	52,078	51,842	52,092
Participation rate	79.3	79.3	79.5	79.5	80.0	80.1	79.9	79.5	79.7
Employed	47,182	48,174	48,192	48,079	48,684	48,773	48,859	48,961	49,091
Employment-population ratio[2]	71.7	72.0	71.9	73.0	73.1	73.1	73.1	73.2	73.2
Agriculture	2,174	2,030	2,081	2,331	2,334	2,283	2,273	2,209	2,230
Nonagricultural industries	45,007	46,144	46,111	45,748	46,350	46,490	46,586	46,752	46,861
Unemployed	3,669	3,544	3,748	2,938	3,228	3,293	3,219	2,881	3,001
Unemployment rate	7.2	6.9	7.2	5.8	6.2	6.3	6.2	5.6	5.8
Not in labor force	13,283	13,532	13,402	13,116	12,990	12,935	13,062	13,408	13,250
Women, 20 years and over									
Total noninstitutional population[1]	72,531	73,642	73,746	72,531	73,378	73,491	73,535	73,642	73,746
Civilian noninstitutional population[1]	72,452	73,550	73,654	72,452	73,288	73,401	73,445	73,550	73,654
Civilian labor force	33,912	34,829	35,159	33,721	34,444	34,848	34,938	34,740	34,982
Participation rate	46.8	47.4	47.7	46.5	47.0	47.5	47.6	47.2	47.5
Employed	31,201	32,205	32,434	31,228	31,811	32,208	32,340	32,331	32,477
Employment-population ratio[2]	43.0	43.7	44.0	43.1	43.4	43.9	44.0	43.9	44.0
Agriculture	333	394	379	426	553	558	573	488	485
Nonagricultural industries	30,868	31,811	32,056	30,802	31,258	31,650	31,767	31,843	31,992
Unemployed	2,711	2,623	2,725	2,493	2,633	2,640	2,598	2,409	2,505
Unemployment rate	8.0	7.5	7.7	7.4	7.6	7.6	7.4	6.9	7.2
Not in labor force	38,540	38,721	38,495	38,731	38,844	38,553	38,507	38,810	38,672
Both sexes, 16-19 years									
Total noninstitutional population[1]	16,754	16,810	16,813	16,754	16,812	16,816	16,806	16,810	16,813
Civilian noninstitutional population[1]	16,376	16,448	16,451	16,376	16,451	16,455	16,446	16,448	16,451
Civilian labor force	8,035	8,157	8,241	8,859	8,946	8,957	8,944	8,934	9,071
Participation rate	49.1	49.6	50.1	54.1	54.4	54.4	54.4	54.3	55.1
Employed	6,381	6,477	6,605	7,164	7,243	7,239	7,242	7,266	7,394
Employment-population ratio[2]	38.1	38.5	39.3	42.8	43.1	43.0	43.1	43.2	44.0
Agriculture	294	248	249	441	423	407	411	393	375
Nonagricultural industries	6,087	6,229	6,356	6,723	6,820	6,832	6,831	6,873	7,019
Unemployed	1,654	1,680	1,636	1,695	1,703	1,718	1,702	1,668	1,677
Unemployment rate	20.6	20.6	19.9	19.1	19.0	19.2	19.0	18.7	18.5
Not in labor force	8,340	8,291	8,210	7,517	7,505	7,498	7,502	7,514	7,380
WHITE									
Total noninstitutional population[1]	136,603	138,415	138,575	136,603	137,944	138,117	138,253	138,415	138,575
Civilian noninstitutional population[1]	134,813	136,654	136,810	134,813	136,166	136,336	136,475	136,654	136,810
Civilian labor force	82,178	83,839	84,368	82,867	84,511	84,816	84,854	84,616	85,086
Participation rate	61.0	61.4	61.7	61.5	62.1	62.2	62.2	61.9	62.2
Employed	75,689	77,450	77,793	77,208	78,384	78,647	78,828	78,923	79,365
Employment-population ratio[2]	55.4	56.0	56.1	56.5	56.8	56.9	57.0	57.0	57.3
Unemployed	6,488	6,389	6,574	5,659	6,127	6,169	6,026	5,693	5,721
Unemployment rate	7.9	7.6	7.8	6.8	7.2	7.3	7.1	6.7	6.7
Not in labor force	52,635	52,814	52,442	51,946	51,655	51,520	51,621	52,038	51,724
BLACK AND OTHER									
Total noninstitutional population[1]	18,503	18,966	19,009	18,503	18,844	18,889	18,923	18,966	19,009
Civilian noninstitutional population[1]	18,147	18,594	18,637	18,147	18,476	18,520	18,555	18,594	18,637
Civilian labor force	10,620	10,864	10,973	10,800	10,910	11,114	11,109	11,030	11,163
Participation rate	58.5	58.4	58.9	59.5	59.0	60.0	59.9	59.3	59.9
Employed	9,075	9,406	9,438	9,329	9,444	9,618	9,623	9,648	9,697
Employment-population ratio[2]	49.0	49.6	49.7	50.4	50.1	50.9	50.9	50.9	51.0
Unemployed	1,545	1,458	1,535	1,471	1,466	1,496	1,486	1,382	1,466
Unemployment rate	14.5	13.4	14.0	13.6	13.4	13.5	13.4	12.5	13.1
Not in labor force	7,527	7,730	7,664	7,347	7,566	7,406	7,446	7,564	7,474

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

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

Table A-2. Major unemployment indicators, seasonally adjusted

Selected categories	Number of unemployed persons (in thousands)		Unemployment rates					
	Feb. 1976	Feb. 1977	Feb. 1976	Oct. 1976	Nov. 1976	Dec. 1976	Jan. 1977	Feb. 1977
Total, 16 years and over	7,126	7,183	7.6	7.9	8.0	7.8	7.3	7.5
Men, 20 years and over	2,938	3,001	5.8	6.2	6.3	6.2	5.6	5.8
Women, 20 years and over	2,493	2,505	7.4	7.6	7.6	7.4	[illegible]	[illegible]
Both sexes, 16-19 years	1,695	1,677	19.1	19.0	19.2	19.0	18.7	18.5
White, total	5,659	5,721	6.8	7.2	7.3	7.1	6.7	6.7
Men, 20 years and over	2,355	2,446	5.1	5.7	5.7	5.5	5.0	5.2
Women, 20 years and over	1,948	1,933	6.7	7.2	7.0	6.8	6.3	6.4
Both sexes, 16-19 years	1,356	1,342	17.1	16.8	17.2	17.2	18.1	16.3
Black and other, total	1,471	1,466	13.6	13.4	13.5	13.4	12.5	13.1
Men, 20 years and over	578	547	11.0	10.9	11.6	11.3	10.2	9.9
Women, 20 years and over	562	591	12.2	11.5	11.0	11.5	10.8	12.4
Both sexes, 16-19 years	331	328	35.3	38.0	36.5	34.8	36.1	37.2
Household heads, total	2,659	2,652	5.0	5.4	5.3	5.1	4.8	4.9
Men	2,027	2,052	4.5	4.9	5.0	4.8	4.3	4.5
With relatives	1,646	1,625	4.1	4.4	4.5	4.3	3.8	4.0
Without relatives	381	427	8.1	8.8	9.0	8.4	8.2	8.2
Women	663	630	7.7	8.1	7.4	7.6	7.0	7.1
With relatives	421	407	10.1	10.7	9.8	10.2	9.0	9.4
Without relatives	242	223	5.5	5.6	5.2	5.1	5.1	4.9
Married men, spouse present	1,663	1,622	4.2	4.4	4.5	4.3	3.8	4.1
Married women, spouse present	1,527	1,494	7.1	7.3	7.2	7.0	6.5	6.7
Full-time workers	5,702	5,651	7.1	7.6	7.6	7.5	6.7	6.9
Part-time workers	1,417	1,529	10.3	10.3	10.5	9.8	10.2	10.7
Unemployed 15 weeks and over[1]	2,531	2,182	2.7	2.5	2.6	2.6	2.4	2.3
Labor force time lost[2]	--	--	8.1	8.6	8.6	8.4	8.0	7.9
OCCUPATION[3]								
White-collar workers	2,058	2,142	4.6	4.6	4.7	4.5	4.5	4.6
Professional and technical	473	457	3.5	3.2	3.4	3.3	3.3	3.3
Managers and administrators, except farm	272	269	2.9	3.0	3.1	3.1	3.0	2.8
Sales workers	302	345	5.3	5.4	5.7	5.0	5.7	5.6
Clerical workers	1,011	1,071	6.1	6.2	6.3	6.1	6.0	6.4
Blue-collar workers	2,947	2,838	9.3	9.8	9.7	9.6	8.4	8.7
Craft and kindred workers	822	809	6.8	6.8	7.0	7.0	6.1	6.5
Operatives, except transport	1,179	1,096	10.5	11.6	11.3	11.0	9.2	9.6
Transport equipment operatives	266	286	7.6	8.3	8.2	8.1	7.2	7.7
Nonfarm laborers	680	653	13.9	14.0	13.5	13.9	12.9	12.8
Service workers	1,145	1,097	8.8	9.4	9.3	9.0	8.6	8.4
Farm workers	117	190	4.0	4.2	5.1	6.1	4.8	6.7
INDUSTRY[3]								
Nonagricultural private wage and salary workers[4]	5,354	5,281	7.9	8.2	8.2	7.9	7.4	7.6
Construction	688	685	15.9	15.1	15.4	14.1	14.9	15.2
Manufacturing	1,696	1,533	7.9	8.2	8.2	8.2	6.9	7.1
Durable goods	1,004	883	8.0	8.0	7.7	8.0	6.5	7.0
Nondurable goods	692	650	7.9	8.5	8.9	8.6	7.4	7.3
Transportation and public utilities	231	237	4.7	5.6	5.7	5.2	4.7	4.6
Wholesale and retail trade	1,445	1,357	8.5	8.9	9.0	8.2	8.4	8.7
Finance and service industries	1,265	1,246	6.6	6.7	6.8	6.8	6.2	6.2
Government workers	687	710	4.4	4.4	4.3	4.4	4.3	4.5
Agricultural wage and salary workers	158	198	10.8	11.5	13.2	14.0	12.6	13.4
VETERAN STATUS								
Male Vietnam-era veterans:[5]								
20 to 34 years	487	453	7.8	8.7	8.5	8.3	7.6	7.0
20 to 24 years	164	134	17.7	19.0	16.8	16.8	16.8	13.8
25 to 29 years	229	197	7.1	7.9	8.6	8.7	7.9	6.7
30 to 34 years	94	102	4.6	5.7	5.0	4.7	3.6	3.9
Male nonveterans:								
20 to 34 years	1,239	1,347	8.4	8.9	9.3	9.1	8.2	8.6
20 to 24 years	747	805	11.2	11.9	12.1	12.4	10.6	11.6
25 to 29 years	294	363	6.5	7.6	7.9	7.2	7.7	7.3
30 to 34 years	198	179	5.4	5.1	5.8	5.4	4.2	4.8

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

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

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

[4] Includes mining, not shown separately.

[5] Vietnam-era veterans are those who served between August 5, 1964, and April 30, 1975.

Table A-3. Selected employment indicators

[Numbers in thousands]

Selected categories	Not seasonally adjusted		Seasonally adjusted					
	Feb. 1976	Feb. 1977	Feb. 1976	Oct. 1976	Nov. 1976	Dec. 1976	Jan. 1977	Feb. 1977
CHARACTERISTICS								
Total employed, 16 years and over	84,764	87,231	86,471	87,738	88,220	88,441	88,558	88,962
Men	50,551	51,659	51,942	52,576	52,643	52,799	52,918	53,046
Women	34,213	35,573	34,529	35,162	35,577	35,642	35,640	35,916
Household heads	50,128	51,057	50,778	51,159	51,356	51,525	51,710	51,729
Married men, spouse present	37,438	37,587	38,006	37,989	37,895	37,998	38,195	38,159
Married women, spouse present	19,976	20,673	20,048	20,384	20,482	20,498	20,511	20,756
OCCUPATION								
White-collar workers	43,092	44,443	43,084	44,207	44,297	44,648	44,521	44,451
Professional and technical	13,356	13,690	13,081	13,427	13,597	13,544	13,444	13,408
Managers and administrators, except farm	9,025	9,350	9,170	9,436	9,491	9,566	9,613	9,502
Sales workers	5,200	5,646	5,357	5,551	5,597	5,815	5,633	5,815
Clerical workers	15,512	15,757	15,476	15,793	15,612	15,725	15,831	15,726
Blue-collar workers	27,497	28,549	28,809	28,921	29,001	29,150	29,636	29,917
Craft and kindred workers	10,879	11,236	11,294	11,352	11,353	11,302	11,626	11,668
Operatives, except transport	9,757	10,030	10,072	9,885	9,970	10,231	10,341	10,351
Transport equipment operatives	3,140	3,355	3,228	3,297	3,258	3,283	3,358	3,448
Nonfarm laborers	3,721	3,929	4,215	4,387	4,420	4,334	4,309	4,450
Service workers	11,749	11,925	11,840	11,972	12,026	11,880	11,874	12,017
Farm workers	2,425	2,315	2,787	2,829	2,743	2,791	2,624	2,663
MAJOR INDUSTRY AND CLASS OF WORKER								
Agriculture:								
Wage and salary workers	1,094	1,073	1,306	1,310	1,285	1,380	1,246	1,280
Self-employed workers	1,503	1,417	1,603	1,671	1,627	1,530	1,490	1,511
Unpaid family workers	205	219	317	343	342	340	354	338
Nonagricultural industries:								
Wage and salary workers	75,971	78,345	77,087	78,498	78,766	78,957	79,205	79,520
Government	15,159	15,211	14,867	14,998	15,045	14,967	15,013	14,913
Private industries	60,811	63,134	62,220	63,500	63,721	63,990	64,192	64,607
Private households	1,178	1,288	1,205	1,377	1,448	1,384	1,391	1,317
Other industries	59,633	61,846	61,015	62,123	62,273	62,606	62,801	63,290
Self-employed workers	5,562	5,719	5,696	5,632	5,771	5,798	5,853	5,854
Unpaid family workers	429	459	482	448	449	460	419	516
PERSONS AT WORK [1]								
Nonagricultural industries	78,485	80,980	78,362	79,469	79,940	80,369	79,832	80,837
Full-time schedules	63,802	65,549	64,395	64,955	65,385	65,846	65,700	66,144
Part time for economic reasons	3,154	3,377	3,201	3,448	3,545	3,454	3,320	3,438
Usually work full time	1,427	1,484	1,283	1,339	1,289	1,234	1,112	1,335
Usually work part time	1,727	1,893	1,918	2,109	2,256	2,220	2,208	2,103
Part time for noneconomic reasons	11,529	12,054	10,766	11,066	11,010	11,069	10,812	11,255

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

Table A-4. Duration of unemployment

[Numbers in thousands]

Weeks of unemployment	Not seasonally adjusted		Seasonally adjusted					
	Feb. 1976	Feb. 1977	Feb. 1976	Oct. 1976	Nov. 1976	Dec. 1976	Jan. 1977	Feb. 1977
DURATION								
Less than 5 weeks	2,699	2,869	2,637	2,952	2,759	2,765	2,762	2,804
5 to 14 weeks	2,541	2,832	1,890	2,367	2,494	2,319	2,083	2,107
15 weeks and over	2,794	2,409	2,531	2,360	2,517	2,514	2,283	2,182
15 to 26 weeks	1,241	1,183	968	1,094	1,188	1,130	1,038	947
27 weeks and over	1,552	1,226	1,563	1,266	1,329	1,384	1,245	1,235
Average (mean) duration, in weeks	16.4	14.8	16.3	15.3	15.5	15.6	15.5	14.7
PERCENT DISTRIBUTION								
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 5 weeks	33.6	35.4	37.4	38.4	35.5	36.4	38.7	39.5
5 to 14 weeks	31.6	34.9	26.8	30.8	32.1	30.5	29.2	29.7
15 weeks and over	34.8	29.7	35.9	30.7	32.4	33.1	32.0	30.8
15 to 26 weeks	15.4	14.6	13.7	14.2	15.3	14.9	14.6	13.4
27 weeks and over	19.3	15.1	22.1	16.5	17.1	18.2	17.5	17.4

Table A-5. Reasons for unemployment

[Numbers in thousands]

Reasons	Not seasonally adjusted		Seasonally adjusted					
	Feb. 1976	Feb. 1977	Feb. 1976	Oct. 1976	Nov. 1976	Dec. 1976	Jan. 1977	Feb. 1977
NUMBER OF UNEMPLOYED								
Lost last job	4,493	4,371	3,490	3,756	3,892	3,736	3,207	3,396
On layoff	1,491	1,474	1,013	1,107	1,067	1,057	791	1,001
Other job losers	3,003	2,898	2,477	2,649	2,735	2,679	2,416	2,395
Left last job	863	868	847	936	858	831	932	852
Reentered labor force	1,925	2,030	1,861	1,927	2,061	1,957	1,991	1,963
Seeking first job	752	839	849	894	920	942	905	936
PERCENT DISTRIBUTION								
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Job losers	56.0	53.9	49.5	50.0	49.8	50.0	45.6	47.5
On layoff	18.6	18.2	14.4	14.7	14.0	14.2	11.2	14.0
Other job losers	37.4	35.7	35.1	35.3	35.8	35.9	34.3	33.5
Job leavers	10.7	10.7	12.0	12.5	11.2	11.1	13.2	11.9
Reentrants	24.0	25.0	26.4	25.6	27.0	26.2	28.3	27.5
New entrants	9.4	10.3	12.0	11.9	12.0	12.6	12.9	13.1
UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE								
Job losers	4.8	4.5	3.7	3.9	4.0	3.9	3.4	3.5
Job leavers	.9	.9	.9	1.0	.9	.9	1.0	.9
Reentrants	2.1	2.1	2.0	2.0	2.1	2.0	2.1	2.0
New entrants	.8	.9	.9	.9	1.0	1.0	.9	1.0

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

Sex and age	Number of unemployed persons (in thousands)		Unemployment rates					
	Feb. 1976	Feb. 1977	Feb. 1976	Oct. 1976	Nov. 1976	Dec. 1976	Jan. 1977	Feb. 1977
Total, 16 years and over	7,126	7,183	7.6	7.9	8.0	7.8	7.3	7.5
16 to 19 years	1,695	1,677	19.1	19.0	19.2	19.0	18.7	18.5
16 to 17 years	782	746	21.3	21.3	21.6	20.7	21.1	19.8
18 to 19 years	914	931	17.6	17.5	17.6	17.7	17.0	17.5
20 to 24 years	1,646	1,722	12.0	12.6	12.7	12.5	11.4	12.0
25 years and over	3,759	3,766	5.3	5.7	5.6	5.5	5.1	5.2
25 to 54 years	3,102	3,088	5.4	6.0	5.9	5.9	5.3	5.3
55 years and over	655	679	4.6	4.6	4.6	4.2	4.1	4.8
Men, 16 years and over	3,858	3,904	6.9	7.4	7.5	7.3	6.6	6.9
16 to 19 years	920	903	19.2	19.6	19.7	19.1	17.4	18.6
16 to 17 years	421	387	21.1	22.3	22.2	21.0	19.5	19.3
18 to 19 years	498	515	17.9	17.7	18.1	17.4	16.1	17.9
20 to 24 years	913	958	12.1	12.7	12.6	12.9	11.3	12.1
25 years and over	2,012	2,034	4.6	5.1	5.2	5.0	4.6	4.6
25 to 54 years	1,617	1,616	4.6	5.3	5.4	5.2	4.7	4.6
55 years and over	395	414	4.5	4.4	4.4	3.9	4.0	4.7
Women, 16 years and over	3,268	3,279	8.6	8.8	8.7	8.6	8.3	8.4
16 to 19 years	775	774	19.0	18.3	18.5	18.9	20.1	18.4
16 to 17 years	361	359	21.6	20.1	20.8	20.2	23.0	20.4
18 to 19 years	416	416	17.3	17.3	17.1	18.0	18.1	16.9
20 to 24 years	733	764	11.9	12.4	12.8	11.9	11.4	11.9
25 years and over	1,747	1,732	6.3	6.6	6.4	6.4	5.9	6.1
25 to 54 years	1,490	1,472	6.7	7.1	6.7	6.9	6.2	6.3
55 years and over	260	265	4.8	4.9	5.1	4.7	4.3	4.9

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

[Percent]

Measures	Quarterly averages					Monthly data		
	1975	1976				1976	1977	
	IV	I	II	III	IV	Dec.	Jan.	Feb.
U-1—Persons unemployed 15 weeks or longer as a percent of the civilian labor force	3.1	2.7	2.2	2.4	2.6	2.6	2.4	2.3
U-2—Job losers as a percent of the civilian labor force	4.6	3.8	3.7	3.9	3.9	3.9	3.4	3.5
U-3—Unemployed household heads as a percent of the household head labor force	5.8	5.0	4.9	5.3	5.3	5.1	4.8	4.9
U-4—Unemployed full-time jobseekers as a percent of the full-time labor force	8.1	7.1	7.0	7.4	7.5	7.5	6.7	6.9
U-5—Total unemployed as a percent of the civilian labor force (official measure)	8.4	7.6	7.4	7.8	7.9	7.8	7.3	7.5
U-6—Total full-time jobseekers plus ½ part-time jobseekers plus ½ total on part time for economic reasons as a percent of the civilian labor force less ½ of the part-time labor force	10.2	9.3	9.1	9.5	9.7	9.6	8.9	9.1
U-7—Total full-time jobseekers plus ½ part-time jobseekers plus ½ total on part time for economic reasons plus discouraged workers as a percent of the civilian labor force plus discouraged workers less ½ of the part-time labor force	11.2	10.2	10.0	10.3	10.7	N.A.	N.A.	N.A.

N.A.—not available.

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

[In thousands]

Industry	Not seasonally adjusted				Seasonally adjusted					
	Feb. 1976	Dec. 1976	Jan. 1977 p	Feb. 1977 p	Feb. 1976	Oct. 1976	Nov. 1976	Dec. 1976	Jan. 1977 p	Feb. 1977 p
TOTAL	77,586	81,099	79,470	79,730	78,635	79,819	80,106	80,344	80,559	80,818
GOODS-PRODUCING	22,482	23,480	22,989	23,023	23,112	23,323	23,489	23,508	23,574	23,658
MINING	752	805	806	816	767	800	805	808	817	832
CONTRACT CONSTRUCTION	3,185	3,547	3,183	3,224	3,571	3,582	3,619	3,605	3,545	3,614
MANUFACTURING	18,545	19,128	19,000	18,983	18,774	18,941	19,065	19,095	19,212	19,212
Production workers	13,290	13,730	13,611	13,606	13,496	13,575	13,675	13,691	13,805	13,815
DURABLE GOODS	10,737	11,189	11,136	11,092	10,857	11,018	11,128	11,158	11,231	11,215
Production workers	7,626	7,989	7,939	7,905	7,734	7,833	7,929	7,955	8,029	8,016
Ordnance and accessories	161.1	157.1	157.2	157.3	161	155	156	156	156	157
Lumber and wood products	575.2	614.2	603.8	607.5	594	613	621	626	627	628
Furniture and fixtures	480.2	495.9	492.1	488.7	484	491	491	493	493	492
Stone, clay, and glass products	592.8	623.7	609.5	598.7	615	630	636	629	632	621
Primary metal industries	1,158.6	1,182.3	1,176.3	1,166.7	1,166	1,194	1,186	1,182	1,179	1,174
Fabricated metal products	1,351.0	1,409.4	1,405.3	1,393.0	1,369	1,387	1,396	1,404	1,415	1,411
Machinery, except electrical	2,045.1	2,122.1	2,133.6	2,140.9	2,039	2,078	2,106	2,107	2,127	2,134
Electrical equipment	1,787.5	1,876.2	1,867.6	1,872.3	1,797	1,849	1,860	1,863	1,869	1,882
Transportation equipment	1,680.8	1,778.6	1,768.8	1,739.5	1,710	1,695	1,749	1,766	1,790	1,770
Instruments and related products	497.9	518.7	518.1	518.5	500	511	514	517	520	521
Miscellaneous manufacturing	406.6	410.6	403.7	409.3	422	415	413	415	423	425
NONDURABLE GOODS	7,808	7,939	7,864	7,891	7,917	7,923	7,937	7,937	7,981	7,997
Production workers	5,664	5,741	5,672	5,701	5,762	5,742	5,746	5,736	5,776	5,799
Food and kindred products	1,632.2	1,694.3	1,659.1	1,643.7	1,706	1,706	1,711	1,710	1,721	1,718
Tobacco manufactures	74.9	79.4	74.1	70.0	77	76	75	75	74	72
Textile mill products	961.7	962.8	957.7	962.2	963	961	960	957	960	963
Apparel and other textile products	1,306.0	1,266.9	1,253.2	1,276.5	1,309	1,273	1,276	1,271	1,279	1,279
Paper and allied products	661.3	683.9	678.7	677.5	669	677	680	680	683	685
Printing and publishing	1,067.7	1,097.3	1,090.8	1,093.4	1,069	1,087	1,089	1,089	1,092	1,094
Chemicals and allied products	1,019.3	1,038.5	1,040.3	1,048.1	1,029	1,032	1,038	1,041	1,048	1,058
Petroleum and coal products	197.5	202.5	200.4	199.6	204	202	203	204	206	206
Rubber and plastics products, nec.	613.6	650.0	648.8	656.2	614	645	642	647	653	656
Leather and leather products	273.7	263.3	260.4	263.8	277	264	263	263	265	266
SERVICE-PRODUCING	55,104	57,619	56,481	56,707	55,523	56,496	56,617	56,836	56,985	57,160
TRANSPORTATION AND PUBLIC UTILITIES	4,445	4,553	4,499	4,503	4,504	4,506	4,519	4,553	4,549	4,562
WHOLESALE AND RETAIL TRADE	17,109	18,559	17,795	17,687	17,496	17,824	17,808	17,898	17,985	18,102
WHOLESALE TRADE	4,189	4,326	4,296	4,308	4,231	4,292	4,291	4,304	4,322	4,352
RETAIL TRADE	12,920	14,233	13,499	13,379	13,265	13,532	13,517	13,594	13,663	13,750
FINANCE, INSURANCE, AND REAL ESTATE	4,228	4,385	4,381	4,400	4,266	4,359	4,381	4,403	4,425	4,440
SERVICES	14,224	14,861	14,737	14,878	14,397	14,819	14,873	14,936	15,007	15,059
GOVERNMENT	15,098	15,261	15,069	15,239	14,860	14,988	15,036	15,046	15,019	14,997
FEDERAL	2,726	2,725	2,697	2,703	2,742	2,730	2,734	2,720	2,721	2,719
STATE AND LOCAL	12,372	12,536	12,372	12,536	12,118	12,258	12,302	12,326	12,298	12,278

p=preliminary.

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

Industry	Not seasonally adjusted				Seasonally adjusted					
	Feb. 1976	Dec. 1976	Jan. 1977 p	Feb. 1977 p	Feb. 1976	Oct. 1976	Nov. 1976	Dec. 1976	Jan. 1977 p	Feb. 1977 p
TOTAL PRIVATE	36.0	36.4	35.5	36.0	36.4	36.1	36.2	36.2	35.9	36.4
MINING	42.7	43.7	41.8	43.1	43.0	43.3	43.3	43.7	42.3	43.4
CONTRACT CONSTRUCTION	36.5	36.8	33.7	36.6	37.7	37.3	37.4	37.3	35.2	37.8
MANUFACTURING	39.9	40.6	39.2	40.1	40.3	39.9	40.1	40.0	39.6	40.4
Overtime hours	2.9	3.3	3.0	3.0	3.1	2.9	3.1	3.2	3.2	3.3
DURABLE GOODS	40.4	41.3	39.7	40.7	40.7	40.5	40.8	40.5	40.1	41.0
Overtime hours	2.8	3.5	3.1	3.1	3.0	3.0	3.2	3.3	3.4	3.3
Ordnance and accessories	40.8	41.6	40.4	40.6	40.8	40.6	40.6	41.0	40.5	40.6
Lumber and wood products	40.0	40.4	38.6	40.6	40.3	40.3	40.3	40.3	39.6	40.9
Furniture and fixtures	38.6	39.3	36.5	36.7	39.3	38.4	38.6	38.6	37.1	37.3
Stone, clay, and glass products	40.7	41.3	39.2	40.7	41.4	41.4	41.2	41.2	40.1	41.4
Primary metal industries	40.4	40.5	40.1	40.6	40.6	40.2	40.3	40.1	40.1	40.8
Fabricated metal products	40.5	41.2	39.6	40.2	40.9	40.4	40.8	40.5	40.1	40.6
Machinery, except electrical	41.1	42.3	40.7	41.4	41.1	41.2	41.5	41.2	40.8	41.4
Electrical equipment	39.9	40.9	39.6	41.2	40.2	40.0	40.3	40.2	39.9	41.5
Transportation equipment	41.4	42.6	40.5	41.4	41.8	41.2	42.0	41.1	41.3	41.8
Instruments and related products	40.0	41.4	39.7	41.2	40.2	40.3	40.4	40.7	40.0	41.4
Miscellaneous manufacturing	38.5	39.3	37.7	39.3	38.7	38.7	39.0	38.9	38.3	39.5
NONDURABLE GOODS	39.3	39.7	38.4	39.3	39.7	39.1	39.2	39.3	38.8	39.7
Overtime hours	2.9	3.1	2.8	2.9	3.2	2.8	3.0	3.1	3.0	3.2
Food and kindred products	39.8	40.5	39.3	39.5	40.4	40.3	40.4	40.1	39.6	40.1
Tobacco manufactures	38.3	38.3	35.4	38.2	39.2	37.5	36.9	37.5	35.8	39.1
Textile mill products	40.6	40.4	39.4	40.0	40.9	39.4	39.8	40.1	39.8	40.3
Apparel and other textile products	36.0	35.3	33.5	35.3	36.4	35.0	35.1	35.3	34.2	35.7
Paper and allied products	42.2	43.1	41.9	42.5	42.8	42.1	42.4	42.6	42.0	43.1
Printing and publishing	37.1	38.3	37.0	37.5	37.5	37.5	37.6	37.7	37.4	37.9
Chemicals and allied products	41.5	42.1	41.4	42.1	41.7	41.6	41.7	41.7	41.6	42.3
Petroleum and coal products	41.6	42.4	41.8	42.7	42.3	42.0	41.9	42.5	42.5	43.4
Rubber and plastics products, nec	40.6	41.9	41.1	42.3	40.7	41.1	41.2	41.5	41.3	42.4
Leather and leather products	38.2	36.8	35.7	37.2	38.4	36.4	36.4	36.5	36.3	37.4
TRANSPORTATION AND PUBLIC UTILITIES	39.5	40.5	39.8	40.1	39.8	39.8	40.2	40.5	40.1	40.4
WHOLESALE AND RETAIL TRADE	33.4	33.9	32.9	33.1	33.8	33.5	33.4	33.6	33.4	33.6
WHOLESALE TRADE	38.5	39.0	38.4	38.5	38.8	38.7	38.7	38.6	38.6	38.8
RETAIL TRADE	31.8	32.5	31.4	31.6	32.3	32.0	31.9	32.2	31.9	32.1
FINANCE, INSURANCE, AND REAL ESTATE	36.7	36.7	36.9	36.7	36.6	36.7	36.7	36.7	36.9	36.6
SERVICES	33.5	33.4	33.3	33.5	33.7	33.6	33.5	33.5	33.5	33.7

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

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

Industry	Average hourly earnings				Average weekly earnings			
	Feb. 1976	Dec. 1976	Jan. 1977 P	Feb. 1977 P	Feb. 1976	Dec. 1976	Jan. 1977 P	Feb. 1977 P
TOTAL PRIVATE	$4.74	$5.02	$5.05	$5.06	$170.64	$182.73	$179.28	$182.16
Seasonally adjusted	4.75	5.02	5.05	5.07	172.90	181.72	181.30	184.55
MINING	6.29	6.71	6.75	6.71	268.58	293.23	282.15	289.20
CONTRACT CONSTRUCTION	7.47	7.88	7.97	7.87	272.66	289.98	268.59	288.04
MANUFACTURING	5.04	5.42	5.45	5.42	201.10	220.05	213.64	217.34
DURABLE GOODS	5.40	5.78	5.80	5.78	218.16	238.71	230.26	235.25
Ordnance and accessories	5.54	6.05	6.05	6.04	226.03	251.68	244.42	245.22
Lumber and wood products	4.48	4.88	4.95	4.86	179.20	197.15	191.07	197.32
Furniture and fixtures	3.87	4.13	4.15	4.17	149.38	162.31	151.48	153.04
Stone, clay, and glass products	5.07	5.47	5.49	5.57	206.35	225.91	215.21	220.70
Primary metal industries	6.56	7.00	6.98	6.97	265.02	283.50	279.90	282.98
Fabricated metal products	5.30	5.62	5.63	5.61	214.65	231.54	222.95	225.52
Machinery, except electrical	5.63	5.99	5.98	6.01	231.39	253.38	243.39	248.81
Electrical equipment	4.78	5.15	5.17	5.14	190.72	210.64	204.73	211.77
Transportation equipment	6.38	6.94	6.95	6.89	264.13	295.64	281.48	285.25
Instruments and related products	4.77	5.09	5.09	5.10	190.80	210.73	202.07	210.12
Miscellaneous manufacturing	3.95	4.18	4.26	4.24	152.08	164.27	160.60	166.63
NONDURABLE GOODS	4.54	4.90	4.94	4.91	178.42	194.53	189.70	192.96
Food and kindred products	4.83	5.16	5.21	5.19	192.23	208.98	204.75	205.01
Tobacco manufactures	4.88	5.04	5.19	5.35	186.90	193.03	183.73	204.37
Textile mill products	3.56	3.83	3.83	3.83	144.54	154.73	150.90	153.20
Apparel and other textile products	3.33	3.52	3.55	3.53	119.88	124.26	118.93	124.61
Paper and allied products	5.25	5.66	5.69	5.66	221.55	243.95	238.41	240.55
Printing and publishing	5.58	5.86	5.91	5.93	207.02	224.44	218.67	222.38
Chemicals and allied products	5.69	6.14	6.18	6.15	236.14	258.49	255.85	258.92
Petroleum and coal products	7.03	7.29	7.39	7.38	292.45	309.10	308.90	315.13
Rubber and plastics products, nec	4.52	5.01	5.06	5.03	183.51	209.92	207.97	212.77
Leather and leather products	3.39	3.53	3.57	3.56	129.50	129.90	127.45	132.43
TRANSPORTATION AND PUBLIC UTILITIES	6.29	6.65	6.65	6.68	248.46	269.33	264.67	267.87
WHOLESALE AND RETAIL TRADE	3.90	4.07	4.16	4.18	130.26	137.91	136.86	138.36
WHOLESALE TRADE	5.07	5.34	5.39	5.37	195.20	208.26	206.98	206.75
RETAIL TRADE	3.47	3.65	3.72	3.75	110.35	118.63	116.81	118.50
FINANCE, INSURANCE, AND REAL ESTATE	4.33	4.43	4.50	4.48	158.91	162.58	166.05	164.42
SERVICES	4.29	4.52	4.58	4.59	143.72	150.97	152.51	153.77

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

ESTABLISHMENT DATA

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

(1967=100)

Industry	Feb. 1976	Sept. 1976	Oct. 1976	Nov. 1976	Dec. 1976	Jan. P 1977	Feb. P 1977	Percent change from: Feb. 1976–Feb. 1977	Percent change from: Jan. 1977–Feb. 1977
TOTAL PRIVATE NONFARM:									
Current dollars	180.3	187.2	188.2	189.4	190.4	192.1	192.2	6.6	0.1
Constant (1967) dollars	107.8	108.6	108.8	109.2	109.3	109.4	N.A.	(2)	(3)
MINING	193.6	204.4	206.1	205.7	207.2	207.8	209.0	8.0	.5
CONTRACT CONSTRUCTION	180.4	186.5	187.9	189.2	189.7	192.7	191.0	5.8	-.9
MANUFACTURING	180.0	188.1	188.4	189.8	191.1	192.2	192.6	7.0	.2
TRANSPORTATION AND PUBLIC UTILITIES	194.1	202.2	203.1	204.3	203.7	204.2	204.8	5.5	.3
WHOLESALE AND RETAIL TRADE	174.4	180.8	182.2	183.4	184.5	186.1	186.8	7.1	.4
FINANCE, INSURANCE, AND REAL ESTATE	168.1	172.0	173.5	173.1	172.8	175.6	173.5	3.2	-1.2
SERVICES	185.2	190.9	192.2	193.9	195.4	197.9	197.6	6.7	-.1

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

[2] Percent change was 1.9 from January 1976 to January 1977, the latest month available.

[3] Percent change was 0.1 from December 1976 to January 1977, the latest month available.

N.A. = not available.

p=preliminary.

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

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

(1967 = 100)

Industry division and group	1976 Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1977 Jan.p	Feb.p
TOTAL	111.1	111.1	111.5	112.0	111.6	111.8	111.8	112.2	112.2	112.8	113.3	112.6	114.7
GOODS-PRODUCING	96.1	96.0	95.6	97.2	96.8	96.5	95.7	95.9	96.0	97.2	96.9	95.4	98.7
MINING	125.0	125.7	125.9	124.7	125.0	127.7	115.6	131.7	131.1	132.6	134.0	130.8	137.7
CONTRACT CONSTRUCTION	104.1	99.6	105.0	104.0	104.0	103.7	102.5	99.4	104.2	105.7	104.3	95.4	104.8
MANUFACTURING	93.6	94.3	93.0	95.1	94.6	94.2	93.9	94.0	93.2	94.5	94.4	94.1	96.3
DURABLE GOODS	91.4	92.4	90.9	94.0	93.8	93.5	93.6	93.2	92.0	93.8	93.6	93.6	95.4
Ordnance and accessories	41.0	41.0	39.9	41.0	40.7	40.0	39.8	38.6	38.5	38.5	39.5	39.6	39.7
Lumber and wood products	96.0	95.8	96.0	96.6	96.1	98.6	97.6	98.2	99.4	100.8	101.9	101.4	104.2
Furniture and fixtures	103.1	103.6	102.7	105.1	103.3	102.3	101.2	102.4	102.2	102.8	103.5	98.5	99.6
Stone, clay, and glass products	97.4	96.5	98.6	99.5	99.7	99.2	98.6	98.9	99.7	100.2	99.1	96.8	97.4
Primary metal industries	84.8	86.0	86.8	88.3	89.2	90.1	89.8	88.8	86.2	85.7	85.0	84.7	85.8
Fabricated metal products	96.4	97.2	94.9	98.7	98.4	98.0	98.6	98.6	96.5	98.1	98.1	98.1	99.1
Machinery, except electrical	93.0	93.3	91.7	94.9	94.5	95.9	95.9	95.9	94.0	96.7	96.0	96.3	98.2
Electrical equipment and supplies	89.3	90.4	89.0	92.2	91.9	90.5	92.2	91.5	92.1	93.4	93.1	93.0	97.9
Transportation equipment	89.2	91.8	96.9	92.8	92.6	90.3	90.7	89.1	86.1	91.5	90.6	93.0	92.5
Instruments and related products	105.2	106.7	105.7	109.6	109.1	110.3	108.1	107.2	107.9	108.5	110.4	109.5	114.0
Miscellaneous manufacturing, ind.	94.3	95.4	93.1	95.4	94.7	93.1	91.8	92.2	92.0	92.1	91.6	93.0	96.5
NONDURABLE GOODS	96.8	97.1	96.0	96.6	95.8	95.2	94.2	95.2	95.0	95.4	95.5	95.0	97.5
Food and kindred products	96.8	96.0	96.1	96.6	96.8	97.0	96.5	96.4	96.2	96.6	95.5	95.3	96.4
Tobacco manufactures	88.1	84.9	85.4	85.4	83.4	82.3	84.0	82.1	83.0	81.6	81.6	75.4	79.6
Textile mill products	99.0	99.3	96.1	99.9	98.6	98.0	95.5	95.2	95.0	95.6	96.1	95.7	97.3
Apparel and other textile products	92.2	92.6	89.3	92.0	91.4	88.9	87.6	86.2	85.7	86.1	86.3	84.2	88.2
Paper and allied products	95.8	96.1	95.9	98.1	97.3	96.9	96.1	96.5	95.7	97.0	97.2	96.6	99.3
Printing and publishing	92.6	92.7	92.3	93.6	93.1	93.6	92.9	93.1	93.4	93.6	93.7	92.8	94.2
Chemicals and allied products	99.4	99.4	100.1	100.0	99.0	99.4	99.8	100.3	99.4	100.0	100.0	100.6	103.8
Petroleum and coal products	114.2	113.9	115.6	113.9	111.6	112.2	112.4	112.2	112.5	113.1	114.7	116.4	121.6
Rubber and plastics products, nec	117.9	121.7	121.3	108.8	107.0	106.2	105.2	124.3	125.6	125.7	127.6	128.2	132.9
Leather and leather products	79.2	79.3	78.4	79.8	76.0	74.7	72.5	72.1	71.0	70.4	70.5	71.1	73.6
SERVICE-PRODUCING	121.6	121.6	122.6	122.3	121.8	122.5	123.0	123.6	123.5	123.5	124.6	124.6	125.8
TRANSPORTATION AND PUBLIC UTILITIES	102.3	102.5	102.4	101.9	101.6	102.1	102.5	102.9	102.0	103.2	105.0	103.6	104.8
WHOLESALE AND RETAIL TRADE	118.0	118.0	119.8	118.9	118.1	118.9	119.0	119.7	119.3	118.9	120.0	119.9	121.4
WHOLESALE TRADE	113.4	113.2	114.3	114.3	114.1	115.3	114.7	114.9	114.8	114.8	114.8	115.0	116.6
RETAIL TRADE	119.8	119.8	121.8	120.6	119.6	120.3	120.6	121.6	121.0	120.4	122.0	121.6	123.2
FINANCE, INSURANCE, AND REAL ESTATE	125.4	125.5	126.1	126.3	126.3	126.6	127.3	127.7	128.3	129.1	129.8	131.4	131.0
SERVICES	134.2	134.0	134.6	135.3	135.0	135.4	136.6	137.2	137.6	137.7	138.4	138.8	140.0

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

p=preliminary.

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

Year and month	Over 1-month span	Over 3-month span	Over 6-month span	Over 12-month span
1974				
January	58.7	61.6	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	73.5
May	63.4	70.6	71.5	79.7
June	47.1	57.0	70.9	79.4
July	52.9	47.4	55.2	76.2p
August	49.1	65.1	55.2	72.4p
September	68.9	54.9	61.9	
October	39.0	59.9	67.7p	
November	64.2	53.8	67.4p	
December	68.3	75.6p		
1977				
January	73.8p	70.3p		
February	61.6p			
March				
April				
May				
June				
July				
August				
September				
October				
November				
December				

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

p preliminary

Senator HUMPHREY. Thank you, Mr. Shiskin, that is an excellent summary statement of your employment situation report.

The fact stands out, as it has for the past couple of years during our discussions of employment and inflation, that we have a stable block of unemployed people in this country, a percentage which is almost fixed. It varies a percentage or so, but it continues to remain above the 6- and 7-percent levels even though the number of employed is up considerably as you noted here, a very sharp increase in employment.

A 4-month period is a reasonable block of time to really look at the development of a trend or a pattern. The most recent 4-month period shows a healthy employment trend. That is the case, as well, in terms of general economic activity but, nevertheless, we still have 7.5 percent unemployed.

As I was saying privately here before the meeting started, a very substantial amount of that unemployment, about half, is youth unemployment. It is here where you feel the previous administration, failed to get at what I feel to be a continuing problem. These young people who have not worked their way into the labor force have worked their way into collecting unemployment compensation, for example, They are really out of the mainstream of employment. They generally begin to get jobs around age 22 or 23 which is a rather late period .There is a gap from age 16 to about 22, a period of about 6 years when there is a difficult time for new entrants into the labor market. Particularly, this is true of minorities, urban ghetto youth and even in some rural areas.

Senator Javits and I and Senator Williams, Senator Brooke, and several other Senators, Senator Jennings Randolph, Senator Stafford—a number of Senators—have put in bills on youth employment programs.

The Government has scattered these youth employment programs, with no central direction. We have to recognize that it is a hodgepodge. There does not seem to be any focal point of responsibility nor any general pattern of attack on the problem of youth unemployment.

It is my judgment and I am making this as my statement that these figures 7.5, 7.3, 7.6 percent will continue to linger until we have looked at the peculiar youth unemployment problem, and until we address it further than we have thus far.

I don't see that the so-called stimulus package will touch on the real problem facing us. In other words, some of the better trained and some of the better educated of that group will find their way into the employment market but full success will require a national policy of education and work and counseling, public service jobs, a conservation type program, a youth conservation corps, a whole series of employment programs that are both public and private, working with private employers even on the basis of some form of tax credit or subsidy for the employment of untrained young people. Unless we are willing to get at it in a more direct, aggressive manner, you are going to be coming here for the next 10 years if the retirement program permits you to do so, or if your health holds out, and you are going to be saying to this committee, "I am sorry, we are at about 7 percent unemployment."

When you look at the figures—and this is the first time I have said this and I want to make it clear—and if you look at the figures of 7.5 you are saying about 4 percentage points adult unemployment and 3.5 percentage points youth unemployment.

I want to tell you something, until we can get at that 3.5 to 4.0 percent youth unemployment, you will be here month after month saying we got it to 6.8 percent or it went up to 7.2 percent, and we are going to be dancing around this figure all the time. In the meantime, there will be 3 million to 3.5 million youths who never get any work experience, who never have what I call the good physical and mental therapy of employment, who really make no contributions to their society. They are the castoffs and until this Government makes up its mind to do something about it, Mr. Shiskin, you are going to have to come in here every month and report—despite the fact that we have real growth of 5 to 6 percent and a rise in the employment figures—you are going to have to say,

I am sorry, one of the children in the family is still sick. Father is fine, mother is enjoying life, brothers and sisters seem to be doing well but we have one daughter and a cousin besides that is in a fix.

That is about what has been going on. We have been spinning our wheels on this the last 2 or 3 years that we have been talking about it. I hope to goodness that somebody at the Labor Department is listening.

We have talked to Ray Marshall and Charles Shultze about this and we have talked to the President about it. I think the best employment policy question is: What can we do about youth employment? The private economy will take care of the rest of it. The strength of the private economy is such it will absorb the unemployed adults pretty well.

We are really now in terms of adult unemployment about what the Humphrey-Hawkins bill calls for. Our target was to get the unemployment down to 3 percent. I think you have adult unemployment down to about 4 percent now.

Mr. SHISKIN. If you take persons 25 years and over, it is 5.2.

Senator HUMPHREY. 5.2 at this time. With some physical stimulus, I dare say you can get adult unemployment to about 4.8. But you will still have youth unemployment out there and it will still be the greatest crime factor and social problem on the streets in America. Any administration that is going to address this problem will have to look at this; if they do not, they will fail.

That is my lesson for the morning.

Mr. SHISKIN. Nothing I say is intended to be different from what you have said. This is purely a supplemental remark.

I want to be sure we don't overlook this very large number of experienced workers who have been unemployed in the last 2 years. Our figures show in the category of job losers the number is running between 3.2 million and 4 million every month. That is a very large number. These are people who have held jobs in the fairly recent past, who are experienced workers. With that kind of a number, 3.2–3.7 million, let us say, you have a very serious problem there, too.

Senator HUMPHREY. Amongst the people who are job oriented.

Mr. SHISKIN. These are people who have been at work and are experienced. I think that is, in part, explained by the fact that manu-

facturing and other goods producing industries have lagged and the service and trade industries have been growing. It works out that many of the people laid off in the recession in 1974 and 1975 were experienced workers and are still unemployed.

All I am saying is in addition to the youth problem, I think we have to watch the job losers. Maybe you are quite right that in the next year or two they will be absorbed.

Senator HUMPHREY. My time is up here. I just want to say, if Senator Proxmire were here, he would be saying that until we get the housing program going and the construction program going in this country, we are not going to absorb many of these able, talented, skilled workers and semiskilled workers.

Housing is a labor intensive industry and picks up a lot of the unskilled. Again, our housing starts are way down.

I want to welcome Senator McClure. I believe this is your first session with this committee. You will find that it is a very interesting committee. It is sort of a graduate course in economics.

Senator MCCLURE. This is my 11th year in the Congress and the 11th year I have tried to get on this committee.

Senator HUMPHREY. I am very pleased that you are here and I speak for Chairman Bolling when we welcome you here.

Senator MCCLURE. If I may answer one question——

Senator HUMPHREY. If Senator Javits will yield.

Senator MCCLURE. I want to commend you on your statement on youth unemployment. I think that is exactly right. I would like to subscribe to every remark you have made.

Looking at table A–6, the statistics that you brought along, it shows unemployment by sex and age; it shows under the age of 25 there are 3,399,000 persons and over 25, 3,766,000 persons. Yet your response a moment ago concerning the over-25 category unemployed would indicate the unemployment rate would have to be nearly 10 percent.

Mr. SHISKIN. I am not sure I understand you. To calculate the unemployment rate for the group 25 years and over, we use as the denominator the civilian labor force 25 years and over. The unemployment rate is a ratio of the unemployed to the corresponding labor force.

Does that help?

Senator MCCLURE. I understand your point and it is well taken. The point is that there are nearly half of all unemployed who are under 25 years of age.

Senator HUMPHREY. Senator Javits.

Senator JAVITS. Thank you, Mr. Chairman.

Mr. Commissioner, how do you evaluate the structural unemployment and systematic unemployment; that is, the cyclical unemployment in these statistics? Would you have any estimate of the breakout?

Mr. SHISKIN. I don't have a quantitative estimate, Senator Javits, but I would like to make a few remarks that might be helpful.

I think that a large proportion of the category I was talking about a few moments ago, experienced workers, are cyclically unemployed. I think if the economy continues to grow vigorously over the next few years, it is quite likely, as Senator Humphrey indicated, that that group—a lot of them will be absorbed. So I would say in those categories, a lot of the job losers reflects cyclical unemployment.

Furthermore, I think if the economy continues to grow vigorously as it has in the past 4 months, many of the others will, too. But there are many pockets of unemployment that will be very hard to take care of in my judgment by the usual patterns of economic growth.

Senator JAVITS. Would it be a fair conclusion, therefore, that we have a double problem in respect to the worker over 24 or 25, whatever the breaking point—what is it——

Mr. SHISKIN. Twenty-five.

Senator JAVITS [continuing]. As to the worker 25 and over, we have a cyclical problem primarily. As to the worker 25 and under, we have a structural problem primarily.

Mr. SHISKIN. That sounds reasonable to me.

Senator JAVITS. This is very important for the Congress to draw this distinction. We cannot assume if we throw government money at unemployment that it will go away nor can we assume if we get a strong recovery from the recession that unemployment will go away.

We have two big problems, each of which requires separate treatment. Although, as you say, there will be some carryover from one to the other no matter which way you go. If you pick up a lot of the youth in dealing with older persons unemployed, you will pick up the older people and vice versa.

Mr. SHISKIN. I agree.

Senator JAVITS. It seems very clear to me that the Congress has to have targeted programs for the youth and stimulative or incentive producing programs for those over 25. Would that be a fair analysis?

Mr. SHISKIN. I tried to stay out of economic policy issues. I leave that subject with you.

Senator JAVITS. I think you have given the lead into it. That is my conclusion and I think that is a proper statement.

One factor, Mr. Commissioner, that seems to trouble people, is why there can be both growth in the labor force—that is 89 million employable people—and growth in unemployment.

Mr. SHISKIN. 89 million are employed.

Some like you and me will remember when Henry Wallace talked about 60 million jobs. Today, there are 89 million people employed.

Senator JAVITS. So we have roughly 89 million in the work force.

The important thing to convey to the country is the employed population of the country can move up materially and successfully at one and the same time, but the unemployment figure remains either sticky, constant, or rises as it has this month.

Would you explain that to us as the Commissioner of Statistics?

Mr. SHISKIN. We divide the number of unemployed by the total number of people who are in the labor force. The people who are in the labor force are those who are employed, starting off with the 89 million people plus others who tell us they are unemployed; that is, they are without work, are available for work, and are actively looking for work. These are our three criteria to define unemployment.

If you have many people enter the labor force, then it is possible for both the number employed and the number unemployed to rise. Let's use a round number, say half a million people enter the labor force. Let's say 300,000 get jobs. Then 200,000 do not get jobs, so that will swell the number of unemployed. So it is not uncommon and it

has not been in recent years for me to come here and report to this group that both employment and unemployment rose.

Senator JAVITS. In giving us that report, therefore, there is no index to the economic success of the country in only one of those figures. Both figures must be considered in assessing our economic performance; is that correct?

Mr. SHISKIN. I had a hearing earlier this week with the Government Operations Committee, and that question came up again and again and I keep saying for a balanced view of the whole economy, you have to look at trends both in employment and unemployment.

Senator JAVITS. It is a fact that twice as many people got jobs in the reporting period, to wit: February, as were unemployed during that time, roughly 400,000, so we are holding our own.

Mr. SHISKIN. A very important measure to look at in this context is the employment-population ratio. We had a lot of pressure on us to add this measure to the release. We did not resist it. It now appears in table A–1. If you look down a few lines, you will come across the employment-population ratio.

Do you have that, sir?

Senator HUMPHREY. Yes; we have it.

Mr. SHISKIN. Let me give you a number that may be helpful to you. I find it quite useful in making a value judgment to ask, has employment increased faster than 110,000, the number, on the average, necessary for the employment-population ratio to hold steady. Normally, you would expect the economy to be able to absorb at least the increase in the new working age population which has entered the labor force. So you want the employment-population ratio to increase. We have had twice the increase in employment this month as we did in the working age population.

One of the interesting things about this 4-month comparison is the following, that in the last 4 months, October to February, we had a healthy increase in the employment-population ratio. In the previous 4 months, it was not increasing at all.

Senator HUMPHREY. Doesn't that employment-population ratio vary somewhat, too, by economic necessity? When you say the work force, there are times when the work force blossoms more when women enter the picture, for instance.

Mr. SHISKIN. The base of this ratio is the population, not the labor force. It is a very useful thing to know what percent of the labor force, the people who actively are seeking jobs, can get jobs.

When you look at employment, I think there is an advantage in thinking in terms of the relationship between the number of people who get jobs and the growth in the population.

Senator JAVITS. So we are back to the plus performance of the economy which we enjoyed in October of 1975 to February of 1976, where we finally attained it for October 1976 to February 1977; is that correct?

Mr. SHISKIN. The way this period of economic development has proceeded is about as follows, and I make these comments because I want to make sure we are talking about the same thing. We had the worst recession in 40 years from 1974 to 1975. Starting in the

spring of 1975, the economy began to improve and we had a rather vigorous expansion for about a year. Then we had what everybody referred to as a pause. Growth took place during that pause, but it was very slow.

The GNP went up but not very vigorously. Employment went up but it went up less than the population. That pause appears to have ended in October and since then we have had a vigorous expansion of employment.

I keep saying that employment still seems to be going up.

Senator JAVITS. My time is up but I would say what you have testified about is very clear and very instructive. It means to me we have to proceed on this bill and we have to proceed on the economic stimulus for the worker over 25, and clearly that is our mandate in Congress.

I thank my colleague.

Senator HUMPHREY. Senator McClure?

Senator MCCLURE. The labor force participation rate which you have been discussing has changed dramatically in recent years. If the labor force participation rate today were the same as 10 years ago, our unemployment rate would be 3.1 percent.

Mr. SHISKIN. If we had the same labor force today that we had 10 years ago, the unemployment rate would be lower, but I don't think it would be that much lower. We have a different world now.

Senator MCCLURE. The reason I mentioned it at this point is to illustrate the fact that we do have a different labor force participation rate. We live in a different world from what we lived in 10 years ago and we ought to be analyzing the reasons why that occurred and what it means with respect to policy. It also bears upon the other statistics that have been troublesome to us for a long time. That that is how we issue unemployment rates in this country differently from other countries.

As I recall, we have developed a kind of base consensus that around 4 percent unemployment rate is relatively fully employed, under the way we measure employment.

Mr. SHISKIN. That is not the consensus today.

Senator MCCLURE. That is correct.

Walter Heller in testimony before the Budget Committee said probably now it would be around 5.5 percent. I think the President's economic report, uses the figure 4.9 percent. At least there is a developing consensus that it is in the range of 5 to 5.5 percent instead of the old 4 percent which indicates our objectives and that our goals need to be tempered by the new conditions under which we work.

It brings us back to the point Senator Humphrey and Senator Javits made. The problem of youth unemployment has to be solved by a targeted approach. If I recall, the inflationary impact of trying to force employment in that target group by traditional economic methods is 5 to 10 times as great as you move down into that group. This means if you seek to solve that unemployment problem by the fiscal process, you will end up with massive inflation that would be very destructive.

I know that you have shied away and I think properly so, from commenting on economic policy. But I think if we understand the underlying statistics with which you are working, then we begin to see how that affects economic policy.

Mr. SHISKIN. I have only one comment to supplement what you have said, Senator McClure, and that is we also have to look at the changes in the industry mix. It has not only been a change in the labor force but a change in the industry mix. The two of these have gone together, I think, in a very interesting way.

What has happened over the last 10 or 15 years is that manufacturing has grown very slowly. The goods-producing industries have grown slowly. Services and government have grown rapidly. One reason the composition in the labor force is so different from what it was 10 or 15 years ago is that we now have a great many young women in the labor force. These are young women often with small children, and this is the key point, often working part-time. It is a very convenient situation, I think, on the one hand that the service and trade industries can easily handle this situation while at the same time, a lot of women with children find it convenient to take part-time jobs, so that sector of the economy has grown rapidly, and it is these same industries which have found it convenient to employ the growing numbers of part-time workers.

You have to bear in mind the close connection between industry changes in our economy and changes in the labor force.

Senator MCCLURE. Does that indicate that the future will lie in expansion of the labor market in services as contrasted with industry? Or does it mean that we should see why there has been a lag in industry employment?

Mr. SHISKIN. I think most economists are concerned with the slow growth of heavy industry. That is where these experienced job losers are. So there is a real problem there. I call it to your attention.

Senator MCCLURE. I would think that would indicate to us that the stimulus we applied should be investment oriented stimulus rather than demand stimulus. I thought I heard you say yes.

Mr. SHISKIN. I don't want to get into this because it is not my business. I am here to report figures. But the two types of programs are not really an either/or proposition.

Senator MCCLURE. I realize a lot of this is subjective.

Mr. SHISKIN. You could do both or you could do neither.

Senator MCCLURE. Does the February jump in the labor force signal a renewed labor force?

Mr. SHISKIN. We have had a very vigorous rise in the labor force. May I ask you if you don't mind looking at a table, refer to table 2, there is an item I had to double check this morning because I could hardly believe it and that is the line on the labor force. That is table 2, the second table.

I took the most recent 4-month period and then 4 months prior to that, and I looked back a year. I wondered what the figures showed for 4 months a year ago. Then the labor force grew at an average of 116,000 a month. Four months ago, they grew at 150,000 per month and in the most recent 4 months, they grew 211,000 per month.

Maybe Mr. Stein can comment on this. We have had a very difficult time tabulating all these energy and other things. I had asked him to look into some of these questions we have been discussing about the labor force.

Do you have anything to add to that?

Mr. STEIN. I think I could only reendorse what you have said that the drop we saw in January was large but clearly temporary, and we can look forward to continued long-term growth.

Mr. SHISKIN. In terms of female participation our most recent rate is about 47 percent for adult females, 47.5.

I got a figure the other day that the rate for that group in Sweden was 60 percent.

Senator MCCLURE. How much?

Mr. SHISKIN. Sixty percent.

Here is one extreme—60 percent. That is a big changeover, let us say, 10 years ago but how far do you go? I don't think we have seen the end to that.

Senator MCCLURE. Even though the civilian labor force rate of growth in the last 4 months is almost double the rate of growth in 4 months for a similar period a year ago, you feel that trend will probably continue?

Mr. SHISKIN. Yes.

Senator MCCLURE. Will the unemployment effects of the weather cause dislocations, will they be short lived and quickly change when the weather moderates?

Mr. SHISKIN. It looks to me the changes have not been that great. Last month when we were all here, there was a great deal of concern about the weather, layoffs and other effects on the economy. We had a survey coming up, which we did, which we did very intensively. It looks to me like there was quite a bounce back and the net impact seems to have been fairly small.

I have seen figures of 1 million, 1.5 million persons laid off, but our figures show the number was much smaller. I guess the effects will drag on but I don't think it is going to be a major problem.

Senator MCCLURE. Others have suggested it has the same effect as a strike in an industry and once it is over, the effects are lost quickly.

Mr. SHISKIN. From what we have been able to learn from the survey we made, the impact was short lived. The weather during the week we took the February survey was quite good, and the total impact, the carryover of bad weather from earlier weeks, was not that bad.

Senator MCCLURE. Do you see any lasting effects from the $50 tax rebate?

Mr. SHISKIN. I hope you will forgive me if I try to duck that for the same reason I want to leave other policy decisions to policymakers. This is not just a bureaucratic position. A major concern of Bureau of Labor Statistics officials is that our figures have complete credibility. We have to be objective, we have to be neutral and everybody has to believe our figures.

If I were to get involved in controversies over policy, I might begin to bias my points of views. If I could get into debates on this or that policy issue it could affect my own objectivity and equally important, it could affect my credibility. For that reason, we try very hard to stay out of the policy issues.

Senator MCCLURE. I understand that, and I am not surprised that you would avoid answering that question. I say that respectfully. I understand your response.

Senator HUMPHREY. Thank you, Senator McClure.

Mr. Shiskin, Mr. Modigliani, the noted economist who appeared before this committee, testified in February that one of the primary reasons for the recent sharp fluctuations in the unemployment rate was the seasonal adjustment factors used by the Bureau of Labor Statistics in determining the rate. He believes the seasonal adjustment factors used by BLS tend to produce great distortions in the unemployment series.

My question is to what degree, if any, do you think the seasonal adjustment factors have distorted the true unemployment rate and how much of the precipitous drop in the unemployment rate to 7.3 percent in January was due to seasonal adjustment factors?

Mr. SHISKIN. I would like to make the hackneyed remark that I am very glad you asked me that question.

It is really a very flattering situation, I have been attacked now by the past president of the American Economic Association and the present president of the American Economic Association for faulty seasonal adjustments. There was a time when I was almost the only person in the country who knew how to make seasonal adjustments.

Now presidents of economic associations comment on these frequently. I have written a letter to Professor Modigliani and I asked him for the basis of his comments. I wrote him about 3 months ago because he made a statement similar to Mr. Raskin of the New York Times. He has not replied.

I have written to Larry Klein and we have had a very understanding exchange. Mr. Klein thinks we should use stable seasonal factors. I understand Mr. Klein but I don't understand Mr. Modigliani, because he has not responded to my letter. I might say there is a very highly qualified professional group at Brookings who still think we should use the "residual method," which we show in a table attached to my prepared statement every month.

That is, column 11 in table 1. The Brookings people invited me over there for lunch last Friday and that is what we discussed. I told them this was the second year in a row that they had invited me for lunch and I was not going to change the method because this is the second free lunch I have gotten to discuss this method and I would like to keep up the free lunches.

You know, when I published this table, I thought everybody would be happy. We have 10 different seasonal adjustments there. We said we have to do it some way and we will take what we think is the best way, but we are not perfect and there may be others who have better judgment than we have. What has happened is that different people have different favorite ways and they keep pressuring us to adopt their ways. That is all right, too.

Let me turn more seriously to the substantive comments. I said last year, and I want to make it clear again, that I do think the January figure is over adjusted. I think if you could make a perfect seasonal adjustment, the January decline would be smaller.

Senator HUMPHREY. I believe you said that when you testified on the January rate.

Mr. SHISKIN. I said it then and I said it last year. The trouble is that at this point, I don't know how to do it better. I think I can do it better for January but we have to deal with 12 months a year. What

we have seen so far is that the other methods, like the residual methods, which may give us—I am not saying it does—a better adjustment for January, gives us inferior adjustments for other months of the year.

Let me say specifically, for this month's, unlike last month and last month a year ago, I think our method of adjusting the figures is satisfactory.

Senator HUMPHREY. You have been revising or looking at your seasonal adjustment formula for some time?

Mr. SHISKIN. I started my career on that.

Senator HUMPHREY. We discussed that several years ago and Senator Proxmire was on you very heavily. One day, I think we will call in Mr. Klein, Professor Modigliani, and you and we will sell tickets at the door. With all the new code of ethics around here, I don't know if we can give you a lunch or not. Brookings is outside the purview of the Government.

Mr. SHISKIN. I have not heard from Professor Modigliani but I have heard from Professor Klein and the Brookings people and particularly John Britten. I must say I find these discussions highly professional discussions. There are no politics involved. I think we will find a better way for adjusting for January.

Senator HUMPHREY. I think it is fair to compliment the efforts the Bureau of Labor Statistics makes. It is the most exhaustive and extensive of any country. I believe that our statistical gathering activities and services are really, if not the best, at least one of the best, you can find in the industrialized countries.

Mr. SHISKIN. Here and there, the other countries will do better but I think on balance there is one area where we excel. Our data are more timely and prompt. Here it is March 4 and we are talking about the employment picture in mid-February, 3 weeks ago, and that is really quite remarkable.

Senator HUMPHREY. On the releases for insurance claims for February, you had one paragraph in each that included energy-related unemployment as well. There was some good news in it that the energy unemployment problem seems to be coming to an end so far as the crisis point for the month of January is concerned. But there is a section of that unemployment insurance benefits release that is bad news. During each of the 3 weeks that we have data for thus far in February, from 31,000 to 32,000 individuals have exhausted their unemployment benefits. In February alone, more than 100,000 workers will exhaust their benefits.

My questions are these: First of all, is this typical; second, can you give us an idea as to what happens to these workers? Do they just drop out of sight? Do they go on welfare? Do many of them find jobs? What is your estimate here?

Mr. SHISKIN. I don't know the answer to those questions, sir.

Can you help, Bob?

Mr. STEIN. We did not do it but there was a recent study of what happens to people who exhaust their benefits and the major finding was they remained unemployed and continued to look for work. A relatively small portion find jobs and a relatively small portion dropped out of the labor force. Even after exhausting benefits, the majority continued to look for work.

Senator HUMPHREY. That means, with no unemployment insurance benefits, they have to use up their savings or they go on welfare.

Mr. STEIN. Yes.

Senator MCCLURE. Who did that study?

Mr. STEIN. It was done in the Department's Employment and Training Administration. We can get the study for you.

Senator MCCLURE. I would be interested in looking at it.

[The study referred to follows:]

FEDERAL SUPPLEMENTAL BENEFITS POST-EXHAUSTION STUDY

Preface

In early 1976, the Unemployment Insurance Service of the U.S. Department of Labor's Employment and Training Administration contracted with five State Employment Security agencies to conduct a survey of the post-exhaustion experience of a sample of individuals who exhausted their entitlement to benefits under the Federal Supplemental Benefits program. The Unemployment Insurance Service, with the cooperation of the State agencies in California, Missouri, Nevada, New York and Wisconsin was responsible for developing the study design, analyzing the results and preparing this report of the findings. Acknowledgment is made to each of the five participating State agencies for their excellent work in providing the data upon which this report is based.

Introduction

The purpose of this report is to provide information on the post-exhaustion experience of unemployment insurance beneficiaries who exhausted their entitlement to Federal Supplemental Benefits (FSB) during 1975 in five States: California, Missouri, Nevada, New York and Wisconsin.

Information on the labor force status and public assistance program participation during the two months following exhaustion was obtained by mail questionnaire for a sample of FSB exhaustees. The results presented here are based on the reported experience of respondents.

Summary and conclusions

Labor force participation remained high during the 2-month period following exhaustion of FSB benefits. About 80 percent of study respondents were still in the labor force; 63 percent were unemployed and 16 percent had obtained employment during the 2-month period following FSB exhaustion.

The low reemployment rate (16 percent) and the low incidence of labor force withdrawal (15 percent) shortly after exhaustion do not support the hypothesis that long-term beneficiaries "ride with" the system and then immediately take jobs or leave the labor force.

Of the 15 percent who left the labor force, the largest group (30 percent) gave retirement as the reason. Discouragement due to continued poor job prospects may have been one underlying factor.

Public assistance does not seem to be an alternative to extended unemployment insurance payments for the long-term unemployed. Only 6 percent of the study exhaustees reported receiving welfare after FSB benefit exhaustion. Three percent had received welfare prior to receipt of benefits, and 3 percent while receiving UI benefits.

Participation in the food stamp program was somewhat higher. Nine percent reported receipt of food stamps after exhaustion of unemployment benefits. Four percent had obtained food stamps before receipt of benefits and 5 percent during the period of benefit receipt. Five percent of the study exhaustees received Medicaid after exhaustion, and 3 percent before and during the UI payment period.

Age seems to be related to post-exhaustion labor force status. In three of the four study States in which labor force status was analyzed according to age, the proportion of exhaustees gaining employment during the two month post-exhaustion period declined as age increased. The proportion who dropped out of the labor force was greatest among the oldest age group (65 years or older), ranging from 14 to 37 percent in the four States, compared with 10 to 14 percent of those under 65 years of age.

Most of the exhaustees were beyond the prime working years, that is, 45 years of age or older. In three of the four study States, at least 70 percent of the exhaustees were 45 years old or older. This is a greater proportion than was found among all FSB exhaustees in the same States during calendar year 1975, and may reflect the more serious unemployment problems experienced by members of our sample.

Legislative background

The Social Security Act of 1935 created the Federal-State unemployment insurance system. Under this system, weekly benefits are provided to eligible individuals who are involuntarily unemployed for a maximum period of time specified in State law. These benefits, which provide a partial measure of economic security, replace part of the workers' weekly wages when employed and are available under all economic conditions. Special programs of extended benefits were enacted during the 1958, 1961–62 and 1971 recessions which provided for a longer duration of benefits during these periods of downturns in economic activity.

The Employment Security Amendments of 1970 (Public Law 91–373) established a permanent program of extended benefits (EB) payable during periods of "high" unemployment. This program "triggers" on or off in a State (or nationally) where the trigger rate[1] reaches a prescribed level. Thus, during periods of high unemployment in a State or across the nation, individuals who have exhausted their entitlement to regular unemployment insurance (RUI) benefits are eligible to receive EB benefits equal to 50 percent of their RUI benefit entitlement. Maximum entitlement is 39 weeks when combined with RUI.

On December 31, 1974, the President signed a bill creating the FSB program (Public Law 93–52) in response to the worst labor market conditions the nation has experienced since World War II. This temporary, 2-year program, as amended, allows individuals who have exhausted both their RUI and EB benefit entitlement to draw additional benefits equal to 100 percent of their RUI benefit entitlement, not to exceed 26 weeks. Thus, eligible individuals can potentially receive up to 65 weeks of total benefits, i.e., RUI plus EB plus FSB. During calendar year 1975, FSB benefits were payable in all States. Beginning in January 1976, availability of FSB depends upon the State trigger rate. In States where the rate is 6 percent or more, eligible individuals are entitled to 100 percent of RUI up to 65 weeks of benefits, and, in States with a rate of at least 5 percent but less than 6 percent, eligible individuals are entitled to 50 percent of RUI up to 52 weeks of benefits.

Study background

During 1975, much interest focused on the FSB program, its beneficiaries, and especially those beneficiaries who exhausted all of their benefit entitlement.

Data on the characteristics of FSB exhaustees have been available through regularly required State reports. One of these reports provides the sex, race, age, industry and occupation of each exhaustee. Based on these characteristics of FSB exhaustees, two previous summary reports were prepared.

While these reports were very important in determining what kinds of individuals were exhausting their entitlement to all benefits, no information was available on what happened to people after benefit exhaustion. The urgent need for this information resulted in visits to California, Missouri, Nevada, New York, and Wisconsin in November 1975 to determine the feasibility of quickly obtaining some information on the post-exhaustion experience of FSB exhaustees.

California, Nevada, New York and Wisconsin had already conducted a study of indiivduals who had exhausted their RUI entitlement during part of 1973 and 1974. As unemployment began to climb, EB benefits and, subsequently, FSB benefits became available to some of the study participants in these States. This group of individuals who had exhausted RUI during 1973 and 1974 and subsequently went on to exhaust EB in 1974 and 1975 and FSB in 1975 had experienced some of the more serious problems with unemployment. For this reason as well as the availability of data prior to FSB exhaustion, it was decided to use this sample of 1973–74 RUI exhaustees to obtain information on post-FSB experience.

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[1] The trigger rate is computed by dividing the average weekly number of continued weeks of unemployment claimed under the State law (including claims for regular benefits, State additional benefits, and Federal-State extended benefits) for a 13-consecutive-week period by the average monthly covered employment in the first 4 of the last 6 completed calendar quarters.

Economic conditions in the study States during 1974–75

During the fourth quarter of 1974, the economic situation in the United States began to deteriorate rapidly. Employment fell and unemployment increased. The drop in employment combined with an increasing labor force caused unemployment rates to accelerate to near record levels.

In September 1974, the total unemployment rate was 5.9 percent and the insured unemployment rate was 2.8 percent. By May 1975, the total unemployment rate had reached 8.9 percent. The insured unemployment rate reached a peak of 7.8 percent in February 1975, and was still at 6.4 percent in May 1975.

Another measure of the severity of the unemployment situation during the late 1974–75 period is the number of new claims for unemployment insurance benefits. In September 1974, new initial claims totaled 1.2 million; in January 1975, over 3.6 million new claims were filed; and over 2 million new claims were filed in each of February, March and April of 1975.

The recession permeated nearly all segments of the economy. All major manufacturing industry groups had employment declines in the late 1974-early 1975 time period. Employment in contract construction also declined substantially. Conditions in these two major segments of the economy help to cause subsequent unemployment in other industries. In fact the only industry groups to have employment growth during the late 1974 to mid 1975 time period were State and local government, the service industries, and mining. The overall employment drop was the largest and most rapid since the post-World War II economic adjustment with overall industrial production lower in 1975 than in 1974.

The second half of 1975 showed some improvement in the unemployment picture. Both the total unemployment rate and the insured rate declined from their highs of 8.9 percent and 7.8 percent, respectively. However, the total unemployment rate for the year was the highest since 1941, and the insured rate was the highest since 1958. Annual unemployment rates are shown below for 1972–75.

Year	Total unemployment rate	Insured unemployment rate
1972	5.6	3.5
1973	4.9	2.7
1974	5.6	3.5
1975	8.5	6.1

In the five States in the FSB study, the unemployment situation closely resembled that of the country. California, New York, and Nevada had unemployment rates higher than the overall U.S. average during the 1974–75 time frame while Missouri and Wisconsin had rates somewhat lower then the national average. Annual average employment for 1975 was lower than for 1974 in all study States except Nevada. In Nevada, 1975 employment showed some increase over 1974 but not enough to affect the unemployment rate which remained high.

California, New York, and Nevada were experiencing relatively high unemployment during all of 1974 which accelerated in late 1974 and continued into 1975. Benefits under the EB program were payable in California for the week beginning March 17, 1974, in New York for the week beginning February 18, 1974, and in Nevada for the week beginning November 3, 1974. In Missouri and Wisconsin, the unemployment situation was not quite as severe as in the other three States. Nonetheless, unemployment rates did rise considerably but remained below the national average in most months of both 1974 and 1975. EB benefits first became payable in Missouri and Wisconsin for the week of January 26, 1975.

The annual average unemployment rates for the five States for 1974 and 1975 are shown below:

State	Total unemployment rate		Insured unemployment rate	
	1974	1975	1974	1975
United States	5.6	8.5	3.5	6.1
California	7.3	9.9	4.5	6.4
Missouri	4.6	6.9	3.1	5.8
Nevada	7.6	9.3	5.2	6.5
New York	6.4	9.5	4.4	6.7
Wisconsin	5.2	6.9	2.9	5.7

Benefit duration in study States

Under the Federal-States unemployment insurance system, States establish their own benefit formulas. The benefit duration provisions of State laws and, specifically, those of the study States vary considerably. Therefore, caution must be used in interpreting data among exhaustees both within and among States. One State, New York, has uniform potential duration of 26 weeks of regular benefits in effect for all eligible claimants. The other four study States vary potential duration of benefits according to the claimant's base period wages or the number of weeks worked during the base period.[2] The range of potential durations in the study States is as follows:

State	Potential duration	
	Minimum number of weeks	Maximum number of weeks
California	12	26
Missouri	8	26
New York	26	26
Nevada	11	26
Wisconsin	1	34

The potential duration for receipt of the additional tiers of benefits (EB and FSB) in turn depends upon the potential duration of regular benefits. Thus, in New York, any individual who exhausted FSB entitlement would have been entitled to receive 26 weeks of RUI benefits, 13 weeks of EB benefits and 26 weeks of FSB benefits, a total of 65 weeks of benefits. However, in Missouri, for example, an individual could have been entitled to receive as little as 20 weeks of benefits (8 weeks of RUI, 4 weeks of EB, and 8 weeks of FSB). Maximum duration under the three programs in all States is 65 weeks.

The number of weeks of regular benefits actually received by the exhaustees in this study from California, Missouri, and Nevada are as follows:

Weeks compensated regular benefits[1]	Percentage distribution		
	California	Missouri	Nevada[2]
Less than 10	[3] NA	4	4
10 to 14	7	39	14
15 to 19	10	31	22
20 to 25	10	20	19
26 or more	73	6	41

[1] Data among States are not strictly comparable. The definition of an exhaustee under the RUI program is different when an EB program is in effect. When only RUI benefits are available an exhaustee is an individual who has exhausted all of his benefit entitlement. When the EB program is in effect an individual is also considered to have exhausted his RUI benefits if his benefit year ends prior to exhaustion of his benefit entitlement. Therefore, some FSB exhaustees received fewer weeks of RUI benefits than their original entitlement and are still considered to have exhausted RUI benefits. In Missouri the count of weeks of RUI duration includes weeks of partial benefit checks. California and Nevada reported weeks of equivalent total unemployment.

[2] Minimum duration is 11 weeks for individuals who are not penalized for disqualification from receipt of benefits. Individuals denied benefits for voluntary leaving without good cause and discharge for misconduct have their benefit entitlement reduced.

[3] Minimum duration is 12 weeks.

[2] The base period is a 52-week period, usually the first four of the last five quarters, prior to the benefit year. A worker's benefit rights are determined on the basis of his employment in covered work over the base period.

About three-fourths of the California sample collected a full 26 weeks of regular benefits. On the other hand, about three-fourths of the Missouri sample and two-fifths of the Nevada sample collected less than 20 weeks of regular benefits. Because of these variations in potential duration, it should not be concluded that all exhaustees are very long term unemployed individuals. However, both in number and duration of compensated unemployment, they are relatively long-term unemployed in contrast to exhaustees in more normal economic conditions.

Study method

Information on the exhaustees' labor force status and public assistance program participation was obtained by mail questionnaire in the five States during February and March of 1976. Each participant was questioned about the two month period after exhaustion of FSB.

Sample description and limitations

The post-exhaustion labor force status reported here must be viewed in light of the limitations of the sample from which the data have been obtained.

Because the FSB exhaustees from California, Nevada, and New York included in this report were drawn from a sample who exhausted their regular benefits during a period beginning in 1973 and ending in 1974 they are not necessarily representative of all 1975 FSB exhaustees. The periods during which the FSB exhaustees from these States could have exhausted thier regular benefits are as follows:

State	Month of first RUI exhaustion date	Month of last RUI exhaustion date
California	September 1973	August 1974.
Nevada	February 1974	June 1974.
New York	August 1973	September 1974.

Individuals who exhausted regular benefits after the last dates shown above could also have been FSB exhaustees during 1975.

In Wisconsin, relatively few individuals from the RUI post-exhaustion study had exhausted FSB in 1975. Therefore, this group of exhaustees was supplemented by a random sample of 1975 FSB exhaustees. Only the post-exhaustion labor force status and social welfare program participation characteristics are available for all 335 of the exhaustees. Other characteristics are available for only 90 of the 335 exhaustees. Therefore, presentation and analysis of other characteristics of Wisconsin FSB exhaustee respondents are excluded from this report.

In Missouri, a random sample of 1975 FSB exhaustees was selected in response to the Missouri agency's expressed interest in obtaining post-exhaustion experience of FSB exhaustees.

Only respondents to the RUI post-exhaustion study and/or the FSB post-exhaustion study are included in the study results.[8]

State:	Number questionnaires sent	Number respondents	Response rate (percent)
California	280	245	88
Nissouri	1,362	985	72
Nevdda	280	201	72
New York	756	693	92
Wisconsin	497	335	67

Characteristics of sample FSB exhaustees

While the major focus of this report is to describe the post-exhaustion labor force status of the study sample, knowledge of the other characteristics of the group is essential both for interpreting the labor force status and adding to the

[8] The response rates to the FSB questionnaire were as follows:

picture of who FSB exhaustees are in relation to other relatively long-term UI recipients.

In this section, other characteristics of the sample respondents are briefly discussed and compared with those of several other groups. It would be desirable to compare these characteristics of different groups of beneficiaries experiencing successively longer durations of unemployment, that is, RUI exhaustees, EB beneficiaries who do not exhaust, EB exhaustees, FSB beneficiaries who do not exhaust and FSB exhaustees. Such data were not available for this report. The data immediately available for comparison purposes are limited. They include (1) characteristics of RUI exhaustees in California and Nevada from which the subgroup of FSB sample exhaustees was drawn; (2) characteristics of all FSB beneficiaries in the study States for calendar year 1975; (3) characteristics of all FSB exhaustees in the study States for calendar year 1975.

These comparisons will help to understand the nature and representativeness of the FSB exhaustees for whom we have post-FSB information.

Age

In California, Nevada and New York, 70 percent or more of the sample exhaustees are 45 years of age and older. In the same three States, the proportions of exhaustees 65 years of age and older are 30 percent, 18 percent and 28 percent respectively. In Missouri, our sample of FSB exhaustees is younger, with only 39 percent 45 years of age or older, and 7 percent at least 65 years old.

Our sample exhaustees are older in all States but Missouri than all FSB exhaustees in the same States during calendar year 1975. The proportion of calendar year 1975 exhaustees 45 years of age or older ranged between 33 and 49 percent in California, Nevada and New York and the proportion at least 65 years old between 7 and 14 percent. Both the nature of the study sample in States other than Missouri, as described previously, and the tendency for questionnaire response to increase with age may be involved in the older age of our sample.

No major differences were noted among the other comparison groups, i.e., RUI exhaustees, FSB calendar year 1975 beneficiaries, and FSB calendar year 1975 exhaustees.

Race

Most exhaustees in the study sample are white, the proportion ranging from 80 percent in Missouri to 94 percent in New York. No consistent differences were observed in race between our sample and the comparison groups.

Sex

The proportion of male exhaustees ranged from 46 percent in Missouri to 62 percent in Nevada.

In California, Missouri and New York, the proportion of males is slightly lower among all calendar year 1975 FSB exhaustees than among beneficiaries.

Occupation

Occupational attachment of the study sample differs among the States. California, Missouri and New York have the greatest proportion of exhaustees in the clerical and sales occupations, about one-third of the sample in California and New York and about one quarter in Missouri.[4] California has over one quarter in the professional, technical and managerial occupations. In Navada, over one quarter of the sample is in service occupations, one quarter in clerical and sales occupations and over one-fifth in structural occupations.

In California, there appears to be some increase in professional, technical and managerial occupational attachment from RUI exhaustion to FSB exhaustion. This increase is much more pronounced when looking at the occupational characteristics of all FSB exhaustees than our sample exhaustees. This pattern in the professional, technical and managerial occupations, however, does not hold true for other States.

Industry

The industry attachment of the study sample of FSB exhaustee varies among the States. In Nevada, there is almost no representation in manufacturing and the service industry accounts for 44 percent of the study exhaustees. California, Missouri and New York are more similar in industry distribution, with the larg-

[4] Occupational data were missing for 27 percent of the Missouri exhaustees. The percentage distribution is based on the total number for whom data were available.

est segment of the group in manufacturing, and wholesale and retail trade second in importance.

Industry attachment within States does not appear to differ among the comparison groups.

Base period earnings

The proportion of exhaustees earning less than $5,000 ranged from 46 percent of the sample in New York to 87 percent in Missouri. The relatively low base period earnings in Missouri may be related to the younger age of the sample exhaustees. Earnings were highest in California and New York, where about one fifth of the sample earned wages of $9,000 or more.

In California and Nevada, comparative base period earnings data are available for the RUI exhaustee sample. The earnings of the two Nevada groups, RUI and FSB exhaustees, are essentially the same. In California, a greater proportion of FSB exhaustees (22 percent) than RUI exhaustees (12 percent) had earnings above the $9,000 level. This may be related to the somewhat higher representation of professional, technical and managerial occupations in the FSB group.

Labor force status

Most of the 2,459 exhaustees in the five States were still in the labor force during the 2-month period following FSB exhaustion. Sixty-three percent remained unemployed for the entire 2-month period. The range in proportion unemployed among the States was narrow, from 58 percecnt in Nevada and Wisconsin to 67 percent in New York.

Sixteen percent of the respondents in the five States had obtained employment during the 2-month period. The percent employed showed somewhat more variation among the States, ranging from 8 percent in New York to 24 percent in Nevada.

Fifteen percent of respondents left the labor force after exhaustion, somewhat fewer in Nevada and Missouri (11 and 12 percent respectively) [5] than in the other States (18 to 20 percent).

Labor force status according to characteristics

In order to shed light on the question of whether certain types of exhaustees tend to be employed, unemployed or out of the labor force, other characteristics of the respondents in California, Missouri, Nevada and New York were examined in relation to their labor force status.

Of all the characteristics available, age shows the most significant relationship with labor force status. In California, Missouri and New York, the proportion of exhaustees employed during the two month period declined as age increased. The proportion out of the labor force was greatest among the oldest age group (65 years of age or older) in these three States (37 percent, 22 percent and 29 percent respectively).

In New York and California, where somewhat more than one quarter of exhaustees were 65 years old or older, 45 percent and 56 percent respectively of all those out of the labor force were at least 65 years old.

Among the study States, there were no consistent differences between the sexes in labor force status. In two States, Missouri and Nevada, a somewhat greater percentage of females than males left the labor force within the 2-month period, while a somewhat greater percentage of males than females remained unemployed. In Nevada, however, there were more females than males employed as well as out of the labor force.

No consistent differences were evident between whites and non-whites in labor force status. In Missouri, the State with the greatest proportion of non-whites in the sample, (20 percent), a greater proportion of whites than nonwhites became employed during the 2-month postexhaustion period and a smaller proportion remained unemployed.

In New York, there appears to be some relationship between occupation and labor force status. The clerical and sales occupational group had a somewhat

[5] These findings particularly with respect to post-exhaustion labor force attachment are consistent with the results of a study conducted in Connecticut on individuals who had exhausted their FSB entitlement during the period from September 1975 through February 1976. Sixteen percent of the Connecticut exhaustees were out of the labor force at the time of the survey which ranged up to 6 months after benefit exhaustion. Fifty-one percent of this exhaustee sample remained unemployed while 23 percent had regained employment.

greater proportion among the unemployed and a smaller proportion among the employed then other occupations.

Industrial attachment does not appear to relate to labor force status in the study samples.

In general, among the States, the level of base period earnings does not appear to relate to post-exhaustion labor force status. In Missouri, however, there is a tendency for the lower base period earnings groups to have somewhat greater representation among the employed than the higher base period earnings groups.

No meaningful analysis can be made of the relationship between actual duration of benefits and labor force status in California and Missouri. About three-fourths of the California exhaustees had 26 weeks of duration. In Missouri, weeks of compensated duration include those in which the exhaustees received a partial check. No significant relationship between labor force status and duration was evident for the Nevada exhaustees.

Receipt or nonreceipt of the State maximum weekly benefit amount did not show a relationship to post-exhaustion labor force status. As State benefit formulas are intended to provide claimants with at least 50 percent wage loss replacement up to the maximum weekly benefit amount, those exhaustees below the maximum amount will, in general, have received a 50 percent wage loss replacement while those at the maximum will have received a smaller proportion of their former weekly wages. The sample exhaustees who received less than the maximum (higher wage replacement) did not show a greater tendency to obtain employment shortly after their benefits ceased.

Reason for leaving the labor force

Of those who left the labor force, 30 percent gave retirement as their reason,[6] 20 percent were sick or disabled, 20 percent believed no work available, 17 percent were keeping house and the remaining 12 percent gave other reasons. Even for those who did not give "believed no work available" as the reason for leaving the labor force, discouragement due to poor job prospects may have been an important factor in giving up job search. In the case of retirees, discouragement could have pushed some into retirement or caused some already retired from a previous job to abandon further job search.

Experience with public assistance programs

The participation rate of the exhaustees in public assistance programs is very low.[7] Of the 2,459 respondents, 6 percent received welfare after benefit exhaustion, with the percentage ranging from 2 percent in California to 8 percent in Missouri. Three percent of the respondents received welfare before receiving UI benefits and 3 percent during the period of receipt of UI benefits. Thus, there is little increase in welfare receipt as a result of benefit exhaustion. The low participation rate may be due to ineligibility because of other family income or assets, or to unwillingness to apply for welfare.

Few exhaustees, 5 percent, received Medicaid after exhaustion. Among the States, the percentage ranged from 2 percent in Nevada to 6 percent in New York and Wisconsin. There was little shift from the 3 percent receiving Medicaid both before and during the receipt of UI benefits.

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[6] In the previously mentioned Connecticut FSB exhaustee study, a similar percent of those out of the labor force, 37 percent, reported being retired and receiving Social Security benefits and/or a pension.

[7] The low participation rate in public assistance programs is consistent with findings of other studies. In the Connecticut FSB study, 6 percent of exhaustees began getting welfare payments after their unemployment benefits terminated. A study conducted by Mathematica in four urban locations found that 4 percent of FSB exhaustees received public assistance or food stamps.

Participation in the food stamp program was somewhat greater on the whole. Nine percent of the exhaustees received food stamps after exhaustion of benefits, with percentages ranging from 5 percent in New York to 20 percent in Nevada. Four percent of the respondends had obtained food stamps before receipt of UI benefits and 5 percent during receipt of benefits.

APPENDIX

TABLE 1.—PERCENTAGE DISTRIBUTION OF FSB EXHAUSTEES BY LABOR FORCE STATUS BY STATE

Labor force status	California	Missouri	Nevada	New York	Wisconsin	Total
Total number	245	985	201	693	335	2,459
Total percent	100	100	100	100	100	100
Employed	14	18	24	8	20	16
Unemployed	61	64	58	67	58	63
Out of labor force	20	12	11	18	20	15
Combination [1]	5	6	8	7	2	6

[1] Some respondents reported more than 1 labor force status during the 2-mo period, i.e., employment during some weeks and/or unemployment during some weeks and/or out of the labor force during some weeks.

Note: Items may not add to totals due to rounding.

Source: U.S. Department of Labor, Employment and Training Administration, Unemployment Insurance Service, FSB Post-Exhaustion Study.

TABLE 2.—PERCENTAGE OF FSB EXHAUSTEES BY PARTICIPATION IN PUBLIC ASSISTANCE PROGRAM BY STATE

Public assistance program	California	Missouri	Nevada	New York	Wisconsin	Tota
Total number	245	985	201	693	335	2,459
Welfare:						
Before receipt of unemployment insurance	2	6	1	1	1	3
During receipt of unemployment insurance	(1)	6	(1)	2	1	3
After receipt of unemployment insurance	2	8	3	4	6	6
Food stamps:						
Before receipt of unemployment insurance	2	7	7	1	3	4
During receipt of unemployment insurance	2	8	6	2	3	5
After receipt of unemployment insurance	6	11	20	5	8	9
Medicaid:						
Before receipt of unemployment insurance	3	4	2	3	2	3
During receipt of unemployment insurance	2	4	1	3	2	3
After receipt of unemployment insurance	3	5	2	6	6	5

[1] Less than 0.5 percent.

Source: U.S. Department of Labor, Employment and Training Administration, Unemployment Insurance Service, FSB Post-Exhaustion Study.

TABLE 3.—PERCENTAGE DISTRIBUTION OF FSB EXHAUSTEES BY CHARACTERISTIC BY STATE

Characteristics	California	Missouri	Nevada	New York
Total number	245	985	201	693
Total percent	100	100	100	100
Sex:				
Male	53	46	62	48
Female	47	54	38	52
Race:				
White	88	80	92	94
Other than white	12	20	8	6
Age:				
Under 22	1	9	1	3
22 to 24	4	11	5	5
25 to 34	11	27	9	9
35 to 44	12	15	16	11
45 to 54	16	16	24	18
55 to 59	11	9	14	12
60 to 64	14	7	14	15
65 and over	30	7	18	28
Industry:				
Agriculture	1	1		
Mining		1		
Contract construction	4	10	20	10
Manufacturing	36	41	2	34
Public utilities	5	2	4	3
Wholesale/retail trade	27	26	20	23
Finance/insurance/real estate	6	4	8	12
Services	18	17	44	18
Government	2	1	2	1
Occupation:				
Professional, technical, and managerial	27	7	13	15
Clerical, sales	31	27	25	35
Service	8	15	28	9
Agriculture/fisheries/forestry	(1)	(1)		(1)
Machine trades	4	9	2	5
Benchwork	8	14	2	16
Structural work	7	9	21	11
Processing	5	3		2
Miscellaneous	8	16	9	7
Weekly benefit amount:				
Below maximum	66	72	55	67
At maximum	34	28	45	33
Base period earnings:				
Less than $2,000	20	24	13	9
$2,000 to $2,999	13	27	17	14
$3,000 to $3,999	8	23	17	13
$4,000 to $4,999	9	13	13	10
$5,000 to $6,999	15	9	16	18
$7,000 to $8,999	13	2	16	17
$9,000 and over	22	2	9	18

[1] Less than 0.5 percent.

Note: Distributions are based on total number for whom data were available. It was assumed that missing data we, distributed in the same proportions as available data. However, the following categories, which had missing date accounting for 10 percent or more of totals, should be analyzed with caution: California, race, 17 percent; Missouri occupation, 27 percent.

Source: U.S. Department of Labor, Employment and Training Administration, Unemployment Insurance Service, FSB Post-Exhaustion Study.

TABLE 4.—PERCENTAGE DISTRIBUTION OF FSB EXHAUSTEES BY LABOR FORCE STATUS BY CHARACTERISTIC BY STATE

Characteristic	California labor force status					Missouri labor force status				
	Employed	Unemployed	Out of labor force	Combination [1]	Total percent	Employed	Unemployed	Out of labor force	Combination [1]	Total percent
Sex:										
Male	15	57	23	5	100	19	67	9	5	100
Female	13	64	17	5	100	18	61	15	6	100
Race:										
White	15	59	21	6	100	20	62	12	6	100
Other than white	25	58	13	4	100	10	74	10	6	100
Age:										
Under 25	33	50	17	—	100	28	59	8	8	100
25 to 44	24	61	11	4	100	20	63	11	6	100
45 to 64	14	69	13	4	100	14	69	14	6	100
65 and over	3	54	37	6	100	8	69	22	2	100
Industry:										
Manufacturing	18	56	18	8	100	17	64	14	5	100
Wholesale and retail trade	8	67	21	5	100	21	64	9	6	100
Contract construction	10	50	30	10	100	18	67	11	4	100
Services	20	58	18	4	100	16	62	15	9	100
Other	9	68	24		100	23	66	6	6	100
Occupation:										
Professional, technical, and managerial	15	57	25	3	100	30	58	3	4	100
Clerical and sales	10	69	16	5	100	22	62	12	5	100
Bench work, machine trades, and processing	14	50	29	7	100	14	67	13	6	100
Structural work	22	56	11	11	100	17	66	8	9	100
Service	16	58	21	5	100	9	72	12	7	100
Other	14	71	10	5	100	19	63	9	9	100
Weekly benefit amount:										
Below maximum	14	61	19	7	100	19	64	12	5	100
At maximum	15	61	22	2	100	17	64	11	7	100
Actual duration of RUI benefits:										
Less than 10 weeks					100	22	61	10	7	100
10 to 14 weeks	24	53	18	6	100	24	62	8	5	100
15 to 19 weeks	17	62	17	4	100	16	63	14	7	100
20 to 25 weeks	4	88	4	4	100	12	69	16	4	100
26 weeks or more	14	58	23	6	100	15	65	13	7	100
Base period earnings:										
Less than $2,000	18	61	16	4	100	18	64	14	4	100
$2,000 to $2,999	3	74	16	6	100	23	62	11	4	100
$3,000 to $3,999	20	60	10	10	100	19	64	9	8	100
$4,000 to $4,999	23	59	18		100	14	66	14	6	100
$5,000 to $6,999	19	56	17	8	100	13	62	18	6	100
$7,000 to $8,999	9	59	25	6	100	11	78		11	100
$9,000 and over	9	57	30	4	100	12	71	12	6	100

See footnotes at end of table.

TABLE 4.—PERCENTAGE DISTRIBUTION OF FSB EXHAUSTEES BY LABOR FORCE STATUS BY CHARACTERISTIC BY STATE—Continued

Characteristic	Nevada labor force status					New York labor force status				
	Employed	Unemployed	Out of labor force	Combination [1]	Total percent	Employed	Unemployed	Out of labor force	Combination [1]	Total percent
Sex:										
Male	21	61	8	10	100	8	78	17	7	100
Female	28	52	15	4	100	9	67	19	6	100
Race:										
White	25	58	10	7	100	8	68	18	6	100
Other than white	13	50	25	13	100	10	58	18	15	100
Age:										
Under 25	18	36	27	18	100	17	62	15	6	100
25 to 44	29	61	4	6	100	15	69	10	5	100
45 to 64	24	57	12	7	100	7	70	15	7	100
65 and over	14	63	14	9	100	3	61	29	7	100
Industry:										
Manufacturing		100			100	10	60	23	8	100
Wholesale and retail trade	18	59	10	13	100	6	76	14	4	100
Contract construction	31	56	6	6	100	8	65	16	11	100
Services	24	55	14	7	100	9	70	15	7	100
Other	25	57	11	7	100	6	70	20	5	100
Occupational:										
Professional, technical and managerial	29	54	8	8	100	12	71	11	7	100
Clerical and sales	23	64	9	4	100	5	75	17	3	100
Bench work, machine trades and processing		57	14	29	100	10	57	25	8	100
Structural work	28	58	10	5	100	8	61	22	10	100
Service	21	52	16	11	100	12	70	10	8	100
Other	24	65	6	6	100	9	58	21	12	100

Weekly benefit amount:										
Below maximum	24	54	10	12	100	8	67	19	6	100
At maximum	23	61	12	5	100	10	67	16	7	
Actual duration of RUE benefits:										
Less than 10 weeks	25	62		12	100					
10 to 14 weeks	8	68	12	12	100					
15 to 19 weeks	35	44	12	9	100					
20 to 25 weeks	32	49	3	11	100					
26 weeks or more	18	64	12	6	100					
Base period earnings:										
Less than $2,000	25	50	12	12	100	2	73	20	5	100
$2,000 to $2,999	15	62	6	18	100	11	67	10	12	100
$3,000 to $3,999	36	52	10	3	100	16	61	17	5	100
$4,000 to $4,999	23	54	15	8	100	9	64	21	6	100
$5,000 to $6,999	29	52	10	10	100	8	69	15	8	100
$7,000 to $8,999	16	68	13	3	100	5	69	21	5	100
$9,000 and over	19	26	12	6	100	7	67	22	4	

[1] Some respondents reported more than 1 labor force status during the 2-mo. preiod; i.e., employment during some weeks and/or unemployment during some weeks and/or out of the labor force during some weeks.

Note: Distributions are based on total number for whom data were available. It was assumed that missing data were distributed in the same proportions as available data. However, the following categories which had missing data accounting for 10 pct. or more of totals should be analyzed with caution: California, race, 17 pct.; Missouri, occupation, 27 pct. Item may not add to totals due to rounding. The hypothesis that labor force status and characteristic are independent is rejected at the 0.05 level of significance for the following characteristics: Sex (Missouri); race (Missouri); age (California, Missouri, New York); occupation (New York); base period earnings (Missouri).

Source: U.S. Department of Labor, Employment and Training Administration, Unemployment Insurance Service, FSB Post Exhaustion Study.

TABLE 5.—PERCENTAGE DISTRIBUTION OF REGULAR UNEMPLOYMENT INSURANCE EXHAUSTEES BY CHARACTERISTIC BY STATE

Characteristics	California	Nevada
Total number	4,694	4,947
Total percent	100	100
Sex:		
Male	57	57
Female	43	43
Race:		
White	85	89
Other than white	15	11
Age:		
Under 22	2	3
22 to 44	56	47
45 to 64	33	39
65 and over	9	11
Industry:		
Agriculture	2	(1)
Mining	(1)	(1)
Contract construction	10	15
Manufacturing	32	1
Public utilities	5	4
Wholesale/retail	24	20
Finance	5	4
Service	18	53
Government	1	1
Other	3	2
Occupation:		
Professional, technical and managerial	21	12
Clerical, sales	20	27
Service	9	31
Agriculture	1	1
Machine trades	5	3
Bench work	7	2
Structural	14	15
Processing	10	(1)
Miscellaneous	13	8
Weekly benefit amount:		
Below maximum	72	58
At maximum [2]	28	42
Base period earnings:		
Less than $2,000	29	13
$2,000 to $2,999	16	16
$3,000 to $3,999	11	15
$4,000 to $4,999	9	13
$5,000 to $6,999	14	20
$7,000 to $8,999	9	12
$9,000 and over	12	12

[1] Less than 0.5 percent.
[2] The maximum weekly benefit amount changed in both States during the study period. Percentages at each maximum were added.

Note: Distributions are based on total number for whom data were available. It was assumed that missing data were distributed in the same proportions as available data.

Source: U.S. Department of Labor, Employment and Training Administration, Unemployment Insurance Service, regular UI post-exhaustion study.

TABLE 6.—PERCENTAGE DISTRIBUTION OF FSB BENEFICIARIES BY CHARACTERISTIC BY STATE, CALENDAR YEAR 1975

Characteristic	California	Missouri	Nevada	New York	Wisconsin
Total number	330,540	39,117	10,201	154,000	31,641
Total percent	100	100	100	100	100
Sex:					
Male	57	54	60	61	58
Female	43	46	40	39	42
Race:					
White	79	80	100	84	94
Other than white	21	20	(1)	16	6
Age:					
Under 22	7	12	7	11	13
22 to 44	60	58	50	53	54
45 to 64	26	26	35	29	27
65 and over	7	4	8	7	6
Industry:					
Mining	(1)	(1)	1	(1)	(1)
Contract and construction	9	9	16	13	12
Manufacturing	35	44	6	39	38
Public utilities	4	4	4	4	33
Wholesale/retail trade	24	24	18	22	15
Finance/insurance/real estate	5	3	5	5	2
Services	20	15	47	15	8
Occupation:					
Professional, technical, and managerial	23	6	10	11	8
Clerical and sales	21	24	24	22	16
Service	10	15	25	9	9
Agriculture/fisheries/forestry	1	1	1	1	1
Machine trades	6	9	2	----	11
Bench work	7	12	2	----	14
Structural work	13	11	18	----	17
Processing	8	3	1	----	6
Miscellaneous	11	18	19	----	18

[1] Less than 0.5 percent. Percent shown represents a total of the blue-collar occupations for which separate information was not available.

Note: Items may not add to totals due to rounding. Distributions are based on total number for whom data were available. It was assumed that missing data were distributed in the same proportion as available data. However, the following categories, which had missing data accounting for 10 percent or more of totals, should be analyzed with caution: California, occupation, 15 percent; Missouri, occupation, 29 percent.

Source: U.S. Department of Labor, Employment and Training Administration, Unemployment Insurance Service, Report MA5–143.

TABLE 7.—PERCENTAGE DISTRIBUTION OF FSB EXHAUSTEES BY CHARACTERISTIC BY STATE, CALENDAR YEAR 1975

Characteristics	California	Missouri	Nevada	New York	Wisconsin
Total number	133,209	13,639	6,483	117,659	10,242
Total percent	100	100	100	100	100
Sex:					
Male	56	51	56	54	56
Female	44	49	44	46	44
Race:					
White	86	69	100	85	93
Nonwhite	14	31	(1)	15	7
Age:					
Under 22	5	12	6	7	12
22 to 44	62	57	47	44	54
45 to 64	26	27	36	35	28
65 and over	7	4	10	14	6
Industry:					
Mining	(1)	(1)	1	(1)	(1)
Contract construction	8	9	13	10	12
Manufacturing	33	41	5	33	37
Public utilities	4	4	4	4	4
Wholesale/retail	24	24	19	25	15
Finance	5	3	5	8	2
Services	22	17	49	18	9
Occupation:					
Professional, technical, and managerial	38	6	10	13	7
Clerical, sales	18	24	25	25	17
Service	9	18	25	11	10
Agriculture	1	1	1	5	1
Machine trades	5	8	2	----------	10
Bench work	6	12	2	----------	15
Structural	9	11	14	[2] 47	17
Processing	6	3	(1)	----------	5
Miscellaneous	8	18	20	----------	1 7

[1] Less than 0.5 percent.
[2] Percent shown represents a total of the blue-collar occupations for which separate information was not available.

Note: Distributions are based on total number for whom data were available. It is assumed that missing data were distributed in the same proportions as available data. However, the following category, which had missing data accounting for 10 percent or more of totals should be analyzed with caution: Missouri, occupation, 25 percent.

Source: U.S. Department of Labor, Employment and Training Administration, Unemployment Insurance Service, Report MA 5-143.

Senator HUMPHREY. Another point in your employment cost index. For the 3 months ending in December, the employment cost index rose 1.9 compared to 1.5 percent during the 3 months ending in September. Is this difference statistically significant? In other words, does it indicate a general speeeding up of wage costs to employers?

Mr. SHISKIN. I would say so.

Again, I would like to make my usual caveat, one-quarter is better than 1 month, but I will feel more confident of my statement if the same trend continues in the next quarter. I looked at some of those figures. There were very large rises in some components.

For example, we had a big rise in hourly earnings in real estate which probably exaggerates the true situation. But my answer to your question is yes.

Senator HUMPHREY. You think it does indicate wage pressures?

Mr. SHISKIN. Yes.

Senator HUMPHREY. That gets into the area of the Consumer Price Index and the whole question of inflation. The January Consumer Price Index showed that consumer prices rose at an annual rate of around 10 percent. This increase was far higher than any monthly

increase in 1976. I think it is fair to say that that basic data for the January index was collected too early in January to reflect any pricing increases that might have resulted from the severe January weather.

Mr. SHISKIN. That is, the food data are collected early in the month. So, you are right.

Senator HUMPHREY. Do you think the January Consumer Price Index is an abberation and unusual, or do you think it portends an increase in inflation for 1977?

Mr. SHISKIN. Let me put it this way: We have been a little uneasy about the rises in the wholesale price index recently. It is nothing like 1973 or 1974, but still there is a rise of 6 percent or so every month. I expect to see a reaction in the CPI soon. It is hard to tell when it will show up.

In January, the weather was terrible, but on the other hand, you have the underlying situation. So if we have a new surge of inflation, from whatever cause, there is cause for concern.

Senator HUMPHREY. There has been the suggestion as you know that the Wage Price Stability Council be empowered to delay price increases in certain industries. Can we use the Consumer Price Index to determine which industries contribute most to inflation and is there any way to use the BLS data to determine if an industry is raising their prices more than would be justified by cost increases? Many of us come down for this delay in price but there are some very complicated factors involved.

Do you have any comments on that?

Mr. SHISKIN. Both the wholesale price and input materials price indexes can be useful in these studies. The different groups—the Wage and Price Stability Council, in fact, have been using them so I think the answer to that question is, yes, these data will be useful.

As you know, there has been a lot of criticism of the wholesale price index. Let me give you one example. We have had a lot of pressure from the Wage and Price Stability Council to expand the amount of detailed information generated from the WPI program. If we try to do the kinds of things they are talking about, and to do the things others are talking about, we estimate that in very rough terms we would need 140,000 quotations per month. They want to know what is happening to the price of finished products. They also want to know what is happening to the prices of new materials entering into the manufacture of each commodity. In order to do what they want, with manufacturing and mining alone we would probably have to expand our coverage from 10,000 quotes a month to 140,000 a month.

So my answer to you is that I think they will be helpful; they are helpful but they cannot answer one of the questions you asked me about whether price rises are justified in light of materials cost. We don't have that kind of data but we do have a program which spells out how you would have to expand the program in order to be able to answer that.

Senator HUMPHREY. Thank you.

Senator McClure.

Senator MCCLURE. You have indicated you were concerned that the WPI has a rather stable rising pricing pattern and the CPI did not exactly replicate that for the overall period.

Mr. SHISKIN. In January, as a general proposition, the CPI figures lag the WPI.

Senator MCCLURE. It has been suggested by many that the main reasons that the CPI has lagged behind the WPI is that food prices did not rise as rapidly as the other components, largely as the result of declining prices to the farmer. Do your statistics bear that out?

Mr. SHISKIN. Yes; I think the farm price situation in 1976 was overall relatively stable, but in the last 3 months, farm prices have been increasing more rapidly, 2.6 percent in December, 1.1 percent in January. It appears as Senator Humphrey said there will be another increase in February based on the Department of Agriculture's release of the other day. Those have not showed up fully at the retail level and we are not sure to what extent they will.

We had a 1-percent increase in the WPI in January and that would lead me to believe if it is passed through, it will show up in the future at the retail level.

Senator MCCLURE. I have a number of producers tell me they are glad to see that. They would like to get more for their food and see if the CPI will move up more rapidly.

Senator HUMPHREY. What you had before when you had the CPI in a sense subdued, was a reduced rate of inflation at the expense of the farm producer. When the wheat prices and beef prices were going down and pork prices were beginning to moderate, prices stabilized. Now as the prices begin somewhat to firm up, but not much, then inflation is building back in again. The manufacturer's price index really had not moderated. It continued to go up. The farmer was absorbing the blow. We farm boys can understand that.

Senator MCCLURE. You said at the expense of the farmers. I have said it a little differently. It is taken out of the hide of the farmer.

Senator HUMPHREY. You are a westerner. You have more cattle out there.

Senator MCCLURE. In your statement, Mr. Commissioner, you indicate a larger number of people are moving into involuntary shorter working hours, and that a large part of those are the result of material shortages.

Is that the result of the energy crises, the weather?

Mr. SHISKIN. We think so. In view of the problems we had last month with the weather, we asked several additional questions in our routine monthly surveys. One of the questions is, Are you working shorter hours because you did not have full-time work? We asked why, and overwhelmingly we got the answer, materials shortage, which we interpreted as fuels and related items.

Senator MCCLURE. That material shortage if it is weather induced would change relatively rapidly after the weather moderates?

Mr. SHISKIN. I believe so.

Senator MCCLURE. If it is energy related in the longer term, it might not?

Mr. SHISKIN. I think so.

Senator HUMPHREY. Just to wrap up on an area that I started. On the matter of unemployment, particularly by age, for those 16 years and over, the rate, of course, is 7.5 for the month of February 1977.

When you come to 16 to 19, it is 18.5 It has been hanging in between 19 and 18.5 for the last year. When you take the 20 to 24 years of age, it is 12 percent; 18 to 19 years, it is 17.5; 16 to 17 years, 19.8; 16 to 19 years, 18.5. I point out that the rates there are unusually high.

Now you take 25 years and over and this is the figure you have given us, Mr. Shiskin, 5.2, and then that breaks down to 25 to 54 years, 5.3; 55 years and over, 4.8. You have a pattern here which actually shows a rather healthy situation or an improved situation, I should say, in 25 years and over, looking back to October 1976, it was 5.7; November 1976, 5.6; December 1976, 5.5; January 1977, 5.1; February 1977, 5.2, so you have had basically a steady decline. When you get into the younger people, you will find while there has been some decline, it is not appreciable—October, 19 percent; November 1976, 19.2; December 1976, 19; January, 18.7; 18.5 in February. So it is a half of 1 percent difference for Febraury 1977 from October 1976, and for the men 25 years and over, October was 5.7 and it is 5.2—it is a half of 1 percent there.

The picture shows all of these large figures runnnig at 18.5, 19.8, 17 percent, 12 percent in what you call the younger group of workers in America.

Many of these young people 20 to 24 years of age are married—how long, you can't say but at least they are married. The rate of divorce among that age group is very high. I notice in California the statistics were alarmingly high, three out of four was the latest figure. That was just incredible. A 12-percent unemployment rate for all persons, men and women, 20 to 24 is social disaster in this country as well as a tremendous loss of economic productivity. That age group is supposed to be educated to a degree. Those are supposed to be vigorous, relatively more healthy at that time than during later years. We are supposed to be a nation that welcomes young people, yet in that group, 19 to 24, we have 12 percent unemployment.

I think it poses the single greatest social problem we have in this country today.

Mr. SHISKIN. May I amplify, as you have pointed out many times, in blacks, it is much larger.

Senator HUMPHREY. Yes; it is much higher in the minority groups.

Do you have any questions?

Senator MCCLURE. I have no questions.

Senator HUMPHREY. Thank you very much.

[Whereupon, at 12:13 p.m., the committee adjourned, subject to the call of the Chair.]

91-491 O - 77 - 11

EMPLOYMENT-UNEMPLOYMENT

FRIDAY, APRIL 1, 1977

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 (chairman of the committee) presiding.

Present: Representatives Bolling and Reuss.

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

OPENING STATEMENT OF REPRESENTATIVE BOLLING, CHAIRMAN

Representative BOLLING. The committee will come to order.

Mr. Shiskin, I am pleased to welcome you here once again to discuss the employment and unemployment figures for March.

The employment situation release, which we received from the Bureau of Labor Statistics early this morning, shows that the unemployment rate in March dropped to 7.3 percent, seasonally adjusted, from 7.5 percent in February. This brings the unemployment rate back to the level of January, and incidentally, back to the level which existed last May, 10 months ago.

I think we should keep this in mind as we evaluate this morning's news—that we have made no real improvement in unemployment for almost a year. Today, there are 7.1 million jobless workers, compared to 6.9 million in May. As we pointed out in this year's annual report, we are a year behind in our progress on unemployment.

On the consumer price front, the news during the past 2 months has been disturbing. In February, the CPI rose 1 percent, following a rise of 0.8 percent in January. The overall rate of increase during the past 3 months has been 9.1 percent at an annual rate, as your Consumer Price Index release for February shows.

In your statement today, I know you will discuss what happened to employment and unemployment in March. But I would appreciate having your ideas on the longer range trends that you see in both the employment and price situation, either during your statement or during the discussion period afterward.

Mr. Shiskin, the drop in unemployment in March is good news, and I hope it is part of the downward trend that has existed since November. But the 7.3-percent unemployment rate for March is still far from our economy's potential for providing our workers with the jobs they want and need. I think we should keep that perspective as we evaluate the figures.

You may proceed as 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 L. STEIN, ASSISTANT COMMISSIONER, OFFICE OF CURRENT EMPLOYMENT ANALYSIS

Mr. SHISKIN. Thank you, Mr. Chairman.

As usual, I have Mr. Stein and Mr. Layng with me. I have a brief statement which I trust you will allow me to read.

Representative BOLLING. Proceed.

Mr. SHISKIN. 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.

The labor force increased again in March by almost 400,000. Total employment increased by more than 500,000 and unemployment declined by more than 100,000.

The total unemployment rate declined to 7.3 percent, which compares with almost 8 percent last October when the economic pause came to an end. The unemployment rates for household heads, married men, full-time workers, job losers, and long-term unemployed also declined and are substantially below the levels of last fall. All these improvements are consistent with those in the weekly seasonally adjusted insured unemployment rate which has declined from 5 percent last September to 3.9 percent in the first 2 weeks in March.

All these rates are, however, still at unprecedented high levels by historical standards. Teenagers did not share in this recent improvement and their unemployment rate remained close to the high levels reached early in 1975 at the peak of the recession.

The number of discouraged workers also decreased over the quarter, particularly those discouraged because of job market factors.

Total employment rose in March by over 500,000, with almost the whole rise taking place in nonagricultural industries. Total employment has been rising vigorously in the last 5 months, on average by almost 350,000, with the most recent rise the largest. With employment rising more rapidly than the working age population, the employment-population ratio continued to advance.

The business survey showed that nonfarm payroll employment also rose by almost 500,000 in March. More than three-fourths of the 172 industries showed an increase in employment. Employment growth was exceptionally strong in contract construction and manufacturing, particularly in the durable goods sector.

The rise in manufacturing was the largest over-the-month rise since October 1972, more than 4 years ago. The average workweek for private nonfarm industries was unchanged, but manufacturing hours rose slightly, again primarily in the durable goods sector. Total private aggregate hours, the most comprehensive measure of labor activity, rose sharply to a new high. (To some extent, the improvement in employment and aggregate hours in March may be "makeup" from the bad weather and fuel shortages of the 2 previous months.)

I might also interpolate from my statement to say that there is probably some new inventory buildup in these figures as well.

Perhaps the most significant aspects of labor market performance in March were the sharp rises in aggregate hours in manufacturing, a highly cyclically-sensitive component of the corresponding total, and the decline in the number of job losers, the most cyclically-sensitive component of total unemployment.

Chairman Bolling stated in his letter of March 25 that the committee "would want to examine recent developments in the consumer price situation." In response, we have assembled various price indicators, including the Consumer Price Index (CPI), the CPI less food and energy items, several experimental diffusion indexes of consumer prices compiled at BLS, and Dun & Bradstreet data on actual and anticipated price changes of retailers.

These data clearly indicate an acceleration in the rate of increase in consumer prices in the first 2 months of this year. What is not quite so clear, however, is the significance that these recent developments have in terms of the "underlying" rate of inflation, that is, the likely course of price movements in, say, the next 6 to 12 months. A significant part of the acceleration occurred in the food sector, major components of which were affected by adverse weather conditions.

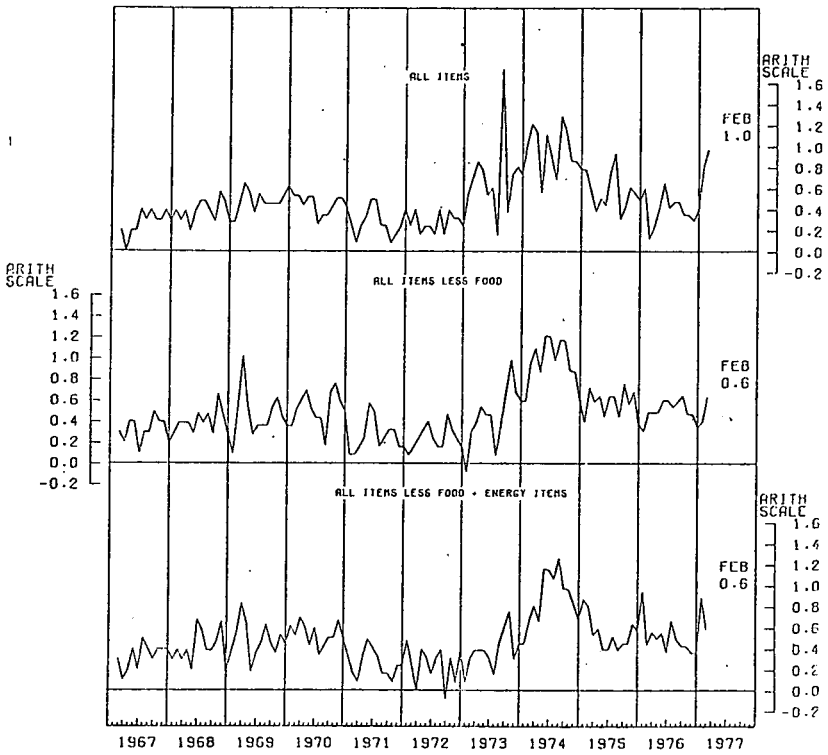
If food is excluded from the overall CPI, the acceleration in consumer prices during the past few months is still evident, but whether this acceleration means that a change in the underlying trend has taken place is less clear. If we go further and exclude energy from the overall index, the acceleration is perhaps even less clear. It is very difficult to identify changes in trend on the basis of only 2 months' data (see attached chart).

It may be of interest to note in this context that in recent months, the rates of increase in consumer prices have been edging up in most of the countries with which we trade—Canada, Japan, West Germany, Italy, and the United Kingdom, with France perhaps an exception.

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

[The chart and table referred to, together with the press release, follow:]

CHART 1.—Consumer price index and selected components, seasonally adjusted 1-month span, 1967–77.



Source: Bureau of Labor Statistics, U.S. Department of Labor, Apr. 1, 1977.

TABLE 1.—UNEMPLOYMENT RATE BY ALTERNATE SEASONAL ADJUSTMENT METHODS

Month	Unadjusted rate	Official adjusted rate [2]	Alternative age-sex procedures: All multiplicative [3]	All additive [4]	Year ahead [5]	Concurrent [6]	Stable 1967–73 [7]	Other aggregations (all multiplicative): Duration [8]	Reasons [9]	Total [10]	Residual [11]	Direct adjustment rate [12]	Composite [13]	Range (cols. 2–13)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1976														
January	8.8	7.8	7.8	8.0	NA	NA	8.1	8.0	7.8	7.8	8.2	7.9	7.9	0.4
February	8.7	7.6	7.6	7.8	NA	NA	7.7	7.5	7.5	7.6	7.7	7.6	7.6	.3
March	8.1	7.5	7.5	7.6	NA	NA	7.7	7.3	7.4	7.5	7.6	7.5	7.5	.4
April	7.4	7.5	7.5	7.5	NA	NA	7.6	7.4	7.5	7.5	7.4	7.5	7.5	.2
May	6.7	7.3	7.4	7.2	NA	NA	7.5	7.2	7.4	7.5	7.2	7.5	7.4	.3
June	8.0	7.6	7.5	7.5	NA	NA	7.5	7.5	7.5	7.3	7.4	7.3	7.5	.3
July	7.8	7.8	7.8	7.7	NA	NA	7.7	7.6	7.8	7.7	7.7	7.7	7.7	.2
August	7.6	7.9	7.9	7.8	NA	NA	7.7	8.0	8.0	7.9	7.8	8.0	7.9	.3
September	7.4	7.8	7.8	7.7	NA	NA	7.6	8.0	7.9	7.8	7.8	7.8	7.8	.4
October	7.2	7.9	8.0	7.8	NA	NA	7.7	8.0	7.9	8.0	7.9	7.9	7.9	.3
November	7.4	8.0	8.0	7.8	NA	NA	7.8	8.1	8.0	8.0	7.8	8.0	7.9	.3
December	7.4	7.8	7.9	7.8	NA	NA	7.9	7.9	7.8	7.8	7.8	7.9	7.8	.1

See footnotes at end of table.

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

Month	Unadjusted rate [1]	Official adjusted rate [2]	Alternative age-sex procedures					Other aggregations (all multiplicative)				Direct adjustment rate [12]	Composite [13]	Range (cols. 2–13)
			All multiplicative [3]	All additive [4]	Year ahead [5]	Concurrent [6]	Stable 1967–73 [7]	Duration [8]	Reasons [9]	Total [10]	Residual [11]			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1977														
January	8.3	7.3	7.3	7.5	7.3	7.4	7.5	7.4	7.4	7.4	7.6	7.4	7.4	.3
February	8.5	7.5	7.5	7.7	7.5	7.5	7.6	7.4	7.4	7.5	7.6	7.5	7.5	.3
March	7.9	7.3	7.3	7.4	7.3	7.3	7.5	7.3	7.3	7.3	7.3	7.4	7.3	.2
April														
May														
June														
July														
August														
September														
October														
November														
December														

[1] Unemployment rate not seasonally adjusted.

[2] Official rate. This is the published seasonally adjusted rate. Each of 4 unemployed age-sex components—males and females, 16–19 and 20 yr of age and over—is independently adjusted. The teenage unemployment 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, 113.8; February, 113.7; March, 108.1; April, 98.7; May, 92.2; June, 105.2; July, 100.2; August, 96.1; September, 94.6; October, 90.1; November, 93.0; December, 93.8.

[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] 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 ½ 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 reseasonally adjusted incorporating the experience through the current month, i.e., the rate for March 1976 is based on adjustment of data for the period, January 1967–March 1976.

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

[8] 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 reentrants.

[10] Unemployment and labor force levels adjusted directly.

[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.

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

Source: U.S. Department of Labor, Bureau of Labor Statistics, Apr. 1, 1977.

News United States Department of Labor

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TRANSMISSION OF MATERIAL IN THIS RELEASE IS EMBARGOED UNTIL 10:00 A. M. (EST), FRIDAY APRIL 1, 1977

THE EMPLOYMENT SITUATION: MARCH 1977

Employment continued to increase in March and unemployment declined slightly, it was reported today by the Bureau of Labor Statistics of the U. S. Department of Labor. The unemployment rate was 7.3 percent, a return to the January level after rising to 7.5 percent in February as a result of weather-related energy shortages. All of the unemployment reduction took place among adult men.

Total employment--as measured by the monthly survey of households--rose by more than half a million in March to 89.5 million. This sustained the marked expansion that has totaled 1.7 million persons since last October.

Nonfarm payroll employment--as measured by the monthly survey of establishments--advanced by nearly 500,000 in March to 81.3 million. The payroll total has also showed a resurgence over the past 5 months with a rise of 1.5 million jobs.

Unemployment

The number of persons unemployed edged down in March to 7.1 million, seasonally adjusted. The over-the-month decline occurred entirely among persons who had lost their last job, including a large number who were recalled from layoff. Total unemployment has declined by nearly 600,000--500,000 adult men and 100,000 adult women--since its 1976 peak level reached last November, with all of the improvement taking place among job losers. (See tables A-1 and A-5.)

The overall unemployment rate declined to 7.3 percent, the same as in January; the rate had risen to 7.5 percent in February as a result of energy-related problems. The rate had been 8.0 percent last November. The over-the-month reduction took place among adult men, as their jobless rate fell 0.4 percentage point to 5.4 percent. This movement was accompanied by unemployment decreases among male household heads, married

men, full-time workers, and manufacturing and construction workers. Jobless rates for most other demographic groups--for example, teenagers (18.8 percent) and adult women (7.2 percent)--showed little change in March. (See table A-2.)

The average (mean) duration of unemployment fell for the second straight month. The 2-month drop totaled one and a half weeks, bringing the March level to 14.0 weeks, the lowest point in nearly 2 years. The February-March change resulted from a sizeable decline in the number of long-term unemployed--persons who have been seeking work for 15 weeks or more--combined with an increase in the number of those who have been unemployed less than 5 weeks. (See table A-4.)

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

Selected categories	Quarterly averages					Monthly data		
	1976				1977	1977		
	I	II	III	IV	I	Jan.	Feb.	Mar.
HOUSEHOLD DATA	Thousands of persons							
Civilian labor force	93,644	94,544	95,261	95,711	96,067	95,516	96,145	96,539
Total employment	86,514	87,501	87,804	88,133	88,998	88,558	88,962	89,475
Unemployment	7,130	7,043	7,457	7,578	7,068	6,958	7,183	7,064
Not in labor force	59,327	59,032	58,963	59,132	59,379	59,732	59,302	59,104
Discouraged workers	940	903	827	992	929	N.A.	N.A.	N.A.
	Percent of labor force							
Unemployment rates:								
All workers	7.6	7.4	7.8	7.9	7.4	7.3	7.5	7.3
Adult men	5.8	5.7	6.0	6.2	5.6	5.6	5.8	5.4
Adult women	7.4	7.1	7.7	7.6	7.1	6.9	7.2	7.2
Teenagers	19.2	18.8	18.8	19.1	18.6	18.7	18.5	18.8
White	6.9	6.8	7.1	7.2	6.7	6.7	6.7	6.6
Black and other	13.1	12.9	13.1	13.4	12.8	12.5	13.1	12.7
Household heads	5.0	4.9	5.3	5.3	4.8	4.8	4.9	4.6
Full-time workers	7.1	7.0	7.4	7.5	6.8	6.7	6.9	6.7
ESTABLISHMENT DATA	Thousands of jobs							
Nonfarm payroll employment	78,674	79,333	79,683	80,090	80,894p	80,561	80,816p	81,304p
Goods-producing industries	23,142	23,380	23,372	23,440	23,741p	23,589	23,680p	23,955p
Service-producing industries	55,532	55,953	56,311	56,650	57,152p	56,972	57,136p	57,349p
	Hours of work							
Average weekly hours:								
Total private nonfarm	36.3	36.2	36.1	36.2	36.1p	35.8	36.2p	36.2p
Manufacturing	40.3	40.0	39.9	40.0	40.0p	39.5	40.2p	40.3p
Manufacturing overtime	3.1	3.0	3.0	3.1	3.3p	3.2	3.3p	3.3p

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

In line with the reduction in unemployment, there was also a decline in the number of persons in nonagricultural industries who were working part time involuntarily (those on part-time schedules for economic reasons); their number decreased by 160,000 to 3.3 million. (See table A-3.)

Total Employment and the Labor Force

Total employment rose for the fifth month in a row, advancing by more than 500,000 in March to 89.5 million, seasonally adjusted. As has been the case in recent months, all of this increase occurred in nonagricultural industries. Adult women accounted for 270,000 of the total increase, while adult men rose by 180,000. Over the past year, total employment has risen by 2.6 million, with two-thirds of it occurring since last October.

The proportion of the total noninstitutional population that is employed--the employment-population ratio--was 56.7 percent in March, the highest percentage in 29 months. However, the ratio was still somewhat below the alltime high of 57.4 percent last reached in March 1974. (See table A-1.)

The civilian labor force rose by nearly 400,000 for the second consecutive large monthly advance. The labor force has grown by more than a million workers since January and by 2.7 million since last March; adult women accounted for more than half of the growth during each period.

The civilian labor force participation rate--the proportion of the civilian noninstitutional population either working or looking for work--was at a new high of 62.0 percent in March, well above the year-earlier level of 61.3 percent. (See table A-1.)

Discouraged Workers

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

Consistent with the decline in unemployment in the first quarter, the number of discouraged workers also decreased, after rising between the third and fourth quarters of 1976. There was an average of 930,000 discouraged workers for the quarter, about the same level that had prevailed a year earlier. About 640,000 (or seventy percent) of the discouraged workers indicated job-market factors as their reason for not seeking work. (See table A-8.)

Industry Payroll Employment

Total nonagricultural payroll employment also increased for the fifth consecutive month, rising by 490,000 in March to 81.3 million, seasonally adjusted. Over-the-month gains occurred in more than three-quarters of the industries that comprise the BLS diffusion index of nonagricultural payroll employment. Over the past year, payroll employment has grown by 2.3 million, almost two-thirds of which has taken place since October. (See tables B-1 and B-6.)

Employment increases were recorded in all eight major industry divisions. The largest gain occurred in manufacturing, where 165,000 jobs were added to payrolls. Four-fifths of this advance took place in the durable goods sector. Increases in transportation equipment (40,000) and about 20,000 each in electrical equipment and fabricated metal products accounted for much of the March growth in durables.

Elsewhere in the goods-producing industries, contract construction employment, which had been affected by bad weather conditions in January, increased for the second straight month, rising by 95,000 in March. At 3.7 million, employment in this industry was 325,000 above its June 1975 recession low. There was also an over-the-month gain in mining--15,000.

In the service-producing sector, strong gains took place in wholesale and retail trade (90,000) and services (55,000), while there were increases ranging from 20,000 to 25,000 in transportation and public utilities; finance, insurance, and real estate; and government.

Hours

The average workweek for production or nonsupervisory workers on private nonagricultural payrolls was 36.2 hours in March, seasonally adjusted, unchanged from the

revised February level. The manufacturing workweek edged up 0.1 hour to 40.3 hours as a result of increases in the durable goods industries. Factory overtime held steady over the month at 3.3 hours. (See table B-2.)

Despite the stability in the average workweek, the index of aggregate hours of private nonagricultural production or nonsupervisory workers rose to an alltime high of 115.0 in March (1967=100), reflecting the sharp increase in employment. The index was 3.5 percent above its year-ago level. The factory index rose sharply for the second straight month to a level (97.2) that was 3.1 percent above March 1976. (See table B-5.)

Hourly and Weekly Earnings

Both average hourly earnings and average weekly earnings of private nonagricultural production or nonsupervisory workers increased 0.6 percent in March, seasonally adjusted, and each was 7.3 percent higher than a year earlier.

Before adjustment for seasonality, average hourly earnings were $5.11, up 2 cents from February. Hourly earnings were 35 cents above the March 1976 level. Average weekly earnings rose 72 cents over the month to $183.45 and have risen $12.57 since March a year ago. (See table B-3.)

The Hourly Earnings Index

The Hourly Earnings Index--earnings adjusted for overtime in manufacturing, seasonality, and the effects of changes in the proportion of workers in high-wage and low-wage industries--was 193.9 (1967=100) in March, 0.4 percent higher than in February. The index was 7.1 percent above March a year ago. During the 12-month period ended in February, the Hourly Earnings Index in dollars of constant purchasing power rose 1.1 percent. (See table B-4.)

Explanatory Note

This release presents and analyzes statistics from two major surveys. Data on labor force, total employment, and unemployment (A tables) are derived from the Current Population Survey, a sample survey of households conducted by the Bureau of the Census for the Bureau of Labor Statistics. The sample consists of about 47,000 households selected to represent the U.S. civilian noninstitutional population 16 years of age and over.

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

Comparability of household and payroll employment statistics

Employment data from the household and payroll surveys differ in several basic respects. The household survey provides information on the labor force activity of the entire population 16 years of age and over, without duplication, since each person is classified as employed, unemployed, or not in the labor force.

The payroll survey relates only to paid wage and salary employees (regardless of age) on the payrolls of nonagricultural establishments. The household survey counts employed persons in both agriculture and in nonagricultural industries and, in addition to wage and salary workers (including private household workers), includes the self-employed, unpaid family workers, and persons "with a job but not at work" and not paid for the period absent. Persons who worked at more than one job during the survey week or otherwise appear on more than one payroll are counted more than once in the establishment survey. Such persons are counted only once in the household survey and are classified in the job at which they worked the greatest number of hours.

Unemployment

To be classified in the household survey as unemployed an individual must: (1) have been without a job during the survey week, (2) have made specific efforts to find employment sometime during the prior 4 weeks, and (3) be presently available for work. In addition, persons on layoff and those waiting to begin a new job (within 30 days) are also classified as unemployed. The unemployed total includes all persons who satisfactorily meet the above criteria, regardless of their eligibility for unemployment insurance benefits or any kind of public assistance. The unemployment rate represents the unemployed as a proportion of the civilian labor force (the employed and unemployed combined).

To meet the extensive needs of data users, the Bureau regularly publishes data on a wide variety of labor market indicators—see, for example, the demographic, occupational, and industry detail in tables A-2 and A-3. A special grouping of seven unemployment measures is set forth in table A-7. Identified by the symbols U-1 through U-7, these measures represent a range of possible definitions of unemployment and of the labor force, extending from the most restrictive (U-1) to the most comprehensive (U-7). The official rate of unemployment appears as U-5.

Seasonal adjustment

Nearly all economic phenomena are affected to some degree by seasonal variations. These are recurring, predictable events which are repeated more or less regularly each year—changes in weather, school vacations, major holidays, industry production schedules, etc. The cumulative effects of these events are often large. For example, on average over the year, they explain about 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. At the beginning of each year, current seasonal adjustment factors for unemployment and other labor force series are calculated taking into account the prior year's experience, and revised data are introduced in the release containing January data.

All seasonally-adjusted civilian labor force and unemployment rate statistics, as well as the major employment and unemployment estimates, are computed by aggregating independently adjusted series. The official unemployment rate for all civilian workers is derived by dividing the estimate for total unemployment (the sum of four seasonally-adjusted age-sex components) by the civilian labor force (the sum of 12 seasonally-adjusted age-sex components). Several alternative methods for seasonally adjusting the overall unemployment rate are also used on a regular basis in order to illustrate the degree of uncertainty that arises because of the seasonal adjustment procedure. Among these alternative methods are five different age-sex adjustments,

including a concurrent adjustment and one based on stable factors and four based on other unemployment aggregations. Alternative rates for 1976 are shown in the table at the end of this note. (Current alternative rates and an explanation of the methods may be obtained from BLS upon request.)

For establishment data, the seasonally-adjusted series for all employees, production workers, average weekly hours, and average hourly earnings are adjusted by aggregating the seasonally-adjusted data from the respective component series. These data are revised annually, usually in conjunction with the annual benchmark adjustments (comprehensive counts of employment).

Sampling variability

Both the household and establishment survey statistics are subject to sampling error, which should be taken into account in evaluating the levels of a series as well as changes over time. Because the household survey is based upon a probability sample, the results may differ from the figures that would be obtained if it were possible to take a complete census using the same questionnaire and procedures. The standard error is the measure of sampling variability, that is, the variations that might occur by chance because only a sample of the population is surveyed. Tables A-E in the "Explanatory Notes" of *Employment and Earnings* provide standard errors for unemployment and other labor force categories.

Although the relatively large size of the monthly establishment survey assures a high degree of accuracy, the estimates derived from it also may differ from the figures obtained if a complete census using the same schedules and procedures were possible. Moreover, since the estimating procedures employ the previous month's level as the base in computing the current month's level of employment (link-relative technique), sampling and response errors may accumulate over several months. To remove this accumulated error, the employment estimates are adjusted to new benchmarks, usually annually. In addition to taking account of sampling and response errors, the benchmark revision adjusts the estimates for changes in the industrial classification of individual establishments. Employment estimates are currently projected from March 1974 benchmark levels. Measures of reliability for employment estimates are provided in the "Explanatory Notes" of *Employment and Earnings*, as are the actual amounts of revisions due to benchmark adjustments (tables G-L).

Unemployment rate by alternative seasonal adjustment methods

Month	Unadjusted rate	Official Adjusted Rate	Alternative age-sex procedures					Other aggregations (all multiplicative)				Direct adjustment	Composite	Range (cols. 2-13)
			All multiplicative	All additive	Year-ahead	Concurrent	Stable 1967-73	Duration	Reasons	Total	Residual			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1976														
January	8.8	7.8	7.8	8.0	7.8	7.8	8.1	8.0	7.8	7.8	8.2	7.9	7.9	0.4
February	8.7	7.6	7.6	7.8	7.6	7.6	7.7	7.5	7.5	7.6	7.7	7.6	7.6	.3
March	8.1	7.5	7.5	7.6	7.5	7.5	7.7	7.3	7.4	7.5	7.8	7.5	7.5	.4
April	7.4	7.5	7.5	7.5	7.4	7.4	7.6	7.4	7.5	7.5	7.4	7.5	7.5	.2
May	6.7	7.3	7.4	7.2	7.2	7.2	7.5	7.2	7.4	7.5	7.2	7.5	7.3	.3
June	8.0	7.6	7.5	7.5	7.5	7.6	7.5	7.5	7.5	7.3	7.4	7.3	7.5	.3
July	7.8	7.8	7.8	7.7	7.8	7.8	7.7	7.6	7.8	7.7	7.7	7.7	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	8.0	7.9	.3
September	7.4	7.8	7.8	7.7	7.8	7.8	7.6	8.0	7.9	7.8	7.8	7.8	7.8	.4
October	7.2	7.9	8.0	7.8	7.9	7.9	7.7	8.0	7.9	8.0	7.9	7.9	7.9	.3
November	7.4	8.0	8.0	7.8	8.1	8.0	7.8	8.1	8.0	8.0	7.8	8.0	8.0	.3
December	7.4	7.8	7.9	7.8	7.9	7.8	7.9	7.9	7.8	7.8	7.8	7.9	7.8	.1

HOUSEHOLD DATA

Table A-1. Employment status of the noninstitutional population

[Numbers in thousands]

Employment status	Not seasonally adjusted			Seasonally adjusted					
	Mar. 1976	Feb. 1977	Mar. 1977	Mar. 1976	Nov. 1976	Dec. 1976	Jan. 1977	Feb. 1977	Mar. 1977
TOTAL									
Total noninstitutional population[1]	155,325	157,584	157,782	155,325	157,096	157,176	157,381	157,584	157,782
Armed Forces[1]	2,147	2,137	2,138	2,147	2,149	2,146	2,133	2,137	2,138
Civilian noninstitutional population[1]	153,178	155,447	155,643	153,178	154,857	155,031	155,248	155,447	155,643
Civilian labor force	93,112	95,340	95,771	93,862	95,871	95,960	95,516	96,145	96,539
Participation rate	60.8	61.3	61.5	61.3	61.9	61.9	61.5	61.9	62.0
Employed	85,588	87,231	88,215	86,845	88,220	88,441	88,558	88,962	89,475
Employment-population ratio[2]	55.1	55.4	55.9	55.9	56.2	56.3	56.3	56.5	56.7
Agriculture	2,897	2,709	2,804	3,215	3,248	3,257	3,090	3,090	3,116
Nonagricultural industries	82,691	84,522	85,411	83,630	84,972	85,184	85,468	85,872	86,359
Unemployed	7,525	8,109	7,556	7,017	7,651	7,519	6,958	7,183	7,064
Unemployment rate	8.1	8.5	7.9	7.5	8.0	7.8	7.3	7.5	7.3
Not in labor force	60,065	60,106	59,872	59,316	58,986	59,071	59,732	59,302	59,104
Men, 20 years and over									
Total noninstitutional population[1]	65,920	67,025	67,114	65,920	66,699	66,835	66,930	67,025	67,114
Civilian noninstitutional population[1]	64,230	65,342	65,423	64,230	65,001	65,140	65,250	65,342	65,423
Civilian labor force	50,945	51,940	51,925	51,075	52,066	52,078	51,842	52,092	52,061
Participation rate	79.3	79.5	79.4	79.5	80.1	79.9	79.5	79.7	79.6
Employed	47,525	48,192	48,599	48,201	48,773	48,859	48,961	49,091	49,267
Employment-population ratio[2]	72.1	71.9	72.4	73.1	73.1	73.1	73.2	73.2	73.4
Agriculture	2,202	2,081	2,106	2,309	2,283	2,273	2,209	2,230	2,208
Nonagricultural industries	45,322	46,111	46,494	45,892	46,490	46,586	46,752	46,861	47,059
Unemployed	3,421	3,748	3,325	2,874	3,293	3,219	2,881	3,001	2,794
Unemployment rate	6.7	7.2	6.4	5.6	6.3	6.2	5.6	5.8	5.4
Not in labor force	13,285	13,402	13,498	13,155	12,935	13,062	13,408	13,250	13,362
Women, 20 years and over									
Total noninstitutional population[1]	72,640	73,746	73,852	72,640	73,491	73,535	73,642	73,746	73,852
Civilian noninstitutional population[1]	72,561	73,654	73,757	72,561	73,401	73,445	73,550	73,654	73,757
Civilian labor force	33,997	35,159	35,433	33,858	34,848	34,938	34,740	34,982	35,295
Participation rate	46.9	47.7	48.0	46.7	47.5	47.6	47.2	47.5	47.9
Employed	31,514	32,434	32,850	31,414	32,208	32,340	32,331	32,477	32,750
Employment-population ratio[2]	43.4	44.0	44.5	43.2	43.9	44.0	43.9	44.0	44.3
Agriculture	372	379	402	458	558	573	488	485	496
Nonagricultural industries	31,142	32,056	32,448	30,956	31,650	31,767	31,843	31,992	32,254
Unemployed	2,482	2,725	2,583	2,444	2,640	2,598	2,409	2,505	2,545
Unemployment rate	7.3	7.7	7.3	7.2	7.6	7.4	6.9	7.2	7.2
Not in labor force	38,564	38,495	38,323	38,703	38,553	38,507	38,810	38,672	38,462
Both sexes, 16-19 years									
Total noninstitutional population[1]	16,765	16,813	16,816	16,765	16,816	16,806	16,810	16,813	16,816
Civilian noninstitutional population[1]	16,387	16,451	16,464	16,387	16,455	16,446	16,448	16,451	16,464
Civilian labor force	8,170	8,241	8,414	8,929	8,957	8,944	8,934	9,071	9,181
Participation rate	49.9	50.1	51.1	54.5	54.4	54.4	54.3	55.1	55.8
Employed	6,549	6,605	6,766	7,230	7,239	7,242	7,266	7,394	7,458
Employment-population ratio[2]	39.1	39.3	40.2	43.1	43.0	43.1	43.2	44.0	44.4
Agriculture	323	249	297	448	407	411	393	375	412
Nonagricultural industries	6,226	6,356	6,469	6,782	6,832	6,831	6,873	7,019	7,046
Unemployed	1,621	1,636	1,648	1,699	1,718	1,702	1,668	1,677	1,725
Unemployment rate	19.8	19.9	19.6	19.0	19.2	19.0	18.7	18.5	18.8
Not in labor force	8,216	8,210	8,050	7,458	7,498	7,502	7,514	7,380	7,281
WHITE									
Total noninstitutional population[1]	136,778	138,575	138,732	136,778	138,117	138,253	138,415	138,575	138,732
Civilian noninstitutional population[1]	134,987	136,810	136,972	134,987	136,336	136,475	136,654	136,810	136,972
Civilian labor force	82,426	84,368	84,792	83,071	84,816	84,854	84,616	85,086	85,482
Participation rate	61.1	61.7	61.9	61.5	62.2	62.2	61.9	62.2	62.4
Employed	76,300	77,793	78,685	77,412	78,647	78,828	78,923	79,365	79,832
Employment-population ratio[2]	55.8	56.1	56.7	56.6	56.9	57.0	57.0	57.3	57.5
Unemployed	6,126	6,574	6,107	5,659	6,169	6,026	5,693	5,721	5,650
Unemployment rate	7.4	7.8	7.2	6.8	7.3	7.1	6.7	6.7	6.6
Not in labor force	52,561	52,442	52,180	51,916	51,520	51,621	52,038	51,724	51,490
BLACK AND OTHER									
Total noninstitutional population[1]	18,547	19,009	19,050	18,547	18,889	18,923	18,966	19,009	19,050
Civilian noninstitutional population[1]	18,191	18,637	18,672	18,191	18,520	18,555	18,594	18,637	18,672
Civilian labor force	10,687	10,973	10,979	10,812	11,114	11,109	11,030	11,163	11,104
Participation rate	58.7	58.9	58.8	59.4	60.0	59.9	59.3	59.9	59.5
Employed	9,288	9,438	9,530	9,453	9,618	9,623	9,648	9,697	9,690
Employment-population ratio[2]	50.1	49.7	50.0	51.0	50.9	50.9	50.9	51.0	50.9
Unemployed	1,399	1,535	1,449	1,359	1,496	1,486	1,382	1,466	1,414
Unemployment rate	13.1	14.0	13.2	12.6	13.5	13.4	12.5	13.1	12.7
Not in labor force	7,504	7,664	7,692	7,379	7,406	7,446	7,564	7,474	7,568

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

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

Table A-2. Major unemployment indicators, seasonally adjusted

Selected categories	Number of unemployed persons (in thousands)		Unemployment rates					
	Mar. 1976	Mar. 1977	Mar. 1976	Nov. 1976	Dec. 1976	Jan. 1977	Feb. 1977	Mar. 1977
Total, 16 years and over	7,017	7,064	7.5	8.0	7.8	7.3	7.5	7.3
Men, 20 years and over	2,874	2,794	5.6	6.3	6.2	5.6	5.8	5.4
Women, 20 years and over	2,444	2,545	7.2	7.6	7.4	6.9	7.2	7.2
Both sexes, 16-19 years	1,699	1,725	19.0	19.2	19.0	18.7	18.5	18.8
White, total	5,659	5,650	6.8	7.3	7.1	6.7	6.7	6.6
Men, 20 years and over	2,367	2,285	5.1	5.7	5.5	5.0	5.2	4.9
Women, 20 years and over	1,951	1,984	6.7	7.0	6.8	6.3	6.4	6.5
Both sexes, 16-19 years	1,361	1,381	17.1	17.2	17.2	18.1	16.3	16.6
Black and other, total	1,359	1,414	12.6	13.5	13.4	12.5	13.1	12.7
Men, 20 years and over	533	515	10.2	11.6	11.3	10.2	9.9	9.4
Women, 20 years and over	482	549	10.5	11.0	11.5	10.8	12.4	11.6
Both sexes, 16-19 years	344	350	36.0	36.5	34.8	36.1	37.2	40.1
Household heads, total	2,659	2,524	5.0	5.3	5.1	4.8	4.9	4.6
Men	2,042	1,897	4.5	5.0	4.8	4.3	4.5	4.2
With relatives	1,623	1,488	4.0	4.5	4.3	3.8	4.0	3.7
Without relatives	419	409	8.8	9.0	8.4	8.2	8.2	7.8
Women	623	642	7.3	7.4	7.6	7.0	7.1	7.2
With relatives	392	411	9.5	9.8	10.2	9.0	9.4	9.6
Without relatives	231	231	5.2	5.2	5.1	5.1	4.9	5.0
Married men, spouse present	1,632	1,490	4.1	4.5	4.3	3.8	4.1	3.7
Married women, spouse present	1,459	1,514	6.8	7.2	7.0	6.5	6.7	6.7
Full-time workers	5,637	5,468	7.0	7.6	7.5	6.7	6.9	6.7
Part-time workers	1,384	1,606	10.2	10.5	9.8	10.2	10.7	11.1
Unemployed 15 weeks and over[1]	2,325	1,923	2.5	2.6	2.6	2.4	2.3	2.0
Labor force time lost[2]	—	—	8.1	8.6	8.4	8.0	7.9	7.8
OCCUPATION[3]								
White-collar workers	2,087	2,191	4.6	4.7	4.5	4.5	4.6	4.7
Professional and technical	473	430	3.5	3.4	3.3	3.3	3.3	3.1
Managers and administrators, except farm	279	334	2.9	3.1	3.1	3.0	2.8	3.4
Sales workers	287	325	5.0	5.7	5.0	5.7	5.6	5.5
Clerical workers	1,048	1,102	6.3	6.3	6.1	6.0	6.4	6.5
Blue-collar workers	2,883	2,729	9.1	9.7	9.6	8.4	8.7	8.4
Craft and kindred workers	805	750	6.7	7.0	7.0	6.1	6.5	6.0
Operatives, except transport	1,157	1,075	10.2	11.3	11.0	9.2	9.6	9.2
Transport equipment operatives	267	257	7.6	8.2	8.1	7.2	7.7	6.9
Nonfarm laborers	654	645	13.2	13.5	13.9	12.9	12.8	13.2
Service workers	1,107	1,051	8.6	9.3	9.0	8.6	8.4	7.9
Farm workers	130	151	4.5	5.1	6.1	4.8	6.7	5.4
INDUSTRY[3]								
Nonagricultural private wage and salary workers[4]	5,185	5,155	7.7	8.2	7.9	7.4	7.6	7.4
Construction	694	647	15.9	15.4	14.1	14.9	15.2	14.2
Manufacturing	1,545	1,436	7.3	8.2	8.2	6.9	7.1	6.6
Durable goods	967	788	7.5	7.7	8.0	6.5	7.0	6.1
Nondurable goods	598	648	7.1	8.9	8.6	7.4	7.3	7.3
Transportation and public utilities	221	252	4.6	5.7	5.2	4.7	4.6	5.1
Wholesale and retail trade	1,483	1,505	8.6	9.0	8.2	8.4	8.7	8.4
Finance and service industries	1,204	1,280	6.2	6.8	6.8	6.2	6.2	6.4
Government workers	694	629	4.4	4.3	4.4	4.3	4.5	4.0
Agricultural wage and salary workers	167	195	11.2	13.2	14.0	12.6	13.4	13.2
VETERAN STATUS								
Male Vietnam-era veterans:[5]								
20 to 34 years	448	441	7.2	8.5	8.3	7.6	7.0	6.8
20 to 24 years	152	162	16.1	16.8	16.8	16.8	15.8	17.1
25 to 29 years	211	193	6.6	8.6	8.7	7.9	6.7	6.6
30 to 34 years	85	86	4.1	5.0	4.7	3.6	3.9	3.3
Male nonveterans:								
20 to 34 years	1,210	1,234	8.2	9.3	9.1	8.2	8.6	7.9
20 to 24 years	754	721	11.4	12.1	12.4	10.6	11.6	10.4
25 to 29 years	278	353	6.1	7.9	7.2	7.7	7.3	7.0
30 to 34 years	178	160	4.9	5.8	5.4	4.2	4.8	4.3

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

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

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

[4] Includes mining, not shown separately.

[5] Vietnam-era veterans are those who served between August 5, 1964, and April 30, 1975.

Table A-3. Selected employment indicators

[Numbers in thousands]

Selected categories	Not seasonally adjusted		Seasonally adjusted					
	Mar. 1976	Mar. 1977	Mar. 1976	Nov. 1976	Dec. 1976	Jan. 1977	Feb. 1977	Mar. 1977
CHARACTERISTICS								
Total employed, 16 years and over	85,588	88,215	86,845	88,220	88,441	88,558	88,962	89,475
Men	50,981	52,180	52,078	52,643	52,799	52,918	53,046	53,270
Women	34,606	36,035	34,767	35,577	35,642	35,640	35,916	36,205
Household heads	50,484	51,502	50,948	51,356	51,525	51,710	51,729	51,970
Married men, spouse present	37,706	37,873	38,134	37,895	37,998	38,195	38,159	38,294
Married women, spouse present	20,061	20,942	20,084	20,482	20,498	20,511	20,756	20,963
OCCUPATION								
White-collar workers	43,493	44,621	43,369	44,297	44,648	44,521	44,451	44,495
Professional and technical	13,455	13,721	13,182	13,597	13,544	13,444	13,408	13,439
Managers and administrators, except farm	9,216	9,476	9,279	9,491	9,564	9,613	9,502	9,543
Sales workers	5,328	5,544	5,401	5,597	5,815	5,633	5,815	5,617
Clerical workers	15,494	15,880	15,507	15,612	15,725	15,831	15,726	15,896
Blue-collar workers	27,775	28,911	28,853	29,001	29,150	29,636	29,917	29,944
Craft and kindred workers	10,842	11,393	11,139	11,353	11,302	11,626	11,668	11,709
Operatives, except transport	9,794	10,193	10,159	9,970	10,231	10,341	10,351	10,574
Transport equipment operatives	3,173	3,410	3,245	3,238	3,283	3,358	3,448	3,487
Nonfarm laborers	3,965	3,915	4,310	4,420	4,334	4,309	4,450	4,255
Service workers	11,830	12,288	11,810	12,026	11,880	11,874	12,017	12,272
Farm workers	2,490	2,395	2,758	2,743	2,791	2,624	2,663	2,652
MAJOR INDUSTRY AND CLASS OF WORKER								
Agriculture:								
Wage and salary workers	1,162	1,123	1,327	1,285	1,380	1,246	1,280	1,282
Self-employed workers	1,510	1,442	1,585	1,627	1,530	1,490	1,511	1,513
Unpaid family workers	225	240	299	362	340	354	338	319
Nonagricultural industries:								
Wage and salary workers	76,648	79,004	77,470	78,766	78,957	79,205	79,520	79,869
Government	15,265	15,251	14,939	15,065	14,967	15,013	14,913	14,923
Private industries	61,383	63,753	62,531	63,721	63,990	64,192	64,607	64,946
Private households	1,292	1,287	1,319	1,448	1,384	1,391	1,317	1,313
Other industries	60,091	62,466	61,212	62,273	62,606	62,801	63,290	63,633
Self-employed workers	5,544	5,812	5,647	5,771	5,798	5,853	5,854	5,919
Unpaid family workers	498	594	450	449	460	419	516	536
PERSONS AT WORK [1]								
Nonagricultural industries	78,933	81,986	78,319	79,940	80,369	79,832	80,837	81,330
Full-time schedules	64,264	66,392	64,517	65,385	65,846	65,700	66,144	66,659
Part time for economic reasons	3,123	3,219	3,173	3,545	3,454	3,320	3,438	3,276
Usually work full time	1,276	1,256	1,231	1,289	1,234	1,112	1,335	1,212
Usually work part time	1,847	1,963	1,942	2,256	2,220	2,208	2,103	2,064
Part time for noneconomic reasons	11,546	12,375	10,629	11,010	11,069	10,812	11,255	11,395

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

Table A-4. Duration of unemployment

[Numbers in thousands]

Weeks of unemployment	Not seasonally adjusted		Seasonally adjusted					
	Mar. 1976	Mar. 1977	Mar. 1976	Nov. 1976	Dec. 1976	Jan. 1977	Feb. 1977	Mar. 1977
DURATION								
Less than 5 weeks	2,332	2,665	2,630	2,759	2,765	2,762	2,804	3,005
5 to 14 weeks	2,231	2,444	1,915	2,494	2,319	2,083	2,107	2,098
15 weeks and over	2,961	2,448	2,325	2,517	2,514	2,283	2,182	1,923
15 to 26 weeks	1,349	1,178	870	1,188	1,130	1,038	947	777
27 weeks and over	1,612	1,270	1,455	1,329	1,384	1,245	1,235	1,146
Average (mean) duration, in weeks	18.0	15.7	16.0	15.5	15.6	15.5	14.7	14.0
PERCENT DISTRIBUTION								
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 5 weeks	31.0	35.3	38.3	35.5	36.4	38.7	39.5	42.8
5 to 14 weeks	29.7	32.3	27.9	32.1	30.5	29.2	29.7	29.9
15 weeks and over	39.4	32.4	33.8	32.4	33.1	32.0	30.8	27.4
15 to 26 weeks	17.9	15.6	12.7	15.3	14.9	14.6	13.4	11.1
27 weeks and over	21.4	16.8	21.2	17.1	18.2	17.5	17.4	16.3

Table A-5. Reasons for unemployment

(Numbers in thousands)

Reasons	Not seasonally adjusted		Seasonally adjusted					
	Mar. 1976	Mar. 1977	Mar. 1976	Nov. 1976	Dec. 1976	Jan. 1977	Feb. 1977	Mar. 1977
NUMBER OF UNEMPLOYED								
Lost last job	4,252	3,850	3,472	3,802	3,736	3,207	3,396	3,143
On layoff	1,294	1,174	953	1,067	1,057	791	1,001	865
Other job losers	2,958	2,676	2,519	2,735	2,679	2,416	2,395	2,278
Left last job	762	904	775	858	831	932	852	919
Reentered labor force	1,773	1,918	1,861	2,061	1,957	1,991	1,963	2,013
Seeking first job	738	883	858	920	942	905	936	1,003
PERCENT DISTRIBUTION								
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Job losers	56.5	50.9	49.8	49.8	50.0	45.6	47.5	44.4
On layoff	17.2	15.5	13.7	14.0	14.2	11.2	14.0	12.2
Other job losers	39.3	35.4	36.2	35.8	35.9	34.3	33.5	32.2
Job leavers	10.1	12.0	11.1	11.2	11.1	13.2	11.9	13.0
Reentrants	23.6	25.4	26.7	27.0	26.2	28.3	27.5	28.4
New entrants	9.8	11.7	12.3	12.0	12.6	12.9	13.1	14.2
UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE								
Job losers	4.6	4.0	3.7	4.0	3.9	3.4	3.5	3.3
Job leavers	.8	.9	.8	.9	.9	1.0	.9	1.0
Reentrants	1.9	2.0	2.0	2.1	2.0	2.1	2.0	2.1
New entrants	.8	.9	.9	1.0	1.0	.9	1.0	1.0

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

Sex and age	Number of unemployed persons (in thousands)		Unemployment rates					
	Mar. 1976	Mar. 1977	Mar. 1976	Nov. 1976	Dec. 1976	Jan. 1977	Feb. 1977	Mar. 1977
Total, 16 years and over	7,017	7,064	7.5	8.0	7.8	7.3	7.5	7.3
16 to 19 years	1,699	1,725	19.0	19.2	19.0	18.7	18.5	18.8
16 to 17 years	743	847	20.3	21.6	20.7	21.1	19.8	22.2
18 to 19 years	964	886	18.4	17.6	17.7	17.0	17.5	16.6
20 to 24 years	1,645	1,638	12.0	12.7	12.5	11.4	12.0	11.4
25 years and over	3,667	3,689	5.2	5.6	5.5	5.1	5.2	5.1
25 to 54 years	2,996	3,086	5.2	5.9	5.9	5.3	5.3	5.2
55 years and over	671	608	4.8	4.6	4.2	4.1	4.8	4.3
Men, 16 years and over	3,798	3,712	6.8	7.5	7.3	6.6	6.9	6.5
16 to 19 years	924	918	19.2	19.7	19.1	17.4	18.6	18.7
16 to 17 years	419	459	21.1	22.2	21.0	19.5	19.3	22.2
18 to 19 years	505	459	18.1	18.1	17.4	16.1	17.9	16.1
20 to 24 years	903	879	12.0	12.6	12.9	11.3	12.1	11.2
25 years and over	1,976	1,919	4.5	5.2	5.0	4.6	4.6	4.3
25 to 54 years	1,546	1,534	4.4	5.4	5.2	4.7	4.6	4.3
55 years and over	428	385	4.9	4.4	3.9	4.0	4.7	4.4
Women, 16 years and over	3,219	3,352	8.5	8.7	8.6	8.3	8.4	8.5
16 to 19 years	775	807	18.8	18.5	18.9	20.1	18.4	18.9
16 to 17 years	324	388	19.4	20.8	20.2	23.0	20.4	22.2
18 to 19 years	459	427	18.7	17.1	18.0	18.1	16.9	17.1
20 to 24 years	742	759	12.0	12.8	11.9	11.4	11.9	11.7
25 years and over	1,691	1,770	6.1	6.4	6.4	5.9	6.1	6.1
25 to 54 years	1,450	1,552	6.5	6.7	6.9	6.2	6.3	6.6
55 years and over	243	223	4.5	5.1	4.7	4.3	4.9	4.2

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

[Percent]

Measures	Quarterly averages					Monthly data		
	1976				1977	1977		
	I	II	III	IV	I	Jan.	Feb.	Mar.
U-1—Persons unemployed 15 weeks or longer as a percent of the civilian labor force	2.7	2.2	2.4	2.6	2.2	2.4	2.3	2.0
U-2—Job losers as a percent of the civilian labor force	3.8	3.7	3.9	3.9	3.4	3.4	3.5	3.3
U-3—Unemployed household heads as a percent of the household head labor force	5.0	4.9	5.3	5.3	4.8	4.8	4.9	4.6
U-4—Unemployed full-time jobseekers as a percent of the full-time labor force	7.1	7.0	7.4	7.5	6.8	6.7	6.9	6.7
U-5—Total unemployed as a percent of the civilian labor force (official measure)	7.6	7.4	7.8	7.9	7.4	7.3	7.5	7.3
U-6—Total full-time jobseekers plus ½ part-time jobseekers plus ½ total on part time for economic reasons as a percent of the civilian labor force less ½ of the part-time labor force	9.3	9.1	9.5	9.7	9.0	8.9	9.1	8.9
U-7—Total full-time jobseekers plus ½ part-time jobseekers plus ½ total on part time for economic reasons plus discouraged workers as a percent of the civilian labor force plus discouraged workers less ½ of the part-time labor force	10.2	10.0	10.3	10.7	9.9	N.A.	N.A.	N.A.

N.A. not available.

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

[In thousands]

Characteristics	Not seasonally adjusted		Seasonally adjusted					
			1975	1976				1977
	I 1976	I 1977	IV	I	II	III	IV	I
Total not in labor force	60,113	60,174	59,215	59,327	59,032	58,963	59,132	59,379
Do not want a job now	54,635	54,437	54,050	53,831	53,938	54,715	53,991	53,792
Want a job now	5,477	5,727	5,256	5,388	5,426	4,339	5,436	5,663
Discouraged workers	976	972	977	940	903	827	992	929
Job-market factors[1]	682	677	803	649	617	568	762	644
Personal factors[2]	294	295	174	291	286	259	230	285
Men	370	287	340	366	308	281	341	283
Women	606	685	637	574	595	546	651	647
White	768	725	697	700	694	601	755	665
Black and other	208	247	292	233	204	226	250	280

[1] Job market factors include "could not find job" and "thinks no job available." [2] Personal factors include "employers think too young or old," "lacks education or training," and "other personal handicap."

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

(In thousands)

Industry	Not seasonally adjusted				Seasonally adjusted					
	Mar. 1976	Jan. 1977	Feb. 1977p	Mar. 1977p	Mar. 1976	Nov. 1976	Dec. 1976	Jan. 1977	Feb. 1977p	Mar. 1977p
TOTAL	78,169	79,473	79,727	80,461	78,980	80,106	80,344	80,561	80,816	81,304
GOODS-PRODUCING	22,723	23,005	23,043	23,415	23,248	23,489	23,508	23,589	23,680	23,955
MINING	759	806	811	826	773	805	808	817	827	841
CONTRACT CONSTRUCTION	3,285	3,198	3,243	3,425	3,578	3,619	3,605	3,561	3,636	3,731
MANUFACTURING	18,679	19,001	18,989	19,164	18,897	19,065	19,095	19,211	19,217	19,383
Production workers	13,409	13,606	13,590	13,803	13,602	13,675	13,691	13,801	13,797	14,000
DURABLE GOODS	10,835	11,141	11,104	11,239	10,956	11,128	11,158	11,236	11,226	11,361
Production workers	7,712	7,936	7,901	8,063	7,815	7,929	7,955	8,026	8,012	8,168
Ordnance and accessories	160.4	156.9	155.8	155.9	161	156	156	156	156	156
Lumber and wood products	578.9	602.1	606.3	612.5	597	621	626	625	626	631
Furniture and fixtures	483.4	493.4	491.4	500.6	488	491	493	494	495	505
Stone, clay, and glass products	602.9	609.1	600.5	631.5	618	636	629	631	623	647
Primary metal industries	1,169.4	1,180.2	1,170.5	1,183.0	1,178	1,186	1,182	1,183	1,178	1,191
Fabricated metal products	1,364.5	1,403.3	1,394.9	1,416.5	1,380	1,396	1,404	1,413	1,413	1,432
Machinery, except electrical	2,052.6	2,130.9	2,138.8	2,141.2	2,047	2,106	2,107	2,125	2,132	2,135
Electrical equipment	1,799.4	1,871.9	1,879.9	1,888.7	1,818	1,860	1,863	1,874	1,889	1,908
Transportation equipment	1,707.2	1,769.0	1,734.1	1,774.7	1,739	1,749	1,766	1,790	1,764	1,807
Instruments and related products	501.4	519.2	521.9	521.5	505	514	517	521	525	526
Miscellaneous manufacturing	414.6	404.5	409.7	412.4	425	413	415	424	425	423
NONDURABLE GOODS	7,844	7,860	7,885	7,925	7,941	7,937	7,937	7,975	7,991	8,022
Production workers	5,697	5,670	6,689	5,740	5,787	5,746	5,736	5,775	5,785	5,832
Food and kindred products	1,626.9	1,659.5	1,647.9	1,649.9	1,698	1,711	1,710	1,721	1,722	1,722
Tobacco manufactures	70.3	74.1	70.9	67.9	75	75	75	74	73	73
Textile mill products	962.9	956.2	961.4	968.5	966	960	957	958	962	971
Apparel and other textile products	1,322.9	1,252.0	1,273.4	1,288.1	1,319	1,276	1,271	1,278	1,276	1,284
Paper and allied products	665.5	680.3	679.5	684.8	671	680	680	684	687	690
Printing and publishing	1,072.7	1,089.3	1,092.1	1,095.0	1,074	1,089	1,089	1,090	1,093	1,096
Chemicals and allied products	1,026.9	1,036.2	1,041.0	1,042.5	1,030	1,038	1,041	1,044	1,050	1,046
Petroleum and coal products	198.7	200.3	199.4	200.7	204	203	204	205	206	206
Rubber and plastics products, nec.	622.1	651.7	656.3	661.5	627	642	647	656	656	666
Leather and leather products	275.0	260.6	262.9	265.7	277	263	263	265	266	268
SERVICE-PRODUCING	55,446	56,468	56,684	57,046	55,732	56,617	56,836	56,972	57,136	57,349
TRANSPORTATION AND PUBLIC UTILITIES	4,462	4,499	4,496	4,533	4,507	4,519	4,553	4,549	4,555	4,579
WHOLESALE AND RETAIL TRADE	17,216	17,791	17,672	17,788	17,592	17,808	17,898	17,981	18,086	18,177
WHOLESALE TRADE	4,194	4,297	4,300	4,320	4,236	4,291	4,304	4,323	4,343	4,364
RETAIL TRADE	13,022	13,494	13,372	13,468	13,356	13,517	13,594	13,658	13,743	13,813
FINANCE, INSURANCE, AND REAL ESTATE	4,246	4,379	4,398	4,427	4,276	4,381	4,403	4,423	4,438	4,458
SERVICES	14,344	14,740	14,887	15,003	14,460	14,873	14,936	15,010	15,068	15,124
GOVERNMENT	15,178	15,059	15,231	15,295	14,897	15,036	15,046	15,009	14,989	15,011
FEDERAL	2,724	2,697	2,705	2,709	2,735	2,734	2,720	2,721	2,721	2,720
STATE AND LOCAL	12,454	12,362	12,526	12,586	12,162	12,302	12,326	12,288	12,268	12,291

p=preliminary.

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

Industry	Not seasonally adjusted				Seasonally adjusted					
	Mar. 1976	Jan. 1977	Feb. 1977[p]	Mar. 1977[p]	Mar. 1976	Nov. 1976	Dec. 1976	Jan. 1977	Feb. 1977[p]	Mar. 1977[p]
TOTAL PRIVATE	35.9	35.4	35.9	35.9	36.2	36.2	36.2	35.8	36.2	36.2
MINING	42.2	42.4	43.3	42.9	42.8	43.3	43.7	42.9	43.6	43.6
CONTRACT CONSTRUCTION	35.7	33.9	36.5	36.6	36.0	37.4	37.3	35.4	37.7	36.9
MANUFACTURING	40.0	39.0	39.8	40.1	40.3	40.1	40.0	39.5	40.2	40.3
Overtime hours	3.0	3.0	3.0	3.2	3.1	3.1	3.2	3.2	3.3	3.3
DURABLE GOODS	40.5	39.5	40.4	40.7	40.7	40.8	40.5	40.0	40.7	40.9
Overtime hours	3.0	3.1	3.1	3.3	3.1	3.2	3.3	3.4	3.3	3.4
Ordnance and accessories	41.0	40.4	40.4	40.7	40.8	40.6	41.0	40.5	40.4	40.5
Lumber and wood products	39.7	38.7	40.0	39.6	40.0	40.3	40.3	39.9	40.3	39.9
Furniture and fixtures	38.7	36.4	37.2	38.1	39.2	38.6	38.6	37.0	37.8	38.6
Stone, clay, and glass products	40.6	39.0	40.4	40.9	40.8	41.2	41.2	39.9	41.1	41.1
Primary metal industries	40.5	40.0	40.4	40.8	40.6	40.3	40.1	40.0	40.6	40.9
Fabricated metal products	40.7	39.4	40.2	40.5	40.9	40.8	40.5	39.9	40.6	40.7
Machinery, except electrical	41.1	40.5	41.3	41.5	41.1	41.5	41.2	40.6	41.3	41.5
Electrical equipment	40.0	39.1	40.3	40.2	40.1	40.3	40.2	39.4	40.6	40.3
Transportation equipment	41.8	40.6	40.9	42.5	42.2	42.0	41.1	41.4	41.3	42.9
Instruments and related products	40.4	39.5	40.5	40.0	40.5	40.4	40.7	39.8	40.7	40.1
Miscellaneous manufacturing	38.8	37.6	39.3	38.9	38.8	39.0	38.9	38.2	39.5	38.9
NONDURABLE GOODS	39.3	38.3	39.1	39.2	39.6	39.2	39.3	38.7	39.5	39.5
Overtime hours	3.0	2.8	2.9	3.0	3.2	3.0	3.1	3.0	3.2	3.2
Food and kindred products	39.7	39.2	39.5	39.7	40.3	40.4	40.1	39.5	40.1	40.3
Tobacco manufactures	38.3	35.7	36.7	36.1	39.0	36.9	37.5	36.1	37.5	36.7
Textile mill products	40.6	39.3	40.1	40.3	40.9	39.8	40.1	39.7	40.4	40.6
Apparel and other textile products	36.2	33.5	35.1	35.5	36.3	35.1	35.3	34.2	35.5	35.6
Paper and allied products	42.2	41.8	42.2	42.3	42.6	42.4	42.6	41.9	42.8	42.7
Printing and publishing	37.3	37.0	37.4	37.6	37.4	37.6	37.7	37.4	37.8	37.7
Chemicals and allied products	41.5	41.4	41.8	41.8	41.6	41.7	41.7	41.6	42.9	41.9
Petroleum and coal products	41.8	41.6	41.7	42.2	42.2	41.9	42.5	42.3	42.4	42.6
Rubber and plastics products, nec	40.8	40.7	41.4	41.3	40.8	41.2	41.5	40.9	41.5	41.3
Leather and leather products	38.2	34.7	36.4	36.3	38.3	36.4	36.5	35.3	36.6	36.4
TRANSPORTATION AND PUBLIC UTILITIES	39.5	39.5	40.0	39.7	39.9	40.2	40.5	39.8	40.3	40.1
WHOLESALE AND RETAIL TRADE	33.2	32.8	32.9	33.0	33.6	33.4	33.6	33.2	33.3	33.5
WHOLESALE TRADE	38.6	38.5	38.7	38.7	38.7	38.7	38.6	38.7	39.0	38.9
RETAIL TRADE	31.6	31.1	31.2	31.4	32.1	31.9	32.2	31.6	31.7	31.9
FINANCE, INSURANCE, AND REAL ESTATE	36.4	36.8	36.7	36.7	36.5	36.7	36.7	36.8	36.6	36.8
SERVICES	33.3	33.3	33.4	33.3	33.5	33.5	33.5	33.5	33.6	33.5

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

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

Industry	Average hourly earnings				Average weekly earnings			
	Mar. 1976	Jan. 1977	Feb. 1977 p	Mar. 1977 p	Mar. 1976	Jan. 1977	Feb. 1977 p	Mar. 1977 p
TOTAL PRIVATE	$4.76	$5.07	$5.09	$5.11	$170.88	$179.48	$182.73	$183.45
Seasonally adjusted	4.77	5.07	5.09	5.12	172.67	181.51	184.26	185.34
MINING	6.29	6.76	6.77	6.74	265.44	286.62	293.14	289.15
CONTRACT CONSTRUCTION	7.55	7.96	7.87	7.85	269.54	269.84	287.26	287.31
MANUFACTURING	5.07	5.46	5.43	5.48	202.80	212.94	216.11	219.75
DURABLE GOODS	5.43	5.81	5.79	5.84	219.92	229.50	233.92	237.69
Ordnance and accessories	5.56	6.06	6.03	6.08	227.96	244.82	243.61	247.46
Lumber and wood products	4.50	4.95	4.90	4.90	178.65	191.57	196.00	194.04
Furniture and fixtures	3.90	4.15	4.16	4.19	150.93	151.06	154.75	159.64
Stone, clay, and glass products	5.11	5.50	5.55	5.59	207.47	214.50	224.22	228.63
Primary metal industries	6.63	7.03	7.06	7.10	268.52	281.20	285.22	289.68
Fabricated metal products	5.32	5.58	5.57	5.63	216.52	219.85	223.91	228.02
Machinery, except electrical	5.66	6.01	6.03	6.05	232.63	243.41	249.04	251.08
Electrical equipment	4.80	5.16	5.16	5.18	192.00	201.76	207.95	208.24
Transportation equipment	6.44	6.95	6.87	7.00	269.19	282.17	280.98	297.50
Instruments and related products	4.78	5.10	5.10	5.09	193.11	201.45	206.55	203.60
Miscellaneous manufacturing	3.96	4.24	4.25	4.26	153.65	159.42	167.03	165.71
NONDURABLE GOODS	4.56	4.95	4.93	4.94	179.21	189.59	192.76	193.65
Food and kindred products	4.84	5.22	5.22	5.22	192.15	204.62	206.19	207.23
Tobacco manufactures	5.01	5.16	5.22	5.24	191.88	184.21	191.57	189.16
Textile mill products	3.57	3.83	3.84	3.85	144.94	150.52	153.98	155.16
Apparel and other textile products	3.37	3.57	3.54	3.60	121.99	119.60	124.25	127.80
Paper and allied products	5.25	5.69	5.68	5.70	221.55	237.84	239.70	241.11
Printing and publishing	5.60	5.92	5.93	5.98	208.88	219.04	221.78	224.85
Chemicals and allied products	5.70	6.18	6.18	6.18	236.55	255.85	258.32	258.32
Petroleum and coal products	7.08	7.40	7.49	7.55	295.94	307.84	312.33	318.61
Rubber and plastics products, nec	4.55	5.07	5.03	5.01	185.64	206.35	208.24	206.91
Leather and leather products	3.40	3.57	3.60	3.60	129.88	123.88	131.04	130.68
TRANSPORTATION AND PUBLIC UTILITIES	6.29	6.70	6.74	6.71	248.46	264.65	269.60	266.39
WHOLESALE AND RETAIL TRADE	3.90	4.17	4.20	4.20	129.48	136.78	138.18	138.60
WHOLESALE TRADE	5.06	5.41	5.40	5.41	195.32	208.29	208.98	209.37
RETAIL TRADE	3.48	3.73	3.76	3.76	109.97	116.00	117.31	118.06
FINANCE, INSURANCE, AND REAL ESTATE	4.31	4.52	4.52	4.52	156.88	166.34	165.88	165.88
SERVICES	4.28	4.60	4.61	4.62	142.52	153.18	153.97	153.85

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

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

(1967=100)

Industry	Mar. 1976	Oct. 1976	Nov. 1976	Dec. 1976	Jan. 1977	Feb. p 1977	Mar. p 1977	Percent change from: Mar. 1976-Mar. 1977	Percent change from: Feb. 1977-Mar. 1977
TOTAL PRIVATE NONFARM:									
Current dollars	181.1	188.2	189.4	190.4	192.7	193.1	193.9	7.1	0.4
Constant (1967) dollars	108.0	108.8	109.2	109.3	109.7	108.9	N.A.	(2)	(3)
MINING	194.8	206.1	205.7	207.2	208.4	210.9	211.0	8.3	.1
CONTRACT CONSTRUCTION	182.9	187.9	189.2	189.7	192.4	190.7	191.0	4.5	.2
MANUFACTURING	180.9	188.4	189.8	191.1	192.3	193.2	194.1	7.3	.4
TRANSPORTATION AND PUBLIC UTILITIES	195.2	203.1	204.3	203.7	207.9	207.0	207.6	6.3	.3
WHOLESALE AND RETAIL TRADE	175.0	182.2	183.4	184.5	186.4	187.7	188.4	7.6	.4
FINANCE, INSURANCE, AND REAL ESTATE	168.1	173.5	173.1	172.8	176.6	175.7	176.4	5.0	.4
SERVICES	185.4	192.2	193.9	195.4	198.6	198.7	199.9	7.8	.6

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

[2] Percent change was 1.1 from February 1976 to February 1977, the latest month available.

[3] Percent change was -0.7 from January 1977 to February 1977, the latest month available.

N.A. = not available.

p=preliminary.

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

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

(1967 = 100)

Industry division and group	1976 Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1977 Jan.	Feb p	Mar. p
TOTAL	111.1	111.5	112.0	111.6	111.8	111.8	112.2	112.2	112.8	113.3	112.3	114.0	115.0
GOODS-PRODUCING	96.0	95.6	97.2	96.8	96.5	95.7	95.9	96.0	97.2	96.9	95.2	98.0	99.8
MINING	125.7	125.9	124.7	125.0	127.7	115.6	131.7	131.1	132.6	134.0	130.7	134.8	138.1
CONTRACT CONSTRUCTION	99.6	105.0	104.0	104.0	103.7	102.5	99.4	104.2	105.7	104.3	96.4	105.3	106.5
MANUFACTURING	94.3	93.0	95.1	94.6	94.2	93.9	94.0	93.2	94.5	94.4	93.8	95.4	97.2
DURABLE GOODS	92.4	90.9	94.0	93.8	93.5	93.6	93.2	92.0	93.8	93.6	93.2	94.6	97.0
Ordnance and accessories	41.0	39.9	41.0	40.7	40.0	39.8	38.6	38.5	38.5	39.5	39.0	38.4	40.1
Lumber and wood products	95.8	96.0	96.6	96.1	98.6	97.6	98.2	99.4	100.8	101.9	101.1	102.3	102.7
Furniture and fixtures	103.6	102.7	105.1	103.3	102.3	101.2	102.4	102.2	102.8	103.5	98.5	101.4	105.8
Stone, clay, and glass products	96.5	98.6	99.5	99.7	99.2	98.6	98.9	99.7	100.2	99.1	96.1	96.8	102.0
Primary metal industries	86.0	86.8	88.3	89.2	90.1	89.8	88.8	86.2	85.7	85.0	84.8	85.6	87.5
Fabricated metal products	97.2	94.9	98.7	98.4	98.0	98.6	98.6	96.5	98.1	98.1	97.6	99.4	102.2
Machinery, except electrical	93.3	91.7	94.9	94.5	95.9	95.9	95.9	94.0	96.7	96.0	95.7	97.7	98.4
Electrical equipment and supplies	90.4	89.0	92.2	91.9	90.5	92.2	91.5	92.1	93.4	93.1	91.7	95.7	96.3
Transportation equipment	91.8	86.9	92.8	92.6	90.3	90.7	89.1	86.1	91.5	90.6	93.3	91.1	97.7
Instruments and related products	106.7	105.7	109.6	109.1	110.3	108.1	107.2	107.9	108.5	110.4	108.9	112.5	111.1
Miscellaneous manufacturing, ind.	95.4	93.1	95.4	94.7	93.1	91.8	92.2	92.0	92.1	91.6	93.1	96.8	97.1
NONDURABLE GOODS	97.1	96.0	96.6	95.8	95.2	94.2	95.2	95.0	95.4	95.5	94.7	96.7	97.6
Food and kindred products	96.0	96.1	96.6	96.8	97.0	96.5	96.4	96.2	96.6	95.5	95.1	96.5	96.9
Tobacco manufactures	84.9	85.4	85.4	83.4	82.3	84.0	82.1	83.0	81.6	81.6	76.1	77.7	76.0
Textile mill products	99.3	96.1	99.9	98.6	98.0	95.5	95.2	95.0	95.6	96.1	95.4	97.5	99.1
Apparel and other textile products	92.6	89.3	92.0	91.4	88.9	87.6	86.2	85.7	86.1	86.3	84.1	87.3	88.2
Paper and allied products	96.1	95.9	98.1	97.3	96.9	96.1	96.5	95.7	97.0	97.2	96.2	98.5	99.2
Printing and publishing	92.7	92.3	93.6	93.1	93.6	92.9	93.1	93.4	93.6	93.7	93.0	94.1	94.5
Chemicals and allied products	99.4	100.1	100.0	99.0	99.4	99.8	100.3	99.4	100.0	100.0	100.4	102.0	102.5
Petroleum and coal products	113.9	115.6	113.9	111.6	112.2	112.4	112.2	112.5	113.1	114.7	115.0	115.3	119.3
Rubber and plastics products, nec	121.7	121.3	108.8	107.0	106.2	105.2	124.3	125.6	125.7	127.6	127.7	130.1	132.3
Leather and leather products	79.3	78.4	79.8	76.0	74.7	72.5	72.1	71.0	70.4	70.5	69.1	71.7	71.9
SERVICE-PRODUCING	121.6	122.6	122.3	121.8	122.5	123.0	123.6	123.5	123.5	124.6	124.1	125.1	125.6
TRANSPORTATION AND PUBLIC UTILITIES	102.5	102.4	101.9	101.6	102.1	102.5	102.9	102.0	103.2	105.0	102.7	104.2	103.9
WHOLESALE AND RETAIL TRADE	118.0	119.8	118.9	118.1	118.9	119.0	119.7	119.3	118.9	120.0	119.1	120.3	121.3
WHOLESALE TRADE	113.2	114.3	114.3	114.1	115.3	114.7	114.9	114.8	114.8	114.8	115.4	116.7	117.1
RETAIL TRADE	119.8	121.8	120.6	119.6	120.3	120.6	121.6	121.0	120.4	122.0	120.4	121.6	122.9
FINANCE, INSURANCE, AND REAL ESTATE	125.5	126.1	126.3	126.3	126.6	127.3	127.7	128.3	129.1	129.8	130.6	130.2	131.4
SERVICES	134.0	134.6	135.3	135.0	135.4	136.6	137.2	137.6	137.7	138.4	138.8	139.8	139.8

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

p=preliminary.

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

Year and month	Over 1-month span	Over 3-month span	Over 6-month span	Over 12-month span
1974				
January	58.7	61.6	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	76.8	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	73.5
May	63.4	70.6	71.5	79.7
June	47.1	57.0	70.9	79.4
July	52.9	47.4	55.2	75.3
August	49.1	65.1	55.2	73.0p
September	68.9	54.9	61.9	76.2p
October	39.0	59.9	70.1	
November	64.2	53.8	70.3p	
December	68.3	75.9	75.9p	
1977				
January	71.5	75.0p		
February	62.5p	80.5p		
March	77.3p			
April				
May				
June				
July				
August				
September				
October				
November				
December				

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

Mr. SHISKIN. I wonder, Mr. Chairman, if you would allow me a moment or two to add some comment to this statement.

I would like to comment on the problem of selecting the right base against which to make comparisons. I noted in your statement, you selected a year ago, and many people do, I think.

Now, what I think happened in 1976 is that the economy was improving vigorously up to about April and then there was a slowdown. Many people referred to it as an economic pause. Because the labor force continued to grow during this period, unemployment rose, so you had a steady rise until the fall.

I think the pause ended about October.

Starting in November, you had a reacceleration. Cyclical movements began to go up again. They began to be stronger. So, I think that from an economic point of view, this time it is better to use October as a base than a year ago.

That explains the base I have selected.

I also would like to make a brief comment about inflation. You are no doubt concerned about whether the recent price increases represent an increase in the underlying trend of inflation. Some of you may remember what took place over several months at these committee hearings on the question as to whether we were in a recession in the spring of 1975. I was reluctant to say that we were for 3 or 4 months. Until the trend became clear.

I think our situation is similar on inflation. That is, we have 2 months which appear to show accelerating inflation. But to say on the basis of 2 months data that the underlying trend has changed, is dubious. I know you are policymakers and maybe that is all the time you have. I am more cautious and I am deferring a judgment on whether we have had a true change in the underlying rate of inflation for another few months.

Representative BOLLING. In that connection, I would like to ask one question and then I will ask Mr. Reuss to proceed.

The one question is: Are 1 or 2 months too little? You say 3 or 4. I would like to really try to pin you down. Do you think 4 months is necessary?

Mr. SHISKIN. Sir, you know life is very complicated and I wish I could give you an easy answer. I do not know. It depends on what happens in the third month. If we have a strong rise in nonfood commodities, other than energy commodities, I would say, "yes."

Representative BOLLING. In other words, it is proper for us to be very cautious about our speculation as to what 2 months means. If it lasts for 3 months, then it is a little bit more than a speculation; and if it goes to 4, then we have some assurance that we may be right.

Mr. SHISKIN. Again, let me say it depends on what you are looking for to change. If it is the food components—and particularly food components affected by the drought in the West—then I would be less willing to say the underlying trend has changed than if it turns out to be nonfood, nonenergy items.

Representative BOLLING. Thank you.

Mr. SHISKIN. But I think I am reasonably sure, if the pressure remains, then 2 months from now I will be able to make a more solid statement than this morning.

Representative BOLLING. The reason I ask this as persistently as I do is because I am trying to make up my mind whether I should make a decision over the weekend as to what I think will happen to inflation.

I am having great difficulty coming to a conclusion. That is why I press for guidance.

Mr. SHISKIN. I understand your problem and I tried to be helpful as far as I could go as a professional, hopefully, scientific person.

But I think you can say this: the long period during which the rate of inflation declined, has come to an end.

Representative BOLLING. Thank you.

Mr. Reuss.

Representative REUSS. Thank you, Mr. Chairman, and thank you, Mr. Shiskin.

I suggest, Mr. Shiskin, that your extremely interesting unemployment figures unmask inadvertently the true situation, that is not at all encouraging. In a nutshell, if you look at your table A–2 in your BLS news release of Tuesday, overall unemployment from last November—at election time—until March, has gone down from 8 percent to 7.3 percent. That is very encouraging.

Unemployment in that same period, among white adult males, has gone down from 5.7 percent to 4.9 percent during that period. That is very encouraging.

But unemployment among black teeenagers, far from going down, has actually gone up from 36 percent to 40 percent. Unemployment among black adult women, far from going down, has gone up from 11 percent to 11.6 percent.

I suggest a couple of your propositions flow from these figures. First, it seems to me we are developing a two-tier employment system with really profound social consequences. Those at the bottom of the line are worse off and those who have a seat at the table happily are doing a little better.

Secondly, in terms of policy, we have let the locusts eat up a good many months since November during which we should have been embarked on specific job programs, CETA-type programs, that provide public service jobs designed to come to grips with the parts of our society where unemployment is actually getting worse.

I think you performed as a scientist a real public service by unmasking what is happening. Would you like to correct what I said?

Mr. SHISKIN. No; I think you are right. As a matter of fact, this was the subject which was discussed here at some length last month with Senator Humphrey and Senator Javits.

I think we all agreed—I did, Senator Humphrey and Senator Javits—there was agreement that if you look at the unemployment category, job losers—the job losers are experienced workers who lost their jobs during the recession and are still unemployed—had been working in the factories and in mining and construction. There are a lot of them out of work and that is a very serious problem.

This is table A–5. There has been a substantial improvement in that category. Since last November, the unemployment rate for job losers declined from 4 to 3.3. I think this reflects what I call the cyclical improvement in the economy.

However, there are still big pockets of unemployment. I gave one example on the first page of my statement, a very important one—teenagers—where there is virtually no improvement since the recession came to an end. You went into a few components of that and mentioned a few other categories.

I would agree with you the way you analyze the situation.

Representative REUSS. How many more months do we have to wait before the theory that overall stimulus is all you need to do the job and that somehow the benefits will trickle down to the fringes, will die? What happened?

Mr. SHISKIN. I have never supported that. As I said last month, we have had and we continue to have a serious cyclical problem. We still have more than 3 million experienced people who are unemployed, but there are about 4 more million who are in these pockets of unemployment, like the teenagers, the blacks, the various other minority groups. So I think you do have a two-tier program. I agree with you.

Representative REUSS. Is not the record of the last 4 or 5 months sufficient to base a conclusion on overall stimulus and overall better times. Overall better indicators do not mean a thing to black teenagers and black women; their situation, far from showing a modest secondary effect recovery, is worse?

Mr. SHISKIN. As you know, there are several difference of opinion on that matter. I have not gotten into that issue. This came up again last month. I believe there is bound to be some impact from the general improvement of the economy on the unemployment of teenagers and on minority groups. But I do not think it will clear up all the pockets of unemployment.

Similarly, when we go into those pockets of unemployment and improve them, if we do, there is going to be an impact on cyclical employment. There is a feedback both ways. But I think it is a two-tiered problem. That is what I started off to say.

Representative REUSS. Wouldn't the country be much better off if we did some major things with these areas of 40 percent unemployment and used them as part of the overall neo-Keynesian macroeconomic stimulus? That would be a nice two-purpose, two-platoon system, would it not?

Mr. SHISKIN. Yes; but, sir, I think I have described the situation as clearly as I know how, consistent with what you have said. If you ever have a chance to read the record of last month, you will see what I mean. I would prefer to stay out of particular types of policy actions that will be taken.

You may recall we at BLS felt that if we get into policy issues that our credibility in putting out the figures may be affected. I think my position must be clear by this time.

Representative REUSS. Thank you very much.

Thank you, Mr. Chairman.

Representative BOLLING. Mr. Shiskin, I will try not to ask questions that move too much into the policy area. The questions I am going to ask are not going to be necessarily very easy to answer either. I am going to concentrate for the moment on the problem of inflation, although my real preoccupation is the problem of unemployment.

I would like to explain why I am going to do that. The reason that I am very concerned at this specific moment about the problems of inflation is that I am afraid that a sound policy of fiscal stimulus could end up by being discredited by a series of inflationary pressures, some of which are already working their way through the economy, natural gas being one of the best examples.

There are some things coming up, and I would like to see if I can get some help, some technical help really, on the inflationary impact of some of the things that are in the offing.

I am going to leave out one because it is too potentially explosive from a policy point of view to be able to play with statistically, at least in my judgment. So I will leave out minimum wage.

I would like to see if you can give me any guidance as to what you think an increase in tariffs on low-priced shoes might do to the CPI. I am just trying to get a general notion of the weight on an increase in item 1, milk supports, item 2, general farm price supports. I think it is important that we have some notion as to what kind of an impact these three items will have.

Very vague answers will make some sense because I may ask you a very vague question. I know you do not have any idea of the level of tariff that may be imposed or the level of inputs.

Mr. SHISKIN. We ought to be able to tell you the weights. I do not remember them, but John Layng may have the tables. If so, John, can you comment?

Mr. LAYNG. Yes. I have some aggregate information with respect to things like footwear in total.

Representative BOLLING. Whatever you have will help.

Mr. LAYNG. For example, in the national, all items CPI, the relative importance of footwear is about 1.4 percent. That was in December 1976.

Representative BOLLING. 1.4 percent?

Mr. LAYNG. Yes.

Representative BOLLING. Which is significant. What kind of information can you elicit on the possible effect of milk price increases and a more broadly based increase in farm price supports?

Mr. LAYNG. Of course, overall, dairy products account for about 2.8 percent of the CPI market basket. Price support programs affect different components of dairy products differently I suspect. On the basis of the price of milk in grocery stores, I think the impact is fairly direct.

In other words, if it is an increase of 1 cent per gallon at the farm level, it would be typically translated pretty directly to the retail level in terms of the penny per gallon.

I also like to caution that it depends on the supply and demand environment at the time. It can be conditioned by that. But typically, I think in the dairy products area, it has been a fairly direct relationship.

Representative BOLLING. I think I have changed my mind on minimum wage. I am curious as one hears these horror stories all the time about an increase in the minimum wage, that this will result in this kind of disasterous inflation and this increase in unemployment.

What kind of a weight does an increase in minimum wage have, if any?

Mr. SHISKIN. I do not have the answer to that, sir. I have been asked about it. It is an obvious question, but I do not have an answer as of this morning. I cannot help you on that.

Representative BOLLING. Tell me why you do not? I am not arguing with you, about you not having the answer.

Mr. SHISKIN. I think our knowledge of the impact of the minimum wage is very limited.

There is an article on the impact of minimum wages, which many people are quoting and which I have been aware of. It was written by

a man named Gramlich, who works at the Brookings Institution. It is authoritative. It is very hard, however, when you read that article, to know just what he concluded.

The best that I can make out is that he concluded that the rise in the minimum wage would be somewhat damaging to the teenagers because many of them would shift from full-time to part-time work, that it would be helpful to women because they would profit from the shift of teenagers to part-time work; and the third conclusion was that adult men as a group would tend to profit from the resulting rise in wages. But I just do not think we know much about the impact of minimum wages.

Representative BOLLING. The next question then is if we do not know much about the impact, is there any way we can find out? Because there are so many wonderful flat statements made by everybody on the subject—I do not mean by you or anybody like you, but politicians—who seem to have wonderful flat statements on both sides of the issue. That, I take it, does not have any support in any particular statistical serious or scientific approach.

Mr. SHISKIN. Well, I cited Gramlich's study. That is the one that I know something about. There were other studies made, but the ones I have looked at are inconclusive and I cannot contribute much.

Do you remember, Bob, whether we are doing a study for one of the sister agencies in the Department on minimum wages?

Mr. STEIN. No.

Mr. SHISKIN. I do not know much about that either. I am sorry I am so unhelpful this morning, Mr. Chairman.

Representative BOLLING. You are being helpful by telling me what the facts are. I am remarkably bored by people who are very dogmatic about situations on which we do not have much evidence. I am very much concerned. This committee, as I think quite properly—or at least the majority of this committee—has consistently throughout this year indicated that it felt a larger dose of stimulus was necessary than that submitted by the President. The Congress has to a degree indicated its agreement with that by increasing somewhat the stimulus.

The committee has gone further than that and suggested a very substantial sort of contingent fund in the first budget resolution, specifically in the jobs area, unallocated $5 million that could be taken back in September if things moved up well.

The majority also indicated very strongly that we think that steps are going to have to be taken in the tax field in fiscal 1978 if we are to continue to have an effective stimulus program.

The thing that I am disturbed about is, not from a statistical point of view, but from a policy point of view, that the effort—which I believe to be entirely wise—to stimulate the economy, both by general stimulation, tax cuts and so on, but also by specific programs, will end up being discredited, inaccurately, if inflation moves up for specific and definable reasons.

The reason that I am anticipating this is that it is predictable what we will be hearing down the track if the inflation rate moves up significantly over a period of time, that this is the result of the fiscal policy, when it probably will have almost nothing to do with the fiscal policy, given the capacity situation. It will have a great deal to do with very specific causes, such as the increases in the cost of energy, and perhaps decisions that are made on tariffs and a few other things.

I wanted to be sure because, as I said earlier, I am trying to figure out how to translate the economic facts into political reality. By political, I mean not Democratic Party political. I mean in effect a reasonable policy that may be effective in getting a reduction in unemployment without too significant an increase in inflation or no increase in inflation.

That is dilemma that, it seems to me, confronts us at the moment.

Mr. SHISKIN. I do have one helpful comment. Probably the best measure, certainly the best monthly measure on inflation, is the CPI.

I am not familiar with the numerous activities that are going on in the energy program. I keep reading bits and pieces in the newspapers. You may know more than I do. But I do know that there are ways of increasing certain energy prices without impacting the CPI.

For example, a plan was floated a few years ago that would have raised fuel prices and gasoline prices, and that would have had an immediate impact on the CPI. So the CPI would have changed.

But part of that plan was to have a rebate program associated with this so that the people who paid the higher prices for gasoline would at least get some of it back through the rebate program. If they did and the rebate program was set up as it was then planned, it would have had little or no impact on the CPI.

So there are ways I think of raising energy prices to discourage energy consumption without raising the general price level as measured by the CPI. But you have to be very careful because we have a set of rules—maybe they are not good rules, but we follow them—and a howl would come up if we changed them just at the time a policy change is being made. I know that the people in the White House were aware of this problem several years ago, and I am sure they are aware of it today.

Representative BOLLING. Thank you.

I have one other specific question in relation to the shoe import problem.

This morning the New York Times says this, and I will quote a paragraph that appears on D–11, a continuation of a story that is headed "Strauss Says a Compromise in Shoe Imports." The last paragraph said, "While imports tend to reduce price levels, exports, according to a report by the Congressional Budget Office, are responsible for 9 million jobs."

Have you any comment on the numbers there?

Mr. SHISKIN. No; I do not have any comment. I just do not know.

Representative BOLLING. You do not have any indication as to that?

Mr. SHISKIN. Another part of the Department does the work on the impact on unemployment of imports and exports. I could provide the record for you what we know about that.

Representative BOLLING. I would be interested in having that.

Mr. SHISKIN. We will provide something for the record.

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

A check with the agency involved, the Bureau of International Labor Affairs, indicates they have not completed work on the job content of exports and imports. Consequently, there is no estimate currently available on the effect of shoe exports and imports on jobs. The measures should be available in early May.

Representative BOLLING. The only number, the 9 million jobs, that the exports presumedly in shoes have to provide, I just was interested in that number.

Mr. SHISKIN. There may be a number, but I do not know it.

Representative BOLLING. It seems to me it is quite remarkable. We thank you very much. I do not propose to repeat what was done last month. I thought that was a very interesting discussion, which I was unable to be at. I do not think there is any point repeating it again. Thank you.

Mr. SHISKIN. Thank you.

Representative BOLLING. The committee stands adjourned.

[Whereupon, at 11:35 a.m., the committee adjourned, subject to the call of the Chair.]

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