EMPLOYMENT-UNEMPLOYMENT

HEARINGS

BEFORE THE

JOINT ECONOMIC COMMITTEE
CONGRESS OF THE UNITED STATES

NINETY-SIXTH CONGRESS

SECOND SESSION

PART 16

FEBRUARY 1, MARCH 7, APRIL 4, MAY 2, AND JUNE 6, 1980

[Hearing days of January 11 and July 4, 1980, of this series, were not held due to Congress not being in session on those respective dates]

Printed for the use of the Joint Economic Committee

U.S. GOVERNMENT PRINTING OFFICE
66-785 O WASHINGTON: 1980

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, D.C. 20402

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FRIDAY, FEBRUARY 1, 1980

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

The committee met, pursuant to notice, at 10 a.m., in room 318, Russell Senate Office Building, Hon. Lloyd Bentsen (chairman of the committee) presiding.

Present: Senators Bentsen and Proxmire; and Representatives Bolling and Reuss.

Also present: John M. Albertine, executive director; Louis C. Krauthoff II, assistant director-director, SSEC; Charles H. Bradford, minority counsel; Lloyd C. Atkinson, William R. Buechner, Kent H. Hughes, Bill Maddox, Mayanne Karmin, and Helen Mohrmann, professional staff members; Betty Maddox, administrative assistant; and Stephen J. Entin, Mark R. Policinski, and Carol Corcoran, minority professional staff members.

OPENING STATEMENT OF SENATOR BENTSEN, CHAIRMAN

Senator BENTSEN. This hearing will come to order.

Commissioner Norwood, this morning you have the worst unemployment news that we have had in 18 months. The unemployment figure rose sharply in January from 5.9 to 6.2 percent. Some of the most important items I see in the data: The unemployment rate for adult men is 4.7 percent. That is the highest since November of 1977. Unemployment also rose for married men, full-time workers, blue-collar workers. Most of the unemployment was due to layoffs or job losses. And the industries affected are heavily influenced by cyclical factors.

For the past year and a half, the economists have been telling us a recession is coming. But I can remember Mr. Schultze's comments. He said, "We don't know where it is, but we know it's out there somewhere."

I know you have repeatedly warned us that 1 month doesn't make a trend. The display chart shows [indicating] the unemployment rate began to climb most sharply late in the last recession, and then it peaked out after the recession was over. Do you think we are going to see history repeated on that one? Is there a recession? Are we likely to see much sharper increases in the unemployment rate in the coming months? With the factors I have cited and the slowing of employment over the last year, I have to wonder in effect: Has the recession finally begun?

Commissioner Norwood, I hope you can clear up that situation for us this morning.

Please proceed.

STATEMENT OF HON. JANET L. NORWOOD, COMMISSIONER, BUREAU OF LABOR STATISTICS, DEPARTMENT OF LABOR, ACCOMPANIED BY ROBERT L. STEIN, ASSISTANT COMMISSIONER, OFFICE OF CURRENT EMPLOYMENT ANALYSIS

Ms. NORWOOD. I am glad to have this opportunity to offer the Joint Economic Committee a few brief comments to supplement our Employment Situation press release issued this morning.

Unemployment rose by 340,000 in January, and the jobless rate moved up to 6.2 percent from 5.9 percent in December. This marks the first time in 18 months that the unemployment rate has moved outside the narrow range of 5.7–5.9 percent. The January increase in the number of jobless persons occurred primarily among adult men. Their unemployment rate reached its highest level in more than 2 years.

Total employment, as measured by the household survey, was virtually unchanged over the month. Job losses among men, primarily in the blue-collar occupations, were about equaled by gains among women. As more women entered the labor force in January, their participation rate reached 51.4 percent, a higher percentage than ever before.

The number of employees on the payrolls of nonfarm industries, as reported by the establishment survey, rose by about 300,000 in January. Most of this increase was reported in the service-producing sector, especially in retail trade. An increase of 60,000 was registered in construction, but this change may be somewhat overstated. The seasonal adjustment factors for construction, influenced by heavy storms in recent years, may have overcorrected the data this January when the weather was unusually mild. The fact that total factory employment showed little change between December and January in the establishment survey was in part caused by the return of approximately 40,000 workers in the machinery industry who had been on strike in December. The business survey did show extensive job cutbacks in the automobile industry and a decline in aggregate hours in most durable manufacturing industries.

Although job gains continued through 1979, a definite slowdown occurred in the rate of employment growth. The employment increase of about 2 million from January 1979 to January 1980 was the smallest gain for any 12-month period since early 1976. In the past 12 months, employment has just about kept pace with increases in the population of working age; the employment-population ratio in January was about the same as a year ago. During this same period, however, the labor force increased by 2.3 million and unemployment rose by 600,000. As employment in the service sector where women had traditionally found jobs increased, more women were employed. At the same time, as the number of factory production workers was reduced and the factory workweek declined, more men were added to the unemployment rolls.

In summary, the Bureau of Labor Statistics data released today show an unemployment rate above 6 percent for the first time in 18 months. At the same time, the slower employment growth experienced in recent months continued, with most of the increases in January concentrated in construction and trade. Significant job losses occurred in the automobile industry, and aggregate hours decreased somewhat in many durable manufacturing industries. The household survey

showed a significant employment decline for blue-collar workers, and the business survey showed no growth in the goods-producing sector, once allowance is made for returning strikers. It is clear, therefore, that the BLS data released today show a deterioration of the labor market situation in January, but it would be premature, on the basis of findings for a single month, to conclude at this time that a major downturn is underway.

Mr. Stein and I will be glad to answer any questions you have.

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

UNEMPLOYMENT RATES BY ALTERNATIVE SEASONAL ADJUSTMENT METHODS

Month and year	Unadjusted rate	X-11 ARIMA method					X-11 method (former official method)	Range (cols. 2-8)
		Official	Concurrent	Stable	Total	Residual		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1979:								
January	6.4	5.8	5.8	5.8	5.8	5.6	5.8	0.2
February	6.4	5.7	5.7	5.8	5.7	5.6	5.7	.2
March	6.1	5.7	5.7	5.8	5.7	5.7	5.7	.1
April	5.5	5.8	5.8	5.8	5.8	5.9	5.8	.1
May	5.2	5.8	5.8	5.8	5.8	5.9	5.8	.1
June	6.0	5.7	5.7	5.5	5.7	5.7	5.7	.2
July	5.8	5.7	5.7	5.7	5.8	5.8	5.7	.1
August	5.9	5.9	5.9	6.0	5.9	5.9	5.9	.1
September	5.6	5.8	5.8	5.8	5.8	5.8	5.8	----------
October	5.6	5.9	5.9	6.0	5.9	6.0	5.9	.1
November	5.6	5.8	5.8	5.9	5.8	5.8	5.8	.1
December	5.6	5.9	5.9	6.0	5.8	5.9	5.9	.2
1980: January	6.8	6.2	6.1	6.2	6.2	6.2	6.2	.1

Source: U.S. Department of Labor, Bureau of Labor Statistics, February 1980.

NOTES TO TABLE COLUMN NUMBERS

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

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

(3) Concurrent (X-11 ARIMA method). The procedure for computation of the official rate is followed, except that the data are reseasonally adjusted each month as the most recent data become available. Extrapolated factors are not used at all in this method. For example, the rate for January 1980 would be based, during 1980, on the adjustment of data for the period January 1967 through January 1980. The rates for the current year are shown as first computed. Since the revision pattern and procedure for computation of the rate are identical to the official procedure, the results of this method will be identical to the official rate at the beginning of each year when the most recent observation is December.

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

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

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

(7) X-11 method (former official method). The procedure for computation of the official rate is used except that the series are not extended with ARIMA models and the factors are projected in 12-mo intervals. The standard X-11 program is used to perform the seasonal adjustment.

Methods of adjustment: The X-11 ARIMA method was developed at Statistics Canada by the seasonal adjustment and times series staff under the direction of Estela Bee Dagum. The method is described in the X-11 ARIMA Seasonal Adjustment Method, by Estela Bee Dagnum, Statistics Canada Catalogue No. 12-564E, September 1979.

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

News
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USDL 80-65
TRANSMISSION OF MATERIAL IN THIS RELEASE IS EMBARGOED UNTIL 9:00 A.M. (EST), FRIDAY, FEBRUARY 1, 1980

THE EMPLOYMENT SITUATION: JANUARY 1980

Unemployment rose in January, and there were contrasting developments in employment, the Bureau of Labor Statistics of the U.S. Department of Labor reported today. Due to a rise in joblessness among adult men, the Nation's unemployment rate increased over the month from 5.9 to 6.2 percent, the highest rate since July 1978.

Total employment--as measured by the monthly survey of households--showed little overall change in January, although there were diverse movements among adult men and women jobholders. Consistent with their rise in unemployment, employment among adult men was down markedly, while the number of adult women holding jobs increased.

In contrast to total employment, nonfarm payroll employment--as measured by the monthly survey of establishments--rose by about 300,000 in January to 90.5 million.

Unemployment

The number of persons unemployed increased 340,000 in January to 6.4 million. Most of this upturn occurred among persons who were laid off or otherwise lost their last jobs. Over the past year, the jobless total has risen by 610,000. (See tables A-1 and A-5.)

With the increase in the level of unemployment, the Nation's jobless rate rose three-tenths of a point to 6.2 percent. The jobless rate had remained within the narrow range of 5.7 to 5.9 percent over the prior 17-month period.

The January increase in unemployment was concentrated among adult men; their rate rose from 4.2 to 4.7 percent, the highest since November 1977. The increase was shared by both black and white men. In contrast, the rates for adult women (5.8 percent) and teenagers (16.3 percent) were about unchanged over the month. Strong increases were also registered in the cyclically sensitive unemployment rates for married men, full-time workers, blue-collar workers, and workers in durable goods manufacturing. (See table A-2.)

There was no change in the number of nonfarm workers on part-time work schedules for economic reasons (sometimes termed the "partially unemployed"), following large increases in the last quarter of 1979. (See table A-3.)

Total Employment and the Labor Force

Total employment was little changed in January, but there were offsetting movements among adult men and women. There was a drop of 200,000 in the number of men with jobs, while employment among adult women rose by 170,000. Employment also fell in the male-dominated blue-collar occupations. Employment was up by 1.7 million from January 1979, the smallest over-the-year increase since January 1976. (See tables A-1 and A-3.)

The civilian labor force grew by 230,000 from December and was up 2.3 million from a year ago. Adult women accounted for the bulk of these increases. Their labor force participation

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

Selected categories	Quarterly averages			Monthly data			Dec.-Jan. change
	1978	1979		1979		1980	
	IV	III	IV	Nov.	Dec.	Jan.	
HOUSEHOLD DATA							
	Thousands of persons						
Civilian labor force	101,538	103,238	103,749	103,652	103,999	104,229	230
Total employment	95,653	97,231	97,665	97,608	97,912	97,804	-108
Unemployment	5,885	6,008	6,084	6,044	6,087	6,425	338
Not in labor force	58,384	58,568	58,842	58,937	58,810	58,791	-19
Discouraged workers	772	731	741	N.A.	N.A.	N.A.	N.A.
	Percent of labor force						
Unemployment rates:							
All workers	5.8	5.8	5.9	5.8	5.9	6.2	0.3
Adult men	4.0	4.2	4.2	4.3	4.2	4.7	.5
Adult women	5.7	5.6	5.7	5.6	5.7	5.8	.1
Teenagers	16.2	16.2	16.1	15.9	16.0	16.3	.3
White	5.0	5.1	5.1	5.1	5.1	5.4	.3
Black and other	11.5	10.9	11.2	10.9	11.3	11.8	.5
Full-time workers	5.2	5.3	5.4	5.4	5.4	5.7	.3
ESTABLISHMENT DATA							
	Thousands of jobs						
Nonfarm payroll employment	87,799	89,759	90,104p	90,100	90,231p	90,536p	305p
Goods-producing industries	26,111	26,638	26,586p	26,533	26,654p	26,705p	51p
Service-producing industries	61,688	63,121	63,518p	63,567	63,577p	63,831p	254p
	Hours of work						
Average weekly hours:							
Total private nonfarm	35.8	35.6	35.7p	35.7	35.7p	35.7p	0p
Manufacturing	40.6	40.2	40.2p	40.1	40.3p	40.4p	0.1p
Manufacturing overtime	3.7	3.2	3.2p	3.3	3.2p	3.3p	.1p

p=preliminary N.A.=not available

rate reached a new high of 51.4 percent, while that of men and teenagers edged down over the month.

Industry Payroll Employment

Nonfarm payroll employment rose to 90.5 million in January, up 305,000 from the December level. Contributing to this increase was a net reduction in strike activity of approximately 50,000.

The bulk of the January employment growth occurred in the service-producing industries. Gains were registered throughout the sector, with the most sizeable increases in trade (130,000), services (55,000), and transportation and public utilities (30,000).

Within the goods-producing sector, the construction industry posted an employment gain of 65,000. Overall employment in manufacturing was about unchanged. There was a decline of nearly 60,000 in transportation equipment, due to job cutbacks in automobiles and parts, and smaller decreases in fabricated metal products and food processing. These were about offset by a return of striking workers in the machinery industry, coupled with small increases in several other industries, primarily in the nondurable goods sector. Employment in mining remained near its December level.

Over the past year, payroll jobs have increased by 2.0 million, with 85 percent of the gain occurring in the service-producing sector. (See table B-1.)

Hours

The average workweek of production or nonsupervisory workers on private nonagricultural payrolls remained at 35.7 hours in January, a level maintained since November. Movements were small and generally offsetting among the major industries. In manufacturing, average hours and overtime both edged up a tenth of an hour to 40.4 and 3.3 hours, respectively. (See table B-2.)

The index of aggregate weekly hours remained at 126.7 (1967=100) in January and has risen by only 1.8 percent since January 1979. The manufacturing index, however, has decreased by 2.2 percent over the past year. (See table B-5.)

Hourly and Weekly Earnings

Average hourly earnings of production or nonsupervisory workers on private nonagricultural payrolls rose 0.3 percent in January and were up 7.4 percent over the year (seasonally adjusted). Average weekly earnings also rose 0.3 percent from December and were 7.1 percent above the January 1979 level.

Before adjustment for seasonality, average hourly earnings rose 3 cents in January to $6.41 and were 44 cents above January 1979. Average weekly earnings were $224.99, down $4.69 from December but still up $14.85 over the year. (See table B-3.)

The Hourly Earnings Index

The Hourly Earnings Index--earnings adjusted for overtime in manufacturing, seasonality, and the effects of changes in the proportion of workers in high-wage and low-wage industries--was 239.8 (1967=100) in January, 0.2 percent higher than in December. The Index was 7.7 percent above January a year ago. In dollars of constant purchasing power, the Index decreased 4.5 percent during the 12-month period ended in December. (See table B-4.)

Chart 1. Civilian labor force and employment
(Seasonally adjusted)

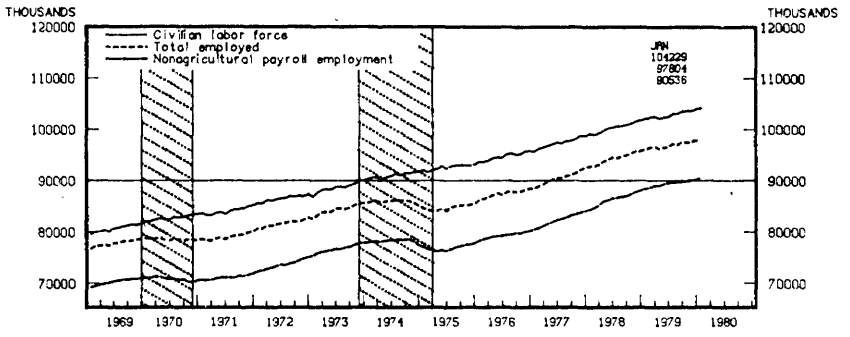


Chart 2. Unemployment rate--all civilian workers

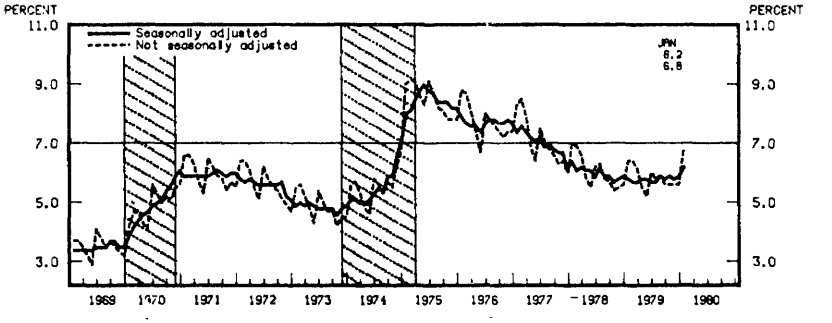
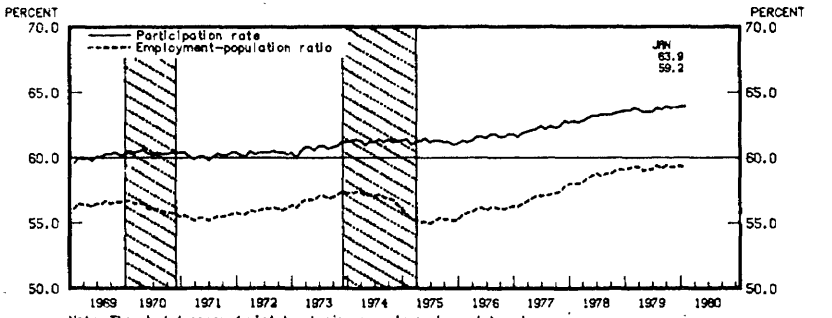


Chart 3. Civilian labor force participation rate
and total employment-population ratio
(Seasonally adjusted)



Note: The shaded areas depict the business cycle peaks and troughs as designated by the National Bureau of Economic Research.

Explanatory Note

This news release presents statistics from two major surveys, the Current Population Survey (household survey) and the Current Employment Statistics Survey (establishment survey). The household survey provides the information on the labor force, total employment, and unemployment that appears in the A tables, marked HOUSEHOLD DATA. It is a sample survey of about 65,000 households that is conducted by the Bureau of the Census with most of the findings analyzed and published by the Bureau of Labor Statistics (BLS).

The establishment survey provides the information on the employment, hours, and earnings of workers on nonagricultural payrolls that appears in the B tables, marked ESTABLISHMENT DATA. This information is collected from payroll records by BLS in cooperation with State agencies. The sample includes approximately 162,000 establishments employing more than 32 million people.

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

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

Coverage, definitions and differences between surveys

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

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

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

The *civilian labor force* equals the sum of the number employed and the number unemployed. The *unemployment rate* is the percentage of unemployed people in the civilian labor force. Table A-4 presents a special grouping of seven measures of unemployment based on varying definitions of unemployment and the labor force. The definitions are provided in the table. The most restrictive definition yields U-1, and the most comprehensive yields U-7. The official unemployment rate is U-5.

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

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

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

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

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

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

Seasonal adjustment

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

Because these seasonal events follow a more or less regular pattern each year, their influence on statistical trends can be eliminated by adjusting the statistics from month to month. These adjustments make nonseasonal developments, such as declines in economic activity or

increases in the participation of women in the labor force, easier to spot. To return to the school's-out example, the large number of people entering the labor force each June is likely to obscure any other changes that have taken place since May, making it difficult to determine if the level of economic activity has risen or declined. However, because the effect of students finishing school in previous years is known, statistics for the current year can be adjusted to allow for a comparable change. Insofar as the seasonal adjustment is made correctly, the adjusted figure provides a more useful tool with which to analyze changes in economic activity.

Measures of civilian labor force, employment, and unemployment contain components such as age and sex. Statistics for all employees, production workers, average weekly hours, and average hourly earnings include components based on the employer's industry. All these statistics can be seasonally adjusted either by adjusting the total or by adjusting each of the components and combining them. The second procedure usually yields more accurate information and is therefore followed by BLS. For example, the seasonally adjusted figure for the civilian labor force is the sum of eight seasonally adjusted employment components and four seasonally adjusted unemployment components, the total for unemployment is the sum of the four unemployment components, and the [illegible] employment rate is derived by dividing the resulting estimate of total unemployment by the estimate of the civilian labor force.

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

Sampling variability

Statistics based on the household and establishment surveys are subject to sampling error, that is, the estimate of the number of people employed and the other estimates drawn from these surveys probably differ from the figures that would be obtained if a complete census, even if the same questionnaire and procedures were used. In the household survey, the amount of the differences can be expressed in terms of standard errors. The numerical value of a standard error depends upon the size of the sample, the results of the survey, and other factors. However, the numerical value is always such that the chances are 68 out of 100 that an estimate based on the sample will differ by no more than the standard error from the results of a complete census. The chances are 90 out of 100 that an estimate based on the sample will differ by no more than 1.6 times the standard error from the results of a complete census. At the 90-percent level of confidence--the confidence limits used by BLS in its analyses--the error for the monthly change in total employment is on the order of plus or minus 293,000; for total unemployment, it is 185,000; and, for the overall unemployment rate, it is 0.19 percentage point. These figures do not mean that the sample results are off by these magnitudes but, rather, that the chances are 90 out of 100 that the "true" level or rate would not be expected to differ from the estimates by more than these amounts.

Sampling errors for monthly surveys are reduced when the data are cumulated for several months, such as quarterly or annually. Also, as a general rule, the smaller the estimate, the larger the sampling error. Therefore, relatively speaking, the estimate of the size of the labor force is subject to less error than is the estimate of the number unemployed. And, among the unemployed, the sampling error for the jobless rate of adult men, for example, is much smaller than is the error for the jobless rate of teenagers. Specifically, the error on monthly change in the jobless rate for men is .23 percentage point; for teenagers, it is 1.06 percentage points.

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

Additional statistics and other information

In order to provide a broad view of the Nation's employment situation, BLS regularly publishes a wide variety of data in this news release. More comprehensive statistics are contained in *Employment and Earnings*, published each month by BLS. It is available for $2.75 per issue or $22.00 per year from the U.S. Government Printing Office, Washington, D.C. 20402. A check or money order made out to the Superintendent of Documents must accompany all orders.

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

Table A-1. Employment status of the noninstitutional population

[Numbers in thousands]

Employment status	Not seasonally adjusted			Seasonally adjusted					
	Jan. 1979	Dec. 1978	Jan. 1978	Jan. 1979	Sept. 1978	Oct. 1978	Nov. 1978	Dec. 1978	Jan. 1979
TOTAL									
Total noninstitutional population[1]	165,848	164,308	165,101	165,484	164,130	164,401	164,632	164,898	165,101
Armed Forces[1]	2,094	2,089	2,081	2,094	2,092	2,092	2,092	2,089	2,081
Civilian noninstitutional population[1]	163,754	162,219	163,020	163,390	162,038	162,309	162,540	162,809	163,020
Civilian labor force	103,867	103,884	103,128	104,061	103,434	103,595	103,652	103,949	104,224
Participation rate	63.4	64.0	63.3	63.6	63.8	63.8	63.8	63.9	63.9
Employed	96,816	96,847	96,145	96,157	97,508	97,474	97,408	97,914	97,404
Employment-population ratio[2]	58.1	59.5	58.2	58.8	59.8	59.8	59.8	59.9	59.7
Agriculture	3,260	2,995	3,282	3,260	3,304	3,294	3,335	3,359	3,270
Nonagricultural industries	93,673	93,852	91,787	92,897	94,190	94,180	94,073	94,555	94,134
Unemployed	6,951	5,936	7,043	5,904	5,926	6,121	6,044	6,047	6,425
Unemployment rate	6.4	5.6	6.8	5.5	5.4	5.4	5.8	5.5	6.2
Not in labor force	59,887	58,925	59,892	58,292	58,519	58,780	58,837	58,810	58,791
Men, 20 years and over									
Total noninstitutional population[1]	69,385	70,504	70,035	69,385	70,235	70,380	70,487	70,594	70,699
Civilian noninstitutional population[1]	67,726	68,940	69,047	67,726	69,522	69,697	68,808	68,940	69,047
Civilian labor force	51,813	54,666	54,613	54,191	54,735	54,760	54,709	54,781	54,655
Participation rate	79.5	79.3	79.1	80.0	79.9	79.7	79.5	79.5	79.4
Employed	51,237	52,335	51,503	52,024	52,451	52,444	52,374	52,478	52,278
Employment-population ratio[2]	73.4	74.1	72.9	75.0	74.7	74.5	74.3	74.3	73.9
Agriculture	2,084	2,242	2,160	2,333	2,377	2,331	2,438	2,427	2,347
Nonagricultural industries	49,143	50,083	49,343	49,721	50,076	50,072	49,936	50,051	49,892
Unemployed	2,607	2,331	3,110	2,167	2,282	2,317	2,335	2,303	2,377
Unemployment rate	4.8	4.1	5.7	4.0	4.2	4.2	4.3	4.2	4.3
Not in labor force	13,892	14,274	14,434	13,535	13,787	13,937	14,099	14,159	14,192
Women, 20 years and over									
Total noninstitutional population[1]	76,337	77,656	77,779	76,337	77,245	77,429	77,547	77,646	77,779
Civilian noninstitutional population[1]	76,228	77,546	77,656	76,228	77,124	77,334	77,426	77,546	77,656
Civilian labor force	38,754	40,057	39,860	38,907	39,239	39,362	39,445	39,658	39,878
Participation rate	50.9	51.7	51.3	50.1	50.6	50.9	50.9	51.1	51.4
Employed	35,843	37,954	37,441	36,012	37,075	37,112	37,248	37,402	37,574
Employment-population ratio[2]	47.0	48.9	48.1	47.2	48.0	47.9	48.0	48.2	48.3
Agriculture	451	466	407	596	628	572	612	582	540
Nonagricultural industries	35,338	37,487	37,034	35,416	36,447	36,540	36,636	36,820	37,034
Unemployed	2,909	2,104	2,419	2,195	2,164	2,250	2,197	2,257	2,304
Unemployment rate	6.1	5.4	6.1	5.7	5.5	5.7	5.6	5.7	5.8
Not in labor force	37,473	37,485	37,796	38,021	37,885	37,945	37,981	37,883	37,778
Both sexes, 16-19 years									
Total noninstitutional population[1]	16,725	16,638	16,627	16,720	16,655	16,659	16,648	16,638	16,627
Civilian noninstitutional population[1]	16,400	16,326	16,317	16,403	16,367	16,370	16,360	16,326	16,317
Civilian labor force	9,875	9,161	8,715	9,661	9,520	9,471	9,498	9,559	9,697
Participation rate	54.1	56.1	53.4	58.9	58.2	57.9	58.1	58.6	59.2
Employed	7,340	7,759	7,201	8,321	7,676	7,919	7,986	8,032	7,952
Employment-population ratio[2]	44.8	46.6	43.3	48.6	47.9	48.5	48.8	48.3	47.8
Agriculture	220	237	215	361	359	151	115	350	344
Nonagricultural industries	7,119	7,522	6,986	7,960	7,317	7,768	7,871	7,682	7,608
Unemployed	1,515	1,401	1,514	1,542	1,548	1,554	1,512	1,527	1,545
Unemployment rate	17.1	15.3	17.4	16.0	16.2	16.4	15.9	16.0	16.3
Not in labor force	7,525	7,166	7,601	6,737	6,847	6,897	6,862	6,767	6,820
White									
Total noninstitutional population[1]	142,351	144,267	144,421	142,351	143,621	143,937	144,101	144,267	144,421
Civilian noninstitutional population[1]	140,681	142,645	142,806	140,683	141,981	142,296	142,461	142,695	142,806
Civilian labor force	91,948	91,503	90,950	89,973	91,092	91,187	91,284	91,579	91,852
Participation rate	63.1	64.2	63.7	64.0	64.2	64.1	64.0	64.2	64.3
Employed	83,950	86,993	85,420	85,434	86,825	86,859	86,971	86,898	86,895
Employment-population ratio[2]	59.0	60.1	59.1	60.0	60.2	60.1	60.1	60.2	60.2
Unemployed	5,998	4,510	5,530	4,539	4,657	4,693	4,671	4,685	4,957
Unemployment rate	6.5	4.9	6.1	5.0	5.1	5.1	5.1	5.1	5.4
Not in labor force	51,695	51,736	51,856	50,710	50,899	51,184	51,219	51,088	50,954
Black and other									
Total noninstitutional population[1]	20,097	20,631	20,680	20,097	20,474	20,531	20,530	20,631	20,680
Civilian noninstitutional population[1]	19,670	20,194	20,214	19,670	20,032	20,079	20,128	20,163	20,214
Civilian labor force	11,873	12,374	12,238	12,101	12,408	12,512	12,341	12,482	12,453
Participation rate	60.4	61.4	60.5	61.5	61.9	62.3	61.6	61.7	61.6
Employed	10,486	11,054	10,725	10,736	11,063	11,076	11,044	11,024	10,979
Employment-population ratio[2]	52.2	53.6	51.9	53.4	54.0	53.9	53.7	53.4	53.1
Unemployed	1,393	1,321	1,513	1,365	1,341	1,436	1,297	1,458	1,474
Unemployment rate	11.7	10.7	12.4	11.3	10.8	11.5	10.9	11.7	11.8
Not in labor force	7,792	7,789	7,976	7,569	7,628	7,567	7,737	7,731	7,761

[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 (excluding Armed Forces)

Table A-2. Major unemployment indicators, seasonally adjusted

Selected categories	Number of unemployed persons (in thousands)		Unemployment rates					
	Jan. 1979	Jan. 1980	Jan. 1979	Sept. 1979	Oct. 1979	Nov. 1979	Dec. 1979	Jan. 1980
CHARACTERISTICS								
Total, 16 years and over	5,304	6,425	5.8	5.8	5.9	5.8	5.9	6.2
Men, 20 years and over	2,167	2,577	4.3	4.2	4.2	4.3	4.2	4.7
Women, 20 years and over	2,195	2,704	5.7	5.5	5.7	5.6	5.7	5.8
Both sexes, 16-19 years	1,542	1,945	16.0	16.2	16.4	15.9	16.0	16.3
White, total	4,519	4,957	5.0	5.1	5.1	5.1	5.1	5.4
Men, 20 years and over	1,701	2,014	3.5	3.7	3.7	3.7	3.7	4.1
Women, 20 years and over	1,686	1,757	5.0	4.8	5.0	4.9	5.0	5.1
Both sexes, 16-19 years	1,192	1,186	13.8	14.1	14.1	13.9	13.9	14.0
Black and other, total	1,365	1,474	11.3	10.8	11.5	10.9	11.3	11.8
Men, 20 years and over	466	567	8.3	8.0	8.6	8.4	8.6	9.6
Women, 20 years and over	542	549	10.5	9.8	10.2	9.5	10.0	10.0
Both sexes, 16-19 years	347	358	33.0	32.3	35.1	32.6	34.3	34.6
Married men, spouse present	1,050	1,386	2.6	2.9	2.9	2.9	2.8	3.4
Married women, spouse present	1,262	1,268	5.3	4.8	5.2	4.8	5.0	5.2
Women who head families	392	479	8.0	7.7	8.4	8.4	8.4	9.2
Full-time workers	4,514	5,046	5.2	5.3	5.4	5.4	5.4	5.7
Part-time workers	1,373	1,364	9.1	8.4	8.9	8.3	8.5	8.7
Unemployed 15 weeks and over[1]	1,229	1,334	1.2	1.1	1.2	1.1	1.2	1.3
Labor force time lost[2]	--	--	6.2	6.2	6.4	6.4	6.4	6.7
OCCUPATION[3]								
White-collar workers	1,683	1,752	3.4	3.5	3.4	3.2	3.3	3.4
Professional and technical	177	343	2.5	2.4	2.7	2.4	2.3	2.2
Managers and administrators, except farm	212	206	2.0	2.2	2.2	1.9	2.0	1.9
Sales workers	249	300	4.0	3.8	3.8	3.7	3.8	4.0
Clerical workers	845	903	4.7	4.5	4.7	4.4	4.6	4.8
Blue-collar workers	2,235	2,783	7.5	7.1	7.2	7.5	7.2	8.0
Craft and kindred workers	592	654	4.4	4.3	4.6	4.5	4.4	4.9
Operatives, except transport	929	1,174	7.8	9.0	9.1	9.0	9.0	9.9
Transport equipment operatives	193	260	5.0	6.1	5.6	5.2	5.0	6.9
Nonfarm laborers	521	667	9.7	11.0	10.7	12.2	12.2	12.3
Service workers	1,076	967	7.7	6.7	6.8	6.6	6.6	6.9
Farm workers	83	123	2.9	4.1	4.3	4.5	4.3	4.4
INDUSTRY[3]								
Nonagricultural private wage and salary workers[4]	4,257	4,738	5.7	5.8	5.9	5.8	5.8	6.2
Construction	527	576	10.3	9.6	9.9	10.2	10.3	10.6
Manufacturing	1,153	1,562	5.1	6.0	6.0	5.9	5.9	6.7
Durable goods	605	934	4.4	5.3	5.5	5.6	5.5	6.7
Nondurable goods	548	629	6.1	7.1	6.8	6.1	6.4	6.8
Transportation and public utilities	187	282	3.5	4.0	3.8	4.2	4.1	4.4
Wholesale and retail trade	1,230	1,264	6.6	6.4	6.6	6.5	6.4	6.6
Finance and service industries	1,128	1,042	5.1	4.7	4.9	4.6	4.7	4.6
Government workers	419	607	3.9	3.3	3.0	3.4	3.6	3.8
Agricultural wage and salary workers	112	164	7.5	10.0	9.9	10.1	9.4	10.3

[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

Table A-3. Selected employment indicators

(In thousands)

Selected categories	Not seasonally adjusted		Seasonally adjusted					
	Jan. 1979	Jan. 1980	Jan. 1979	Sept. 1979	Oct. 1979	Nov. 1979	Dec. 1979	Jan. 1980
CHARACTERISTICS								
Total employed, 16 years and over	94,430	96,145	96,157	97,504	97,474	97,608	97,912	97,808
Men	53,057	55,251	56,326	56,714	56,629	56,580	56,714	56,886
Women	39,378	40,893	39,831	40,790	40,845	41,028	41,178	41,318
Married men, spouse present	34,772	35,362	36,119	36,198	36,124	36,045	36,026	36,749
Married women, spouse present	22,165	23,111	22,372	22,917	22,919	22,940	23,027	23,111
OCCUPATION								
White-collar workers	48,337	50,351	48,304	49,816	49,738	49,912	49,911	50,313
Professional and technical	14,474	15,430	14,734	15,161	15,057	15,131	15,272	15,337
Managers and administrators, except farm	10,312	10,619	10,312	10,650	10,634	10,617	10,535	10,608
Sales workers	5,852	6,291	6,048	6,181	6,261	6,362	6,346	6,852
Clerical workers	17,259	17,951	17,209	17,835	17,781	17,802	17,758	17,915
Blue-collar workers	31,171	33,400	32,290	32,209	32,305	32,140	32,302	31,882
Craft and kindred workers	12,470	12,881	12,107	12,993	13,001	12,925	13,041	12,818
Operatives, except transport	10,804	10,519	10,958	10,964	10,967	10,963	11,042	10,678
Transport equipment operatives	3,604	3,569	3,651	3,617	3,593	3,628	3,635	3,616
Nonfarm laborers	4,294	4,211	4,574	4,635	4,644	4,594	4,584	4,774
Service workers	12,581	12,738	12,117	12,459	12,937	12,994	12,970	12,979
Farm workers	2,161	2,256	2,764	2,722	2,695	2,718	2,694	2,660
MAJOR INDUSTRY AND CLASS OF WORKER								
Agriculture								
Wage and salary workers	1,122	1,154	1,387	1,389	1,381	1,475	1,451	1,428
Self-employed workers	1,446	1,476	1,564	1,642	1,602	1,622	1,596	1,558
Unpaid family workers	194	193	295	325	313	310	310	293
Nonagricultural industries								
Wage and salary workers	84,857	86,385	86,029	86,932	86,982	87,320	87,384	87,578
Government	15,430	15,584	15,251	15,407	15,421	15,358	15,397	15,814
Private industries	69,427	70,820	70,778	71,505	71,559	71,662	71,987	71,763
Private households	1,169	1,062	1,287	1,313	1,261	1,211	1,228	1,132
Other industries	68,258	69,738	69,531	70,192	70,298	70,451	70,759	71,031
Self-employed workers	6,372	6,624	6,497	6,731	6,814	6,781	6,737	6,752
Unpaid family workers	484	354	475	489	430	417	409	379
PERSONS AT WORK[1]								
Nonagricultural industries	87,307	89,206	87,520	88,723	88,638	88,617	88,180	89,058
Full time schedules	71,148	72,857	72,176	73,159	73,204	72,997	73,137	73,223
Part time for economic reasons	3,034	3,339	3,203	3,167	3,115	3,392	3,519	3,513
Usually work full time	1,294	1,541	1,252	1,273	1,354	1,413	1,491	1,549
Usually work part time	1,740	1,798	1,951	1,894	1,961	1,979	2,028	1,964
Part time for noneconomic reasons	12,425	13,010	12,141	12,397	12,119	12,228	12,524	12,718

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

Table A-4. Duration of unemployment

(Numbers in thousands)

Weeks of unemployment	Not seasonally adjusted		Seasonally adjusted					
	Jan. 1979	Jan. 1980	Jan. 1979	Sept. 1979	Oct. 1979	Nov. 1979	Dec. 1979	Jan. 1980
DURATION								
Less than 5 weeks	3,133	3,506	2,751	2,778	2,955	2,919	2,916	3,184
5 to 14 weeks	2,102	2,128	1,881	2,035	1,963	1,869	1,966	1,907
15 weeks and over	1,296	1,409	1,229	1,152	1,195	1,191	1,230	1,334
15 to 26 weeks	779	873	738	644	678	660	711	795
27 weeks and over	517	536	521	508	517	531	519	539
Average (mean) duration, in weeks	10.7	10.1	11.2	10.7	10.5	10.6	10.5	10.5
Median duration, in weeks	5.6	5.0	5.8	5.8	5.5	5.3	5.5	5.2
PERCENT DISTRIBUTION								
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 5 weeks	47.2	49.8	46.9	46.6	48.1	48.8	47.7	49.6
5 to 14 weeks	32.7	30.2	32.1	34.1	32.1	31.3	32.2	29.7
15 weeks and over	20.2	20.0	21.0	19.3	19.5	19.9	20.1	20.8
15 to 26 weeks	12.1	12.4	12.1	10.8	11.1	11.0	11.6	12.4
27 weeks and over	8.0	7.6	8.9	8.5	8.5	8.9	8.5	8.4

HOUSEHOLD DATA

Table A-5. Reasons for unemployment

(Numbers in thousands)

Reasons	Not seasonally adjusted		Seasonally adjusted					
	Jan. 1979	Jan. 1980	Jan. 1979	Sept. 1979	Oct. 1979	Nov. 1979	Dec. 1979	Jan. 1980
NUMBER OF UNEMPLOYED								
Lost last job	2,098	1,779	2,441	2,632	2,731	2,723	2,728	2,588
On layoff	1,196	1,550	752	955	929	987	944	1,019
Other job losers	1,902	2,179	1,689	1,777	1,802	1,742	1,744	1,969
Left last job	941	819	900	825	835	845	800	779
Reentered labor force	1,751	1,822	1,721	1,760	1,762	1,694	1,771	1,797
Seeking first job	686	674	524	601	604	736	658	611
PERCENT DISTRIBUTION								
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Job losers	47.4	52.4	41.5	43.7	44.5	45.4	44.3	46.9
On layoff	17.8	22.0	12.4	14.2	15.2	14.4	15.1	16.0
Other job losers	29.6	30.9	28.7	29.5	29.4	29.0	29.0	30.9
Job leavers	14.7	11.6	15.3	13.7	13.6	14.1	13.0	12.2
Reentrants	27.3	25.9	29.2	29.2	28.7	28.3	28.8	28.2
New entrants	10.7	9.6	14.0	13.3	13.1	12.3	13.9	12.7
UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE								
Job losers	3.0	3.6	2.4	2.5	2.6	2.6	2.6	2.9
Job leavers	.9	.8	.7	.8	.8	.8	.8	.7
Reentrants	1.7	1.8	1.7	1.7	1.7	1.6	1.7	1.7
New entrants	.7	.7	.8	.8	.8	.7	.8	.8

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

Sex and age	Number of unemployed persons (in thousands)		Unemployment rates					
	Jan. 1979	Jan. 1980	Jan. 1979	Sept. 1979	Oct. 1979	Nov. 1979	Dec. 1979	Jan. 1980
Total, 16 years and over	5,904	6,425	5.8	5.8	5.9	5.8	5.9	6.2
16 to 19 years	1,542	1,545	16.0	16.2	16.4	15.9	16.0	16.3
16 to 17 years	761	764	18.6	16.9	18.4	17.3	18.0	19.0
18 to 19 years	771	772	13.8	15.6	15.0	14.7	14.5	14.0
20 to 24 years	1,322	1,554	8.7	9.2	9.6	9.8	9.8	10.1
25 years and over	3,032	3,326	3.9	3.9	4.0	4.0	3.8	4.2
25 to 54 years	2,590	2,818	4.1	4.1	4.2	4.3	4.1	4.4
55 years and over	444	512	3.0	2.9	3.0	2.7	2.7	3.5
Men, 16 years and over	2,997	3,392	5.1	5.2	5.2	5.2	5.2	5.7
16 to 19 years	830	915	16.2	16.1	15.7	15.8	15.6	16.2
16 to 17 years	425	410	19.2	16.7	17.1	17.8	17.9	19.0
18 to 19 years	401	399	13.7	15.3	14.4	14.0	13.6	13.9
20 to 24 years	686	860	8.4	8.8	9.5	8.4	9.4	10.6
25 years and over	1,479	1,719	3.2	3.3	3.4	3.5	3.2	3.7
25 to 54 years	1,219	1,410	3.3	3.6	3.5	3.8	3.4	3.8
55 years and over	262	314	2.9	2.8	2.8	2.6	2.6	3.5
Women, 16 years and over	2,907	3,034	6.8	6.6	6.9	6.6	6.8	6.8
16 to 19 years	712	730	15.7	16.4	17.2	16.1	16.4	16.3
16 to 17 years	336	354	17.8	17.2	19.8	16.7	18.0	19.1
18 to 19 years	370	373	14.0	15.9	15.6	15.5	15.5	14.2
20 to 24 years	636	694	9.1	9.6	9.7	9.3	10.2	9.8
25 years and over	1,553	1,607	5.0	4.6	4.9	4.7	4.7	4.9
25 to 54 years	1,371	1,408	5.4	5.0	5.2	5.0	5.1	5.2
55 years and over	182	198	3.2	2.9	3.4	2.9	2.9	3.4

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

(Percent)

Measure	Quarterly averages					Monthly data		
	1978	1979				1979		1980
	IV	I	II	III [1]	IV	Nov.	Dec.	Jan.
U-1—Persons unemployed 15 weeks or longer as a percent of the civilian labor force	1.2	1.2	1.2	1.1	1.2	1.1	1.2	1.3
U-2—Job losers as a percent of the civilian labor force	2.4	2.4	2.4	2.5	2.6	2.6	2.6	2.9
U-3—Unemployed persons 25 years and over as a percent of the civilian labor force 25 years and over	3.9	3.7	3.9	3.9	3.9	4.0	3.8	4.2
U-4—Unemployed full-time jobseekers as a percent of the full-time labor force	5.2	5.2	5.2	5.3	5.4	5.4	5.4	5.7
U-5—Total unemployed as a percent of the civilian labor force (official measure)	5.8	5.8	5.9	5.8	5.9	5.8	5.9	6.2
U-6—Total full-time jobseekers plus ½ part-time jobseekers plus ½ total on part time for economic reasons as a percent of the civilian labor force less ½ of the part-time labor force	7.2	7.2	7.2	7.1	7.4	7.4	7.5	7.8
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	8.0	7.9	8.0	8.0	8.1	N.A.	N.A.	N.A.

N.A.=not available

Table A-8. Employment status of the noninstitutional population by race and Hispanic origin, not seasonally adjusted

(Number in thousands)

Employment status	Total		White		Black [1]		Hispanic origin [2]	
	Jan. 1979	Jan. 1980	Jan. 1979	Jan. 1980	Jan. 1979	Jan. 1980	Jan. 1979	Jan. 1980
TOTAL								
Civilian noninstitutional population	160,351	161,020	140,683	142,806	16,855	17,240	7,477	8,033
Civilian labor force	100,867	103,148	88,989	90,950	10,088	10,339	4,748	5,159
Percent of population	62.9	64.1	63.3	63.7	59.9	60.0	63.5	64.2
Employment	94,436	96,145	83,950	85,820	8,822	8,988	4,325	4,665
Agriculture	2,762	2,782	2,499	2,515	216	217	174	192
Nonagricultural industries	91,671	93,363	81,452	82,905	8,606	8,771	4,151	4,474
Unemployment	6,431	7,003	5,038	5,130	1,266	1,351	423	494
Unemployment rate	6.4	6.8	5.7	6.1	12.5	13.1	8.9	9.6
Not in labor force	59,487	57,832	51,695	51,856	6,767	6,901	2,730	2,874

[1] Data relate to black workers only. According to the 1970 Census, they comprised about 88 per cent of the "black and other" population group.

[2] Data on persons of Hispanic origin are tabulated separately, without regard to race, which means that they are also included in the data for white and black workers. At the time of the 1970 Census, approximately 96 percent of their population was white.

Table A-9. Employment status of male Vietnam-era veterans and nonveterans by age, not seasonally adjusted

(Numbers in thousands)

Veteran status and age	Civilian noninstitutional population		Civilian labor force							
			Total		Employed		Unemployed			
							Number		Percent of labor force	
	Jan. 1979	Jan. 1980	Jan. 1979	Jan. 1980	Jan. 1979	Jan. 1980	Jan. 1979	Jan. 1980	Jan. 1979	Jan. 1980
VETERANS[1]										
Total, 20 years and over	8,463	8,568	8,028	8,117	7,589	7,625	439	492	5.5	6.1
20 to 24 years	639	441	589	412	508	338	81	74	13.8	18.0
25 to 29 years	2,037	2,207	1,758	1,924	1,610	1,530	328	394	8.9	5.7
25 to 29 years	2,119	1,925	2,022	1,718	1,869	1,556	133	162	6.6	9.4
30 to 34 years	1,547	1,616	1,421	1,507	1,285	1,349	136	158	4.0	4.5
35 to 39 years	1,371	1,766	1,335	1,699	1,276	1,625	59	74	4.4	4.4
40 years and over	787	920	681	781	651	757	30	24	4.4	3.1
NONVETERANS[2]										
Total 25 to 39 years	14,169	15,076	11,431	14,381	12,807	11,531	624	780	4.6	5.5
25 to 29 years	6,427	6,896	6,022	6,531	5,666	6,135	156	196	5.9	6.1
30 to 34 years	4,064	4,180	3,904	4,175	3,752	3,941	152	232	3.9	5.6
35 to 39 years	3,678	3,930	3,505	3,675	3,389	3,453	116	152	3.3	4.2

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

[2] Nonveterans are males who have never served in the Armed Forces. Published data are limited to those 25-39 years of age, the group that most closely corresponds to the bulk of the Vietnam-era veteran population.

Table A-10. Employment status of the noninstitutional population for the ten largest States

(Numbers in thousands)

State and employment status	Not seasonally adjusted[1]			Seasonally adjusted					
	Jan. 1979	Dec. 1979	Jan. 1980	Jan. 1979	Sept. 1979	Oct. 1979	Nov. 1979	Dec. 1979	Jan. 1980
California									
Civilian noninstitutional population[2]	16,579	16,925	16,954	16,579	16,836	16,866	16,895	16,925	16,954
Civilian labor force	10,835	11,195	11,065	10,841	11,081	11,123	11,135	11,178	11,076
Employed	10,053	10,521	10,338	10,149	10,375	10,425	10,458	10,481	10,438
Unemployed	782	675	727	692	706	698	677	697	640
Unemployment rate	7.2	6.0	6.6	6.4	6.4	6.3	6.1	6.2	5.8
Florida									
Civilian noninstitutional population	6,661	6,852	6,870	6,661	6,798	6,816	6,834	6,852	6,870
Civilian labor force	3,780	3,764	3,757	3,816	3,813	3,829	3,783	3,802	3,791
Employed	3,495	3,569	3,544	3,548	3,588	3,603	3,570	3,598	3,596
Unemployed	285	194	213	268	225	226	213	204	195
Unemployment rate	7.5	5.2	5.7	7.0	5.9	5.9	5.6	5.4	5.1
Illinois									
Civilian noninstitutional population[2]	8,232	8,265	8,290	8,232	8,266	8,273	8,279	8,285	8,290
Civilian labor force	5,263	5,476	5,428	5,303	5,371	5,367	5,395	5,454	5,466
Employed	4,960	5,135	5,002	5,036	5,046	5,054	5,078	5,105	5,077
Unemployed	303	339	426	267	325	313	317	349	389
Unemployment rate	5.7	6.2	7.8	5.0	6.1	5.8	5.9	6.4	7.1
Massachusetts									
Civilian noninstitutional population[2]	4,350	4,389	4,393	4,350	4,377	4,381	4,385	4,389	4,393
Civilian labor force	2,902	2,852	2,830	2,901	2,930	2,877	2,836	2,879	2,827
Employed	2,683	2,708	2,648	2,721	2,743	2,719	2,687	2,719	2,685
Unemployed	219	144	181	180	187	158	149	160	142
Unemployment rate	7.5	5.1	6.4	6.2	6.4	5.5	5.3	5.6	5.0
Michigan									
Civilian noninstitutional population[2]	6,683	6,755	6,762	6,683	6,732	6,740	6,747	6,755	6,762
Civilian labor force	4,250	4,323	4,266	4,270	4,334	4,343	4,348	4,345	4,283
Employed	3,909	3,955	3,827	3,957	3,988	3,976	3,987	3,968	3,875
Unemployed	341	368	439	313	346	367	357	377	408
Unemployment rate	8.0	8.5	10.3	7.3	8.0	8.5	8.2	8.7	9.5
New Jersey									
Civilian noninstitutional population[2]	5,478	5,532	5,536	5,478	5,516	5,521	5,526	5,532	5,536
Civilian labor force	3,505	3,590	3,570	3,536	3,546	3,545	3,526	3,568	3,597
Employed	3,243	3,376	3,312	3,285	3,326	3,301	3,279	3,335	3,348
Unemployed	262	214	258	251	220	244	247	233	249
Unemployment rate	7.5	6.0	7.2	7.1	6.2	6.9	7.0	6.5	6.9
New York									
Civilian noninstitutional population[2]	13,264	13,298	13,298	13,264	13,282	13,287	13,290	13,298	13,298
Civilian labor force	7,980	8,111	8,049	8,004	8,020	8,013	8,117	8,114	8,064
Employed	7,363	7,546	7,376	7,438	7,437	7,434	7,551	7,525	7,440
Unemployed	617	565	673	566	583	579	566	589	624
Unemployment rate	7.7	7.0	8.4	7.1	7.3	7.2	7.0	7.3	7.7
Ohio									
Civilian noninstitutional population[2]	7,889	7,944	7,949	7,889	7,925	7,931	7,937	7,944	7,949
Civilian labor force	4,982	5,082	4,994	5,047	5,043	5,042	5,033	5,069	5,062
Employed	4,652	4,815	4,645	4,748	4,756	4,726	4,743	4,775	4,743
Unemployed	330	267	349	299	287	316	290	294	319
Unemployment rate	6.6	5.2	7.0	5.9	5.7	6.3	5.8	5.8	6.3
Pennsylvania									
Civilian noninstitutional population[2]	8,876	8,920	8,925	8,876	8,901	8,909	8,915	8,920	8,925
Civilian labor force	5,273	5,331	5,332	5,324	5,307	5,331	5,337	5,304	5,383
Employed	4,897	4,978	4,918	4,977	4,943	4,502	4,950	4,930	4,998
Unemployed	376	354	414	347	364	429	387	374	385
Unemployment rate	7.1	6.6	7.8	6.5	6.9	8.0	7.3	7.1	7.2
Texas									
Civilian noninstitutional population[2]	9,373	9,618	9,637	9,373	9,560	9,580	9,599	9,618	9,637
Civilian labor force	6,127	6,327	6,345	6,151	6,337	6,315	6,329	6,342	6,365
Employed	5,856	6,102	6,018	5,903	6,087	6,061	6,062	6,092	6,060
Unemployed	271	226	327	248	250	254	267	250	305
Unemployment rate	4.4	3.6	5.2	4.0	3.9	4.0	4.2	3.9	4.8

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

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

NOTE: The not seasonally adjusted labor force estimates for 1979 have been revised to reflect the latest 1978 population estimates for the States. These revised estimates were used to develop seasonally adjusted data for 1979 and seasonal factors to be used in 1980 using the X-11/ARIMA methodology.

Table B-1. Employees on nonagricultural payrolls by industry

[In thousands]

Industry	Not seasonally adjusted				Seasonally adjusted					
	JAN. 1979	NOV. 1979	DEC. p 1979	JAN. p 1980	JAN. 1979	SEPT. 1979	OCT. 1979	NOV. 1979	DEC. p 1979	JAN. p 1980
TOTAL	87,128	90,902	91,000	89,176	88,433	89,803	89,982	90,100	90,231	90,596
GOODS-PRODUCING	25,671	26,829	26,598	25,959	26,382	26,593	26,572	26,533	26,654	26,765
MINING	910	984	985	977	927	973	979	983	992	995
CONSTRUCTION	3,998	4,879	4,708	4,305	4,497	4,671	4,694	4,714	4,780	4,903
MANUFACTURING	20,763	20,966	20,905	20,677	20,958	20,949	20,899	20,836	20,882	20,867
Production workers	14,910	14,954	14,900	14,673	15,085	14,957	14,894	14,829	14,873	14,804
DURABLE GOODS	12,561	12,661	12,645	12,518	12,640	12,737	12,650	12,587	12,610	12,594
Production workers	9,016	8,983	8,969	8,822	9,085	9,066	8,972	8,908	8,929	8,847
Lumber and wood products	739.0	748.9	730.8	709.8	768	758	760	751	741	738
Furniture and fixtures	497.0	488.7	486.6	483.8	497	480	482	483	482	484
Stone, clay, and glass products	681.6	712.9	699.7	675.6	709	708	709	704	706	702
Primary metal industries	1,243.8	1,216.7	1,204.5	1,199.5	1,250	1,236	1,226	1,223	1,208	1,206
Fabricated metal products	1,716.0	1,738.2	1,728.7	1,705.8	1,725	1,716	1,723	1,726	1,724	1,714
Machinery, except electrical	2,428.7	2,440.9	2,454.6	2,499.4	2,419	2,496	2,455	2,434	2,482	2,489
Electric and electronic equipment	2,060.9	2,146.3	2,154.7	2,147.8	2,065	2,117	2,125	2,125	2,102	2,152
Transportation equipment	2,075.2	2,009.7	2,038.6	1,963.2	2,069	2,086	2,025	1,998	2,014	1,957
Instruments and related products	677.5	695.9	699.2	698.3	679	692	696	694	698	700
Miscellaneous manufacturing	441.2	462.8	447.2	434.4	459	448	449	449	453	452
NONDURABLE GOODS	8,202	8,305	8,260	8,159	8,318	8,212	8,249	8,249	8,272	8,273
Production workers	5,894	5,971	5,931	5,851	6,000	5,891	5,922	5,921	5,944	5,957
Food and kindred products	1,678.0	1,725.0	1,699.2	1,645.8	1,735	1,691	1,707	1,710	1,718	1,702
Tobacco manufacturers	69.8	64.8	66.5	65.0	68	65	65	60	62	64
Textile mill products	896.3	893.9	893.7	887.8	900	880	887	889	893	891
Apparel and other textile products	1,313.6	1,306.2	1,293.7	1,276.9	1,339	1,294	1,299	1,292	1,299	1,302
Paper and allied products	700.0	715.9	715.1	712.7	706	718	715	714	714	718
Printing and publishing	1,221.0	1,265.6	1,272.8	1,266.9	1,225	1,245	1,252	1,262	1,264	1,271
Chemicals and allied products	1,100.0	1,115.2	1,115.7	1,114.3	1,109	1,110	1,113	1,114	1,119	1,123
Petroleum and coal products	205.8	217.2	215.1	211.8	211	215	217	217	217	217
Rubber and misc. plastics products	771.0	757.6	746.9	743.4	774	751	751	749	744	746
Leather and leather products	246.3	243.2	241.0	234.7	251	243	243	242	242	239
SERVICE-PRODUCING	61,457	64,073	64,402	63,217	62,051	63,210	63,410	63,567	63,577	63,831
TRANSPORTATION AND PUBLIC UTILITIES	5,010	5,255	5,237	5,173	5,071	5,180	5,218	5,229	5,206	5,236
WHOLESALE AND RETAIL TRADE	19,765	20,580	20,923	20,175	19,965	20,169	20,243	20,308	20,246	20,378
WHOLESALE TRADE	5,066	5,251	5,238	5,207	5,102	5,190	5,209	5,235	5,222	5,248
RETAIL TRADE	14,699	15,329	15,685	14,968	14,863	14,979	15,034	15,073	15,024	15,130
FINANCE, INSURANCE, AND REAL ESTATE	4,829	5,029	5,039	5,030	4,868	4,997	5,018	5,039	5,054	5,071
SERVICES	16,353	17,281	17,273	17,083	16,670	17,191	17,257	17,298	17,360	17,414
GOVERNMENT	15,500	15,928	15,930	15,756	15,477	15,673	15,674	15,693	15,711	15,732
FEDERAL	2,730	2,760	2,770	2,754	2,758	2,762	2,770	2,771	2,771	2,782
STATE AND LOCAL	12,770	13,168	13,160	13,002	12,719	12,911	12,904	12,922	12,940	12,950

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					
	JAN. 1979	NOV. 1979	DEC. 1979 p	JAN. 1980 p	JAN. 1979	SEPT. 1979	OCT. 1979	NOV. 1979	DEC. 1979 p	JAN. 1980 p
TOTAL PRIVATE	35.2	35.6	36.0	35.1	35.8	35.7	35.6	35.7	35.7	35.7
MINING	42.6	43.7	43.9	43.6	43.4	43.1	43.1	43.2	43.9	44.6
CONSTRUCTION	36.6	36.5	37.1	35.1	37.1	37.5	36.6	36.8	37.1	37.6
MANUFACTURING	40.1	40.4	41.0	39.9	40.6	40.2	40.2	40.1	40.3	40.4
Overtime hours	3.5	3.4	3.4	3.1	3.7	3.2	3.2	3.3	3.2	3.3
DURABLE GOODS	40.9	40.8	41.7	40.4	41.4	40.7	40.8	40.6	40.8	40.8
Overtime hours	3.8	3.5	3.5	3.1	4.1	3.3	3.3	3.4	3.3	3.3
Lumber and wood products	38.5	38.8	39.4	38.1	39.9	39.7	39.4	38.9	39.2	39.5
Furniture and fixtures	38.3	39.2	39.9	38.8	39.9	39.6	39.8	39.9	39.8	39.8
Stone, clay, and glass products	40.5	41.7	41.9	40.7	41.8	41.5	41.5	41.5	41.7	42.0
Primary metal industries	42.2	40.7	40.9	40.3	42.3	41.0	41.1	40.7	40.6	40.6
Fabricated metal products	40.8	41.0	42.0	40.6	41.1	40.7	40.9	40.7	41.1	40.9
Machinery, except electrical	42.1	41.9	42.9	41.6	42.3	41.9	41.6	41.6	41.7	41.8
Electric and electronic equipment	40.3	40.9	41.4	40.3	40.5	40.3	40.3	40.6	40.6	40.5
Transportation equipment	41.9	40.8	42.8	40.5	42.0	40.6	41.3	40.6	41.0	41.6
Instruments and related products	40.6	41.4	41.7	40.1	41.1	40.6	40.7	41.0	40.9	40.6
Miscellaneous manufacturing	38.6	39.4	39.6	39.2	39.0	39.1	39.1	39.1	39.1	39.6
NONDURABLE GOODS	38.9	39.6	40.0	39.2	39.5	39.3	39.3	39.0	39.5	39.7
Overtime hours	3.0	3.3	3.2	3.0	3.2	3.1	3.0	3.2	3.1	3.2
Food and kindred products	39.5	40.2	40.6	39.6	40.0	40.0	39.9	40.0	40.0	40.1
Tobacco manufacturers	36.1	36.8	39.9	38.0	37.2	36.6	38.3	37.8	39.2	39.1
Textile mill products	39.9	41.3	41.6	41.1	40.7	40.6	40.8	41.1	41.1	41.9
Apparel and other textile products	34.6	35.6	36.0	34.9	35.3	35.3	35.3	35.3	35.7	35.6
Paper and allied products	42.6	42.9	43.6	42.8	42.8	42.4	42.6	42.7	43.0	43.0
Printing and publishing	37.1	37.9	38.1	37.5	37.7	37.5	37.4	37.4	37.4	38.1
Chemicals and allied products	41.7	42.1	42.5	41.5	42.0	41.7	41.7	41.9	41.6	41.8
Petroleum and coal products	42.8	44.8	44.2	43.1	43.5	44.1	43.7	44.4	44.3	43.8
Rubber and misc. plastics products	41.1	40.3	40.7	40.0	41.4	40.3	40.3	40.0	39.9	40.3
Leather and leather products	36.3	36.8	37.2	36.7	36.8	37.0	36.5	36.7	36.8	37.2
TRANSPORTATION AND PUBLIC UTILITIES	39.6	40.2	40.2	39.6	40.0	39.9	39.8	40.2	40.0	40.0
WHOLESALE AND RETAIL TRADE	32.0	32.4	32.9	31.8	32.5	32.6	32.6	32.7	32.6	32.4
WHOLESALE TRADE	38.4	38.9	39.1	38.3	38.7	38.7	38.8	38.9	38.9	38.6
RETAIL TRADE	29.9	30.4	31.0	29.7	30.6	30.7	30.6	30.7	30.6	30.4
FINANCE, INSURANCE, AND REAL ESTATE	36.4	36.4	36.4	36.4	36.3	36.4	36.2	36.5	36.4	36.3
SERVICES	32.4	32.6	32.8	32.6	32.6	32.7	32.6	32.7	32.9	32.6

[1] Data relate to production workers in mining and manufacturing, to construction workers in construction, and to nonsupervisory workers in transportation and public utilities, wholesale and retail trade, finance, insurance, and real estate, and services. These groups account for approximately 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. 1979	NOV. 1979	DEC. 1979 p	JAN. 1980 p	JAN. 1979	NOV. 1979	DEC. 1979 p	JAN. 1980 p
TOTAL PRIVATE	$5.97	$6.35	$6.38	$6.41	$210.18	$226.06	$229.68	$226.98
Seasonally adjusted	6.06	6.33	6.38	6.40	213.37	225.98	227.77	228.68
MINING	8.20	8.70	8.72	8.70	367.68	380.19	382.81	379.32
CONSTRUCTION	8.98	9.50	9.56	9.53	310.71	346.75	356.68	354.58
MANUFACTURING	6.49	6.86	6.96	6.99	260.25	277.18	285.34	277.91
DURABLE GOODS	6.92	7.29	7.41	7.37	285.03	297.43	309.88	297.75
Lumber and wood products	5.79	6.23	6.23	6.22	222.92	241.72	245.46	236.98
Furniture and fixtures	6.47	6.23	6.28	6.19	194.52	205.82	210.67	203.52
Stone, clay, and glass products	6.67	7.07	7.10	7.07	266.00	294.82	297.49	287.74
Primary metal industries	8.42	9.26	9.30	9.26	363.76	378.88	380.37	373.18
Fabricated metal products	6.68	6.99	7.11	7.08	269.28	286.59	298.62	285.82
Machinery, except electrical	7.10	7.51	7.63	7.63	295.91	314.47	327.35	317.41
Electric and electronic equipment	6.11	6.51	6.62	6.61	246.23	266.26	278.07	266.38
Transportation equipment	8.34	8.68	8.93	8.88	349.85	358.18	379.18	356.88
Instruments and related products	5.99	6.30	6.39	6.48	245.19	260.55	270.65	258.24
Miscellaneous manufacturing	4.93	5.15	5.22	5.32	190.30	203.48	206.71	208.98
NONDURABLE GOODS	5.81	6.21	6.26	6.31	226.01	245.92	250.40	247.35
Food and kindred products	6.09	6.51	6.55	6.61	240.56	261.70	268.62	261.76
Tobacco manufacturers	6.36	7.01	7.08	7.10	229.60	273.39	280.90	269.88
Textile mill products	4.57	4.66	4.68	4.69	180.35	200.72	203.01	200.98
Apparel and other textile products	4.17	4.32	4.39	4.41	144.28	153.79	154.04	153.91
Paper and allied products	6.80	7.42	7.49	7.52	297.68	318.32	326.56	321.88
Printing and publishing	6.72	7.09	7.15	7.21	269.51	284.71	272.82	278.38
Chemicals and allied products	7.52	7.87	7.89	7.95	305.28	351.35	343.76	329.93
Petroleum and coal products	8.51	9.57	9.48	9.77	385.63	428.78	417.25	421.09
Rubber and misc. plastics products	5.82	6.14	6.22	6.25	239.20	287.48	293.15	249.60
Leather and leather products	4.15	4.34	4.40	4.53	149.92	159.71	163.68	166.25
TRANSPORTATION AND PUBLIC UTILITIES	7.90	8.52	8.55	8.55	312.68	382.50	383.71	378.58
WHOLESALE AND RETAIL TRADE	4.96	5.18	5.17	.....	158.72	167.83	170.09	168.58
WHOLESALE TRADE	6.18	6.57	6.66	6.68	237.31	259.57	260.61	255.88
RETAIL TRADE	4.47	4.62	4.60	4.74	133.65	140.65	142.68	140.78
FINANCE, INSURANCE, AND REAL ESTATE	5.13	5.42	5.48	5.52	186.73	197.29	199.87	200.93
SERVICES	5.23	5.58	5.68	5.65	168.45	180.60	183.68	183.06

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

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ESTABLISHMENT DATA

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

(1967=100)

Industry	JAN. 1979	FEB. 1979	SEPT. 1979	OCT. 1979	NOV. 1979	DEC. P 1979	JAN. P 1980	Percent change from— JAN. 1979–JAN. 1980	Percent change from— DEC. 1979–JAN. 1980
TOTAL PRIVATE NONFARM									
Current dollars	222.6	223.2	237.5	238.4	237.5	239.3	239.8	7.7	0.2
Constant (1967) dollars	104.5	104.1	104.9	104.6	104.2	103.9	99.4	(2)	(3)
MINING	252.1	245.6	266.1	268.0	271.6	272.8	278.6	7.3	2.1
CONSTRUCTION	213.8	223.1	226.0	226.1	225.8	227.0	228.2	5.8	.5
MANUFACTURING	225.1	224.9	238.7	241.1	242.1	244.1	244.7	8.5	.2
TRANSPORTATION AND PUBLIC UTILITIES	248.8	252.6	255.6	255.4	258.9	260.5	261.0	4.8	.2
WHOLESALE AND RETAIL TRADE	217.7	225.0	227.0	227.0	229.5	230.9	233.2	7.1	1.0
FINANCE, INSURANCE AND REAL ESTATE	202.4	211.5	214.4	215.1	216.2	218.8	217.5	7.5	-.6
SERVICES	220.8	229.4	231.5	232.3	232.7	237.8	237.4	7.6	-.1

1 SEE FOOTNOTE 1, TABLE B-2.
2 PERCENT CHANGE WAS +0.5 FROM DECEMBER 1978 TO DECEMBER 1979, THE LATEST MONTH AVAILABLE.
3 PERCENT CHANGE WAS -1.5 FROM NOVEMBER 1979 TO DECEMBER 1979, THE LATEST MONTH AVAILABLE.

N.A. = not available
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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	1979 JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC. P	1980 JAN. P
TOTAL PRIVATE	124.4	124.7	125.7	123.6	125.4	125.7	125.7	125.5	125.9	125.8	126.3	126.7	126.7
GOODS-PRODUCING	110.3	110.2	111.3	106.8	110.3	110.1	109.9	109.4	109.7	109.0	108.7	109.8	110.5
MINING	152.0	152.5	152.5	152.0	151.6	152.5	148.4	156.9	157.4	156.1	154.8	162.3	163.8
CONSTRUCTION	128.9	128.7	132.7	124.9	133.7	134.4	133.9	134.5	135.6	132.7	133.7	137.1	140.8
MANUFACTURING	105.6	105.8	106.0	102.0	104.7	104.3	104.4	103.3	103.4	103.1	102.5	103.2	103.3
DURABLE GOODS	109.2	109.9	110.1	105.0	108.3	107.9	107.9	106.8	107.1	106.2	105.1	105.7	105.4
Lumber and wood products	115.9	114.9	116.4	112.4	113.3	112.7	111.9	112.3	113.6	113.3	110.1	108.9	108.7
Furniture and fixtures	109.9	109.1	109.8	105.8	105.9	105.3	105.9	104.5	104.8	105.9	106.2	106.4	106.2
Stone, clay, and glass products	113.0	112.8	114.9	111.5	113.1	113.0	111.5	110.8	111.2	110.5	110.4	111.1	111.7
Primary metal industries	100.1	100.3	100.2	99.7	97.9	97.9	97.8	95.9	95.3	96.6	93.1	91.8	91.0
Fabricated metal products	107.6	108.7	108.6	102.7	106.6	107.1	106.7	104.8	105.4	106.1	105.8	106.5	105.1
Machinery, except electrical	115.8	117.4	117.5	113.0	117.4	117.6	118.0	116.2	117.7	116.3	115.6	113.9	116.5
Electric and electronic equipment	106.6	107.8	108.5	104.6	108.2	108.6	108.5	104.7	107.2	107.6	108.1	109.0	109.3
Transportation equipment	105.9	106.9	105.9	94.3	102.6	99.4	100.3	102.6	100.1	97.4	93.7	96.6	93.1
Instruments and related products	128.2	129.4	129.7	127.2	128.1	128.4	128.1	127.2	127.2	127.8	127.8	128.5	128.4
Miscellaneous manufacturing industry	102.3	101.7	101.7	97.5	98.7	100.3	100.7	100.8	99.9	99.9	99.9	101.4	102.1
NONDURABLE GOODS	100.3	99.8	100.1	97.8	99.5	99.1	99.1	98.2	98.1	98.5	98.8	99.4	100.2
Food and kindred products	98.1	97.0	98.1	96.8	97.0	96.8	95.9	94.6	95.0	96.1	96.5	97.3	98.6
Tobacco manufactures	71.8	70.0	73.8	73.9	76.5	72.6	73.0	66.7	70.5	69.9	61.1	66.1	68.6
Textile mill products	91.9	90.5	90.6	86.7	89.5	89.6	89.8	89.0	89.5	90.6	91.8	92.1	93.9
Apparel and other textile products	91.0	90.3	89.9	86.8	89.5	88.7	89.5	88.0	87.5	87.9	87.3	88.9	88.8
Paper and allied products	101.1	101.8	103.0	100.8	102.3	102.1	103.2	103.1	102.2	102.7	102.8	103.7	104.3
Printing and publishing	102.5	103.1	103.4	101.7	103.1	103.3	104.0	104.7	103.9	104.3	105.9	105.2	104.5
Chemicals and allied products	108.7	108.5	108.1	107.7	108.3	108.4	108.8	108.2	107.6	107.9	108.4	109.2	110.0
Petroleum and coal products	122.7	123.8	125.0	125.7	124.2	123.1	123.0	124.2	126.2	125.1	128.0	128.6	129.0
Rubber and misc. plastics products	153.5	154.0	154.8	148.6	153.4	150.4	150.5	145.6	143.5	143.5	142.5	141.1	143.5
Leather and leather products	67.9	66.6	66.1	64.9	65.8	66.0	61.3	64.9	66.1	65.2	64.9	64.6	64.5
SERVICE-PRODUCING	134.2	134.8	135.6	135.3	135.9	136.5	136.7	136.6	137.2	137.5	138.5	138.4	138.0
TRANSPORTATION AND PUBLIC UTILITIES	112.8	113.3	113.7	109.2	113.8	115.0	114.2	115.2	114.9	115.8	116.9	115.8	116.1
WHOLESALE AND RETAIL TRADE	129.0	129.3	130.2	130.6	130.2	130.0	129.9	129.6	130.4	130.7	131.6	130.9	130.7
WHOLESALE TRADE	130.5	130.8	132.3	131.5	132.8	132.8	132.7	132.4	132.5	133.4	134.3	134.2	133.6
RETAIL TRADE	128.5	128.7	129.5	130.3	129.1	128.9	128.9	128.5	129.6	129.7	130.5	129.6	129.6
FINANCE, INSURANCE, AND REAL ESTATE	143.3	144.1	144.6	145.5	144.5	145.7	146.5	146.3	147.1	146.7	148.3	148.2	148.2
SERVICES	148.6	149.5	151.1	151.0	151.7	152.6	153.5	153.4	153.8	154.1	155.2	156.4	155.3

1 See footnote 1, table B-2

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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
1977				
January	73.0	80.2	86.3	80.5
February	67.2	84.3	84.6	81.4
March	72.4	82.6	84.0	82.8
April	71.5	81.7	82.3	84.6
May	70.3	76.5	79.1	85.2
June	65.1	72.7	77.4	86.6
July	70.3	70.3	75.3	84.9
August	52.8	70.9	76.7	83.1
September	67.2	67.7	79.7	83.1
October	66.2	76.2	80.5	82.8
November	73.3	73.7	84.0	81.1
December	75.3	79.4	82.3	82.0
1978				
January	68.3	80.2	83.1	81.4
February	69.2	75.6	79.1	83.1
March	69.5	77.3	77.6	81.1
April	68.0	69.8	73.5	82.0
May	57.8	67.2	72.7	81.7
June	66.6	66.6	71.2	82.3
July	64.5	69.5	73.0	81.4
August	60.5	67.2	77.3	78.2
September	62.5	71.2	79.7	77.9
October	71.0	78.2	82.3	73.5
November	75.9	81.1	82.3	76.2
December	74.4	82.3	80.5	71.8
1979				
January	70.3	76.5	74.1	71.8
February	55.1	72.1	67.4	70.6
March	60.5	57.8	61.9	61.7
April	44.8	55.2	58.1	64.0
May	54.7	51.5	50.3	61.9
June	57.0	58.4	46.9	58.7p
July	61.6	56.7	56.1	58.1p
August	48.8	52.0	55.8	
September	46.8	52.0	55.8p	
October	69.8	61.0	60.5p	
November	59.9	66.3p		
December	59.3p	61.9p		
1980				
January	62.2p			
February				
March				
April				
May				
June				
July				
August				
September				
October				
November				
December				

[1] Number of employees seasonally adjusted, on payrolls of 172 private nonagricultural industries.
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Senator BENTSEN. Commissioner, the Wall Street Journal, I noticed the other day, reported that many economists no longer think that we are going to have a recession in 1980, and they gave as one of the reasons the expectation of rapid increases in defense spending, and employment increasing because of that.

How much employment is directly related to defense spending?

Ms. NORWOOD. I can't answer that question offhand, sir, but certainly much of the defense-related spending is in manufacturing. We could provide something for the record.

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

JOB REQUIREMENTS ASSOCIATED WITH DEFENSE IN FISCAL YEARS 1980 AND 1981

At this time, the Bureau of Labor Statistics (BLS) can only provide a rough approximation of the job effects of the new defense budget. The 1980 and 1981 Department of Defense (DOD) budgets will affect jobs in those years and in later years as appropriated funds are spent. The following estimate was based upon an earlier study of defense expenditures in fiscal year 1975 which was roughly updated to account for planned changes in military outlays. DOD planned military outlays in current dollars rise from $127.4 billion in fiscal year 1980 to $142.7 billion in fiscal year 1981. Military and civilian pay and military retired pay were subtracted to determine the amounts available for purchases of goods and services in the private sector. In constant 1972 dollars, this amounted to $37.1 billion in fiscal year 1980 and $39.2 billion in fiscal year 1981, an increase of about 5 percent. Private sector employment resulting from DOD military outlays is estimated at 2.1 million in fiscal year 1980 and 2.2 million in fiscal year 1981, an increase of about 4 percent. These jobs include those required directly to produce the goods and services sold to DOD and the indirect jobs needed in other industries to support this output.

Given the lack of actual defense expenditure data for fiscal year 1980 and fiscal year 1981 at this time and the methods used, the above estimate of jobs required in the private sector should be considered only as a general order of magnitude. This is not an estimate of the actual increase in defense related employment expected by the Bureau in 1981. The interindustry model used in deriving these estimates is based on average requirements and not the marginal requirements needed to examine a change in funding levels. Actual employment changes at that time will be a function of a variety of supply and demand considerations in the labor market. The technique used in this estimate considers just one aspect of demand.

Senator BENTSEN. Have you looked at the budget from that standpoint, to what kind of an early impact it would have?

Ms. NORWOOD. No, sir.

Senator BENTSEN. You have not.

You have quite a mixed picture of unemployment gains and losses. Would you describe that as principally concentrated in the automobile industry rather than a general phenomenon? In other words, we have one or two industries that are really distorting this unemployment picture.

Ms. NORWOOD. I think we have a concentration of unemployment, certainly, in the automobile industry and perhaps in some of the other goods-producing industries.

As you could see from the data, Mr. Chairman, the establishment survey still shows some increases in the service industries, and if you make allowances for some of the factors that I have pointed out, I think it shows relatively little change in the goods-producing sector.

I believe that the increase in unemployment among the blue-collar workers, however, is a significant one.

Senator BENTSEN. Well, I was noticing in the administration's Economic Report that the administration has estimated that the long-term increase in productivity would be more on the order of 1 percent than the increases we have had in years past. That really does add up to a rather dismal forecast, it seems to me.

Ms. NORWOOD. Well, as you certainly know, sir, the productivity picture has been rather dismal. Last year, productivity declined during the fourth quarter at an annual rate of 1.6 percent, and the decline from fourth quarter to fourth quarter was 2 percent.

Senator BENTSEN. That's right. And if you look at it compared to what we have had in the past, I guess that is the worst we have had since 1947, the worst we have had since the Depression.

Ms. NORWOOD. You are certainly right; we have had several periods in the past—in 1969, 1973, and 1974—when there have also been declines from fourth quarter to the fourth quarter.

Senator BENTSEN. When we are looking at numbers this morning as you are talking about, would you anticipate a further decline in productivity? Does that normally go with that?

Ms. NORWOOD. Well, of course, if manufacturers' payrolls are pared and more workers are removed from the payrolls, the productivity picture could, perhaps, improve. Therefore, I think, what we have here is not inconsistent with some of the things that have been said about changes in productivity.

Senator BENTSEN. There doesn't seem to be any general cutback in hours and earnings for industry in general. Is that consistent with this kind of increase in unemployment? Why wouldn't you see a cutback on earnings and hours when you see an increase in unemployment?

Ms. NORWOOD. I think that is a really good question and I don't know the answer. There have been some studies done about the effect of changes in employment on earnings, and the fact is that many of the earnings relationships are established over a long period of time so that there may be no immediate reaction in wages to a decline in employment.

On the other hand, the wage picture is not really very encouraging in some ways. The wage picture shows over-the-year increases in the 8- to 9-percent range, which is considerably less than the Consumer Price Index or any price measure would show.

Senator BENTSEN. Let me get to one that is of concern, particularly along the Mexican border, and now I guess across the United States. And that is the question of illegal aliens in the country. I have seen numbers all the way up to 12 million as the possible number of illegal aliens in the country. And it is because of the nature of the problem, that they are here illegally and not registered with anyone—I don't see how they can get their hands on that and make serious estimates, but I just saw one that came out from the Bureau of the Census talking about 5 million, which is substantially less than what we have heard before.

Did the Bureau of Labor Statistics participate in that study? And, if not, have you had the chance to review such findings? What is your opinion of that study?

Ms. NORWOOD. No, sir, we did not participate in that study. We do expect to review it. We have not yet had an opportunity to do so.

Senator BENTSEN. Do you have any opinion at this time on that study?

Ms. NORWOOD. Not on that study; no. It is a very difficult area about which to get any hard facts.

Senator BENTSEN. I understand, but it is a very important area and one that we haven't properly addressed in this country.

Ms. NORWOOD. I agree.

Senator BENTSEN. We couldn't put enough soldiers on that border or build a fence high enough to keep people out who are coming here for a chance to work and help their families back home where they have quite a high unemployment rate. And yet we know that it is intruding on American jobs here.

I see my time is up.

Representative Reuss.

Representative REUSS. Thank you, Mr. Chairman.

Ms. Norwood, the Bureau of Labor Statistics' figures show, do they not—I refer here to their report—that while the unemployment rate overall went up from December to January by 0.3 of a percentage point, the unemployment rate for black workers went up by 0.5 of a percentage point—66 percent worse than for overall. Is that not a correct reading?

Ms. NORWOOD. The unemployment rate for blacks certainly did go up, and I believe that the increase in unemployment in the month of January was pretty much shared by blacks and whites. One has to be a little bit careful about reading the exact proportions, because the population of blacks is, of course, much smaller than the population of whites, and therefore the statistical validity of the numbers is somewhat different. That is, it takes a larger proportion——

Representative REUSS. Well, we have to rely on you.

Ms. NORWOOD. Let me say that since blacks represent something like 10 to 12 percent of the population, clearly there is need for a larger change in the unemployment rate for blacks than for whites to be certain that a real change has occurred.

Representative REUSS. There are 25 million blacks in the country. Can't you get a big enough sample?

Ms. NORWOOD. We represent blacks in proportion to their size in the population.

The important point I wanted to make, sir, is that the increase in unemployment in January was shared between blacks and whites. Second, blacks certainly have a much higher rate of unemployment, more than double the unemployment rate that whites have. Whether that can be translated into specific percentages is a different question.

Representative REUSS. Well, I would stipulate that always overall figures are going to be shared by blacks and whites. What I was interested in was: Doesn't it look as if the fact is that overall and for whites the unemployment rate went up by 0.3 of a percentage point and for blacks it went up by 0.5—66⅔ percent more? And thus my point is well telegraphed. It looks as if it is still true, does it not, that blacks are the last hired and the first fired?

Here we have a monthly unemployment picture which, with all the shortcomings of looking at just 1 month, looks as if a lot of people were getting fired. And doesn't it look as if, relatively speaking, for every three whites fired, five blacks were fired?

Ms. NORWOOD. Well, sir, I guess the point is really that 0.3 percentage point that you are referring to has about the same relationship to its December level of 5.1 that the 0.5 has to the 11.3 percent. That was the point I was trying to make. We are talking about different bases.

Yes, you are right; blacks have a very high rate of unemployment. Whether blacks are more affected by a downturn in unemployment depends, I think, primarily on the particular demographic makeup of the labor force in the industries in which the unemployment occurs.

Representative REUSS. Well, my time is up, but I still haven't been jarred from the thesis from which I started this questioning, that it is nicer to be white than black when the firing starts.

Ms. NORWOOD. Certainly blacks have a harder time in the labor force. There is no question about that, sir.

Representative REUSS. Thank you.

Senator BENTSEN. Senator Proxmire.

Senator PROXMIRE. Madam Commissioner, this is a puzzling report. It does indicate, and the big news is, I suppose, that we have for the first time unemployment above 6 percent—the highest in a year and a half. At the same time as we look at this and at your very helpful data here, I see it appears to be largely regional. I note in California unemployment is down; in Florida unemployment is down; in Massachusetts it's down; in Pennsylvania it's about the same; in New Jersey it's up a little bit but it's below what it was 1 year ago.

So if you take the 10 biggest States as an example, we find a big increase in Michigan, increases in Ohio and Illinois, pretty much of a regional result of the kind you might expect with the automobile industry leading the way for the slowdown in the economy. And it is hard to conclude that this is a national, universal, homogenized effect. Is that right?

Ms. NORWOOD. Yes. I think that what you are saying is that the regional effect is, in a sense, the same thing as the industry effect, and that those industries which happen to be in these States are the ones that are affected.

And that was really why I was trying to insert a word of caution.

Senator PROXMIRE. You also have an interesting dispersion factor, so to speak, which you have had for the last couple of years, and this is very interesting because it indicates over 60 percent of the industries were actually hiring additional people and had more employment rates than less employment. So that once again it indicates a concentration in a relatively few of the industries, rather than a generalized overall increase in unemployment.

Ms. NORWOOD. Yes.

Senator PROXMIRE. My third point is that this is 1 month, and because it is 1 month, and because we have had such a stable pattern, it seems to me we have to be very careful in assuming that it is leading us into a recession necessarily; is that right?

Ms. NORWOOD. I agree completely, sir.

Senator PROXMIRE. Another point is that I notice that the decline in real weekly wages was 4.5 percent for the year 1979. And I think this must be one of the very biggest drops in real weekly wages we have ever had outside of a serious depression or recession period. Is that right?

Ms. NORWOOD. I can check that, but we certainly have had a very high rate of inflation, and I think that it probably is very nearly true if not absolutely so. We will submit that for the record.

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

The decline in the constant dollar hourly earnings index for production or nonsupervisory workers on private nonagricultural payrolls was 4.5 percent from December 1978 to December 1979. The decline in real average weekly earnings was 5.3 percent from December 1978 to December 1979. This is the largest 12-month decline since the recession of 1973–75. In 1974, we had a 12-month declines in real average weekly earnings of more than 5.3 percent in April, November, and December.

Senator PROXMIRE. It seems to me this is an indication of why, as has been indicated by so many, rather than inflation, unemployment is our No. 1 problem and should be our No. 1 priority in economic policy.

Ms. NORWOOD. Yes, sir.

Senator PROXMIRE. It has been called to my attention that the labor force growth rate may not be realistic because you assume a slowdown in the influx of women into the labor force for the coming year and therefore you may be underestimating the unemployment potential for 1980.

How do you respond to the charge that you seem to assume that fewer women will be entering the labor force than have entered it in the past couple of years?

Ms. NORWOOD. You are now talking, you mean, about our labor force projections?

Senator PROXMIRE. I am talking about the administration's forecast, not the BLS forecast.

Ms. NORWOOD. Well, I think it is very difficult to forecast what women will do.

Senator PROXMIRE. Well, that's always tough, I know. [Laughter.]

But when you get women as a generality like this and they have a habit of coming into the work force as they have so dramatically ever since 1950, why should we expect that to stop now?

Ms. NORWOOD. I think that is certainly true, and I might add that the Bureau of Labor Statistics tried in the last year or two to put out three different scenarios for labor force projections because of this difficulty.

Senator PROXMIRE. My time is up, sir.

Senator BENTSEN. Congressman Bolling.

Representative BOLLING. No questions, Mr. Chairman.

Senator BENTSEN. I think we are right on time.

Thank you very much, Commissioner Norwood. We appreciate your testimony very much.

The committee stands adjourned.

[Whereupon, at 10:29 a.m., the committee adjourned, subject to the call of the Chair.]

EMPLOYMENT-UNEMPLOYMENT

FRIDAY, MARCH 7, 1980

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

The committee met, pursuant to notice, at 10 a.m., in room 318, Russell Senate Office Building, Hon. Lloyd Bentsen (chairman of the committee) presiding.

Present: Senators Bentsen, Sarbanes, and Javits.

Also present: John M. Albertine, executive director; William R. Buechner and Mayanne Karmin, professional staff members; Betty Maddox, administrative assistant; and Carol Corcoran and Mark R. Policinski, minority professional staff members.

OPENING STATEMENT OF SENATOR BENTSEN, CHAIRMAN

Senator BENTSEN. This hearing will come to order.

The news today is that inflation still obviously remains the No. 1 problem in the country. Producer prices rose in February at the annual rate of 19.6 percent. While consumer foods fell slightly, prices of manufactured goods rose at an annual rate of almost 27 percent. During 1980, the prices of manufactured goods have risen at double the 1979 rate, as the chart shows [indicating]. Obviously that's going to have a serious effect on consumer prices in the months ahead.

My concern is how much of that may be a marking up of prices by manufacturers trying to anticipate wage and price controls. I really see little prospect for relief from inflation in 1980 under current economic policies. The only way our Nation can absorb external price shocks like the recent increase in the price of petroleum is through productivity growth and, unfortunately, the policies just haven't been put into place to strengthen productivity in this country.

The inflation fight has fallen almost entirely to the Federal Reserve Board but we cannot and we should not allow the Fed to fight this battle alone. Our first priority must be to work toward a balanced budget. We have to show that we have discipline and that we have the tools to put the Federal Government's financial house in order. I think we have to do something to reverse the psychology of inflation expectations in this country, to convince the American public at least symbolically that we are trying to get control of the situation and turn it around.

We also ought to be planning for a modest tax cut in the area of $25 billion during 1981. At least half of that should be targeted toward increasing productivity by stimulating savings and investment

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in this country. If we fail to reverse our dismal productivity performance, we are going to make very little headway in fighting inflation.

The unemployment picture improved slightly during February to 6 percent, but total employment rose only slightly and the 1.5 million jobs created between February 1979 and February 1980 was the smallest number in 4 years. Those figures show that we probably won't go into an early recession.

Our witnesses today are Jerome Mark, Assistant Commissioner, Office of Productivity and Technology; John Layng, Assistant Commissioner for Prices and Living Conditions; and Mr. John E. Bregger, Chief, Division of Employment and Unemployment Analysis. I'd like to now defer to my colleague, Senator Sarbanes, for any comments he might have.

Senator Sarbanes.

Opening Statement of Senator Sarbanes

Senator Sarbanes. Thank you, Mr. Chairman.

First, I want to say that to the extent the unemployment rate figure can be interpreted as meaning we are not going into a recession, I welcome it. I happen to think it's a bankruptcy in economic thinking and economic policymaking to seek to have a recession. The objective, amongst others, is to avoid a recession and if these unemployment figures justify the view that we are not moving in that direction, I think it's a welcome thing.

I think that the inflation problem can be dealt with in a number of ways, including the breaking of the psychology of inflationary expectations, without throwing the economy into a downspin with all the concomitant costs that that will bring with it.

I also hope the witnesses this morning—and I notice they do to some extent in their statements—will, in the course of testifying on the price index, go into some detail on the components that make this up, in addition to dealing with the overall figure. I think it's extremely important that we focus on the components as we consider policies to address the problem. It is important to know its composition in order to respond intelligently to the situation with which we are confronted.

Senator Bentsen. Mr. Mark, please proceed.

STATEMENT OF JEROME A. MARK, ASSISTANT COMMISSIONER, OFFICE OF PRODUCTIVITY AND TECHNOLOGY, BUREAU OF LABOR STATISTICS, DEPARTMENT OF LABOR, ACCOMPANIED BY W. JOHN LAYNG, ASSISTANT COMMISSIONER, OFFICE OF PRICES AND LIVING CONDITIONS; AND JOHN E. BREGGER, CHIEF, DIVISION OF EMPLOYMENT AND UNEMPLOYMENT ANALYSIS

Mr. Mark. Mr. Chairman and Senator Sarbanes, I am Jerome A. Mark, Assistant Commissioner, Office of Productivity and Technology; on my left is John E. Bregger, Chief, Division of Employment and Unemployment Analysis; and on my right is John Layng, Assistant Commissioner, Office of Prices and Living Conditions.

Commissioner Norwood regrets she cannot be here today. As you know, she has been ill and she just left the hospital today and will be back in time for the next hearing.

Mr. Bregger will give a brief statement on the employment situation first and then he will be followed by Mr. Layng to give a statement on the price situation.

Senator BENTSEN. Mr. Bregger, please proceed.

Mr. BREGGER. Mr. Chairman and members of the committee, I am pleased to have the opportunity to provide the Joint Economic Committee with a few brief comments to supplement our Employment Situation press release that was issued this morning at 9 a.m.

The overall employment situation held about steady between January and February, as the unemployment rate, the number of unemployed, and the total number of employed persons all showed little change over the month. There was, however, a reduction in average hours worked.

The overall unemployment rate was 6 percent, compared with 6.2 percent in January. There was little change between the 2 months, however, because a good part of the difference was due to rounding. Confirming the overall change, jobless rate movements among most individual worker groups were small and nonsignificant.

The general slowdown in employment growth which we reported last month is still in evidence. The household and payroll surveys each report relatively small over-the-year employment growth, and the proportation of the population that is employed is no higher than a year ago.

While the number of payroll jobs increased by 140,000, the increase was essentially confined to the service-producing sector, particularly trade. Manufacturing employment was unchanged, though transportation equipment recovered the job losses of the prior month. Construction employment edged down, following an unexpectedly large increase in January.

There was a reduction in hours of work in February that may bear watching. The workweek for persons on private nonagricultural payrolls declined by 0.2 hours, with decreases widespread throughout both the goods- and service-producing sectors. The factory workweek, which is among the most cyclically sensitive indicators, also declined two-tenths of an hour. As a result of these developments, the aggregate hours indexes for both all private production workers and manufacturing workers declined over the month.

Thank you, Senator.

[The table attached to Mr. Bregger's statement follows:]

UNEMPLOYMENT RATES BY ALTERNATIVE SEASONAL ADJUSTMENT METHODS

Month and year	Unadjusted rate	X-11 ARIMA method					X-11 method (former official method)	Range (cols. 2–8)
		Official	Concurrent	Stable	Total	Residual		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1979:								
February	6.4	5.7	5.7	5.8	5.7	5.6	5.7	0.2
March	6.1	5.7	5.7	5.8	5.7	5.7	5.7	.1
April	5.5	5.8	5.8	5.8	5.8	5.9	5.8	.1
May	5.2	5.8	5.8	5.8	5.8	5.9	5.8	.1
June	6.0	5.7	5.7	5.5	5.7	5.7	5.7	.2
July	5.8	5.7	5.7	5.7	5.8	5.8	5.7	.1
August	5.9	5.9	5.9	6.0	5.9	5.9	5.9	.1
September	5.6	5.8	5.8	5.8	5.8	5.8	5.8	----------
October	5.6	5.9	5.9	6.0	5.9	6.0	5.9	.1
November	5.6	5.8	5.8	5.9	5.8	5.8	5.8	.1
December	5.6	5.9	5.9	6.0	5.8	5.9	5.9	.2
1980:								
January	6.8	6.2	6.1	6.2	6.2	6.2	6.2	.1
February	6.8	6.0	6.1	6.0	6.1	5.9	6.0	.2

Source: U.S. Department of Labor, Bureau of Labor Statistics, March 1980.

NOTES TO TABLE COLUMN NUMBERS

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

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

(3) Concurrent (X-11 ARIMA method). The procedure for computation of the official rate is followed, except that the data are reseasonally adjusted each month as the most recent data become available. Extrapolated factors are not used at all in this method. For example, the rate for January 1980 would be based, during 1980, on the adjustment of data for the period January 1967 through January 1980. The rates for the current year are shown as first computed. Since the revision pattern and procedure for computation of the rate are identical to the official procedure, the results of this method will be identical to the official rate at the beginning of each year when the most recent observation is December.

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

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

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

(7) X-11 method (former official method). The procedure for computation of the official rate is used except that the series are not extended with ARIMA models and the factors are projected in 12-mo intervals. The standard X-11 program is used to perform the seasonal adjustment.

Methods of adjustment: The X-11 ARIMA method was developed at Statistics Canada by the seasonal adjustment and times series staff under the direction of Estela Bee Dagum. The method is described in the X-11 ARIMA Seasonal Adjustment Method, by Estela Bee Dagnum, Statistics Canada Catalogue No. 12-564E, September 1979.

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

Senator BENTSEN. Mr. Layng, please proceed as you wish.

Mr. LAYNG. Thank you, Senator. In the price area, this year began much the same way last year ended. The January Consumer Price Index increased 1.4 percent, a substantial acceleration from the average monthly increase of 1 percent we observed in the fourth quarter of 1979. Prices of energy items jumped 4.6 percent. This was a sharp acceleration from increases in October and November which had slowed to 1.3 percent and 0.9 percent, respectively, and was an increase equal to the largest increase recorded in 1979. Gasoline prices jumped 7.4 percent and home heating oil prices increased 5.3 percent. This development is particularly disturbing if it is a sign that energy price increases this year are going to match last year's increase of 37 percent. A change of this magnitude would, by itself, add almost 4 percentage points to the inflation rate this year.

This, of course, includes only the direct impact of energy price increases on the CPI. Energy in one form or another gets into virtually every good and service we consume. One fairly clear example of this in the CPI is in the area of public transportation. In 1979, airline fares increased 32 percent, largely as a result of a 75 percent increase in producer prices for jet fuel. When the indirect impacts of higher energy costs are added up across all affected sectors, the total effect can be significant.

Increases in mortgage interest rates and house prices also played a major role in the January increase in the CPI. Mortgage interest rates rose 3 percent and house prices increased 0.9 percent. All combined, direct energy, mortgage interest rates, and house prices accounted for about 60 percent of the 1.4 percent rise in the January CPI. This means that if these items had not risen in price, the CPI increase in January would have been between four-tenths and five-tenths of 1 percent.

Changes in the CPI reflect, to a significant degree, changes in producer prices. The most recent data in this area for February, which were released this morning, showed finished goods prices increasing 1.5 percent. During the first 2 months of this year, finished goods prices increased 3.1 percent, an acceleration from the end of last year and a very large increase by historical standards. These increases occurred even though food prices fell for the second consecutive month.

Much of the acceleration in January and February was due to energy items—namely, gasoline and fuel oil. In February alone, finished energy items increased 7.5 percent, the largest 1-month change since March 1974 when energy prices jumped 8.8 percent. For items other than food and energy, prices jumped 2.1 percent in January and then slowed in February to an increase of 1.2 percent. Price increases for gold and silver jewelry played a role in these increases, but other items also rose sharply during the first 2 months of this year. Apparel prices rose following very little increase in 1979. Tire prices rose 6 percent as they continue to reflect the almost 50-percent rise in crude natural rubber prices over the last year. Paper and tobacco products were other areas of finished goods which increased in price.

At the intermediate and crude stages of production, prices also continued to rise at a rapid pace in January and February. While energy items at these levels continue to account for a significant part of the price rises that have occurred, other nonfood items continue to rise by large amounts relative to the past. Prices of intermediate or semifinished goods other than food and energy increased 1.1 percent in February following a 2.8-percent rise in January. For crude materials, the increase in goods other than foodstuffs and feedstuffs and energy was 4.4 percent in February and 2.4 percent in January. In summary, the producer price data for January and February indicate that price pressure may be accelerating.

Thank you.

[The Employment Situation press release referred to follows:]

News
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USDL 80-144
TRANSMISSION OF MATERIAL IN THIS RELEASE IS EMBARGOED UNTIL 9:00 A.M. (EST), FRIDAY, MARCH 7, 1980

THE EMPLOYMENT SITUATION: FEBRUARY 1980

The overall employment situation in February was little changed from January, the Bureau of Labor Statistics of the U.S. Department of Labor reported today.

Total employment--as measured by the monthly survey of households--was close to 98 million for the third consecutive month. Since February a year ago, employment has grown by a modest 1.5 million. The Nation's unemployment rate was 6.0 percent, compared with the January rate of 6.2 percent.

Nonfarm payroll employment--as measured by the monthly survey of establishments--rose slightly from the January level. Payroll jobs have increased by 2 million since February 1979. Hours of work, as measured by the same survey, declined over the month.

Unemployment

The number of unemployed persons in February, 6.3 million, and the unemployment rate, 6.0 percent, were little changed from the previous month. The two-tenths difference in the rate from January to February is overstated because of rounding; the actual change is not statistically significant. Unemployment had risen in January from a 17-month plateau during which time the overall rate had fluctuated narrowly between 5.7 and 5.9 percent.

Jobless rates for most worker categories showed little movement in February. Accordingly, unemployment rates for adult men (4.6 percent), adult women (5.7 percent), teenagers (16.5 percent), whites (5.3 percent), and blacks (11.5 percent) were about the same as in January. In contrast, there were jobless rate declines for married men and workers in durable goods manufacturing, groups which had experienced sharp increases in joblessness in the prior month. (See table A-2.)

Total Employment and the Labor Force

Total employment was little different from the January level, although employment among adult men rebounded from a sharp drop a month earlier. Employment rose 1.5 million from February 1979, the smallest over-the-year change in more than 4 years.

The civilian labor force was little changed from January's level and up 2.0 million over the year. The civilian labor force participation rate was at a high of 63.9 percent for the last three months. (See table A-1.)

Industry Payroll Employment

Nonfarm payroll employment rose by 140,000 in February to 90.7 million. (See table B-1.) Since February 1979, payroll employment has grown by 2 million or 2.3 percent. As with total employment, the pace was slower than anytime in the previous 4 years.

As in the prior month, February employment growth was concentrated in the service-producing sector, and the biggest increase was in trade (up 110,000). Employment in the services industry also rose over the month, by 60,000. Over the past year, jobs in trade have grown by 475,000 and services by 700,000.

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

Selected categories	Quarterly averages			Monthly data			Jan.-Feb. change
	1978	1979		1979	1980		
	IV	III	IV	Dec.	Jan.	Feb.	
HOUSEHOLD DATA							
	Thousands of persons						
Civilian labor force	101,538	103,238	103,749	103,999	103,229	104,260	31
Total employment	95,653	97,231	97,665	97,912	97,804	97,953	149
Unemployment	5,885	6,008	6,084	6,087	6,425	6,307	-118
Not in labor force	58,384	58,568	58,842	58,810	58,791	58,951	160
Discouraged workers	772	731	741	N.A.	N.A.	N.A.	N.A.
	Percent of labor force						
Unemployment rates:							
All workers	5.8	5.8	5.9	5.9	6.2	6.0	-0.2
Adult men	4.0	4.2	4.2	4.2	4.7	4.6	-.1
Adult women	5.7	5.6	5.7	5.7	5.8	5.7	-.1
Teenagers	16.2	16.2	16.1	16.0	16.3	16.5	.2
White	5.0	5.1	5.1	5.1	5.4	5.3	-.1
Black and other	11.5	10.9	11.2	11.3	11.8	11.5	-.3
Full-time workers	5.2	5.3	5.4	5.4	5.7	5.6	-.1
ESTABLISHMENT DATA							
	Thousands of jobs						
Nonfarm payroll employment	87,799	89,759	90,108	90,241	90,590p	90,731p	141p
Goods-producing industries	26,111	26,638	26,587	26,655	26,778p	26,771p	-7p
Service-producing industries	61,688	63,121	63,521	63,586	63,812p	63,960p	148p
	Hours of work						
Average weekly hours:							
Total private nonfarm	35.8	35.6	35.7	35.7	35.6p	35.4p	-0.2p
Manufacturing	40.6	40.2	40.2	40.2	40.3p	40.1p	-.2p
Manufacturing overtime	3.7	3.2	3.2	3.2	3.2p	3.1p	-.1p

p=preliminary N.A.=not available

Overall manufacturing employment was little changed in February, although there were offsetting movements among the component industries. A strike contributed to an employment drop of about 50,000 jobs in petroleum and coal products. On the other hand, employment in transportation equipment nearly returned to its December level, following a drop in January. This industry has been relatively weak since last summer and has comprised the bulk of the overall manufacturing job decline of 115,000 over the past year.

Construction employment edged down following an unusually large increase in January. Mining continued its long-term uptrend; employment in this industry has advanced 7.9 percent over the past year.

Hours

The average workweek of production or nonsupervisory workers on private nonagricultural payrolls fell by 0.2 hour in February to 35.4 hours; the most marked declines occurred in the goods-producing sector. In manufacturing, the workweek fell by 0.2 to 40.1 hours, and overtime was down a tenth of an hour to 3.1 hours. (See table B-2.)

The index of aggregate weekly hours of production or nonsupervisory workers on private nonfarm payrolls fell by 0.2 percent to 126.4 (1967=100) in February but was still up 1.4 percent over the year. The manufacturing index fell 0.3 percent over the month and has declined 3.0 percent since February 1979. (See table B-5.)

Hourly and Weekly Earnings

Average hourly earnings of production or nonsupervisory workers on private nonagricultural payrolls rose by 0.5 percent in February and were up 7.5 percent over the year (seasonally adjusted). Average weekly earnings declined by 0.1 percent from January but have risen by 6.6 percent over the year.

Before adjustment for seasonality, average hourly earnings rose 4 cents in February to $6.46 and were 46 cents above February 1979. Average weekly earnings were $226.75, up $1.41 over the month and $14.35 over the year. (See table B-3.)

The Hourly Earnings Index

The Hourly Earnings Index--earnings adjusted for overtime in manufacturing, seasonality, and the effects of changes in the proportion of workers in high-wage and low-wage industries--was 242.2 (1967=100) in February, 0.8 percent higher than in January. The Index was 8.1 percent above February a year ago. In dollars of constant purchasing power, the Index decreased 5.2 percent during the 12-month period ended in January. (See table B-4.)

Chart 1. Civilian labor force and employment
(Seasonally adjusted)

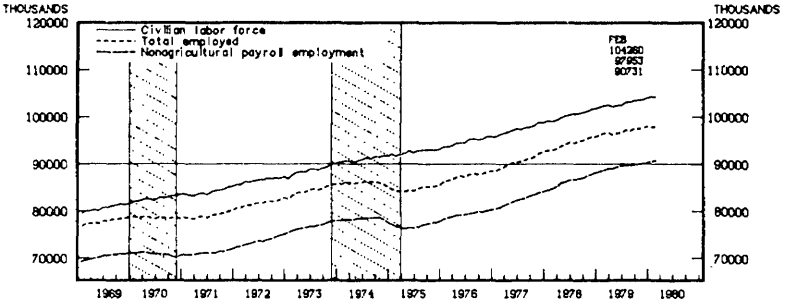


Chart 2. Unemployment rate--all civilian workers

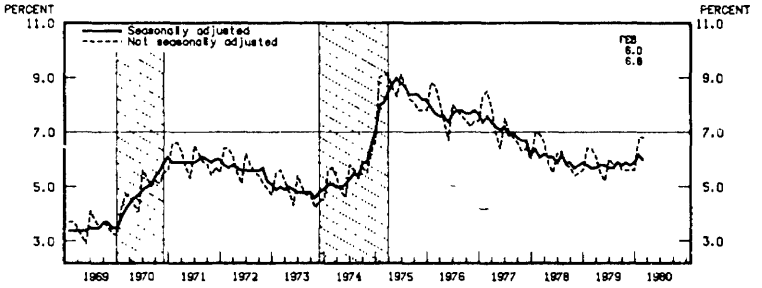
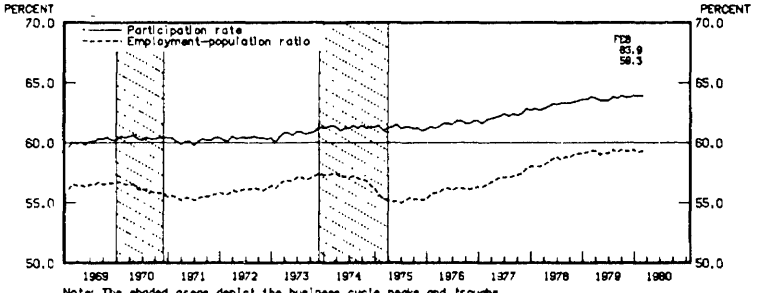


Chart 3. Civilian labor force participation rate
and total employment-population ratio
(Seasonally adjusted)



Note: The shaded areas depict the business cycle peaks and troughs as designated by the National Bureau of Economic Research.

Explanatory Note

This news release presents statistics from two major surveys, the Current Population Survey (household survey) and the Current Employment Statistics Survey (establishment survey). The household survey provides the information on the labor force, total employment, and unemployment that appears in the A tables, marked HOUSEHOLD DATA. It is a sample survey of about 65,000 households that is conducted by the Bureau of the Census with most of the findings analyzed and published by the Bureau of Labor Statistics (BLS).

The establishment survey provides the information on the employment, hours, and earnings of workers on nonagricultural payrolls that appears in the B tables, marked ESTABLISHMENT DATA. This information is collected from payroll records by BLS in cooperation with State agencies. The sample includes approximately 162,000 establishments employing more than 32 million people.

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

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

Coverage, definitions and differences between surveys

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

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

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

The *civilian labor force* equals the sum of the number employed and the number unemployed. The *unemployment rate* is the percentage of unemployed people in the civilian labor force. Table A-4 presents a special grouping of seven measures of unemployment based on varying definitions of unemployment and the labor force. The definitions are provided in the table. The most restrictive definition yields U-1, and the most comprehensive yields U-7. The official unemployment rate is U-5.

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

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

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

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

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

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

Seasonal adjustment

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

Because these seasonal events follow a more or less regular pattern each year, their influence on statistical trends can be eliminated by adjusting the statistics from month to month. These adjustments make nonseasonal developments, such as declines in economic activity or

increases in the participation of women in the labor force, easier to spot. To return to the school's-out example, the large number of people entering the labor force each June is likely to obscure any other changes that have taken place since May, making it difficult to determine if the level of economic activity has risen or declined. However, because the effect of students finishing school in previous years is known, the statistics for the current year can be adjusted to allow for a comparable change. Insofar as the seasonal adjustment is made correctly, the adjusted figure provides a more useful tool with which to analyze changes in economic activity.

Measures of civilian labor force, employment, and unemployment contain components such as age and sex. Statistics for all employees, production workers, average weekly hours, and average hourly earnings include components based on the employer's industry. All these statistics can be seasonally adjusted either by adjusting the total or by adjusting each of the components and combining them. The second procedure usually yields more accurate information and is therefore followed by BLS. For example, the seasonally adjusted figure for the civilian labor force is the sum of eight seasonally adjusted employment components and four seasonally adjusted unemployment components; the total for unemployment is the sum of the four unemployment components; and the official unemployment rate is derived by dividing the resulting estimate of total unemployment by the estimate of the civilian labor force.

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

Sampling variability

Statistics based on the household and establishment surveys are subject to sampling error, that is, the estimate of the number of people employed and the other estimates drawn from these surveys probably differ from the figures that would be obtained from a complete census, even if the same questionnaires and procedures were used. In the household survey, the amount of the differences can be expressed in terms of standard errors. The numerical value of a standard error depends upon the size of the sample, the results of the survey, and other factors. However, the numerical value is always such that the chances are 68 out of 100 that an estimate based on the sample will differ by no more than the standard error from the results of a complete census. The chances are 90 out of 100 that an estimate based on the sample will differ by no more than 1.6 times the standard error from the results of a complete census. At the 90-percent level of confidence--the confidence limits used by BLS in its analyses--the error for the monthly change in total employment is on the order of plus or minus 293,000; for total unemployment, it is 185,000; and, for the overall unemployment rate, it is 0.19 percentage point. These figures do not mean that the sample results are off by these magnitudes but, rather, that the chances are 90 out of 100 that the "true" level or rate would not be expected to differ from the estimates by more than these amounts.

Sampling errors for monthly surveys are reduced when the data are cumulated for several months, such as quarterly or annually. Also, as a general rule, the smaller the estimate, the larger the sampling error. Therefore, relatively speaking, the estimate of the size of the labor force is subject to less error than is the estimate of the number unemployed. And, among the unemployed, the sampling error for the jobless rate of adult men, for example, is much smaller than is the error for the jobless rate of teenagers. Specifically, the error on monthly change in the jobless rate for men is .23 percentage point; for teenagers, it is 1.06 percentage points.

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

Additional statistics and other information

In order to provide a broad view of the Nation's employment situation, BLS regularly publishes a wide variety of data in this news release. More comprehensive statistics are contained in *Employment and Earnings*, published each month by BLS. It is available for $2.75 per issue or $22.00 per year from the U.S. Government Printing Office, Washington, D.C. 20204. A check or money order made out to the Superintendent of Documents must accompany all orders.

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

Table A-1. Employment status of the noninstitutional population

(Numbers in thousands)

Employment status	Not seasonally adjusted			Seasonally adjusted					
	Feb. 1979	Jan. 1980	Feb. 1980	Feb. 1979	Oct. 1979	Nov. 1979	Dec. 1979	Jan. 1980	Feb. 1980
TOTAL									
Total noninstitutional population[1]	162,633	165,101	165,298	162,633	164,468	164,682	164,898	165,101	165,298
Armed Forces[1]	2,098	2,088	2,086	2,094	2,093	2,092	2,089	2,081	2,086
Civilian noninstitutional population[1]	160,539	163,020	163,211	160,539	162,375	162,589	162,809	163,020	163,211
Civilian labor force	101,249	103,188	103,257	102,379	103,595	103,652	103,999	104,229	104,260
Participation rate	63.1	63.3	63.3	63.8	63.8	63.8	63.9	63.9	63.9
Employed	94,765	96,145	96,268	96,496	97,474	97,608	97,912	97,804	97,953
Employment-population ratio[2]	58.3	58.2	58.2	59.3	59.3	59.3	59.4	59.2	59.3
Agriculture	2,796	2,782	2,836	3,307	3,294	3,385	3,359	3,270	3,326
Nonagricultural industries	91,969	93,363	93,428	93,189	94,180	94,223	94,553	94,534	94,626
Unemployed	6,484	7,043	6,993	5,883	6,121	6,044	6,087	6,425	6,307
Unemployment rate	6.4	6.8	6.8	5.7	5.9	5.8	5.9	6.2	6.0
Not in labor force	59,290	59,832	59,954	58,160	58,780	58,937	58,810	58,791	58,951
Men, 20 years and over									
Total noninstitutional population[1]	69,476	70,695	70,792	69,476	70,380	70,487	70,594	70,695	70,792
Civilian noninstitutional population[1]	67,816	69,047	69,140	67,816	68,697	68,804	68,940	69,047	69,140
Civilian labor force	53,961	54,613	54,749	54,349	54,760	54,709	54,781	54,855	55,038
Participation rate	79.6	79.1	79.2	80.1	79.7	79.5	79.5	79.4	79.6
Employed	51,328	51,503	51,658	52,211	52,443	52,374	52,478	52,279	52,531
Employment-population ratio[2]	75.7	74.9	73.0	75.1	74.5	74.3	74.3	73.9	74.2
Agriculture	2,117	2,160	2,213	2,329	2,371	2,438	2,427	2,387	2,435
Nonagricultural industries	49,207	49,343	49,445	49,882	50,072	49,936	50,051	49,892	50,096
Unemployed	2,637	3,110	3,091	2,138	2,317	2,335	2,303	2,577	2,507
Unemployment rate	4.9	5.7	5.6	3.9	4.2	4.3	4.2	4.7	4.6
Not in labor force	13,855	14,434	14,391	13,467	13,937	14,095	14,159	14,192	14,102
Women, 20 years and over									
Total noninstitutional population[1]	76,440	77,779	77,890	76,440	77,429	77,567	77,666	77,779	77,890
Civilian noninstitutional population[1]	76,332	77,656	77,766	76,332	77,308	77,426	77,542	77,656	77,766
Civilian labor force	38,525	39,860	39,991	38,399	39,362	39,445	39,659	39,878	39,857
Participation rate	50.5	51.3	51.4	50.3	50.9	50.9	51.1	51.4	51.3
Employed	36,193	37,441	37,609	36,197	37,112	37,248	37,402	37,574	37,604
Employment-population ratio[2]	47.3	48.1	48.3	47.4	47.9	48.0	48.2	48.3	48.3
Agriculture	442	407	426	593	572	612	582	540	567
Nonagricultural industries	35,751	37,034	37,185	35,604	36,540	36,636	36,820	37,034	37,037
Unemployed	2,332	2,419	2,382	2,202	2,250	2,197	2,257	2,304	2,254
Unemployment rate	6.1	6.1	6.0	5.7	5.7	5.6	5.7	5.8	5.7
Not in labor force	37,807	37,796	37,776	37,933	37,946	37,981	37,883	37,778	37,909
Both sexes, 16-19 years									
Total noninstitutional population[1]	16,717	16,627	16,616	16,717	16,659	16,648	16,638	16,627	16,616
Civilian noninstitutional population[1]	16,391	16,317	16,305	16,391	16,370	16,360	16,326	16,317	16,305
Civilian labor force	8,763	8,715	8,517	9,631	9,473	9,498	9,559	9,497	9,365
Participation rate	53.5	53.4	52.2	58.8	57.9	58.1	58.6	58.2	57.4
Employed	7,248	7,201	6,997	8,088	7,949	7,986	8,032	7,952	7,818
Employment-population ratio[2]	43.4	43.3	42.1	48.4	47.5	48.0	48.3	47.8	47.1
Agriculture	238	215	198	385	351	335	350	344	325
Nonagricultural industries	7,011	6,986	6,798	7,703	7,568	7,651	7,682	7,608	7,493
Unemployed	1,515	1,514	1,520	1,543	1,524	1,512	1,527	1,545	1,547
Unemployment rate	17.3	17.4	17.9	16.0	16.1	15.9	16.0	16.3	16.5
Not in labor force	7,628	7,601	7,788	6,760	6,897	6,862	6,767	6,820	6,940
White									
Total noninstitutional population[1]	142,493	144,421	144,570	142,493	143,937	144,101	144,267	144,421	144,570
Civilian noninstitutional population[1]	140,825	142,806	142,951	140,825	142,296	142,461	142,645	142,806	142,951
Civilian labor force	89,215	90,950	91,029	90,250	91,187	91,242	91,579	91,852	91,977
Participation rate	63.4	63.7	63.7	64.1	64.1	64.0	64.2	64.3	64.3
Employed	84,237	85,420	85,580	85,786	86,654	86,571	86,894	86,895	87,081
Employment-population ratio[2]	59.1	59.1	59.2	60.2	60.1	60.1	60.2	60.2	60.2
Unemployed	4,978	5,530	5,450	4,464	4,693	4,671	4,685	4,957	4,896
Unemployment rate	5.6	6.1	6.0	4.9	5.1	5.1	5.1	5.4	5.3
Not in labor force	51,610	51,856	51,921	50,575	51,149	51,219	51,066	50,954	50,975
Black and other									
Total noninstitutional population[1]	20,140	20,680	20,727	20,140	20,531	20,580	20,631	20,680	20,727
Civilian noninstitutional population[1]	19,714	20,214	20,261	19,714	20,079	20,128	20,163	20,214	20,261
Civilian labor force	12,033	12,238	12,228	12,177	12,512	12,391	12,432	12,453	12,382
Participation rate	61.0	60.5	60.4	61.8	62.3	61.6	61.7	61.6	61.0
Employed	10,527	10,725	10,725	10,746	11,076	11,044	11,024	10,979	10,937
Employment-population ratio[2]	52.3	51.9	51.7	53.4	53.9	53.7	53.4	53.1	52.8
Unemployed	1,506	1,513	1,503	1,431	1,436	1,347	1,408	1,474	1,424
Unemployment rate	12.5	12.4	12.3	11.8	11.5	10.9	11.3	11.8	11.5
Not in labor force	7,680	7,976	8,033	7,537	7,567	7,737	7,731	7,761	7,899

[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. 1979	Feb. 1980	Feb. 1979	Oct. 1979	Nov. 1979	Dec. 1979	Jan. 1980	Feb. 1980
CHARACTERISTICS								
Total, 16 years and over	5,883	6,307	5.7	5.9	5.8	5.9	6.2	6.0
Men, 20 years and over	2,138	2,507	3.9	4.2	4.3	4.2	4.7	4.6
Women, 20 years and over	2,202	2,254	5.7	5.7	5.6	5.7	5.8	5.7
Both sexes, 16-19 years	1,543	1,547	16.0	16.4	15.9	16.0	16.3	16.5
White, total	4,464	4,896	4.9	5.1	5.1	5.1	5.4	5.3
Men, 20 years and over	1,637	1,964	3.8	3.7	3.7	3.7	4.1	4.0
Women, 20 years and over	1,662	1,776	5.0	5.0	4.9	5.0	5.1	5.2
Both sexes, 16-19 years	1,165	1,156	13.6	14.1	13.9	13.9	14.0	13.8
Black and other, total	1,431	1,428	11.8	11.5	10.9	11.3	11.8	11.5
Men, 20 years and over	503	546	8.6	8.6	8.4	8.6	9.6	9.2
Women, 20 years and over	549	486	10.4	10.2	9.5	10.0	10.0	9.0
Both sexes, 16-19 years	379	392	38.9	35.9	32.8	34.3	39.6	37.9
Married men, spouse present	1,057	1,232	2.6	2.9	2.9	2.8	3.4	3.1
Married women, spouse present	1,250	1,330	5.3	5.2	4.8	5.0	5.2	5.4
Women who head families	409	430	8.3	8.4	8.4	8.4	9.2	8.5
Full time workers	4,565	4,982	5.2	5.4	5.4	5.4	5.7	5.6
Part-time workers	1,337	1,383	8.8	8.9	8.3	8.5	8.7	8.9
Unemployed 15 weeks and over[1]	1,239	1,286	1.2	1.2	1.1	1.2	1.3	1.2
Labor force time lost[2]	--	--	6.2	6.4	6.4	6.4	6.7	6.6
OCCUPATION[3]								
White-collar workers	1,707	1,778	3.4	3.4	3.2	3.3	3.4	3.4
Professional and technical	372	361	2.4	2.7	2.4	2.3	2.2	2.3
Managers and administrators, except farm	210	251	2.0	2.2	1.9	2.0	1.9	2.2
Sales workers	267	291	4.2	3.8	3.7	3.8	4.4	4.5
Clerical workers	858	875	4.7	4.7	4.4	4.6	4.8	4.7
Blue-collar workers	2,233	2,632	6.5	7.2	7.5	7.2	8.0	7.7
Craft and kindred workers	613	687	4.5	4.6	4.9	4.4	4.9	4.8
Operatives, except transport	918	1,076	7.8	9.1	9.0	9.0	9.9	9.2
Transport equipment operatives	191	255	5.0	5.6	5.2	5.0	6.9	6.7
Nonfarm laborers	511	654	9.7	10.7	12.2	12.2	12.3	12.0
Service workers	1,007	967	7.3	6.8	6.6	6.6	6.9	6.9
Farm workers	96	111	3.4	4.3	4.5	4.3	4.4	3.9
INDUSTRY[3]								
Nonagricultural private wage and salary workers[4]	4,185	4,590	5.6	5.9	5.8	5.8	6.2	6.0
Construction	553	550	10.9	9.9	10.2	10.3	10.8	10.5
Manufacturing	1,108	1,488	4.9	6.0	5.9	5.9	6.7	6.4
Durable goods	579	882	4.2	5.5	5.6	5.5	6.7	6.1
Nondurable goods	525	606	5.9	6.8	6.3	6.4	6.8	6.7
Transportation and public utilities	171	239	3.2	3.8	4.2	4.1	4.4	4.4
Wholesale and retail trade	1,233	1,225	6.5	6.4	6.5	6.4	6.6	6.6
Finance and service industries	1,079	1,086	4.8	4.9	4.6	4.7	4.6	4.6
Government workers	604	643	3.8	4.0	3.6	3.6	3.8	4.0
Agricultural wage and salary workers	136	143	8.6	9.9	10.1	9.4	10.3	9.2

[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.

Table A-3. Selected employment indicators

[In thousands]

Selected categories	Not seasonally adjusted		Seasonally adjusted					
	Feb. 1979	Feb. 1980	Feb. 1979	Oct. 1979	Nov. 1979	Dec. 1979	Jan. 1980	Feb. 1980
CHARACTERISTICS								
Total employed, 16 years and over	94,765	96,264	96,896	97,478	97,608	97,912	97,806	97,953
Men	55,032	55,319	56,476	56,629	56,580	56,734	56,486	56,732
Women	39,733	40,945	40,020	40,845	41,028	41,178	41,318	41,221
Married men, spouse present	38,744	38,410	39,291	39,124	38,845	38,924	38,749	38,955
Married women, spouse present	22,587	23,271	22,522	22,919	22,940	23,027	23,111	23,178
OCCUPATION								
White-collar workers	48,911	50,525	48,836	49,738	49,912	49,911	50,313	50,448
Professional and technical	15,244	15,753	14,950	15,057	15,131	15,272	15,337	15,484
Managers and administrators, except farm	10,258	10,850	10,379	10,639	10,617	10,535	10,608	10,771
Sales workers	5,963	6,055	6,090	6,261	6,362	6,346	6,452	6,185
Clerical workers	17,447	17,866	17,417	17,781	17,802	17,758	17,915	17,848
Blue collar workers	30,927	30,527	32,176	32,205	32,110	32,302	31,882	31,754
Craft and kindred workers	12,505	12,346	12,898	13,001	12,925	13,041	12,814	12,728
Operatives, except transport	10,657	10,428	10,901	10,967	10,963	11,002	10,678	10,661
Transport equipment operatives	3,535	3,507	3,602	3,593	3,628	3,635	3,616	3,571
Nonfarm laborers	4,230	4,248	4,775	4,644	4,594	4,584	4,774	4,795
Service workers	12,603	12,866	12,804	12,937	12,899	12,970	12,979	13,080
Farm workers	2,324	2,347	2,786	2,695	2,718	2,694	2,660	2,764
MAJOR INDUSTRY AND CLASS OF WORKER								
Agriculture								
Wage and salary workers	1,166	1,158	1,425	1,381	1,475	1,451	1,428	1,417
Self-employed workers	1,418	1,698	1,558	1,602	1,622	1,596	1,554	1,648
Unpaid family workers	212	180	334	313	310	310	293	283
Nonagricultural industries								
Wage and salary workers	85,067	86,267	86,192	86,982	87,020	87,384	87,578	87,419
Government	15,568	15,773	15,322	15,423	15,358	15,397	15,414	15,540
Private industries	69,500	70,495	70,870	71,559	71,662	71,987	72,163	71,879
Private households	1,265	1,121	1,328	1,261	1,211	1,228	1,132	1,178
Other industries	68,235	69,374	69,542	70,298	70,451	70,759	71,031	70,702
Self-employed workers	6,486	6,796	6,591	6,812	6,781	6,737	6,752	6,899
Unpaid family workers	416	364	455	430	417	409	379	397
PERSONS AT WORK[1]								
Nonagricultural industries	87,692	89,159	87,583	88,638	88,617	89,180	89,458	88,985
Full-time schedules	71,600	72,525	72,212	73,204	72,997	73,137	73,223	73,110
Part time for economic reasons	3,068	3,292	3,176	3,315	3,392	3,519	3,513	3,406
Usually work full time	1,297	1,430	1,248	1,358	1,413	1,481	1,588	1,340
Usually work part time	1,771	1,862	1,930	1,961	1,979	2,038	1,964	2,026
Part time for noneconomic reasons	13,024	13,342	12,155	12,119	12,228	12,524	12,718	12,469

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

Table A-4. Duration of unemployment

[Numbers in thousands]

Weeks of unemployment	Not seasonally adjusted		Seasonally adjusted					
	Feb. 1979	Feb. 1980	Feb. 1979	Oct. 1979	Nov. 1979	Dec. 1979	Jan. 1980	Feb. 1980
DURATION								
Less than 5 weeks	2,683	2,878	2,779	2,955	2,819	2,916	3,188	2,995
5 to 14 weeks	2,393	2,653	1,877	1,963	1,869	1,966	1,907	2,081
15 weeks and over	1,407	1,462	1,239	1,195	1,191	1,230	1,334	1,286
15 to 26 weeks	847	946	700	678	660	711	795	790
27 weeks and over	560	516	539	517	531	519	539	496
Average (mean) duration, in weeks	11.3	10.7	11.3	10.5	10.6	10.5	10.5	10.7
Median duration, in weeks	6.8	6.7	5.9	5.5	5.3	5.5	5.2	5.8
PERCENT DISTRIBUTION								
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 5 weeks	41.6	41.2	47.1	48.3	48.8	47.7	49.6	47.1
5 to 14 weeks	36.9	37.9	31.8	32.1	31.3	32.2	29.7	32.7
15 weeks and over	21.7	20.9	21.0	19.5	19.9	20.1	20.8	20.2
15 to 26 weeks	13.1	13.5	11.9	11.1	11.0	11.6	12.4	12.4
27 weeks and over	8.6	7.4	9.1	8.5	8.9	8.5	8.4	7.8

Table A-5. Reasons for unemployment

(Numbers in thousands)

Reasons	Not seasonally adjusted		Seasonally adjusted					
	Feb. 1979	Feb. 1980	Feb. 1979	Oct. 1979	Nov. 1979	Dec. 1979	Jan. 1980	Feb. 1980
NUMBER OF UNEMPLOYED								
Lost last job	3,106	3,643	2,875	2,731	2,729	2,728	2,988	2,907
On layoff	1,154	1,530	779	929	987	944	1,019	1,031
Other job losers	1,952	2,113	1,696	1,802	1,742	1,784	1,969	1,876
Left last job	819	805	828	835	845	800	779	813
Reentered labor force	1,800	1,814	1,766	1,762	1,698	1,771	1,797	1,784
Seeking first job	759	730	858	804	736	858	811	827
PERCENT DISTRIBUTION								
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Job losers	67.9	72.1	61.8	66.5	65.4	66.3	66.9	65.9
On layoff	17.8	21.9	13.1	15.2	16.4	15.3	16.0	16.3
Other job losers	30.1	30.2	28.6	29.4	29.0	29.0	30.9	29.6
Job leavers	12.6	11.5	14.0	13.6	14.1	13.0	12.2	12.8
Reentrants	27.8	25.9	29.8	28.7	28.3	28.8	28.2	28.2
New entrants	11.7	10.4	14.5	13.1	12.3	13.9	12.7	13.1
UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE								
Job losers	3.0	3.5	2.4	2.6	2.6	2.6	2.9	2.8
Job leavers	.4	.4	.4	.4	.4	.4	.4	.4
Reentrants	1.8	1.8	1.7	1.7	1.6	1.7	1.7	1.7
New entrants	.8	.7	.8	.8	.7	.8	.8	.8

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

Sex and age	Number of unemployed persons (in thousands)		Unemployment rates					
	Feb. 1979	Feb. 1980	Feb. 1979	Oct. 1979	Nov. 1979	Dec. 1979	Jan. 1980	Feb. 1980
Total, 16 years and over	5,883	6,307	5.7	5.9	5.8	5.9	6.2	6.0
16 to 19 years	1,543	1,567	16.0	16.6	15.9	16.0	16.3	16.5
16 to 17 years	759	716	18.5	18.4	17.3	18.0	19.0	18.7
18 to 19 years	784	841	14.3	15.0	14.7	14.5	14.0	15.1
20 to 24 years	1,315	1,458	8.6	9.6	8.8	9.8	10.1	9.5
25 years and over	3,021	3,300	3.9	4.0	4.0	3.8	4.2	4.1
25 to 54 years	2,581	2,899	4.1	4r2	4.3	4.1	4.4	4.5
55 years and over	442	412	3.0	3.0	2.7	2.7	3.5	2.8
Men, 16 years and over	2,958	3,283	5.0	5.2	5.2	5.2	5.7	5.5
16 to 19 years	820	776	16.1	15.7	15.8	15.6	16.2	15.6
16 to 17 years	422	377	19.2	17.1	17.8	17.9	19.0	18.0
18 to 19 years	410	411	14.2	14.4	14.0	13.6	13.9	14.1
20 to 24 years	664	817	8.1	9.5	8.4	9.4	10.4	9.9
25 years and over	1,443	1,680	3.2	3.4	3.5	3.2	3.7	3.6
25 to 54 years	1,208	1,435	3.3	3.5	3.8	3.4	3.8	3.8
55 years and over	251	242	2.8	2.8	2.6	2.6	3.5	2.6
Women, 16 years and over	2,925	3,025	6.8	6.9	6.6	6.8	6.8	6.8
16 to 19 years	723	771	15.9	17.2	16.1	16.4	16.3	17.6
16 to 17 years	337	339	17.7	19.8	16.7	18.0	19.1	19.5
18 to 19 years	384	430	14.5	15.6	15.5	15.5	14.2	16.2
20 to 24 years	651	641	9.3	9.7	9.3	10.2	9.8	9.1
25 years and over	1,550	1,621	5.0	4.9	4.7	4.7	4.9	4.9
25 to 54 years	1,375	1,465	5.4	5.2	5.0	5.1	5.2	5.4
55 years and over	191	170	3.3	3.4	2.9	2.9	3.4	3.0

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

[Percent]

Measure	Quarterly averages					Monthly data		
	1978	1979				1979	1980	
	IV	I	II	III	IV	Dec.	Jan.	Feb.
U-1—Persons unemployed 15 weeks or longer as a percent of the civilian labor force	1.2	1.2	1.2	1.1	1.2	1.2	1.3	1.2
U-2—Job losers as a percent of the civilian labor force	2.4	2.4	2.4	2.5	2.6	2.6	2.9	2.8
U-3—Unemployed persons 25 years and over as a percent of the civilian labor force 25 years and over	3.9	3.9	3.9	3.9	3.9	3.8	4.2	4.1
U-4—Unemployed full-time jobseekers as a percent of the full time labor force	5.2	5.2	5.2	5.3	5.4	5.4	5.7	5.6
U-5—Total unemployed as a percent of the civilian labor force (official measure)	5.8	5.8	5.8	5.8	5.9	5.9	6.2	6.0
U-6—Total full time jobseekers plus ½ part time jobseekers plus ½ total on part time for economic reasons as a percent of the civilian labor force less ½ of the part time labor force	7.2	7.2	7.2	7.3	7.4	7.5	7.8	7.6
U-7—Total full time jobseekers plus ½ part time jobseekers plus ½ total on part time for economic reasons plus discouraged workers as a percent of the civilian labor force plus discouraged workers less ½ of the part time labor force	8.0	7.9	8.0	8.0	8.1	N.A.	N.A.	N.A.

N.A. = not available

Table A-8. Employment status of the noninstitutional population by race and Hispanic origin, not seasonally adjusted

[Number in thousands]

Employment status	Total		White		Black[1]		Hispanic origin[2]	
	Feb. 1979	Feb. 1980	Feb. 1979	Feb. 1980	Feb. 1979	Feb. 1980	Feb. 1979	Feb. 1980
TOTAL								
Civilian noninstitutional population	160,539	163,211	140,825	142,951	16,888	17,271	7,618	8,175
Civilian labor force	101,249	103,257	89,215	91,029	10,241	10,336	4,856	5,177
Percent of population	63.1	63.3	63.4	63.7	60.6	59.9	63.7	63.3
Employment	94,765	96,264	84,237	85,540	8,846	8,984	4,456	4,675
Agriculture	2,796	2,836	2,551	2,567	196	213	202	197
Nonagricultural industries	91,969	93,428	81,687	82,972	8,650	8,771	4,254	4,477
Unemployment	6,484	6,993	4,978	5,490	1,394	1,352	401	503
Unemployment rate	6.4	6.8	5.6	6.0	13.6	13.1	8.2	9.7
Not in labor force	59,290	59,954	51,610	51,921	6,643	6,935	2,762	2,998

[1] Data relate to black workers only. According to the 1970 Census, they comprised about 89 per cent of the "black and other" population group.

[2] Data on persons of Hispanic origin are tabulated separately, without regard to race, which means that they are also included in the data for white and black workers. At the time of the 1970 Census, approximately 88 percent of these population was white.

Table A-9. Employment status of male Vietnam-era veterans and nonveterans by age, not seasonally adjusted

(Numbers in thousands)

Veteran status and age	Civilian noninstitutional population		Civilian labor force							
			Total		Employed		Unemployed			
							Number		Percent of labor force	
	Feb. 1979	Feb. 1980	Feb. 1979	Feb. 1980	Feb. 1979	Feb. 1980	Feb. 1979	Feb. 1980	Feb. 1979	Feb. 1980
VETERANS[1]										
Total, 20 years and over	8,476	8,576	8,049	8,106	7,586	7,626	463	480	5.8	5.9
20 to 24 years	624	622	579	379	490	316	89	63	15.4	16.6
25 to 39 years	7,054	7,219	6,786	6,939	6,466	6,546	320	393	5.0	5.7
25 to 29 years	2,090	1,804	1,982	1,716	1,811	1,554	171	162	8.6	9.4
30 to 34 years	3,558	3,609	3,437	3,489	3,307	3,339	130	150	3.8	4.3
35 to 39 years	1,406	1,806	1,367	1,734	1,328	1,653	39	81	2.9	4.7
40 years and over	798	935	684	788	650	764	34	24	5.0	3.0
NONVETERANS[2]										
Total, 25 to 39 years	14,242	15,148	13,544	14,371	12,941	13,568	603	803	4.5	5.6
25 to 29 years	6,870	6,932	6,128	6,547	5,786	6,125	342	422	5.6	6.4
30 to 34 years	4,085	4,416	3,888	4,211	3,732	3,998	156	213	4.0	5.1
35 to 39 years	3,687	3,800	3,528	3,613	3,423	3,445	105	168	3.0	4.6

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

[2] Nonveterans are males who have never served in the Armed Forces. Published data are limited to those 25-39 years of age, the group that most closely corresponds to the bulk of the Vietnam-era veteran population.

HOUSEHOLD DATA

Table A-10. Employment status of the noninstitutional population for the ten largest States

(Numbers in thousands)

State and employment status	Not seasonally adjusted[2]			Seasonally adjusted					
	Feb. 1979	Jan. 1980	Feb. 1980	Feb. 1979	Oct. 1979	Nov. 1979	Dec. 1979	Jan. 1980	Feb. 1980
California									
Civilian noninstitutional population[1]	16,613	16,954	16,975	16,613	16,866	16,953	16,945	16,954	16,979
Civilian labor force	10,859	11,265	11,025	10,950	11,123	11,135	11,178	11,074	11,013
Employed	10,095	10,538	10,283	10,149	10,425	10,456	10,481	10,434	10,337
Unemployed	764	727	741	801	698	677	697	640	676
Unemployment rate	7.0	6.6	6.7	6.5	6.3	6.1	6.4	5.8	6.1
Florida									
Civilian noninstitutional population[1]	6,678	6,870	6,906	6,678	6,816	6,834	6,856	6,870	6,906
Civilian labor force	3,845	3,757	3,825	3,823	3,849	3,783	3,802	3,751	3,842
Employed	3,583	3,544	3,637	3,599	3,603	3,570	3,598	3,596	3,644
Unemployed	262	213	194	224	246	213	204	155	198
Unemployment rate	6.8	5.7	5.1	5.9	6.4	5.6	5.4	4.1	5.2
Illinois									
Civilian noninstitutional population[1]	8,236	8,290	8,295	8,236	8,273	8,279	8,285	8,296	8,295
Civilian labor force	5,218	5,428	5,400	5,272	5,387	5,393	5,454	5,466	5,483
Employed	4,919	5,202	4,993	5,004	5,256	5,278	5,335	5,277	5,081
Unemployed	299	226	407	268	313	317	349	389	402
Unemployment rate	5.7	7.0	7.5	5.1	5.8	5.9	6.4	7.1	7.3
Massachusetts									
Civilian noninstitutional population[1]	4,353	4,393	4,396	4,353	4,381	4,385	4,389	4,393	4,396
Civilian labor force	2,915	2,830	2,825	2,929	2,877	2,836	2,879	2,847	2,838
Employed	2,722	2,684	2,684	2,761	2,739	2,687	2,715	2,685	2,702
Unemployed	193	181	161	168	158	149	164	142	136
Unemployment rate	6.6	6.4	5.7	5.7	5.5	5.3	5.6	5.0	4.8
Michigan									
Civilian noninstitutional population[1]	6,689	6,762	6,786	6,689	6,740	6,747	6,755	6,762	6,786
Civilian labor force	4,280	4,266	4,287	4,268	4,343	4,348	4,365	4,403	4,423
Employed	3,929	3,827	3,836	3,956	3,976	3,967	3,968	3,875	3,834
Unemployed	351	439	451	306	367	381	377	528	589
Unemployment rate	8.2	10.3	11.4	7.2	8.5	8.2	8.7	12.0	13.3
New Jersey									
Civilian noninstitutional population[1]	5,483	5,536	5,541	5,483	5,521	5,526	5,532	5,536	5,541
Civilian labor force	3,580	3,572	3,544	3,562	3,585	3,526	3,568	3,597	3,580
Employed	3,245	3,311	3,322	3,296	3,301	3,279	3,335	3,348	3,371
Unemployed	295	258	221	266	284	247	233	249	192
Unemployment rate	8.3	7.2	6.2	7.5	8.9	7.0	6.5	6.9	5.4
New York									
Civilian noninstitutional population[1]	13,266	13,296	13,300	13,266	13,287	13,294	13,294	13,296	13,300
Civilian labor force	7,785	8,049	8,120	7,990	8,031	8,117	8,118	8,134	8,161
Employed	7,360	7,570	7,462	7,446	7,434	7,551	7,525	7,480	7,543
Unemployed	585	673	658	544	579	566	589	654	618
Unemployment rate	7.4	8.4	8.1	6.8	7.2	7.0	7.3	7.7	7.6
Ohio									
Civilian noninstitutional population[1]	7,893	7,949	7,954	7,893	7,931	7,937	7,944	7,949	7,954
Civilian labor force	4,968	4,998	4,963	5,045	5,082	5,033	5,069	5,064	5,043
Employed	4,643	4,685	4,613	4,761	4,726	4,743	4,775	4,743	4,733
Unemployed	325	349	350	284	356	290	294	319	310
Unemployment rate	6.5	7.0	7.0	5.6	6.3	5.8	5.8	6.3	6.1
Pennsylvania									
Civilian noninstitutional population[1]	8,879	8,925	8,929	8,879	8,905	8,915	8,920	8,925	8,929
Civilian labor force	5,236	5,332	5,363	5,281	5,331	5,337	5,304	5,283	5,411
Employed	4,842	4,918	4,944	4,939	4,902	4,950	4,930	4,898	5,041
Unemployed	394	414	419	342	429	387	374	385	370
Unemployment rate	7.5	7.8	7.8	6.5	8.0	7.3	7.1	7.3	6.8
Texas									
Civilian noninstitutional population[1]	9,398	9,637	9,655	9,398	9,580	9,599	9,618	9,637	9,655
Civilian labor force	6,204	6,345	6,320	6,288	6,315	6,325	6,342	6,365	6,358
Employed	5,924	6,018	5,994	5,982	6,061	6,062	6,092	6,060	6,049
Unemployed	279	327	326	262	254	267	250	305	309
Unemployment rate	4.5	5.2	5.2	4.2	4.0	4.2	3.9	4.8	4.9

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

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

Table B-1 Employees on nonagricultural payrolls by industry

(In thousands)

Industry	Not seasonally adjusted				Seasonally adjusted					
	Feb. 1979	Dec. 1979	Jan. p 1980	Feb. p 1980	Feb. 1979	Oct. 1979	Nov. 1979	Dec. 1979	Jan. p 1980	Feb. p 1980
TOTAL	87,331	91,109	89,225	89,301	88,700	89,982	90,100	90,241	90,390	90,731
GOODS-PRODUCING	25,647	26,597	26,027	25,932	26,448	26,572	26,533	26,655	26,776	26,771
MINING	915	984	985	987	937	979	983	991	1,003	1,010
CONSTRUCTION	3,957	4,711	4,350	4,267	4,460	4,694	4,714	4,703	4,693	4,661
MANUFACTURING	20,775	20,902	20,692	20,658	21,025	20,899	20,836	20,831	20,862	20,900
Production workers	14,908	14,891	14,654	14,649	15,128	14,894	14,829	14,865	14,824	14,862
DURABLE GOODS	12,579	12,649	12,524	12,526	12,715	12,850	12,587	12,615	12,600	12,659
Production workers	9,016	8,971	8,810	8,825	9,138	8,972	8,908	8,931	8,875	8,939
Lumber and wood products	737.7	729.2	704.2	696.1	768	760	751	740	732	727
Furniture and fixtures	495.2	486.9	484.0	480.0	496	482	483	483	484	480
Stone, clay, and glass products	680.6	699.6	679.9	676.3	712	705	704	706	707	707
Primary metal industries	1,244.8	1,204.4	1,199.7	1,199.2	1,256	1,226	1,223	1,208	1,206	1,216
Fabricated metal products	1,715.0	1,730.4	1,702.5	1,703.0	1,733	1,723	1,726	1,725	1,711	1,720
Machinery, except electrical	2,446.4	2,459.8	2,507.2	2,509.9	2,437	2,455	2,438	2,444	2,497	2,500
Electric and electronic equipment	2,071.0	2,153.1	2,144.9	2,138.9	2,079	2,125	2,125	2,140	2,149	2,147
Transportation equipment	2,062.7	2,043.4	1,965.0	1,985.5	2,094	2,025	1,994	2,019	1,959	2,016
Instruments and related products	680.2	699.8	699.2	700.3	652	696	694	696	701	702
Miscellaneous manufacturing	444.6	446.4	436.9	437.1	458	449	449	452	454	456
NONDURABLE GOODS	8,196	8,253	8,168	8,130	8,310	8,249	8,249	8,266	8,262	8,241
Production workers	5,890	5,920	5,844	5,824	5,990	5,922	5,921	5,934	5,949	5,923
Food and kindred products	1,658.1	1,695.9	1,650.1	1,639.1	1,729	1,707	1,710	1,715	1,706	1,709
Tobacco manufacturers	66.4	66.7	65.0	63.9	68	65	60	62	64	65
Textile mill products	896.4	893.5	886.7	888.3	895	867	889	893	890	891
Apparel and other textile products	1,320.6	1,292.0	1,282.3	1,300.7	1,327	1,299	1,292	1,297	1,307	1,307
Paper and allied products	703.4	714.0	712.2	710.2	711	715	714	713	718	717
Printing and publishing	1,223.7	1,272.0	1,266.9	1,275.2	1,229	1,252	1,262	1,263	1,271	1,279
Chemicals and allied products	1,099.7	1,115.6	1,113.1	1,111.9	1,108	1,113	1,114	1,119	1,122	1,120
Petroleum and coal products	206.4	214.9	213.3	163.6	212	217	217	217	219	168
Rubber and misc. plastics products	773.8	747.5	742.4	738.1	779	751	749	745	745	743
Leather and leather products	245.1	240.7	235.8	239.4	248	243	242	242	240	242
SERVICE-PRODUCING	61,684	64,412	63,198	63,369	62,252	63,410	63,567	63,586	63,812	63,960
TRANSPORTATION AND PUBLIC UTILITIES	5,026	5,254	5,144	5,130	5,094	5,218	5,229	5,223	5,204	5,198
WHOLESALE AND RETAIL TRADE	19,548	20,932	20,192	20,025	20,016	20,243	20,306	20,254	20,396	20,505
WHOLESALE TRADE	5,067	5,234	5,206	5,215	5,118	5,209	5,235	5,216	5,243	5,268
RETAIL TRADE	14,481	15,698	14,986	14,810	14,898	15,034	15,073	15,036	15,153	15,237
FINANCE, INSURANCE, AND REAL ESTATE	4,845	5,041	5,042	5,046	4,884	5,018	5,039	5,056	5,083	5,087
SERVICES	16,545	17,270	17,084	17,247	16,763	17,257	17,298	17,357	17,415	17,474
GOVERNMENT	15,718	15,915	15,736	15,921	15,495	15,674	15,695	15,696	15,712	15,696
FEDERAL	2,738	2,770	2,763	2,771	2,757	2,770	2,771	2,771	2,791	2,791
STATE AND LOCAL	12,980	13,145	12,973	13,150	12,738	12,904	12,922	12,925	12,921	12,905

p=preliminary

ESTABLISHMENT DATA

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

Industry	Not seasonally adjusted				Seasonally adjusted					
	Feb. 1979	Dec. 1979	Jan. 1980 p	Feb. 1980 p	Feb. 1979	Oct. 1979	Nov. 1979	Dec. 1979	Jan. 1980 p	Feb. 1980 p
TOTAL PRIVATE	35.4	35.9	35.1	35.1	35.7	35.6	35.7	35.7	35.6	35.4
MINING	42.6	43.9	43.2	43.0	43.1	43.1	43.2	43.9	44.2	43.5
CONSTRUCTION	35.4	37.1	34.9	35.9	36.6	36.6	36.8	37.1	37.4	36.7
MANUFACTURING	40.2	40.9	39.8	39.7	40.0	40.2	40.1	40.2	40.3	40.1
Overtime hours	3.5	3.4	3.0	2.9	3.7	3.2	3.3	3.2	3.4	3.1
DURABLE GOODS	41.1	41.6	40.4	40.3	41.4	40.8	40.8	40.7	40.9	40.8
Overtime hours	3.9	3.5	3.1	3.0	4.1	3.3	3.4	3.3	3.3	3.1
Lumber and wood products	39.0	39.2	38.4	38.3	39.0	39.4	38.9	39.0	39.6	38.9
Furniture and fixtures	38.1	39.9	38.5	38.3	38.8	38.8	38.9	39.0	39.1	39.0
Stone, clay, and glass products	40.6	41.8	40.1	39.9	41.6	41.3	41.5	41.6	41.3	40.8
Primary metal industries	42.1	40.9	40.6	40.5	42.2	41.1	40.7	40.6	40.7	40.6
Fabricated metal products	40.9	41.9	40.6	40.4	41.3	40.9	40.7	41.0	40.9	40.8
Machinery, except electrical	42.5	42.8	41.4	41.4	42.5	41.6	41.6	41.6	41.6	41.4
Electric and electronic equipment	40.5	41.3	40.3	40.1	40.7	40.3	40.6	40.5	40.5	40.3
Transportation equipment	42.1	42.6	40.6	40.7	42.7	41.3	40.6	41.0	41.3	41.2
Instruments and related products	41.0	41.6	41.1	40.7	41.2	40.7	41.0	40.6	41.6	40.9
Miscellaneous manufacturing	38.6	39.7	39.0	39.2	39.0	39.1	39.1	39.2	39.4	39.6
NONDURABLE GOODS	38.9	39.9	39.0	38.8	39.3	39.3	39.4	39.4	39.5	39.3
Overtime hours	3.0	3.2	2.9	2.8	3.2	3.0	3.2	3.1	3.1	3.0
Food and kindred products	39.2	40.3	39.4	38.9	39.8	39.9	40.0	39.9	39.9	39.5
Tobacco manufacturers	36.2	34.5	37.4	36.1	36.9	35.3	37.6	38.6	38.3	38.0
Textile mill products	39.8	41.5	40.9	40.9	40.1	40.5	41.1	41.0	41.7	41.2
Apparel and other textile products	34.9	35.9	35.2	35.3	35.4	35.3	35.3	35.0	35.9	35.6
Paper and allied products	42.2	43.5	42.6	42.1	42.7	42.6	42.7	42.9	42.6	42.6
Printing and publishing	37.3	38.1	37.3	37.0	37.7	37.4	37.6	37.4	37.9	37.4
Chemicals and allied products	41.7	42.2	41.6	41.5	42.0	41.7	41.9	41.7	41.9	41.8
Petroleum and coal products	42.7	43.4	38.0	41.9	43.0	43.7	44.4	43.5	36.5	42.8
Rubber and misc. plastics products	41.2	40.7	40.3	39.6	41.4	40.3	42.0	39.9	40.0	39.6
Leather and leather products	35.9	37.3	36.9	36.9	36.4	36.5	36.7	36.9	37.4	37.4
TRANSPORTATION AND PUBLIC UTILITIES	39.9	40.0	39.3	39.3	40.0	39.9	40.2	39.8	39.7	39.4
WHOLESALE AND RETAIL TRADE	32.1	32.9	31.8	31.8	32.5	32.0	32.7	32.6	32.4	32.2
WHOLESALE TRADE	38.4	39.1	38.4	38.3	38.7	38.8	38.9	38.9	38.7	38.6
RETAIL TRADE	30.1	31.0	29.7	29.7	30.6	30.6	30.7	30.6	30.4	30.2
FINANCE, INSURANCE, AND REAL ESTATE	36.4	36.4	36.3	36.3	36.4	36.2	36.5	36.4	36.2	36.3
SERVICES	32.4	32.8	32.5	32.5	32.6	32.6	32.7	32.9	32.7	32.7

[1] Data relate to production workers in mining and manufacturing, to construction workers in construction, and to nonsupervisory workers in transportation and public utilities, wholesale and retail trade, finance, insurance, and real estate, and services. These groups accounts 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. 1979	Dec. 1979	Jan. 1980 p	Feb. 1980 p	Feb. 1979	Dec. 1979	Jan. 1980 p	Feb. 1980 p
TOTAL PRIVATE	$6.00	$6.39	$6.42	$6.46	$212.40	$229.40	$225.34	$226.75
Seasonally adjusted	6.00	6.39	6.42	6.45	214.20	226.12	228.55	228.33
MINING	8.21	8.73	8.87	8.91	349.75	383.25	363.18	383.13
CONSTRUCTION	9.02	9.57	9.49	9.63	319.31	355.05	331.20	341.67
MANUFACTURING	6.52	6.97	6.95	6.98	262.10	285.07	276.61	277.11
DURABLE GOODS	6.96	7.41	7.37	7.44	286.06	306.26	297.75	299.83
Lumber and wood products	5.83	6.25	6.20	6.36	227.37	245.00	238.08	243.59
Furniture and fixtures	4.93	5.27	5.26	5.29	187.83	210.27	202.51	202.61
Stone, clay, and glass products	6.58	7.10	7.06	7.11	267.15	296.76	283.11	281.69
Primary metal industries	8.75	9.28	9.26	9.35	368.36	379.55	375.96	376.68
Fabricated metal products	6.65	7.12	7.06	7.12	271.99	298.33	286.64	287.65
Machinery, except electrical	7.16	7.65	7.64	7.67	304.30	327.42	316.30	317. 4
Electric and electronic equipment	6.13	6.64	6.66	6.71	246.27	274.23	268.40	269.07
Transportation equipment	8.35	8.90	8.77	8.83	351.54	379.14	354.31	359.36
Instruments and related products	6.02	6.49	6.57	6.62	246.82	269.96	270.03	269.43
Miscellaneous manufacturing	4.95	[illegible]	[illegible]	5.31	191.57	[illegible]	[illegible]	[illegible]
NONDURABLE GOODS	5.82	6.26	6.28	6.27	226.40	249.77	244.92	243.23
Food and kindred products	6.10	6.56	6.63	6.66	239.12	264.37	261.22	259.0
Tobacco manufactures	6.53	7.04	7.06	7.14	236.39	278.08	264.04	257.7
Textile mill products	4.51	4.87	4.90	4.91	179.50	202.11	200.41	200.82
Apparel and other textile products	4.17	4.39	4.44	4.43	145.53	157.60	156.29	156.38
Paper and allied products	6.83	7.48	7.46	7.47	288.23	325.36	317.80	314.49
Printing and publishing	6.73	7.17	7.21	7.21	251.03	273.18	268.93	266.77
Chemicals and allied products	7.32	7.91	7.94	7.95	305.24	333.80	330.30	329.93
Petroleum and coal products	9.10	9.49	9.54	9.53	388.57	411.87	343.44	399.31
Rubber and misc. plastics products	5.84	6.21	6.25	6.24	240.61	252.75	251.86	247.10
Leather and leather products	4.14	4.36	4.45	4.46	148.63	162.63	164.21	164.57
TRANSPORTATION AND PUBLIC UTILITIES	7.92	8.55	8.54	8.57	316.01	342.00	335.62	336.80
WHOLESALE AND RETAIL TRADE	4.97	5.18	5.34	5.36	159.54	170.42	169.81	170.45
WHOLESALE TRADE	6.21	6.66	6.72	6.75	238.46	261.19	258.05	256.53
RETAIL TRADE	4.47	4.61	4.77	4.78	134.55	142.91	141.67	141.97
FINANCE, INSURANCE, AND REAL ESTATE	5.19	5.49	5.57	5.6.	188.92	199.84	202.19	203.64
SERVICES	5.27	5.60	5.65	5.66	170.75	183.68	183.63	184.60

[1] See footnote 1, table B-2

p=preliminary

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

[1967=100]

Industry	FEB. 1979	SEPT. 1979	OCT. 1979	NOV. 1979	DEC. 1979	JAN. P 1980	FEB. P 1980	Percent change from— FEB. 1979–FEB. 1980	Percent change from— JAN. 1980–FEB. 1980
TOTAL PRIVATE NONFARM									
Current dollars	224.0	234.3	234.9	237.3	237.5	240.3	242.2	N.A.	0.8
Constant (1967) dollars	107.8	104.9	104.1	104.1	103.6	102.7	N.A.	(4)	(3)
MINING	253.7	266.1	268.0	271.6	273.2	274.2	275.5	8.6	.5
CONSTRUCTION	216.7	224.4	224.0	225.8	227.6	225.4	230.7	6.5	2.3
MANUFACTURING	227.2	238.7	240.0	242.1	244.3	244.9	247.3	8.9	1.0
TRANSPORTATION AND PUBLIC UTILITIES	241.7	255.6	255.8	258.9	260.7	260.3	262.0	8.4	.6
WHOLESALE AND RETAIL TRADE	218.1	227.0	227.4	229.5	231.3	234.5	235.4	8.0	.4
FINANCE, INSURANCE, AND REAL ESTATE	204.2	214.4	213.1	216.2	218.5	219.5	220.9	8.1	.6
SERVICES	222.2	231.5	232.3	234.7	237.7	238.1	239.2	7.7	.5

1 SEE FOOTNOTE 1, TABLE B-2.
2 PERCENT CHANGE WAS -5.2 FROM JANUARY 1979 TO JANUARY 1980, THE LATEST MONTH AVAILABLE.
3 PERCENT CHANGE WAS -1.1 FROM DECEMBER 1979 TO JANUARY 1980, 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	1979 Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1980 Jan.P	Feb.P
TOTAL PRIVATE	124.7	125.7	123.6	125.4	125.7	125.7	125.5	125.9	125.8	126.3	126.6	126.7	126.4
GOODS-PRODUCING	110.2	111.3	106.8	110.3	110.1	109.9	109.4	109.7	109.0	108.7	109.6	110.4	109.5
MINING	152.5	152.5	152.0	151.6	152.5	148.4	136.7	157.4	158.1	158.4	162.3	165.2	162.4
CONSTRUCTION	126.7	132.7	124.9	133.7	134.4	133.9	134.5	135.4	132.7	133.7	137.1	141.7	137.7
MANUFACTURING	105.8	106.0	102.0	104.7	104.3	104.4	103.3	103.4	103.1	102.5	102.9	102.9	102.6
DURABLE GOODS	109.9	110.1	105.0	108.3	107.9	107.9	106.8	107.1	106.2	105.1	105.6	105.3	105.4
Lumber and wood products	114.9	115.4	112.4	113.3	112.7	111.9	112.3	113.6	113.3	110.1	108.3	108.9	105.8
Furniture and fixtures	109.1	109.4	105.6	105.9	105.3	105.9	104.5	104.8	105.9	106.2	106.4	106.7	105.6
Stone, clay, and glass products	112.6	114.9	111.5	113.1	113.0	111.5	110.8	111.2	110.6	110.4	110.8	110.0	108.9
Primary metal industries	100.3	100.2	99.7	97.9	97.9	97.8	95.9	95.3	94.6	93.1	91.8	91.7	91.6
Fabricated metal products	108.7	108.6	102.7	106.6	107.1	106.7	104.8	105.4	106.1	105.6	106.4	104.9	105.7
Machinery, except electrical	117.4	117.5	113.0	117.4	117.6	118.0	116.2	117.7	114.3	113.6	113.5	116.4	115.8
Electric and electronic equipment	107.8	108.5	104.4	108.2	108.6	108.5	108.7	107.2	107.6	108.1	108.8	109.4	108.9
Transportation equipment	106.9	108.9	94.3	102.6	99.4	100.3	102.6	100.1	97.6	93.7	96.7	91.9	95.2
Instruments and related products	129.4	129.7	127.2	128.1	128.4	128.1	127.2	127.2	127.8	127.8	128.1	130.7	130.3
Miscellaneous manufacturing industry	101.7	101.7	97.5	96.7	100.3	100.7	100.8	99.9	99.9	99.5	101.4	102.2	101.8
NONDURABLE GOODS	99.8	100.1	97.8	99.5	99.1	99.1	98.2	98.1	98.5	98.8	99.0	99.6	98.5
Food and kindred products	97.0	98.1	96.8	97.0	96.8	95.9	94.6	93.0	96.1	96.5	97.0	96.4	95.5
Tobacco manufacturers	70.0	73.4	73.9	76.5	72.6	73.0	66.7	70.5	69.9	61.1	65.4	67.6	65.9
Textile mill products	90.3	90.6	86.7	89.5	89.6	89.8	89.0	89.8	90.6	91.8	91.8	93.3	92.3
Apparel and other textile products	90.3	89.9	86.8	89.5	88.7	89.5	88.0	87.3	87.9	87.3	88.4	89.9	89.7
Paper and allied products	101.8	103.0	100.8	102.3	102.1	103.2	103.1	102.2	102.7	102.8	103.3	103.6	103.3
Printing and publishing	103.1	103.4	101.7	103.3	103.3	104.4	104.7	103.9	104.3	105.9	105.1	107.1	106.2
Chemicals and allied products	108.5	108.1	107.7	108.3	108.4	108.8	108.2	107.6	107.9	108.6	108.6	109.5	109.4
Petroleum and coal products	123.9	123.4	125.7	124.2	123.1	123.0	124.2	126.2	125.1	128.0	126.3	106.0	94.5
Rubber and misc. plastics products	154.0	154.4	148.4	151.4	150.4	150.5	145.6	143.5	143.5	142.5	140.9	143.9	139.6
Leather and leather products	66.6	66.1	63.9	65.4	66.0	61.3	64.9	66.1	65.2	64.9	65.0	65.5	66.2
SERVICE-PRODUCING	134.8	135.8	135.3	135.9	136.5	136.7	136.6	137.2	137.5	138.5	136.4	138.1	138.2
TRANSPORTATION AND PUBLIC UTILITIES	113.3	113.7	109.2	113.4	115.0	114.2	115.2	114.9	115.6	116.9	115.4	114.5	113.6
WHOLESALE AND RETAIL TRADE	129.3	130.2	130.6	130.2	130.0	129.9	129.6	130.4	130.7	131.6	130.9	130.9	130.6
WHOLESALE TRADE	130.8	132.3	131.3	132.8	132.8	132.7	132.4	132.5	133.4	134.3	134.1	133.8	134.2
RETAIL TRADE	128.7	129.3	130.3	129.1	128.9	128.9	128.5	129.6	129.7	130.5	129.7	129.8	129.5
FINANCE, INSURANCE, AND REAL ESTATE	144.1	144.8	145.5	144.5	145.7	146.5	146.3	147.1	146.7	148.3	148.3	148.1	149.3
SERVICES	149.5	151.1	151.0	151.7	152.6	153.5	153.4	153.8	154.1	155.2	156.5	156.0	156.6

1 See footnote 1 table B-2

P preliminary

Table B-8. 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
1977				
January	73.1	80.2	86.3	80.5
February	67.2	84.3	84.8	81.4
March	73.4	82.6	84.0	82.8
April	71.5	81.7	82.3	84.6
May	70.3	76.5	79.1	85.2
June	65.1	72.7	77.6	86.6
July	70.3	70.3	75.3	84.9
August	57.8	70.9	76.7	83.1
September	67.2	67.7	79.7	83.1
October	64.2	76.2	80.5	82.8
November	73.3	79.7	84.0	81.1
December	75.3	79.4	82.3	12.0
1978				
January	68.3	80.2	83.1	81.4
February	69.2	75.6	79.1	83.1
March	69.5	77.3	77.6	81.1
April	68.0	69.8	73.5	82.0
May	57.8	67.2	72.7	81.2
June	66.6	66.6	71.2	82.3
July	64.5	69.5	73.0	81.4
August	60.5	67.2	77.3	78.2
September	62.5	71.2	79.7	77.9
October	73.0	78.2	82.3	73.5
November	75.9	81.1	82.3	76.2
December	74.4	82.1	80.5	71.8
1979				
January	70.3	76.5	74.1	71.8
February	65.1	72.1	67.4	70.6
March	60.5	67.8	61.9	63.7
April	44.8	55.2	58.1	64.0
May	54.7	51.5	50.3	61.9
June	57.0	58.4	46.8	58.1
July	67.6	56.7	56.1	56.7p
August	48.8	52.0	55.8	54.9p
September	48.8	52.9	57.6	
October	49.8	61.0	60.2p	
November	59.9	64.6	62.5p	
December	59.0	65.4p		
1980				
January	64.2p	62.2p		
February	53.6p			
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 BENTSEN. Mr. Layng, do you see any evidence that producers and manufacturers are increasing prices in anticipation of wage and price controls?

Mr. LAYNG. No, sir. It's extremely difficult to discern that from the data. About the only thing you can do is get anecdotal information from reading the trade press and the national press. It's very clear there is a great deal of sensitivity with respect to the imposition of mandatory price and wage controls and that——

Senator BENTSEN. When you say, "No," are you saying that in effect you can't tell?

Mr. LAYNG. It's impossible to tell. If I look at, for example, increases that occurred and try to attribute them to the anticipation of wage and price controls in an empirical way, it's extremely difficult, if not impossible, I would say. But based on information that we read in the trade press, it's clear that there's a great deal of sensitivity to try to capture cost increases as quickly as possible. I think it would be fair to say that in the production sector of the economy there certainly is the feeling that the future is now and if you don't get it now you may not get it later. That's been true I think from the beginning. Certainly when I was at the Council on Wage and Price Stability in discussing these matters directly with producers, there was a great deal of apprehension when this program was put in place and it's clear that it continues, and that's got to be a factor in these figures, but we can't tell exactly how much.

Senator BENTSEN. Mr. Layng, I know that mortgage interest rates have a significant effect on the Consumer Price Index and I know that just this week one of the major lenders in the Washington area, for example, said they were increasing their mortgage interest rate to 17 percent. Now if other lenders follow suit, what kind of an impact is that going to have?

Mr. LAYNG. Substantial. For example, we have to remember with mortgage interest rates that we deal with that the same way we do with the price of apples. In other words, we're looking at the percent change in mortgage interest rates and not necessarily just the level itself. For example, assume we were dealing in the past at perhaps a 10-percent interest rate and they were to rise to 11, that would be a 10-percent increase in mortgage interest rates. The direct impact on the Consumer Price Index of that increase would be roughly eight-tenths of 1 percent. So if we see increases in mortgage interest rates of 2, 3, and 4 percentage points, it's going to have a very substantial impact on the Consumer Price Index.

Senator BENTSEN. Well, let me give you an example. Let's think back to when mortgage interest rates were 8 percent. That wasn't too long ago. If you went out to borrow $40,000 on a 30-year mortgage, that worked out to about $300 a month in monthly payments. If you increase the rate by 5 percentage points, you actually increase the monthly payment by about 50 percent. That $300 a month payment goes to about $450 a month.

Mr. LAYNG. Right. You're dealing with the change in the rate—the rate you're dealing with is a 5-percentage-point increase from 8 to 13.

Senator BENTSEN. From 8 to 13 percent, and you increase the monthly payment on a 30-year mortgage from around $300 to around $450 a month.

Mr. LAYNG. That would be reflected in the Consumer Price Index as roughly 5 over 8 or roughly a 50- to 60-percent increase in mortgage interest rates, which would have a substantial impact on the Consumer Price Index.

Senator BENTSEN. Let me get to this other problem, and we have discussed it repeatedly in the past but it becomes more and more a question of concern, and that's again, the components of the Consumer Price Index. We have listened to Alfred Kahn testify that you all have been doing some studies trying to find out what truly measures inflation. Some contend that the Consumer Price Index, as it is now made up, results in an inflationary figure that's higher than the actual because of the cost of a home—I understand that's one of the major components in it, the argument being that people don't buy a home but once or twice perhaps in a lifetime. Are you not developing and reporting an alternative set of components? What is that and what is the makeup of that?

Mr. LAYNG. In that context, the housing component of the Consumer Price Index and in particular the home ownership component of the Consumer Price Index has been a topic that's been under discussion for I hate to say a long time. The Bureau of Labor Statistics has done a considerable amount of work in this area and it's an extremely difficult area to come up with unequivocable rights and wrongs. A lot of it depends on what your use of the Consumer Price Index is and what kind of measure you're looking for, and there are many different uses to what a CPI-type measure might be put—income escalation, current prices of goods and services, and a variety of others—and each has its advocate in one way or another.

BLS began a long time ago as you know to look into this question to develop alternatives. One thing we learned more than anything else was that there's a great diversity of view with respect to what is right or wrong or what the inflation rate should or should not reflect.

In that connection, because of the recent increases in mortgage interest rates and house prices and their large impact on the Consumer Price Index, Commissioner Norwood felt it important to try to educate and promote discussion of this issue again and in that connection she issued in early February a series of experimental CPI measures which reflected different treatments of homeownership. Those measures give different results all the way down to numbers that are less than the official rate of the CPI by as much as 2 or 2½ percentage points during the situation we faced in the last year with respect to mortgage interest rates and house prices.

The choice as to which measure one chooses depends importantly on one's objective and it is that issue that I think needs to be discussed and determined but it needs to be discussed and determined in the context of what we call a normal CPI revision process; namely, a period of time that is set aside for the CPI to be revised under the calm of reasonable judgments as to what is right and wrong, not with respect to what will give the highest or the lowest inflation rate; and that's why the Commissioner has said before—and we agree firmly with that—that we would like to see this issue explored again.

We think there's additional work that needs to be done, but that it should be done in the context of a normal CPI revision process, one of which, unfortunately, we just completed in January of 1978.

Senator BENTSEN. Let me ask you then, the argument is made that retired people aren't normally buying another home unless it's a smaller one and, therefore, to put housing in there reflects something that's not a true expenditure for them. On the other hand, they buy more medicine and other things than the average age and therefore that isn't given enough weight.

When you get to talking about the Consumer Price Index and you want it to truly reflect whatever the inflation is without kidding anybody up or down, have you looked at anything in regard to what older people are spending? Has there been any experiment or study there?

Mr. LAYNG. Well, we have looked at differences in expenditure patterns with respect to different groups of the population and you're right, there are differences. Some things are lower and some things are higher. If one wants to look at the Consumer Price Index for the retired population or the aged or social security beneficiaries—there are differences in the definitions of those groups—but one would want to construct a CPI in much the same way we construct the CPI for the urban portion of the country as a whole. We would want to look at expenditure patterns of that group of the population and locations and places where they live, the stores in which they buy items, the kinds of items that they purchase. All these would contribute to a potential difference, positive or negative, between that type of measure and the national average. We could say that about a lot of groups. Unfortunately, the only thing we have right now in-house is expenditure pattern information from 1972–73, a consumer expenditure survey which can be examined, and that has been done. We did not do it. The only study I know of or the most recent study that I'm aware of was done by someone from the American Assoication of Retired Persons and I don't have that study in front of me. We could obtain it for you, but I believe—and I'm trying to pick my memory a little bit here—that that index was simply a reweighted CPI, reweighted with the same type of housing measure in the CPI now but reflecting the proportions of people who bought houses and entered into housing contracts in that age group in 1972–73, and just the differences in the weights. There was no reflection of the areas in which the retired people live, no reflection of the stores, neighborhoods versus big shopping centers or the items, the specific items, the kinds of drugs, the kinds of food that they buy—it did not reflect these, just the differences in the weights.

I believe that showed that over a period of time that I also can't recall right off the top of my head, there was a slightly larger increase than in the CPI itself.

One of the big potential differences is in the area you mentioned which would be the treatment of housing. If we change the treatment of housing for this group to reflect the fact that it doesn't buy houses to a large extent, we may not get a different measure and the measures might be more like the differences in the experimental measures for the country as a whole that we released. In other words, if we look at a different measure of housing, we get a different overall rate of increase in the CPI and that fact would probably pertain to the population group that you're talking about as well.

Senator BENTSEN. Well, I'm convinced that's going to become more and more a subject of discussion.

Mr. LAYNG. I might add to that that there's two potential possibilities here. One is that the Bureau could produce a measure based on existing data. It would have to be based on a particular definition that would have to be worked out. It would have to be something like a national measure, perhaps produced at certain times of the year when such a measure might be needed, and we are prepared to do that. In addition, if a more sophisticated and complete measure is desired, we are in a position to undertake that work.

In the past, legislation has been introduced in the Congress with respect to the development of such an index. Our response in the past has been that before a major program with a large expenditure of funds is undertaken, we might want to pursue some type of pilot study to look into areas that are heavily populated by retired people, construct an index for those areas, and compare it to the indexes that we produce for the all-urban population and see what differences there might be to try to get some idea of whether the benefit would be worth the expenditure of the funds, and the benefit could be either increased benefits or decreased benefits. The point is, it would be better for that group of the population and more responsive to the experience that they have.

Senator BENTSEN. Mr. Bregger, on the other subject of the unemployment rate, we have seen a pretty steady number there. Do you get any trend feeling about whether we are in a recession or whether or not this index is pointing us in that direction?

Mr. BREGGER. Mr. Chairman, you may recall when Ms. Norwood appeared before the committee last month she indicated it was too early to call such a——

Senator BENTSEN. This is a month later. That's why I'm asking it again.

Mr. BREGGER. Exactly, and I think the results this month bear out the reason why we tend to be conservative in making a very positive response in this regard. The figures show basically very little change and, indeed, there's some indication that the auto industry is not as bad off as it was in the prior month.

The only thing that I can point to in this month's numbers is that there was a decline in hours of work, and that may be something to bear watching for the future. But at the present time it certainly would be quite premature to indicate that there are any signs at all that we are going into a major downturn.

Senator BENTSEN. I'd like to now turn to my colleague, Senator Sarbanes, for any questions he might have.

Senator SARBANES. Mr. Bregger, you said in your oral statement that the proportion of the population that is employed is no higher than 1 year ago. What is that proportion?

Mr. BREGGER. It's 59.3 percent of the population.

Senator SARBANES. Now isn't that, as a proportion of the population employed, either the highest figure that we have had since we have kept records or close to it?

Mr. BREGGER. It's very close to it. It's a tenth below our record, which was 59.4 percent.

Senator SARBANES. When was that record set?

Mr. BREGGER. It occurred several times, the most recent being in December of 1979.

Senator SARBANES. Wasn't the rate at about 55 percent for a long time? This jump has taken place over the last few years, hasn't it, and isn't the general explanation for it the fact that more women have come into the labor market; is that right?

Mr. BREGGER. Well, it's certainly true that the proportion has been rising for the last few years. The reason, as you point out, has been due to increases among adult women, consistent with their increasing rate of participation in the labor force. There have been some increases among youth as well.

Senator SARBANES. Now are you able to say how this figure, relative to the proportion of the population employed, compares with other major industrial countries?

Mr. MARK. We do develop that information. Unfortunately, I do not have it with me, but we could provide it for the record for you. We have it for most of the industrialized countries, particularly the European ones.

Senator SARBANES. I would be interested in that. Do you recall whether this is high or low compared with their proportion of the population working?

Mr. MARK. I just don't recall, Senator.

Senator SARBANES. Well, if you could submit that for the record it would be helpful.

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

EMPLOYMENT-POPULATION RATIOS[1] APPROXIMATING U.S. CONCEPTS, 1960-79

Year	United States	Canada	Australia	Japan	France	Germany	Italy	Sweden	United Kingdom[2]
1960	56.1	[3] 52.6	(4)	66.7	58.6	59.4	55.8	(4)	59.4
1961	55.4	[3] 52.4	(4)	66.8	58.1	59.6	55.6	62.2	59.7
1962	55.5	[3] 52.9	(4)	66.0	57.1	59.3	54.7	63.0	59.2
1963	55.4	[3] 53.1	(4)	66.3	56.3	59.2	53.4	63.4	59.0
1964	55.7	[3] 53.8	57.9	64.1	56.4	58.8	52.5	62.0	59.4
1965	56.2	[3] 54.5	58.3	63.6	55.7	58.6	50.9	62.1	59.6
1966	56.9	55.4	58.8	63.7	55.7	58.0	49.2	62.1	59.6
1967	57.3	55.4	59.2	64.0	55.4	65.3	49.5	60.9	58.5
1968	57.5	55.0	59.3	64.1	55.2	56.2	48.8	61.0	58.2
1969	58.0	55.3	59.5	63.9	55.5	56.6	48.4	61.1	58.0
1970	57.4	54.5	60.9	63.8	55.2	56.6	48.0	61.9	57.5
1971	56.6	54.5	60.2	63.4	54.8	56.1	47.7	61.6	56.6
1972	57.0	54.9	59.9	62.8	54.6	55.3	46.4	61.4	56.7
1973	57.8	56.4	60.4	63.2	54.7	54.9	46.2	61.4	58.8
1974	57.8	57.3	60.4	62.2	54.6	53.5	46.6	62.6	58.7
1975	56.0	56.9	59.2	61.2	53.4	51.6	46.4	63.8	58.1
1976	56.8	56.7	59.0	61.1	53.2	50.9	45.3	63.9	58.0
1977	57.9	56.6	58.5	61.2	[5] 53.1	[5] 50.5	46.3	63.8	[5] 57.8
1978	59.4	57.4	57.3	61.3	[5] 52.8	[5] 51.0	46.0	63.8	[5] 57.7
1979	60.0	58.6	57.0	.....	[5] 52.9	[5] 51.2	[5] 46.0	.....	.....

[1] Civilian employment adjusted to U.S. concepts as a percent of the civilian working age population. The data relate to persons 16 and over in the United States, France, Sweden, and beginning in 1973, Great Britain; 15 and over in Canada, Australia, Japan, Germany, and prior to 1973, Great Britain; and 14 and over in Italy.

[2] Great Britain only.

[3] Estimates by BLS based on new survey definitions. Statistics Canada revised the data for 1966 onward on the new urvey basis.

[4] Not available.

[5] Preliminary.

Prepared by: U.S. Department of Labor, Bureau of Labor Statistics, Office of Productivity and Technology, Division of Foreign Labor Statistics and Trade, March 1980.

Senator SARBANES. I'm interested, Mr. Bregger, in some sector analysis of the overall employment figure you gave us. Is there anything within the particular components of it that should be brought specifically to our attention, anything unusual in terms of the movements of some of the component figures, even though the overall figure has stayed roughly the same or actually declined two-tenths of a point, but that's rounding out. Is there anything in the component figures?

Mr. BREGGER. Well, to begin with, the true change in the overall rate, if you look at the unrounded numbers, is really about one-tenth and quite virtually every worker group was showing no change as well. So it's a remarkably flat picture. There were a couple of small declines, one decline of about three-tenths for married men, and there was also a decline in workers in durable goods manufacturing.

Senator SARBANES. What about in construction? Can you relate that?

Mr. BREGGER. Well, the construction unemployment rate was 10.5 percent, which is certainly much higher than the average, but there's been no real change in that figure as yet.

Senator SARBANES. Since when?

Mr. BREGGER. Well, over the past year it's been remarkably flat. The construction industry, oddly enough, has been showing significant increases up to but not including February. The increases have been very large, in fact. In February there was finally a small decline of about 30,000. So that could be the beginning of something there, certainly given the high mortgage rates that are upon us.

Senator SARBANES. Mr. Layng, I want to make sure I understand how the rise in the interest rate translates into the increases in the Consumer Price Index, and I want to leave to one side this question of the housing component, whether it's overstated or understated.

Do I understand that a 10-percent increase in interest rates—in other words, the example you used was from 10 percent to 11 percent—results in an 0.8-percent increase in the Consumer Price Index?

Mr. LAYNG. Yes, sir.

Senator SARBANES. Now let me just carry this point further. Does it mean if the interest rate went from 8 percent to 12 percent, a 50-percent increase, that that fact alone would boost the Consumer Price Index 4 percent?

Mr. LAYNG. Four percentage points.

Senator SARBANES. When you say 4 percentage points, what do you mean?

Mr. LAYNG. Well, if the rate for everything else was 5 percent, it would add 4 percentage points to make it 9.

Senator SARBANES. So it would be 9 percent?

Mr. LAYNG. Not the impact of interest rates. If you add 4 percentage points to whatever the inflation rate was. If it was zero, it would be 4 percent rather than zero.

Senator SARBANES. I'm not sure most people appreciate how much of a passthrough into the Consumer Price Index results from these increases in interest rates.

Mr. LAYNG. You must recognize, as Senator Bentsen said, mortgage interest rates enter the Consumer Price Index in a multiplicative fashion; namely, the value of the house as well as the mortgage interest rate affects the movement of that component. So you get the

changes you said, very large increase in payments, even when you hold—if you assume the house prices do not rise and you increase interest rates by that amount, you still get an impact of that degree.

Senator SARBANES. Do the interest rates feed into the producer price increases in any way?

Mr. LAYNG. No, sir, not directly. The impact on the Producer Price Index would be indirect as a cost of doing business. There is no direct component in the Producer Price Index that deals with home ownership at all. There are not any house prices. There are no mortgage interest rates. There are construction materials, but no direct house prices or mortgage interest rates.

Senator SARBANES. Well, I think this point on the interest rates underscores the point I made in my statement at the outset about the importance of looking at the components of the Consumer Price Index in terms of developing a policy to address specific matters rather than dealing only in more general terms with a general policy directed in a general way.

Let's look at these energy costs now. What is the Consumer Price Index increase? Let me just make sure I have this. The Consumer Price Index increase that's related to energy costs?

Mr. LAYNG. For the year?

Senator SARBANES. For the year and then for the recent months.

Mr. LAYNG. For the year it was 37 percent. That reflects gasoline, home heating oil, natural gas and electricity. Then the first 2 months of this year——

Senator SARBANES. That 37-percent increase is a 37-percent increase in energy costs?

Mr. LAYNG. Right.

Senator SARBANES. Now, of the 13.2-percent increase in the CPI for the year, how much of that was energy? How does the 37-percent increase in energy costs translate into that CPI?

Mr. LAYNG. 3.2 percentage points.

Senator SARBANES. All right.

Mr. LAYNG. That's for 1979. The first 2 months of this year it was 2.3 in January and 4.6 percent in February. Excuse me, it was 4.6 percent in January. I don't have February figures yet. The changes were 4.6 percent in January and 2.3 percent in December.

Senator SARBANES. Now last year the CPI went up 13.2 percent.

Mr. LAYNG. Year to year, it was 13.3.

Senator SARBANES. In the 13.2 percent, 4 percent is direct energy costs?

Mr. LAYNG. About 3.2 percentage points.

Senator SARBANES. Not indirect; is that correct?

Mr. LAYNG. Correct.

Senator SABRANES. Now how much of the 13.2 percent is attributable to the interest question that we were discussing earlier?

Mr. LAYNG. About 2.5 percentage points.

Senator SARBANES. Is there any other single component that would make up the roughly 6 points still to be accounted for that we should pay particular attention to?

Mr. LAYNG. Not really. It's spread over a variety of other items. What we don't know is how much of it is indirectly attributable to energy.

Senator SARBANES. And interest?

Mr. LAYNG. And interest, too. Interest and energy are two items that permeate the entire structure as a cost of production. Interest is a cost of production. Energy is a cost of production. They are not like increases or shortage of fresh fruits and vegetables that essentially focus on one or two components of consumption. Things like energy and mortgage interest rates permeate the entire structure. I can't think of anything in the cost of production that would not be affected by those two items. I think that underlines the seriousness of them.

Senator SARBANES. In terms of thinking about policy, it underlines the importance of focusing on measures that will directly affect these two components when you're trying to deal with the inflation question. Effective policies to bring down or hold down costs in those areas will have really enormous repercussions in the Consumer Price Index.

Mr. LAYNG. Correct. It's also not only just looking at energy price increases alone; it is the increase in the relative price of energy which has been just fantastic in this episode. In other words, the price of energy relative to the prices of other things. If everything goes up by the same percentage, everything is sort of affected by the same degree. But when one item shoots up relative to others, it means that there's terrific pressure on that item to reduce consumption or to reduce other items in order to maintain consumption.

We did some charts just illustrating in the Consumer Price Index the relative change in energy prices, and you can see what happened to, for example, fuel oil prices, the relative price of fuel oil—fuel oil relative to everything else last year. It was just terrific. And virtually every item in the Consumer Price Index dealing with energy experienced that, with the possible exception of electricity, but particularly gasoline and fuel oil have risen relative to everything else and that puts a great deal of stress on people's budgets.

Senator SARBANES. All right. Thank you, Mr. Chairman.

Senator BENTSEN. Mr. Layng, I want to follow up with a couple questions and then yield to Senator Javits.

I have been one who's argued all my adult life about how interest rates add to the cost of everything, and there's a streak of the populist in me there. But I'm absolutely amazed at the number you're giving me because the numbers I used I thought were enough to be concerned about.

Mr. LAYNG. I think you characterized it well when you said this is what happens to a mortgage interest payment when the interest goes from x to y. It's a very large increase. It doesn't appear to be very much when you say from 4 to 8 percent, but that's a terrific increase in interest rates.

Senator BENTSEN. Let me look at another measure to show you again what interest rates do. You go down to borrow money today to build housing, say a bunch of townhouses, and you pay 5 points or maybe 8 points on the front. Do you know what that developer does? He just automatically increases the house cost by 5 percent or 8 percent immediately.

Mr. LAYNG. The cost of borrowing gets built into the cost structure if demand is there.

Senator BENTSEN. Maybe he shows them a 12-percent interest rate on the mortgage, but he's already moved the price up to compensate for the points up front.

Mr. LAYNG. Points certainly get built into the housing structure.

Senator BENTSEN. Of course they do, and they really get built into the cost of everything—producer prices and all the rest of it. It's very material.

Now the one thing that's pretty hard for me because I want to be sure—Senator Sarbanes asked you but I'm going to ask you again. Are you telling me that for a 1-percent increase in interest rates on that component, you increase it eight-tenths of a point?

Mr. LAYNG. One percentage point, from 10 to 11.

Senator SARBANES. A 10-percent increase.

Mr. LAYNG. That's a 10-percent increase.

Senator SARBANES. The higher the interest rate is, then the add-on translates into a much smaller figure. In other words, if you take it from 17 to 18 percent, that's a 1 over 17 increase, that's not a 10-percent increase.

Senator BENTSEN. I see. I just couldn't understand that.

Senator SARBANES. For instance, if the interest rate were cut from 18 to 12 percent, let's assume, then the Consumer Price Index would drop 3.2 percent. Is that correct?

Mr. LAYNG. Correct.

Senator SARBANES. So that would be a 33⅓ percent cut.

Mr. LAYNG. All other things being equal, recognizing this is one component that enters multiplicatively, the only one. We call it mortgage interest costs, which is influenced by house price changes and mortgage interest rate changes.

Senator SARBANES. If they jump then from 8 to 12 percent, it's a much more really enormous impact as compared to a jump from——

Senator BENTSEN. From 18 to 22.

Mr. LAYNG. And the impact on mortgage interest payments would be smaller from 17 to 18 percent than it would be from 4 to 8 percent.

Senator BENTSEN. Senator Javits.

Senator JAVITS. Gentlemen, I'd like to ask you a question about food. What does it look like in the food line in comparison to January and projecting forward. First tell me if you can give me some sense of proportion as to what foods mean in the Consumer Price Index, what percentage of the total index do they represent.

Mr. LAYNG. Direct food purchased in grocery stores is roughly about 12 percent of the Consumer Price Index. That's not counting alcoholic beverages. That's what we call food at home, and that means food purchased in grocery stores as opposed to restaurant meals. If we looked at the total category, including restaurants and away from home, it would be roughly 19 percent, 18.7 percent.

Senator JAVITS. So in round figures, about a fifth of the Consumer Price Index comes in what the consumer would pay for food?

Mr. LAYNG. In aggregate, for all types of food.

Senator JAVITS. Yes. Just to get an order of magnitude.

Mr. LAYNG. Right.

Senator JAVITS. Now can you give us your views as to the development of that situation? Is it on the way up or is it on the way down or what do you see?

Mr. LAYNG. I don't have a great deal of insight into what the future holds. Certainly this year has begun with a very encouraging situation. In the Producer Price Index we had two declines, the first two in a long

time, not large, but declines, and we are thankful for that, and the Consumer Price Index reflected that in January. It showed a very, very small increase. At the crude stage of production in February, crude foodstuffs and feedstuffs did go up, not by a large amount but they did go up, but I think the overall expectation is that food prices will be better this year than last.

Senator JAVITS. In their impact?

Mr. LAYNG. We may be over the beef situation—namely, the cattle cycle in terms of rebuilding beef herds, cattle herds for beef—and that may ease the upper pressure on the price of beef that we have experienced in recent years.

I think one area of uncertainty perhaps is in the grain situation where there's a lot of activity with respect to the situation with the Soviet Union and with respect to crop forecasts for this year. They seem to move around a good deal and I think that will be an important factor in determining what happens this year. What happens to the grain situation, as you know, also influences directly the price of meats through feeds.

Senator JAVITS. Would you say that the energy, decline in energy goods, as you call them, and in the cost of energy represents the biggest bulge for February?

Mr. LAYNG. Yes, sir. There's no question about it. For January and February.

Senator JAVITS. So that that pinpoints the sore spot as far as inflation is concerned?

Mr. LAYNG. Certainly a very major one directly and a major one indirectly. Energy prices at the consumer level had been trending down—the rate of increase had been decelerating from the middle of the year when we experienced very large increases in 1979 and we had reached increases in the fall of 1.3 and 0.9, which are much smaller. Recently we have accelerated and it looks like it's going to continue based on the Producer Price Index at least through February. Increases in the PPI and CPI tend to pretty much follow the same pattern. In other words, in the Producer Price Index, finished energy goods increased about 12 percent in the first 2 months, and if that pushes through to the Consumer Price Index—and it appears in January it did—we are talking about some large increases in retail energy prices, but in a way we can all see that when we go to the gasoline station.

Senator JAVITS. Now what proportion of the total index in percent is represented by the energy factors?

Mr. LAYNG. In the Consumer Price Index, it's roughly 10 percent if we take all into account; namely, gasoline, home heating oil, natural gas, and electricity.

Senator JAVITS. And do you see any evidence of falling demand? We're making a lot out of the fact that demand, for example, is falling, say by 5 percent. Do you see evidence of that in your figures?

Mr. LAYNG. Certainly not in the price figures, although——

Senator JAVITS. I realize that. That's why I'm trying to judge it and I'm telling you honestly what I'm trying to demonstrate, if the figures bear it out, is that we are dealing with a real old-fashioned trust that has absolutely no connection with demand. There's no demand and supply. It's a fixed price at the caprice of the seller.

Mr. LAYNG. I wish I could disagree with you.

Senator JAVITS. What I mean is, do the figures bear that out? In short, there's no correlation?

Mr. LAYNG. One way to look at that is to look at the producer price changes and crude price changes as they move through the system, and there's no real evidence that there's been a great diminution in the rate of change as it's moved through the system, but we don't know all the factors behind that and it's very difficult to draw those kinds of conclusions. I think it's going to be interesting this year to see what unfolds, because apparently gasoline stocks are in relatively good shape relative to last year. Whether that will have any dampening effect on the retail price at the station, we don't know yet. When you get increases in raw material inputs of this magnitude, it's very difficult to say that this situation or that situation with respect to demand and supply is prevailing. It's clear that the whole structure, from beginning to end, has been dominated to a large extent by energy in the last year and a half.

Senator JAVITS. Yes. But you see no correlation between demand and price?

Mr. LAYNG. I haven't seen any real good data yet on what's happened to demand. Your hypothesis is that demand has been reduced by rising prices and that should have some dampening effect on the price situation.

Senator JAVITS. The President reports that and the Department of Energy reports that.

Mr. LAYNG. Right. I haven't examined energy data in detail. The only information I have seen has been anecdotal information. I have no reason to not believe that energy consumption with the prices we have been experiencing has not declined.

Senator SARBANES. But you haven't seen a reflection in the price?

Mr. LAYNG. Right.

Senator JAVITS. What I meant was this: Would it be within your jurisdiction to look into that question? You see, this bears upon the issue of our dealing with the naked trust of the most old-fashioned kind, what we used to call engrossment in my law school days.

Mr. LAYNG. It's probably not an analytical question that we are particularly well equipped to look into. I would think the Department of Energy would have a more complete set of data with respect to trying to look at your question—they spend a lot of time dealing with cost passthrough.

Senator JAVITS. What about Macy's getting together with Gimbel's and your Department working with the Department of Energy, because this is a very important point for us?

Mr. LAYNG. I hate to say it, but I have been trying to work with the Department of Energy for some time and I don't find it very satisfying.

Senator JAVITS. You have a very good emissary sitting right here.

Mr. LAYNG. In all truthfulness, we have been trying to develop a price index for imported crude oil based on information from the Department of Energy, and we have had a terrible time getting that information from the Department of Energy. The alternative is for us to collect it directly ourselves. We tried to avoid that because they have the information. Trying to get it from them is not easy. We do

not have an imported price index for crude oil in this country right now and I don't understand why.

Senator BENTSEN. I don't, either, and I'm going to see if I can help.

Senator JAVITS. Thank you so much. I was going to suggest, if the Chair agrees, that we dig into this because I think that would be very sound proof because the OPEC countries, Mr. Chairman—and you know I'm on Foreign Relations, like Senator Sarbanes—are telling us you just conserve and you'll see that price go down. Well, I don't think the chart, that one or whichever one, is going to show that and I think this would be very important for us to show we are dealing with a naked trust, without any relation to supply and demand; and besides, they can turn the tap up or down.

Senator SARBANES. That's right.

Senator BENTSEN. They can charge all the traffic can bear.

Senator JAVITS. I think that's important at this time. So, with the Chair's agreement then, we will put you in a position to give us a little help on that.

Mr. LAYNG. We will certainly try to.

Senator JAVITS. Thank you, Mr. Chairman.

Senator BENTSEN. Would you provide me specifically with what you want so I don't have problems with communications there?

Mr. LAYNG. Yes, sir.

Senator SARBANES. I should say I think this has been very helpful.

Senator BENTSEN. All right. Thank you very much, gentlemen.

The committee is adjourned.

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

EMPLOYMENT-UNEMPLOYMENT

FRIDAY, APRIL 4, 1980

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

The committee met, pursuant to notice, at 10 a.m., in room 2220, Rayburn House Office Building, Hon. Richard Bolling (vice chairman of the committee) presiding.

Present: Representative Bolling.

Also present: John M. Albertine, executive director; William R. Buechner, Mayanne Karmin, and Mary E. Eccles, professional staff members; and Betty Maddox, administrative assistant.

OPENING STATEMENT OF REPRESENTATIVE BOLLING, VICE CHAIRMAN

Representative BOLLING. The committee will be in order.

Commissioner Norwood, it is a bleak day outside, and you have brought us news to match the weather. Unemployment increased in March and so did prices. The best we can say about the unemployment and producer price figures is that they could have been worse. Unemployment in March rose to 6.2 percent.

This increase is due to a loss of almost 300,000 jobs in the American economy. One of the most disturbing figures is the 2.5 percentage point increase in unemployment among construction workers, which indicates that the high interest rates are having a serious effect on jobs and homebuilding industry.

Outside of that industry, however, the figures seem to indicate that we still have not gone into a recession. Producer prices rose 1.4 percent in March. This comes to just over 18 percent at an annual rate, which is slightly less than we saw in January and February, but it is still too high. All in all, the March news is bleak, but at least on the price front it isn't hopeless. And I would think that no figures are hopeless.

We would be delighted to hear you in whatever way you wish to make your presentation.

STATEMENT OF HON. JANET L. NORWOOD, COMMISSIONER, BUREAU OF LABOR STATISTICS, DEPARTMENT OF LABOR, ACCOMPANIED BY W. JOHN LAYNG, ASSISTANT COMMISSIONER, OFFICE OF PRICES AND LIVING CONDITIONS; AND JOHN E. BREGGER, CHIEF, DIVISION OF EMPLOYMENT AND UNEMPLOYMENT ANALYSIS

Ms. NORWOOD. Thank you, Mr. Vice Chairman.

Let me first introduce Mr. John Layng, our Assistant Commissioner for Prices and Living Conditions, who is on my right; and Mr. John

Bregger, who is the Chief of our Division of Employment and Unemployment Analysis, who is on my left.

Representative BOLLING. We are glad to have them both.

Ms. NORWOOD. I am glad to have this opportunity to offer the Joint Economic Committee a few brief comments to supplement our Employment Situation and Producer Price Index press releases, issued this morning at 9 a.m.

Unemployment edged up in March. The overall unemployment rate was 6.2 percent, the same as in January. The number of unemployed persons and the unemployment rate during the first quarter of 1980 were higher than figures prevailing throughout 1979. This increased unemployment occurred almost exclusively among adult men.

Total employment, as measured by the household survey, declined about 300,000 from February to March. The employment-population ratio decreased 0.3 percentage points to 59 percent, the lowest since April 1979. The proportion of the population working or looking for work dropped to 63.7 percent.

The number of employees on the payrolls of nonfarm industries, as reported by the establishment survey, also declined. The employment decrease was concentrated primarily in the construction industry, where average weekly hours also dropped significantly. Factory jobs decreased slightly in March, and were nearly a quarter of a million lower than in March of last year.

The index of aggregate weekly hours of production or nonsupervisory workers declined by 0.6 of a point in March. In addition to the sharp reduction already noted in construction, aggregate hours declined in almost all of the individual manufacturing industries.

Most of the rise in unemployment in March resulted from an increase in the number of workers laid off from their jobs. The jobless rate for adult men rose to 4.9 percent in March, nearly a full point higher than the March 1979 level. In contrast, the rates for adult women and teenagers showed little or no change over the month and over the year. As employment in construction dropped in March, the unemployment rate for construction workers rose 2½ percentage points to 13 percent.

We are also reporting today a sizable increase in the number of discouraged workers—persons who are not looking for a job because they believe they cannot find one. After holding fairly steady at about three-quarters of a million since late 1978, the number of discouraged workers rose 250,000 in the first quarter of 1980 to 1 million persons. Those discouraged for job market reasons continued to account for 60 percent of the total.

I would like to call the committee's attention to a new release that the BLS published last week. This is the first in a series of quarterly releases which relate quarterly earnings and employment status of individuals to the families in which they live.

The data show that the dual-earner family has become one of the mainstays of the American economy. Of all the families with any earners, more than half—or about 21 million—had two or more persons employed in 1979. In about 16 million of these families, both the husband and wife worked. In 1979, the combined median usual weekly earnings for such couples was nearly $500.

In families where the wife was the sole earner and the husband was unemployed, median earnings in 1979 were only $155 a week. In contrast, in families where the husband was the only earner and the wife was unemployed, median earnings in 1979 were much higher—$280.

In 1979, a little more than one-half of the families with an unemployed husband had at least one employed family member, as did almost 90 percent of the families where the wife was unemployed. In contrast, only 17 percent of the families maintained by an unemployed woman with no husband present had an employed member.

In addition to providing some valuable insights into the earnings and employment of American families, the new quarterly release will also provide information on the median usual weekly earnings of American workers by sex, race, and Hispanic ethnicity.

In the price area, the data we released this morning for the Producer Price Index for finished goods for March showed an increase of 1.4 percent, only slightly less than the very large rates of increase recorded in January and February. Food prices at the producer level turned up in March following 2 months of decline.

Most of the turnaround was due to sharp upturns in prices of eggs, pork, and fresh vegetables. Energy prices continued to soar with the annual rate of increase for the 3 months ended in March reaching almost 110 percent. However, the movement of prices of finished goods other than food and energy improved considerably in March. The increase in prices of these goods was 0.5 percent in March, the smallest increase since last August.

This improvement was also shown in the behavior of the intermediate or semifinished materials index, where prices moved up 0.5 percent, the smallest increase since July 1978. Some of the dramatic improvement in this area was in prices of gold, silver, and jewelers' materials. We are all familiar with these developments.

However, prices also decreased for copper and lead and price increases slowed for energy products used in production, and several other commodities. I do not mean to convey the notion that the behavior of all semifinished material prices improved dramatically in March. Prices continued to increase substantially, for example, for some construction materials, industrial chemicals, fertilizers, and paper. But I do think that on average the behavior of intermediate materials in March was the most encouraging news we have had in some months.

For crude materials, the price picture was also improved. Prices of both crude foodstuffs and feedstuffs and other crude materials declined. The decline in crude food materials was due in part to a 26.4 percent drop in sugar prices, which incidentally had risen 43.9 percent in February. In addition, prices declined for livestock, soybeans, grains, and poultry. Among nonfood crude materials, prices fell for copper scrap, iron and steel scrap, cotton, natural rubber, and hides and skins, and the increase in crude energy prices of 0.6 percent was the smallest in over a year.

In summary, labor market conditions during the first quarter of 1980 showed a deterioration from last year. Unemployment rose, especially among adult men, as the number of persons laid off increased. Employment growth slowed markedly. The March data suggest further deterioration as employment declined, especially in the construction industry. Hours declined in construction and in virtually every manufacturing industry.

In contrast to the employment data, the price data for March released today show some favorable signs. Although producer finished prices continued to rise at a very high rate, finished goods excluding

food and energy decelerated to 0.5 percent, less than half the increases of the previous 2 months. In addition, the sharp diminution of price increases at both the crude and intermediate stages of processing is encouraging.

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

[The table attached to Ms. Norwood's statement, together with the press releases on the Employment Situation and the Producer Price Index, follows:]

UNEMPLOYMENT RATES BY ALTERNATIVE SEASONAL ADJUSTMENT METHODS

Month and year	Unadjusted rate	X-11 ARIMA method					X-11 method (former official method)	Range (cols. 2-7)
		Official	Concurrent	Stable	Total	Residual		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1979:								
March	6.1	5.7	5.7	5.8	5.7	5.7	5.7	0.1
April	5.5	5.8	5.8	5.8	5.8	5.9	5.8	.1
May	5.2	5.8	5.8	5.8	5.8	5.9	5.8	.1
June	6.0	5.7	5.7	5.5	5.7	5.7	5.7	.2
July	5.8	5.7	5.7	5.7	5.8	5.8	5.7	.1
August	5.9	5.9	5.9	6.0	5.9	5.9	5.9	.1
September	5.6	5.8	5.8	5.8	5.8	5.8	5.8	
October	5.6	5.9	5.9	6.0	5.9	6.0	5.9	.1
November	5.6	5.8	5.8	5.9	5.8	5.8	5.8	.1
December	5.6	5.9	5.9	6.0	5.8	5.9	5.9	.2
1980:								
January	6.8	6.2	6.1	6.2	6.2	6.2	6.2	.1
February	6.8	6.0	6.1	6.0	6.1	5.9	6.0	.2
March	6.6	6.2	6.2	6.2	6.2	6.2	6.2	

Source: U.S. Department of Labor, Bureau of Labor Statistics, April 1980.

NOTES TO TABLE COLUMN NUMBERS

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

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

(3) Concurrent (X-11 ARIMA method). The procedure for computation of the official rate is followed, except that the data are reseasonally adjusted each month as the most recent data become available. Extrapolated factors are not used at all in this method. For example, the rate for January 1980 would be based, during 1980, on the adjustment of data for the period January 1967 through January 1980. The rates for the current year are shown as first computed. Since the revision pattern and procedure for computation of the rate are identical to the official procedure, the results of this method will be identical to the official rate at the beginning of each year when the most recent observation is December.

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

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

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

(7) X-11 method (former official method). The procedure for computation of the official rate is used except that the series are not extended with ARIMA models and the factors are projected in 12-mo intervals. The standard X-11 program is used to perform the seasonal adjustment.

Methods of adjustment: The X-11 ARIMA method was developed at Statistics Canada by the seasonal adjustment and times series staff under the direction of Estela Bee Dagum. The method is described in the X-11 ARIMA Seasonal Adjustment Method, by Estela Bee Dagnum, Statistics Canada Catalogue No. 12-564E, September 1979.

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

News United States Department of Labor

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USDL 80-217
TRANSMISSION OF MATERIAL IN THIS RELEASE IS EMBARGOED UNTIL 9:00 A.M. (EST), FRIDAY, APRIL 4, 1980

THE EMPLOYMENT SITUATION: MARCH 1980

Employment declined in March and unemployment returned to its January level, the Bureau of Labor Statistics of the U.S. Department of Labor reported today. The March unemployment rate was 6.2 percent, compared with 6.0 percent in February and 6.2 percent in January. During the previous year and a half, the unemployment rate had remained in the narrow range of 5.7 to 5.9 percent.

Total employment--as measured by the monthly survey of households--declined by 300,000 to 97.7 million. Total employment has not advanced appreciably since September 1979.

Nonfarm payroll employment--as measured by the monthly survey of establishments--dropped by 140,000 to 90.6 million. Most of this reduction was in construction, which is being affected by declining housing starts and rising interest rates.

Unemployment

Both the number of unemployed, 6.4 million, and the unemployment rate, 6.2 percent, returned to January levels after edging down in February. Whereas the overall change was small, there was a sizeable increase in the jobless rate for adult men to 4.9 percent in March, the highest since October 1977. The rates for workers in the construction industry and craft workers also rose in March. There was an increase in the number of unemployed persons laid off from their last job and in the number unemployed for more than 6 months. On the other hand, jobless rates for adult women (5.7 percent), teenagers (15.9 percent), whites (5.4 percent), and blacks (11.8 percent) all showed little or no change over the month. (See tables A-1, A-2, A-4, and A-5.)

The number of nonfarm workers on part-time work schedules for economic reasons (sometimes termed the "partially unemployed") remained at 3.4 million in March. Over the past year, their total has risen by 200,000, all of it among those who usually work full time. (See table A-3.)

Total Employment and the Labor Force

Total employment fell by 300,000 in March to 97.7 million, with the decrease concentrated among adult men. Employment among adult women and teenagers was little changed over the month. Employment growth has been slowing for several months, and the March level was up only 1 million

from a year earlier. Due in part to their employment drop of 230,000 in March, adult men have experienced almost no employment growth over the past year. (See table A-1.)

The civilian labor force was about unchanged in March and was up only 1.7 million over the year, the smallest yearly jump in more than 4 years. The labor force participation rate fell by 0.2 percentage point in March to 63.7 percent, with decreases registered by adult men and women. The employment-population ratio also fell in March, from 59.3 to 59.0 percent.

Discouraged Workers

Discouraged workers are those 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

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

Selected categories	Quarterly averages			Monthly data			Feb.-Mar. change
	1979		1980	1980			
	I	IV	I	Jan.	Feb.	Mar.	
HOUSEHOLD DATA							
	Thousands of persons						
Civilian labor force	102,315	103,749	104,194	104,229	104,260	104,094	-166
Total employment	96,425	97,665	97,804	97,804	97,953	97,656	-297
Unemployment	5,890	6,084	6,390	6,425	6,307	6,438	131
Not in labor force	58,255	58,842	59,022	58,791	58,951	59,322	371
Discouraged workers	740	741	993	N.A.	N.A.	N.A.	N.A.
	Percent of labor force						
Unemployment rates:							
All workers	5.8	5.9	6.1	6.2	6.0	6.2	0.2
Adult men	4.0	4.2	4.7	4.7	4.6	4.9	.3
Adult women	5.7	5.7	5.7	5.8	5.7	5.7	0
Teenagers	15.9	16.1	16.2	16.3	16.5	15.9	-.6
White	5.0	5.1	5.4	5.4	5.3	5.4	.1
Black and other	11.4	11.2	11.7	11.8	11.5	11.8	.3
Full-time workers	5.2	5.4	5.7	5.7	5.6	5.8	.2
ESTABLISHMENT DATA							
	Thousands of jobs						
Nonfarm payroll employment	88,724	90,108	90,687p	90,652	90,774p	90,634p	-140p
Goods-producing industries	26,486	26,587	26,684p	26,783	26,719p	26,549p	-170p
Service-producing industries	62,238	63,521	64,003p	63,869	64,055p	64,085p	30p
	Hours of work						
Average weekly hours:							
Total private nonfarm	35.8	35.7	35.5p	35.7	35.5p	35.4p	-0.1p
Manufacturing	40.6	40.2	40.0p	40.3	40.0p	39.8p	-.2p
Manufacturing overtime	3.7	3.2	3.1p	3.2	3.1p	3.1p	0p

p=preliminary N.A.=not available

is, they are not engaged in active job search--they are classified as not in the labor force rather than unemployed. Data for this group are published quarterly.

The number of discouraged workers jumped sharply in the first quarter of 1980 to a level of 1 million. This represented a 250,000 increase over the last quarter of 1979 and brought the number of discouraged workers to its highest level since the third quarter of 1977. Three-fifths of the total cited job-market factors as the reason for their discouragement, the same proportion as in the previous quarter. (See table A-10.)

Industry Payroll Employment

The number of employees on nonagricultural payrolls fell by 140,000 to a March level of 90.6 million. Payroll employment was only 1.6 million higher than a year earlier.

The largest over-the-month decline occurred in the construction industry, where employment dropped by 135,000. This was the second consecutive monthly reduction in this industry, with the 2-month decrease totaling 200,000 jobs; up through January, employment had been rising. Manufacturing employment was down slightly in March, with the transportation equipment, food processing, and lumber industries posting the largest declines. Employment in the service-producing sector was unchanged at 64.1 million, as a small job gain in the services industry was about offset by an employment drop in retail trade. (See table B-1.)

Hours

The average workweek for production or nonsupervisory workers on private nonagricultural payrolls fell for the second straight month, to 35.4 hours in March. All of the declines took place in the goods-producing sector. The manufacturing workweek, which is recognized as a leading indicator of business cycle developments, decreased 0.2 hour in March to 39.8 hours and was down half an hour since January. The construction workweek was down 1.2 hours over the month and 2 hours since January. (See table B-2.)

The index of aggregate weekly hours of production or nonsupervisory workers on private nonfarm payrolls fell 0.5 percent to 125.9 (1967=100) in March and was only 0.2 percent higher than in March 1979. The manufacturing index dropped nearly 0.8 percent in March and has fallen by 4.3 percent over the year. (See table B-5.)

Hourly and Weekly Earnings

Average hourly earnings of production or nonsupervisory workers on private nonagricultural payrolls rose 0.9 percent in March and 7.8 percent over the year (seasonally adjusted). Average weekly earnings rose 0.6 percent in March and were up 6.3 percent over the year. (See table B-3.)

Before adjustment for seasonality, average hourly earnings rose 4 cents in March to $6.50 and were 48 cents higher than a year before. Average weekly earnings were $228.80, up $2.05 over the month and $13.89 over the year.

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 245.0 (1967=100) in March, 1.0 percent higher than in February. The Index was 8.8 percent above March a year ago. In dollars of constant purchasing power, the Index decreased 5.2 percent during the 12-month period ended in February. (See table B-4.)

Chart 1. Civilian labor force and employment
(Seasonally adjusted)

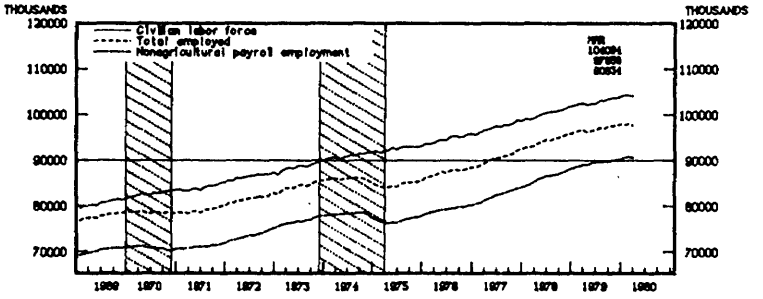


Chart 2. Unemployment rate—all civilian workers

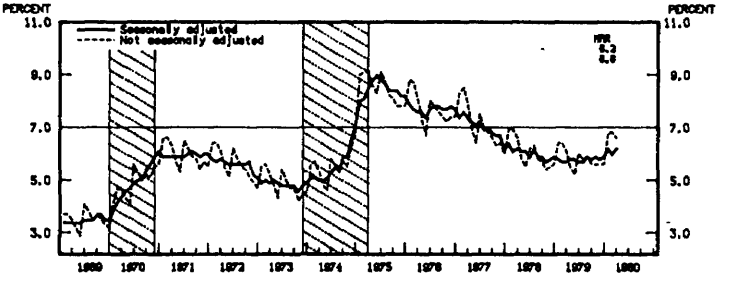
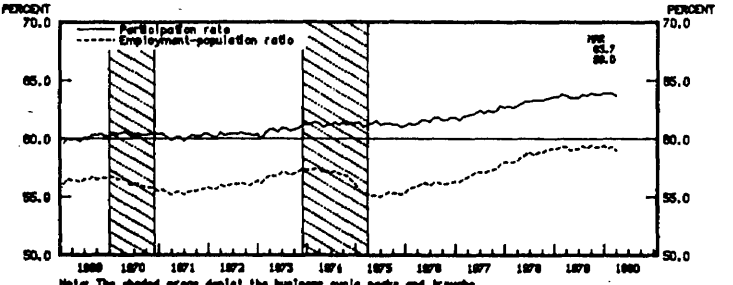


Chart 3. Civilian labor force participation rate
and total employment-population ratio
(Seasonally adjusted)



Note: The shaded areas depict the business cycle peaks and troughs as designated by the National Bureau of Economic Research.

Explanatory Note

This news release presents statistics from two major surveys, the Current Population Survey (household survey) and the Current Employment Statistics Survey (establishment survey). The household survey provides the information on the labor force, total employment, and unemployment that appears in the A tables, marked HOUSEHOLD DATA. It is a sample survey of about 65,000 households that is conducted by the Bureau of the Census with most of the findings analyzed and published by the Bureau of Labor Statistics (BLS).

The establishment survey provides the information on the employment, hours, and earnings of workers on nonagricultural payrolls that appears in the B tables, marked ESTABLISHMENT DATA. This information is collected from payroll records by BLS in cooperation with State agencies. The sample includes approximately 162,000 establishments employing more than 32 million people.

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

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

Coverage, definitions and differences between surveys

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

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

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

The *civilian labor force* equals the sum of the number employed and the number unemployed. The *unemployment rate* is the percentage of unemployed people in the civilian labor force. Table A-4 presents a special grouping of seven measures of unemployment based on varying definitions of unemployment and the labor force. The definitions are provided in the table. The most restrictive definition yields U-1, and the most comprehensive yields U-7. The official unemployment rate is U-5.

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

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

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

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

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

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

Seasonal adjustment

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

Because these seasonal events follow a more or less regular pattern each year, their influence on statistical trends can be eliminated by adjusting the statistics from month to month. These adjustments make nonseasonal developments, such as declines in economic activity or

increases in the participation of women in the labor force, easier to spot. To return to the school's-out example, the large number of people entering the labor force each June is likely to obscure any other changes that have taken place since May, making it difficult to determine if the level of economic activity has risen or declined. However, because the effect of students finishing school in previous years is known, the statistics for the current year can be adjusted to allow for a comparable change. Insofar as the seasonal adjustment is made correctly, the adjusted figure provides a more useful tool with which to analyze changes in economic activity.

Measures of civilian labor force, employment, and unemployment contain components such as age and sex. Statistics for all employees, production workers, average weekly hours, and average hourly earnings include components based on the employer's industry. All these statistics can be seasonally adjusted either by adjusting the total or by adjusting each of the components and combining them. The second procedure usually yields more accurate information and is therefore followed by BLS. For example, the seasonally adjusted figure for the civilian labor force is the sum of eight seasonally adjusted employment components and four seasonally adjusted unemployment components; the total for unemployment is the sum of the four unemployment components; and the official unemployment rate is derived by dividing the resulting estimate of total unemployment by the estimate of the civilian labor force.

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

Sampling variability

Statistics based on the household and establishment surveys are subject to sampling error, that is, the estimate of the number of people employed and the other estimates drawn from these surveys probably differ from the figures that would be obtained from a complete census, even if the same questionnaires and procedures were used. In the household survey, the amount of the differences can be expressed in terms of standard errors. The numerical value of a standard error depends upon the size of the sample, the results of the survey, and other factors. However, the numerical value is always such that the chances are 68 out of 100 that an estimate based on the sample will differ by no more than the standard error from the results of a complete census. The chances are 90 out of 100 that an estimate based on the sample will differ by no more than 1.6 times the standard error from the results of a complete census. At the 90-percent level of confidence--the confidence limits used by BLS in its analyses--the error for the monthly change in total employment is on the order of plus or minus 293,000; for total unemployment, it is 185,000; and, for the overall unemployment rate, it is 0.19 percentage point. These figures do not mean that the sample results are off by these magnitudes but, rather, that the chances are 90 out of 100 that the "true" level or rate would not be expected to differ from the estimates by more than these amounts.

Sampling errors for monthly surveys are reduced when the data are cumulated for several months, such as quarterly or annually. Also, as a general rule, the smaller the estimate, the larger the sampling error. Therefore, relatively speaking, the estimate of the size of the labor force is subject to less error than is the estimate of the number unemployed. And, among the unemployed, the sampling error for the jobless rate of adult men, for example, is much smaller than is the error for the jobless rate of teenagers. Specifically, the error on monthly change in the jobless rate for men is .23 percentage point; for teenagers, it is 1.06 percentage points.

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

Additional statistics and other information

In order to provide a broad view of the Nation's employment situation, BLS regularly publishes a wide variety of data in this news release. More comprehensive statistics are contained in *Employment and Earnings*, published each month by BLS. It is available for $2.75 per issue or $22.00 per year from the U.S. Government Printing Office, Washington, D.C. 20204. A check or money order made out to the Superintendent of Documents must accompany all orders.

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

Table A-1. Employment status of the noninstitutional population

[Numbers in thousands]

Employment status	Not seasonally adjusted			Seasonally adjusted					
	Mar. 1979	Feb. 1980	Mar. 1980	Mar. 1979	Nov. 1979	Dec. 1979	Jan. 1980	Feb. 1980	Mar. 1980
TOTAL									
Total noninstitutional population[1]	162,909	165,288	165,506	162,509	164,662	164,898	165,101	165,298	165,506
Armed Forces[1]	2,090	2,086	2,090	2,090	2,092	2,089	2,081	2,086	2,090
Civilian noninstitutional population[1]	160,819	163,211	163,416	160,819	162,589	162,809	163,020	163,211	163,416
Civilian labor force	101,665	103,257	103,351	102,505	103,652	103,999	104,229	104,284	104,094
Participation rate	63.2	63.3	63.2	63.7	63.8	63.9	63.9	63.9	63.7
Employed	95,501	96,264	96,544	96,623	97,808	97,912	97,804	97,953	97,656
Employment-population ratio[2]	58.6	58.2	58.3	59.3	59.3	59.4	59.2	59.3	59.0
Agriculture	2,925	2,836	2,962	3,320	3,385	3,359	3,270	3,326	3,358
Nonagricultural industries	92,576	93,428	93,582	93,303	94,223	94,553	94,534	94,626	94,298
Unemployed	6,165	6,993	6,805	5,882	6,044	6,087	6,425	6,331	6,438
Unemployment rate	6.1	6.8	6.6	5.7	5.8	5.9	6.2	6.0	6.2
Not in labor force	59,153	59,954	60,065	58,314	58,937	58,810	58,791	58,951	59,322
Men, 20 years and over									
Total noninstitutional population[1]	69,612	70,792	70,896	69,612	70,487	70,594	70,695	70,792	70,896
Civilian noninstitutional population[1]	67,939	69,140	69,238	67,939	68,804	68,910	69,007	69,100	69,238
Civilian labor force	54,006	54,749	54,744	54,315	54,708	54,781	54,855	55,038	54,994
Participation rate	79.5	79.2	79.1	79.9	79.5	79.5	79.4	79.6	79.4
Employed	51,487	51,658	51,624	52,151	52,374	52,478	52,279	52,531	52,300
Employment-population ratio[2]	76.0	73.0	72.8	76.9	76.3	76.3	73.9	76.2	75.8
Agriculture	2,176	2,213	2,217	2,350	2,438	2,427	2,387	2,435	2,394
Nonagricultural industries	49,310	49,445	49,407	49,801	49,936	50,051	49,892	50,096	49,906
Unemployed	2,518	3,091	3,141	2,164	2,335	2,303	2,577	2,507	2,696
Unemployment rate	4.7	5.6	5.7	4.0	4.3	4.2	4.7	4.6	4.9
Not in labor force	13,934	14,391	14,493	13,624	14,095	14,159	14,192	14,102	14,242
Women, 20 years and over									
Total noninstitutional population[1]	76,589	77,890	78,005	76,589	77,567	77,666	77,779	77,890	78,005
Civilian noninstitutional population[1]	76,476	77,766	77,876	76,476	77,626	77,582	77,656	77,766	77,876
Civilian labor force	38,790	39,991	39,989	38,578	39,645	39,659	39,678	39,657	39,751
Participation rate	50.7	51.4	51.4	50.4	50.9	51.1	51.4	51.3	51.0
Employed	36,592	37,609	37,755	36,362	37,248	37,402	37,578	37,604	37,496
Employment-population ratio[2]	47.8	48.3	48.4	47.5	48.0	48.2	48.3	48.3	48.1
Agriculture	678	624	671	595	612	582	540	567	582
Nonagricultural industries	35,114	36,985	37,083	35,767	36,636	36,820	37,038	37,037	36,914
Unemployed	2,197	2,382	2,235	2,212	2,197	2,257	2,100	2,054	2,255
Unemployment rate	5.7	6.0	5.6	5.7	5.6	5.7	5.4	5.7	5.7
Not in labor force	37,686	37,776	37,886	37,902	37,981	37,883	37,778	37,909	38,125
Both sexes, 16-19 years									
Total noninstitutional population[1]	16,709	16,616	16,606	16,709	16,448	16,638	16,627	16,614	16,606
Civilian noninstitutional population[1]	16,604	16,305	16,302	16,604	16,360	16,324	16,317	16,305	16,302
Civilian labor force	8,871	8,517	8,596	9,618	9,498	9,559	9,497	9,365	9,344
Participation rate	54.1	52.2	52.7	58.6	58.1	58.6	58.2	57.4	57.3
Employed	7,422	6,997	7,167	8,110	7,986	8,032	7,952	7,818	7,859
Employment-population ratio[2]	44.4	42.1	43.2	48.5	48.0	48.3	47.8	47.1	47.3
Agriculture	231	198	226	335	335	350	344	325	381
Nonagricultural industries	7,192	6,798	6,893	7,775	7,651	7,682	7,608	7,493	7,478
Unemployed	1,449	1,520	1,429	1,506	1,512	1,527	1,545	1,547	1,487
Unemployment rate	16.3	17.9	16.6	15.7	15.9	16.0	16.3	16.5	15.9
Not in labor force	7,533	7,788	7,706	6,788	6,862	6,767	6,820	6,940	6,956
White									
Total noninstitutional population[1]	142,720	144,570	144,730	142,720	144,101	144,267	144,421	144,570	144,730
Civilian noninstitutional population[1]	141,063	142,951	143,115	141,063	142,661	142,695	142,806	142,951	143,115
Civilian labor force	89,558	91,029	91,204	90,260	91,282	91,579	91,852	91,977	91,821
Participation rate	63.5	63.7	63.7	64.0	64.0	64.2	64.3	64.3	64.2
Employed	84,770	85,540	85,845	85,754	86,571	86,898	86,895	87,081	86,832
Employment-population ratio[2]	59.6	59.2	59.3	60.1	60.1	60.2	60.2	60.2	60.0
Unemployed	4,788	5,490	5,358	4,506	4,671	4,685	4,957	4,896	4,989
Unemployment rate	5.3	6.0	5.9	5.0	5.1	5.1	5.4	5.3	5.4
Not in labor force	51,506	51,921	51,911	50,803	51,219	51,066	50,954	50,975	51,294
Black and other									
Total noninstitutional population[1]	20,189	20,727	20,777	20,189	20,580	20,631	20,680	20,727	20,777
Civilian noninstitutional population[1]	19,755	20,261	20,301	19,755	20,128	20,163	20,214	20,261	20,301
Civilian labor force	12,108	12,228	12,147	12,238	12,391	12,432	12,453	12,362	12,266
Participation rate	61.3	60.4	59.8	62.0	61.6	61.7	61.6	61.0	60.4
Employed	10,731	10,725	10,703	10,868	11,084	11,014	10,979	10,937	10,823
Employment-population ratio[2]	53.2	51.7	51.5	53.8	53.7	53.4	53.1	52.8	52.1
Unemployed	1,377	1,503	1,446	1,378	1,307	1,408	1,474	1,426	1,443
Unemployment rate	11.4	12.3	11.9	11.3	10.9	11.3	11.8	11.5	11.8
Not in labor force	7,648	8,033	8,154	7,517	7,737	7,731	7,761	7,899	8,035

[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 (excluding Armed Forces).

Table A-2. Major unemployment indicators, seasonally adjusted

Selected categories	Number of unemployed persons (in thousands)		Unemployment rates					
	Mar. 1979	Mar. 1980	Mar. 1979	Nov. 1979	Dec. 1979	Jan. 1980	Feb. 1980	Mar. 1980
CHARACTERISTICS								
Total 16 years and over	5,882	6,438	5.7	5.8	5.9	6.2	6.0	6.2
Men, 20 years and over	2,169	2,694	4.0	4.3	4.2	4.7	4.6	4.9
Women, 20 years and over	2,212	2,255	5.7	5.6	5.7	5.8	5.7	5.7
Both sexes, 16-19 years	1,506	1,487	15.7	15.9	16.0	16.3	16.5	15.9
White, total	4,506	4,999	5.0	5.1	5.1	5.4	5.3	5.4
Men, 20 years and over	1,671	2,171	3.9	3.7	3.7	4.1	4.0	4.4
Women, 20 years and over	1,669	1,677	5.0	4.9	5.0	5.1	5.2	4.9
Both sexes, 16-19 years	1,166	1,151	13.6	13.9	13.9	14.0	13.8	13.8
Black and other, total	1,376	1,493	11.3	10.9	11.3	11.8	11.5	11.8
Men, 20 years and over	512	568	8.7	8.4	8.6	9.6	9.2	9.3
Women, 20 years and over	534	568	10.6	9.5	10.0	10.0	9.0	10.5
Both sexes, 16-19 years	332	327	31.5	32.8	34.3	34.6	37.9	33.0
Married men, spouse present	1,047	1,355	2.6	2.9	2.8	3.0	3.1	3.4
Married women, spouse present	1,247	1,487	5.2	4.8	5.0	5.2	5.0	5.3
Women who head families	404	488	8.2	8.4	8.4	9.2	8.5	8.7
Full-time workers	4,539	5,168	5.2	5.4	5.4	5.7	5.6	5.8
Part-time workers	1,351	1,275	9.0	8.3	8.5	8.7	8.9	8.3
Unemployed 15 weeks and over[1]	1,291	1,363	1.3	1.1	1.2	1.3	1.2	1.3
Labor force time lost[2]	--	--	6.2	6.4	6.4	6.7	6.6	6.8
OCCUPATION[3]								
White-collar workers	1,695	1,732	3.3	3.2	3.3	3.4	3.4	3.3
Professional and technical	339	366	2.2	2.4	2.3	2.2	2.3	2.3
Managers and administrators, except farm	224	269	2.1	1.9	2.0	1.9	2.2	2.4
Sales workers	257	252	4.1	3.7	3.8	4.4	4.5	4.0
Clerical workers	875	848	4.8	4.4	4.6	4.8	4.7	4.5
Blue-collar workers	2,263	2,771	6.6	7.5	7.2	8.0	7.7	8.0
Craft and kindred workers	602	724	4.5	4.9	4.8	4.9	4.8	5.4
Operatives, except transport	932	1,080	7.8	9.0	9.0	9.9	9.2	9.3
Transport equipment operatives	196	253	5.2	5.2	5.0	6.9	6.7	6.6
Nonfarm laborers	533	714	10.2	12.2	12.2	12.3	12.0	13.0
Service workers	1,011	995	7.3	6.6	6.6	6.9	6.9	7.1
Farm workers	95	114	3.3	4.5	4.3	4.4	3.9	4.0
INDUSTRY[3]								
Nonagricultural private wage and salary workers[4]	4,224	4,716	5.6	5.8	5.8	6.2	6.0	6.2
Construction	514	673	10.1	10.2	10.3	10.8	10.5	13.0
Manufacturing	1,192	1,506	5.2	5.9	5.9	6.7	6.6	6.5
Durable goods	615	888	4.8	5.6	5.5	6.7	6.3	6.9
Nondurable goods	577	618	6.4	6.3	6.4	6.8	6.7	6.7
Transportation and public utilities	233	208	3.9	4.2	4.1	4.4	4.4	3.8
Wholesale and retail trade	1,189	1,196	6.3	6.5	6.4	6.6	6.4	6.3
Finance and service industries	1,078	1,098	4.8	4.6	4.7	4.6	4.6	4.9
Government workers	647	688	4.1	3.6	3.6	3.8	4.0	4.2
Agricultural wage and salary workers	123	165	8.0	10.1	9.4	10.3	9.2	10.2

[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.

Table A-3. Selected employment indicators

(In thousands)

Selected categories	Not seasonally adjusted		Seasonally adjusted					
	Mar. 1979	Mar. 1980	Mar. 1979	Nov. 1979	Dec. 1979	Jan. 1980	Feb. 1980	Mar. 1980
CHARACTERISTICS								
Total employed, 16 years and over	95,501	96,546	96,623	97,608	97,912	97,804	97,953	97,656
Men	55,367	55,844	56,449	56,580	56,734	56,466	56,732	56,601
Women	40,153	41,062	40,174	41,028	41,178	41,318	41,221	41,056
Married men, spouse present	38,820	38,196	38,193	38,845	38,924	38,769	38,955	38,785
Married women, spouse present	22,700	23,294	22,605	22,940	23,027	23,111	23,170	23,202
OCCUPATION								
White-collar workers	49,258	50,608	48,956	49,912	49,911	50,313	50,488	50,302
Professional and technical	15,339	15,736	15,012	15,151	15,272	15,337	15,488	15,397
Managers and administrators, except farm	10,386	10,748	10,392	10,617	10,535	10,608	10,931	10,755
Sales workers	5,986	6,052	6,055	6,262	6,346	6,452	6,185	6,133
Clerical workers	17,577	18,073	17,537	17,882	17,758	17,915	17,848	18,037
Blue-collar workers	30,954	30,580	32,041	32,110	32,302	31,862	31,754	31,670
Craft and kindred workers	12,385	12,358	12,792	12,525	13,041	12,814	12,728	12,767
Operatives, except transport	10,839	10,461	10,893	10,963	11,042	10,678	10,661	10,579
Transport equipment operatives	3,515	3,505	3,569	3,628	3,635	3,616	3,571	3,558
Nonfarm laborers	4,215	4,276	4,699	4,594	4,584	4,754	4,795	4,767
Service workers	12,790	12,930	12,847	12,899	12,970	12,979	13,080	12,981
Farm workers	2,461	2,432	2,778	2,718	2,696	2,660	2,764	2,733
MAJOR INDUSTRY AND CLASS OF WORKER								
Agriculture								
Wage and salary workers	1,225	1,253	1,415	1,475	1,451	1,428	1,417	1,469
Self-employed workers	1,469	1,486	1,583	1,622	1,596	1,554	1,648	1,600
Unpaid family workers	231	223	374	310	310	293	283	300
Nonagricultural industries								
Wage and salary workers	85,563	86,355	86,439	87,020	87,384	87,578	87,619	87,221
Government	15,693	15,809	15,281	15,356	15,397	15,414	15,540	15,622
Private industries	70,080	70,546	71,158	71,662	71,987	72,163	71,879	71,599
Private households	1,209	1,067	1,262	1,211	1,228	1,132	1,178	1,115
Other industries	68,871	69,482	69,896	70,451	70,759	71,031	70,702	70,484
Self-employed workers	6,498	6,791	6,542	6,781	6,737	6,752	6,899	6,825
Unpaid family workers	514	438	446	417	409	379	397	376
PERSONS AT WORK[1]								
Nonagricultural industries	88,727	89,536	87,847	88,617	89,180	89,454	88,985	88,585
Full-time schedules	72,478	72,765	72,529	72,997	73,137	73,223	73,110	72,749
Part time for economic reasons	3,111	3,313	3,481	3,392	3,519	3,513	3,406	3,416
Usually work full time	1,251	1,480	1,258	1,413	1,491	1,545	1,380	1,463
Usually work part time	1,860	1,853	1,957	1,979	2,028	1,969	2,026	1,955
Part time for noneconomic reasons	13,138	13,458	12,107	12,228	12,524	12,718	12,469	12,418

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

Table A-4. Duration of unemployment

(Numbers in thousands)

Weeks of unemployment	Not seasonally adjusted		Seasonally adjusted					
	Mar. 1979	Mar. 1980	Mar. 1979	Nov. 1979	Dec. 1979	Jan. 1980	Feb. 1980	Mar. 1980
DURATION								
Less than 5 weeks	2,517	2,725	2,769	2,919	2,916	3,188	2,995	2,995
5 to 14 weeks	2,083	2,425	1,860	1,869	1,966	1,907	2,081	2,189
15 weeks and over	1,565	1,653	1,291	1,191	1,230	1,338	1,288	1,363
15 to 26 weeks	931	989	729	660	711	795	790	776
27 weeks and over	633	662	562	531	519	539	498	587
Average (mean) duration, in weeks	12.7	11.9	11.8	10.6	10.5	10.5	10.7	11.0
Median duration, in weeks	7.4	7.5	5.8	5.3	5.5	5.2	5.8	5.9
PERCENT DISTRIBUTION								
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 5 weeks	40.8	40.0	46.8	48.8	47.7	49.6	47.1	45.9
5 to 14 weeks	33.8	35.7	31.4	31.3	32.2	29.7	32.7	33.2
15 weeks and over	25.4	24.3	21.8	19.9	20.1	20.8	20.2	20.9
15 to 26 weeks	15.1	14.5	12.3	11.0	11.6	12.4	12.4	11.9
27 weeks and over	10.3	9.7	9.5	8.9	8.5	8.4	7.8	9.0

HOUSEHOLD DATA

Table A-8. Reasons for unemployment

[Numbers in thousands]

Reason	Not seasonally adjusted		Seasonally adjusted					
	Mar. 1979	Mar. 1980	Mar. 1979	Nov. 1979	Dec. 1979	Jan. 1980	Feb. 1980	Mar. 1980
NUMBER OF UNEMPLOYED								
Lost last job	2,848	3,522	2,857	2,729	2,728	2,588	2,907	3,047
On layoff	986	1,404	791	987	944	1,015	1,031	1,129
Other job losers	1,862	2,118	1,666	1,742	1,784	1,969	1,876	1,918
Left last job	855	780	868	845	800	779	813	786
Reentered labor force	1,765	1,787	1,766	1,698	1,771	1,797	1,784	1,803
Seeking first job	717	716	808	736	858	811	827	865
PERCENT DISTRIBUTION								
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Job losers	46.2	51.7	41.7	45.4	44.3	46.9	45.9	47.3
On layoff	16.0	20.8	13.4	16.4	15.3	16.0	16.3	17.5
Other job losers	30.2	31.1	28.3	29.0	29.0	30.9	29.6	29.8
Job leavers	13.9	11.5	14.7	14.1	13.0	12.2	12.8	12.2
Reentrants	28.7	26.3	30.0	28.3	28.8	28.2	28.2	28.0
New entrants	11.6	10.5	13.7	12.3	13.9	12.7	13.1	12.5
UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE								
Job losers	2.4	3.4	2.4	2.6	2.6	2.9	2.8	2.9
Job leavers	.6	.5	.6	.6	.6	.7	.6	.6
Reentrants	1.7	1.7	1.7	1.6	1.7	1.7	1.7	1.7
New entrants	.7	.7	.6	.7	.6	.6	.6	.6

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

Sex and age	Number of unemployed persons (in thousands)		Unemployment rates					
	Mar. 1979	Mar. 1980	Mar. 1979	Nov. 1979	Dec. 1979	Jan. 1980	Feb. 1980	Mar. 1980
Total, 16 years and over	5,882	6,438	5.7	5.8	5.8	6.2	6.0	6.2
16 to 19 years	1,506	1,657	15.7	15.9	16.0	16.3	16.5	15.9
16 to 17 years	754	671	16.5	17.3	18.0	19.0	18.7	17.4
18 to 19 years	745	806	13.5	14.7	14.5	14.0	15.1	14.7
20 to 24 years	1,346	1,482	8.8	8.8	9.0	10.1	9.5	9.7
25 years and over	3,025	3,463	3.9	4.0	3.8	4.2	4.1	4.4
25 to 54 years	2,572	3,064	4.3	4.3	4.1	4.4	4.5	4.7
55 years and over	460	610	3.1	2.7	2.7	3.5	2.8	2.8
Men, 16 years and over	2,972	3,441	5.0	5.2	5.2	5.7	5.5	5.7
16 to 19 years	808	745	15.8	15.8	15.6	16.2	15.6	14.8
16 to 17 years	416	362	18.9	17.8	17.9	19.0	18.0	15.9
18 to 19 years	395	405	13.6	14.0	13.6	13.9	14.1	14.0
20 to 24 years	678	863	8.3	8.4	9.4	10.6	9.9	10.4
25 years and over	1,479	1,826	3.2	3.5	3.2	3.7	3.6	3.9
25 to 54 years	1,219	1,573	3.3	3.8	3.4	3.8	3.8	4.2
55 years and over	253	246	2.8	2.6	2.6	3.5	2.6	2.7
Women, 16 years and over	2,910	2,997	6.8	6.6	6.8	6.8	6.8	6.8
16 to 19 years	698	782	15.5	16.1	16.4	16.3	17.6	17.3
16 to 17 years	338	328	18.0	16.7	18.6	19.1	19.5	19.2
18 to 19 years	350	401	13.3	15.5	15.5	14.2	16.2	15.6
20 to 24 years	668	620	9.5	9.3	10.2	9.8	9.1	9.0
25 years and over	1,546	1,637	4.9	4.7	4.7	4.9	4.9	5.0
25 to 54 years	1,353	1,491	5.3	5.0	5.1	5.2	5.4	5.5
55 years and over	207	165	3.6	2.9	2.9	3.8	3.0	2.9

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

[Percent]

Measure	Quarterly averages					Monthly data		
	1979				1980	1980		
	I	II	III	IV	I	Jan.	Feb.	Mar.
U-1—Persons unemployed 15 weeks or longer as a percent of the civilian labor force	1.2	1.2	1.1	1.2	1.3	1.3	1.2	1.3
U-2—Job losers as a percent of the civilian labor force	2.8	2.8	2.5	2.6	2.9	2.9	2.8	2.9
U-3—Unemployed persons 25 years and over as a percent of the civilian labor force 25 years and over	3.9	3.9	3.9	3.9	4.2	4.2	4.1	4.4
U-4—Unemployed full-time jobseekers as a percent of the full-time labor force	5.2	5.2	5.3	5.4	5.7	5.7	5.6	5.8
U-5—Total unemployed as a percent of the civilian labor force (official measure)	5.8	5.8	5.8	5.9	6.3	6.2	6.0	6.2
U-6—Total full-time jobseekers plus ½ part-time jobseekers plus ½ total on part time for economic reasons as a percent of the civilian labor force less ½ of the part-time labor force	7.2	7.2	7.3	7.4	7.7	7.8	7.6	7.8
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	7.9	8.0	8.0	8.1	8.7	N.A.	N.A.	N.A.

N.A.= not available

Table A-8. Employment status of the noninstitutional population by race and Hispanic origin, not seasonally adjusted

[Number in thousands]

Employment status	Total		White		Black[1]		Hispanic origin[2]	
	Mar. 1979	Mar. 1980	Mar. 1979	Mar. 1980	Mar. 1979	Mar. 1980	Mar. 1979	Mar. 1980
TOTAL								
Civilian noninstitutional population	160,819	163,816	141,063	143,115	16,918	17,289	7,831	8,381
Civilian labor force	101,665	103,351	89,558	91,204	10,269	10,288	4,936	5,307
Persons of population	63.2	63.2	63.5	63.7	60.7	59.5	63.1	63.6
Employment	95,501	96,546	84,770	85,845	9,904	9,878	4,549	4,804
Agriculture	2,925	2,962	2,688	2,698	236	207	188	205
Nonagricultural industries	92,576	93,588	82,131	83,147	9,768	9,771	4,361	4,599
Unemployment	6,165	6,805	4,788	5,358	1,264	1,310	390	503
Unemployment rate	6.1	6.6	5.3	5.9	12.3	12.7	7.9	9.5
Not in labor force	59,153	60,065	51,506	51,911	6,645	7,012	2,892	3,074

[1] Data relate to black workers only. According to the 1970 Census, they comprised about 89 percent of the "black and other" population group.

[2] Data on persons of Hispanic origin are tabulated separately, without regard to race, which means that they are also included in the data for white and black workers. At the time of the 1970 Census, approximately 58 percent of their population was white.

Table A-9. Employment status of male Vietnam-era veterans and nonveterans by age, not seasonally adjusted

(Numbers in thousands)

Veteran status and age	Civilian noninstitutional population		Civilian labor force							
			Total		Employed		Unemployed			
							Number		Percent of labor force	
	Mar. 1979	Mar. 1980	Mar. 1979	Mar. 1980	Mar. 1979	Mar. 1980	Mar. 1979	Mar. 1980	Mar. 1979	Mar. 1980
VETERANS[1]										
Total, 20 years and over	8,492	8,583	8,105	8,097	7,647	7,592	458	504	5.7	6.2
20 to 24 years	610	603	573	357	478	299	95	58	16.6	16.2
25 to 29 years	7,072	7,231	6,836	6,940	6,497	6,519	339	421	5.0	6.1
25 to 29 years	2,061	1,784	1,973	1,693	1,822	1,518	151	175	7.7	10.3
30 to 34 years	3,569	3,602	3,455	3,460	3,312	3,283	143	177	4.1	5.1
35 to 39 years	1,442	1,845	1,408	1,787	1,363	1,718	45	69	3.2	3.9
40 years and over	810	949	696	800	672	774	24	26	3.4	3.2
NONVETERANS[2]										
Total, 25 to 39 years	14,312	15,215	13,552	14,399	12,946	13,568	586	831	4.3	5.8
25 to 29 years	6,511	6,965	6,110	6,566	5,777	6,102	333	464	5.5	7.1
30 to 34 years	4,104	4,450	3,905	4,239	3,764	4,028	141	211	3.6	5.0
35 to 39 years	3,697	3,800	3,537	3,594	3,405	3,438	112	156	3.2	4.3

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

[2] Nonveterans are males who have never served in the Armed Forces. Published data are limited to those 25-39 years of age, the group that most closely corresponds to the bulk of the Vietnam-era veteran population.

Table A-10. Persons not in the labor force by selected characteristics, quarterly averages

(In thousands)

Characteristics	Not seasonally adjusted		Seasonally adjusted					
	I	I	1978	1979				1980
	1979	1980	IV	I	II	III	IV	I
Total not in labor force	59,310	59,950	58,384	58,252	58,824	58,568	58,862	59,022
Do not want a job now	53,901	54,227	53,068	53,230	53,666	52,955	53,563	53,585
Want a job now	5,399	5,724	5,261	5,248	5,190	5,527	5,287	5,583
Discouraged workers	728	967	772	760	807	731	761	993
Job-market factors[1]	484	592	481	495	507	531	459	618
Personal factors[2]	239	375	281	265	300	200	282	384
Men	285	364	294	290	256	286	285	377
Women	438	603	478	486	551	445	456	616
White	540	709	537	527	568	581	580	686
Black and other	184	258	232	221	218	200	181	313

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

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

Table A-11. Employment status of the noninstitutional population for the ten largest States

(Numbers in thousands)

State and employment status	Not seasonally adjusted[2]			Seasonally adjusted					
	Mar. 1979	Feb. 1980	Mar. 1980	Mar. 1979	Nov. 1979	Dec. 1979	Jan. 1980	Feb. 1980	Mar. 1980
California									
Civilian noninstitutional population[1]	16,646	16,979	17,007	16,646	16,895	16,925	16,954	16,979	17,007
Civilian labor force	10,783	11,025	11,085	10,804	11,135	11,178	11,074	11,013	11,103
Employed	10,061	10,283	10,385	10,116	10,458	10,481	10,434	10,337	10,441
Unemployed	722	741	700	688	677	697	640	676	662
Unemployment rate	6.7	6.7	6.3	6.4	6.1	6.2	5.8	6.1	6.0
Florida									
Civilian noninstitutional population[1]	6,695	6,886	6,904	6,695	6,838	6,852	6,870	6,886	6,904
Civilian labor force	3,874	3,825	3,881	3,861	3,783	3,802	3,791	3,842	3,884
Employed	3,650	3,631	3,692	3,645	3,570	3,598	3,596	3,646	3,683
Unemployed	225	194	189	216	213	204	195	196	201
Unemployment rate	5.8	5.1	4.9	6.1	5.6	5.4	5.1	5.2	5.2
Illinois									
Civilian noninstitutional population[1]	8,268	8,295	8,300	8,268	8,279	8,285	8,290	8,295	8,300
Civilian labor force	5,237	5,400	5,377	5,287	5,395	5,456	5,468	5,463	5,431
Employed	4,923	4,993	4,936	4,990	5,078	5,105	5,077	5,081	5,058
Unemployed	315	407	391	297	317	349	389	382	373
Unemployment rate	6.0	7.5	7.3	5.6	5.9	6.4	7.1	7.0	6.9
Massachusetts									
Civilian noninstitutional population[1]	4,356	4,396	4,400	4,356	4,385	4,389	4,393	4,396	4,400
Civilian labor force	2,911	2,825	2,840	2,927	2,836	2,879	2,827	2,838	2,853
Employed	2,717	2,664	2,690	2,743	2,687	2,719	2,685	2,702	2,714
Unemployed	198	161	150	184	149	160	142	136	139
Unemployment rate	6.7	5.7	5.3	6.3	5.3	5.6	5.0	4.8	4.9
Michigan									
Civilian noninstitutional population[1]	6,695	6,768	6,775	6,695	6,747	6,755	6,762	6,768	6,775
Civilian labor force	4,281	4,287	4,239	4,288	4,348	4,365	4,283	4,273	4,248
Employed	3,981	3,806	3,773	3,981	3,987	3,968	3,875	3,834	3,818
Unemployed	341	481	466	307	357	377	408	439	430
Unemployment rate	8.0	11.2	11.0	7.2	8.2	8.7	9.5	10.3	10.2
New Jersey									
Civilian noninstitutional population[1]	5,488	5,541	5,545	5,488	5,526	5,532	5,536	5,541	5,545
Civilian labor force	3,496	3,544	3,533	3,544	3,526	3,568	3,597	3,563	3,588
Employed	3,246	3,322	3,286	3,294	3,279	3,335	3,348	3,371	3,339
Unemployed	250	221	247	250	247	233	249	192	249
Unemployment rate	7.2	6.2	7.0	7.1	7.0	6.5	6.9	5.4	6.9
New York									
Civilian noninstitutional population[1]	13,268	13,300	13,303	13,268	13,290	13,294	13,298	13,300	13,303
Civilian labor force	8,002	8,120	7,831	8,006	8,117	8,114	8,064	8,161	7,936
Employed	7,385	7,462	7,354	7,419	7,551	7,525	7,440	7,543	7,391
Unemployed	617	658	574	587	566	588	624	618	545
Unemployment rate	7.7	8.1	7.3	7.3	7.0	7.3	7.7	7.6	6.9
Ohio									
Civilian noninstitutional population[1]	7,897	7,954	7,960	7,897	7,937	7,944	7,949	7,954	7,960
Civilian labor force	4,989	4,963	4,926	5,051	5,033	5,069	5,062	5,043	4,991
Employed	4,688	4,613	4,602	4,782	4,743	4,775	4,743	4,733	4,695
Unemployed	301	350	324	269	290	294	319	310	296
Unemployment rate	6.0	7.0	6.6	5.3	5.8	5.8	6.3	6.1	5.9
Pennsylvania									
Civilian noninstitutional population[1]	8,882	8,929	8,934	8,882	8,915	8,920	8,925	8,929	8,934
Civilian labor force	5,271	5,363	5,357	5,283	5,337	5,304	5,383	5,411	5,365
Employed	4,860	4,944	4,941	4,919	4,950	4,930	4,998	5,041	4,998
Unemployed	411	419	415	362	387	374	385	370	367
Unemployment rate	7.8	7.8	7.8	6.9	7.3	7.1	7.2	6.8	6.8
Texas									
Civilian noninstitutional population[1]	9,623	9,655	9,673	9,623	9,599	9,618	9,637	9,655	9,673
Civilian labor force	6,156	6,320	6,310	6,174	6,329	6,362	6,365	6,358	6,327
Employed	5,928	5,994	5,960	5,924	6,062	6,092	6,060	6,049	5,957
Unemployed	232	326	350	250	267	250	305	309	370
Unemployment rate	3.8	5.2	5.6	4.0	4.2	3.9	4.8	4.9	5.8

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

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

ESTABLISHMENT DATA

Table B-1. Employees on nonagricultural payrolls by industry

(In thousands)

Industry	Not seasonally adjusted				Seasonally adjusted					
	Mar. 1979	Jan. 1980	Feb. p 1980	Mar. p 1980	Mar. 1979	Nov. 1979	Dec. 1979	Jan. 1980	Feb. p 1980	Mar. p 1980
TOTAL	88,207	89,285	89,346	89,774	89,039	90,100	90,241	90,652	90,774	90,634
GOODS-PRODUCING	26,039	26,031	25,882	25,959	26,627	26,533	26,655	26,783	26,719	26,549
MINING	926	982	977	991	940	983	991	1,000	1,000	1,006
CONSTRUCTION	4,226	4,350	4,260	4,301	4,614	4,714	4,783	4,893	4,830	4,695
MANUFACTURING	20,887	20,699	20,645	20,667	21,073	20,836	20,881	20,890	20,889	20,848
Production workers	14,993	14,874	14,808	14,841	15,153	14,829	14,865	14,848	14,821	14,792
DURABLE GOODS	12,664	12,525	12,515	12,532	12,751	12,587	12,615	12,601	12,648	12,616
Production workers	9,081	8,825	8,808	8,827	9,158	8,908	8,931	8,894	8,923	8,900
Lumber and wood products	745.5	709.2	706.8	702.7	760	751	740	737	736	724
Furniture and fixtures	491.8	484.4	480.1	480.7	493	483	483	484	481	482
Stone, clay, and glass products	697.2	680.8	677.7	681.9	718	704	706	708	709	702
Primary metal industries	1,251.1	1,201.6	1,189.1	1,196.9	1,259	1,223	1,208	1,209	1,210	1,204
Fabricated metal products	1,719.8	1,703.8	1,705.9	1,708.9	1,732	1,726	1,725	1,712	1,723	1,721
Machinery, except electrical	2,459.5	2,522.5	2,522.8	2,526.9	2,450	2,438	2,444	2,512	2,513	2,517
Electric and electronic equipment	2,082.6	2,144.5	2,139.2	2,139.5	2,093	2,125	2,140	2,149	2,148	2,150
Transportation equipment	2,083.9	1,943.6	1,946.0	1,947.8	2,094	1,994	2,019	1,958	1,976	1,958
Instruments and related products	683.2	698.9	700.6	704.6	685	694	698	700	702	707
Miscellaneous manufacturing	449.0	435.9	437.2	442.2	458	449	452	453	450	451
NONDURABLE GOODS	8,223	8,174	8,130	8,135	8,322	8,249	8,266	8,289	8,241	8,232
Production workers	5,912	5,849	5,800	5,814	5,995	5,921	5,934	5,954	5,898	5,892
Food and kindred products	1,666.9	1,650.5	1,636.4	1,623.9	1,736	1,710	1,715	1,707	1,706	1,692
Tobacco manufacturers	64.4	65.1	63.3	60.6	69	60	62	64	65	65
Textile mill products	894.4	887.4	887.7	889.4	897	889	893	891	890	893
Apparel and other textile products	1,326.6	1,284.4	1,306.8	1,317.3	1,324	1,292	1,297	1,309	1,313	1,315
Paper and allied products	708.8	711.8	710.1	710.1	716	714	713	718	717	717
Printing and publishing	1,229.5	1,269.5	1,274.0	1,277.4	1,232	1,262	1,263	1,273	1,278	1,280
Chemicals and allied products	1,103.9	1,113.9	1,114.3	1,117.1	1,108	1,114	1,119	1,123	1,122	1,122
Petroleum and coal products	208.3	213.1	162.3	161.7	213	217	217	219	167	165
Rubber and misc. plastics products	774.4	762.2	737.4	738.4	780	749	745	745	743	744
Leather and leather products	245.7	236.1	237.8	238.1	247	242	242	240	240	239
SERVICE-PRODUCING	62,168	63,254	63,464	63,815	62,412	63,567	63,586	63,869	64,055	64,085
TRANSPORTATION AND PUBLIC UTILITIES	5,060	5,149	5,124	5,140	5,116	5,229	5,223	5,212	5,191	5,197
WHOLESALE AND RETAIL TRADE	19,690	20,224	20,050	20,112	20,054	20,308	20,254	20,428	20,530	20,499
WHOLESALE TRADE	5,098	5,211	5,212	5,226	5,134	5,235	5,218	5,248	5,265	5,263
RETAIL TRADE	14,592	15,013	14,838	14,886	14,920	15,073	15,036	15,180	15,265	15,236
FINANCE, INSURANCE, AND REAL ESTATE	4,870	5,040	5,044	5,060	4,899	5,039	5,056	5,081	5,085	5,091
SERVICES	16,749	17,131	17,277	17,456	16,833	17,298	17,357	17,442	17,505	17,544
GOVERNMENT	15,799	15,730	15,969	16,047	15,510	15,693	15,696	15,706	15,744	15,734
FEDERAL	2,740	2,763	2,803	2,805	2,757	2,771	2,771	2,791	2,823	2,822
STATE AND LOCAL	13,059	12,967	13,166	13,242	12,753	12,922	12,925	12,915	12,921	12,932

p=preliminary

ESTABLISHMENT DATA

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

Industry	Not seasonally adjusted				Seasonally adjusted					
	Mar. 1979	Jan. 1980	Feb. 1980 p	Mar. 1980 p	Mar. 1979	Nov. 1979	Dec. 1979	Jan. 1980	Feb. 1980 p	Mar. 1980 p
TOTAL PRIVATE	35.7	35.1	35.1	35.2	35.9	35.7	35.7	35.7	35.5	35.4
MINING	42.9	43.4	43.0	43.4	43.1	43.2	43.9	44.4	43.5	43.6
CONSTRUCTION	37.0	35.1	35.6	35.5	37.1	36.8	37.1	37.6	36.8	35.6
MANUFACTURING	40.6	39.8	39.7	39.8	40.8	40.1	40.2	40.3	40.0	39.8
Overtime hours	3.6	3.0	2.9	3.0	3.7	3.3	3.2	3.2	3.1	3.1
DURABLE GOODS	41.4	40.3	40.2	40.3	41.6	40.6	40.7	40.8	40.5	40.3
Overtime hours	3.9	3.1	3.0	3.1	4.0	3.4	3.3	3.3	3.1	3.2
Lumber and wood products	39.7	38.1	38.3	38.1	40.0	38.9	39.0	39.5	38.9	38.4
Furniture and fixtures	39.0	38.4	38.2	38.2	39.1	38.9	39.0	39.0	38.9	38.3
Stone, clay, and glass products	41.8	40.1	40.0	40.4	42.0	41.5	41.6	41.3	40.9	40.6
Primary metal industries	41.9	40.7	40.5	40.6	42.0	40.7	40.6	40.8	40.6	40.7
Fabricated metal products	41.3	40.6	40.4	40.6	41.3	40.7	41.0	40.9	40.8	40.6
Machinery, except electrical	42.6	41.5	41.5	41.5	42.4	41.6	41.6	41.7	41.5	41.3
Electric and electronic equipment	40.7	40.2	40.1	40.2	40.7	40.6	40.5	40.4	40.3	40.2
Transportation equipment	42.3	40.1	39.9	40.0	42.3	40.6	41.0	41.0	40.4	40.0
Instruments and related products	41.3	41.0	40.8	40.8	41.2	41.0	40.8	41.3	41.0	40.7
Miscellaneous manufacturing	39.2	39.1	38.7	38.8	39.0	39.1	39.2	39.5	39.1	38.8
NONDURABLE GOODS	39.3	39.0	38.9	38.9	39.4	39.4	39.4	39.5	39.3	39.0
Overtime hours	3.1	2.9	2.8	2.8	3.3	3.2	3.1	3.1	3.0	3.0
Food and kindred products	39.6	39.5	39.1	39.0	40.0	40.0	39.9	40.0	39.7	39.4
Tobacco manufacturers	38.1	37.4	37.0	37.7	38.0	37.8	38.8	38.5	37.8	37.6
Textile mill products	40.4	40.9	40.8	40.7	40.3	41.1	41.0	41.7	41.1	40.6
Apparel and other textile products	35.4	35.2	35.4	35.4	35.4	35.3	35.6	35.9	35.9	35.6
Paper and allied products	42.6	42.6	42.3	42.4	42.8	42.7	42.9	42.8	42.8	42.6
Printing and publishing	37.7	37.2	37.0	37.3	37.7	37.6	37.4	37.8	37.4	37.3
Chemicals and allied products	41.9	41.7	41.6	41.8	41.9	41.9	41.7	42.0	41.9	41.8
Petroleum and coal products	43.8	38.1	39.6	38.8	44.0	44.4	43.5	36.6	40.4	39.0
Rubber and misc. plastics products	41.4	40.3	39.9	40.1	41.3	40.0	39.9	40.6	39.9	40.0
Leather and leather products	35.9	36.7	36.9	36.3	36.3	36.7	36.9	37.2	37.4	36.7
TRANSPORTATION AND PUBLIC UTILITIES	39.8	39.5	39.7	39.8	40.0	40.2	39.8	39.9	39.8	40.0
WHOLESALE AND RETAIL TRADE	32.4	31.9	31.9	32.0	32.7	32.7	32.6	32.5	32.3	32.4
WHOLESALE TRADE	38.9	38.5	38.4	38.5	39.0	38.9	38.9	38.8	38.7	38.6
RETAIL TRADE	30.3	29.8	29.8	30.0	30.7	30.7	30.6	30.5	30.3	30.4
FINANCE, INSURANCE, AND REAL ESTATE	36.3	36.3	36.3	36.4	36.4	36.5	36.4	36.2	36.3	36.5
SERVICES	32.6	32.5	32.5	32.6	32.8	32.7	32.9	32.7	32.7	32.8

[1] Data relate to production workers in mining and manufacturing, to construction workers in construction, and to nonsupervisory workers in transportation and public utilities, wholesale and retail trade, finance, insurance, and real estate, and services. These groups account for approximately 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. 1979	Jan. 1980	Feb. 1980 p	Mar. 1980 p	Mar. 1979	Jan. 1980	Feb. 1980 p	Mar. 1980 p
TOTAL PRIVATE	$6.02	$6.42	$6.46	$6.50	$214.91	$225.34	$226.75	$228.80
Seasonally adjusted	6.04	6.42	6.45	6.51	216.84	229.19	228.98	230.45
MINING	8.27	8.85	8.92	9.01	354.78	384.09	383.56	391.03
CONSTRUCTION	8.97	9.47	9.62	9.64	331.89	332.40	342.47	342.22
MANUFACTURING	6.56	6.98	6.99	7.05	266.34	277.01	277.50	280.59
DURABLE GOODS	6.98	7.39	7.45	7.53	289.39	297.82	299.49	303.46
Lumber and wood products	5.84	6.22	6.33	6.36	231.85	236.98	242.44	242.32
Furniture and fixtures	4.95	5.27	5.33	5.37	193.05	202.37	203.61	205.13
Stone, clay, and glass products	6.64	7.05	7.11	7.26	277.55	282.71	285.20	293.30
Primary metal industries	8.75	9.30	9.43	9.51	366.63	378.51	381.92	386.11
Fabricated metal products	6.72	7.06	7.12	7.19	277.54	286.64	287.65	291.91
Machinery, except electrical	7.19	7.67	7.71	7.77	306.29	318.31	319.97	322.46
Electric and electronic equipment	6.16	6.67	6.71	6.75	250.71	268.13	269.07	271.35
Transportation equipment	8.42	8.78	8.85	9.02	356.17	352.08	353.12	360.80
Instruments and related products	6.04	6.57	6.58	6.64	249.65	269.37	268.46	270.91
Miscellaneous manufacturing	4.95	5.31	5.33	5.37	194.04	207.62	208.27	208.36
NONDURABLE GOODS	5.85	6.28	6.27	6.30	229.91	244.92	243.90	245.07
Food and kindred products	6.12	6.62	6.66	6.66	242.35	261.69	259.62	259.74
Tobacco manufacturers	6.64	7.13	7.32	7.56	252.98	266.66	270.84	285.01
Textile mill products	4.52	4.90	4.90	4.91	182.61	200.41	199.92	199.84
Apparel and other textile products	4.19	4.45	4.46	4.51	148.33	156.64	157.88	159.65
Paper and allied products	6.88	7.48	7.50	7.53	293.09	318.65	317.25	319.27
Printing and publishing	6.77	7.20	7.26	7.30	255.23	267.84	268.62	272.29
Chemicals and allied products	7.36	7.96	7.99	8.05	308.38	331.93	332.38	336.49
Petroleum and coal products	9.31	9.48	9.21	9.11	407.78	342.23	364.72	353.47
Rubber and misc. plastics products	5.86	6.25	6.26	6.31	242.60	251.88	249.77	253.03
Leather and leather products	4.17	4.46	4.48	4.51	149.70	163.68	165.31	163.71
TRANSPORTATION AND PUBLIC UTILITIES	7.90	8.56	8.60	8.62	314.42	338.12	341.42	343.08
WHOLESALE AND RETAIL TRADE	4.98	5.34	5.36	5.38	181.35	170.35	170.98	172.16
WHOLESALE TRADE	6.23	6.72	6.74	6.80	242.35	258.72	259.82	261.80
RETAIL TRADE	4.47	4.78	4.78	4.80	135.44	142.44	142.44	144.00
FINANCE, INSURANCE, AND REAL ESTATE	5.16	5.55	5.60	5.68	187.31	201.47	203.28	206.75
SERVICES	5.26	5.65	5.69	5.72	171.48	183.63	184.93	186.47

[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	MAR. 1979	OCT. 1979	NOV. 1979	DEC. 1979	JAN. 1980	FEB. P 1980	MAR. P 1980	Percent change from—	
								MAR. 1979–MAR. 1980	FEB. 1980–MAR. 1980
TOTAL PRIVATE NONFARM:									
Current dollars	225.2	234.9	237.3	239.5	240.5	242.5	245.0	8.8	1.0
Constant (1967) dollars	107.3	104.1	104.1	103.8	102.8	102.2	N.A.	(2)	(3)
MINING	256.1	268.0	271.6	273.2	274.0	276.2	279.9	9.3	1.4
CONSTRUCTION	216.5	224.0	225.8	227.6	225.1	230.0	231.2	6.8	.6
MANUFACTURING	228.7	240.0	242.1	244.3	245.3	248.0	250.2	9.4	.9
TRANSPORTATION AND PUBLIC UTILITIES	243.1	255.8	258.9	260.7	261.2	263.0	265.7	9.3	1.0
WHOLESALE AND RETAIL TRADE	219.4	227.4	229.5	231.3	234.7	235.4	237.6	8.3	.9
FINANCE, INSURANCE, AND REAL ESTATE	204.8	213.1	216.2	218.5	218.6	220.7	225.8	10.2	2.3
SERVICES	223.3	232.5	234.7	237.7	238.0	239.7	242.1	8.5	1.0

1 SEE FOOTNOTE 1, TABLE B-2.
2 PERCENT CHANGE WAS -5.2 FROM FEBRUARY 1979 TO FEBRUARY 1980, THE LATEST MONTH AVAILABLE.
3 PERCENT CHANGE WAS -.5 FROM JANUARY 1980 TO FEBRUARY 1980, 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	1979										1980		
	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.P	Mar.P
TOTAL PRIVATE	125.7	125.6	125.4	125.7	125.7	125.5	125.9	125.8	126.3	126.4	127.1	126.5	125.9
GOODS-PRODUCING	111.3	106.8	110.3	110.1	109.9	109.4	109.7	109.0	108.7	109.6	110.6	109.0	106.9
MINING	152.5	152.0	151.6	152.5	148.4	156.7	157.4	158.4	158.4	162.3	165.7	161.9	163.0
CONSTRUCTION	132.7	124.9	133.7	134.4	133.9	134.5	135.4	132.7	133.7	137.1	142.5	136.9	127.3
MANUFACTURING	106.0	102.0	104.7	104.3	104.4	103.3	103.4	103.1	102.5	102.9	103.0	102.2	101.4
DURABLE GOODS	110.1	105.0	108.3	107.9	107.9	106.8	107.1	106.2	105.1	105.6	105.3	104.8	104.1
Lumber and wood products	116.4	112.4	113.3	112.7	111.9	112.3	113.6	113.3	110.1	108.3	109.0	107.0	103.8
Furniture and fixtures	109.4	105.8	105.9	105.3	105.9	104.5	104.8	105.9	106.2	106.4	106.7	105.6	104.0
Stone, clay, and glass products	114.9	111.5	113.1	113.0	111.5	110.8	111.2	112.6	110.4	110.8	110.4	109.2	107.4
Primary metal industries	100.2	99.7	97.8	97.9	97.8	95.9	95.3	96.6	93.1	91.8	92.1	91.7	91.5
Fabricated metal products	108.6	102.7	106.6	107.1	106.7	104.8	105.4	106.1	105.8	106.4	105.1	105.9	105.2
Machinery, except electrical	117.5	113.0	117.4	117.6	118.0	116.2	117.7	114.3	113.6	113.5	117.5	116.8	116.5
Electric and electronic equipment	108.5	104.4	108.2	108.6	108.5	104.7	107.2	107.6	108.1	108.8	109.2	108.5	108.4
Transportation equipment	105.9	98.3	101.6	99.4	100.3	102.6	100.1	97.6	95.7	96.7	98.7	91.4	89.6
Instruments and related products	129.7	127.2	128.1	128.4	128.1	127.2	127.2	122.8	127.8	128.1	130.6	129.7	130.9
Miscellaneous manufacturing industry	101.7	97.5	98.7	100.5	100.7	100.8	99.9	99.9	99.9	101.4	102.2	100.5	99.5
NONDURABLE GOODS	100.1	97.8	99.5	99.1	99.1	98.2	98.1	98.5	98.8	99.0	99.7	98.3	97.4
Food and kindred products	98.1	96.8	97.0	96.8	95.9	94.6	95.0	96.1	96.5	97.0	96.8	95.8	93.7
Tobacco manufacturers	73.4	73.9	76.5	72.6	73.0	68.7	70.5	69.9	61.1	65.4	67.6	66.4	66.0
Textile mill products	90.6	86.7	89.5	89.6	89.8	89.0	89.8	90.6	91.8	91.8	93.5	92.1	91.0
Apparel and other textile products	89.9	86.8	89.5	88.7	89.5	88.0	87.5	87.9	87.3	88.4	90.0	90.3	89.1
Paper and allied products	103.0	104.5	102.5	102.1	103.2	103.1	102.3	102.7	102.8	103.3	103.6	103.6	103.5
Printing and publishing	103.4	101.7	103.1	103.3	104.4	104.7	103.9	104.3	105.9	105.1	107.2	106.4	106.2
Chemicals and allied products	108.1	107.7	108.3	108.4	108.8	108.2	107.6	107.9	108.6	108.6	109.7	108.9	109.5
Petroleum and coal products	125.0	125.7	124.2	123.1	123.0	124.2	126.2	125.1	128.0	126.3	126.3	73.5	71.0
Rubber and misc. plastics products	154.4	148.6	153.4	150.4	150.5	145.6	143.5	143.5	142.5	140.9	143.6	140.6	141.2
Leather and leather products	66.1	63.9	65.4	66.0	61.3	64.9	66.1	65.2	64.9	65.0	65.2	65.5	64.3
SERVICE-PRODUCING	135.8	135.3	135.9	136.5	136.7	136.6	137.2	137.5	138.5	138.4	138.6	138.7	139.1
TRANSPORTATION AND PUBLIC UTILITIES	113.7	109.2	113.4	115.0	114.2	115.2	114.9	115.8	116.9	115.4	119.2	114.6	115.4
WHOLESALE AND RETAIL TRADE	130.2	130.6	130.2	130.0	129.9	129.6	130.4	130.7	131.6	130.9	131.6	131.5	131.3
WHOLESALE TRADE	132.3	131.3	132.8	132.8	132.7	132.4	132.5	133.4	134.3	134.1	134.3	134.3	133.8
RETAIL TRADE	129.3	130.3	129.1	128.9	128.9	128.5	129.6	129.7	130.5	129.7	130.5	130.4	130.4
FINANCE, INSURANCE, AND REAL ESTATE	144.6	145.9	144.5	145.7	146.5	146.3	147.1	146.7	148.3	148.3	148.1	148.9	149.6
SERVICES	151.1	151.6	151.7	152.6	153.1	153.4	153.8	154.1	155.2	156.5	156.2	156.9	157.8

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
1977				
January	71.0	80.2	86.3	80.5
February	67.2	84.3	84.6	81.4
March	72.4	82.6	84.0	82.8
April	71.9	81.7	82.3	84.6
May	70.3	74.5	79.1	85.2
June	65.1	72.7	77.6	86.6
July	70.3	70.3	75.3	84.9
August	57.8	70.9	76.7	83.1
September	67.2	67.7	79.7	83.1
October	64.2	76.2	80.5	82.8
November	73.3	79.7	84.0	81.1
December	75.3	79.4	82.5	82.0
1978				
January	68.3	80.2	83.1	81.4
February	69.2	75.6	79.1	83.1
March	69.5	77.3	77.6	81.1
April	68.0	69.8	73.5	82.0
May	57.8	67.2	72.7	81.7
June	68.6	66.6	71.2	82.3
July	64.5	69.5	73.0	81.4
August	60.3	67.2	77.3	78.2
September	62.5	71.2	79.7	77.9
October	73.0	78.2	82.3	73.5
November	75.9	81.1	82.3	76.2
December	74.4	82.3	80.5	71.8
1979				
January	70.3	76.5	74.1	71.8
February	65.1	72.1	67.4	70.6
March	60.5	57.8	61.9	63.7
April	64.8	55.2	58.1	64.0
May	54.7	51.5	50.3	61.9
June	57.0	58.4	46.8	58.1
July	61.6	56.7	56.1	57.0
August	48.8	52.0	55.8	52.9p
September	46.8	52.9	57.6	52.7p
October	69.8	61.0	61.6	
November	59.9	66.6	63.4p	
December	59.0	64.5	65.7p	
1980				
January	63.4	61.0p		
February	57.0p	53.8p		
March	45.3p			
April				
May				
June				
July				
August				
September				
October				
November				
December				

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

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USDL 80-222
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PRODUCER PRICE INDEXES--MARCH 1980

The Producer Price Index for Finished Goods moved up 1.4 percent from February to March on a seasonally adjusted basis, the Bureau of Labor Statistics of the U.S. Department of Labor reported today. The March advance was not quite as large as the increases reported for either January or February. Prices for intermediate (semifinished) goods rose 0.5 percent, less than in any month since July 1978. Crude material prices declined 2.2 percent following a 2.6 percent rise in February and a 0.9 percent drop in January. (See table A.)

Among finished goods, prices for energy goods increased 7.2 percent, nearly as much as in February and considerably more than in any other month in the past 6 years. Consumer food prices rose 1.1 percent, following declines in each of the first 2 months of the year.

Table A.- Percent changes from preceding month in selected stage-of-processing price indexes, seasonally adjusted*

Month	Finished goods			Intermediate goods			Crude goods		
	Total	Consumer foods	Other	Total	Foods and feeds 1/	Other	Total	Foodstuffs and feedstuffs	Other
Mar. 1979	1.0	1.3	0.9	1.0	-0.8	1.1	1.9	1.7	2.3
Apr.	.8	-.4	1.2	1.5	.1	1.6	-.4	-.4	-.3
May	.5	-1.0	1.0	1.0	.1	1.0	.7	-.7	2.7
June	.6	-1.0	1.1	1.0	.5	1.0	1.2	0	2.8
July	1.2	.7	1.3	1.6	4.2	1.5	2.2	3.0	1.2
Aug.	1.1	1.5	1.0	1.4	.9	1.5	.2	-.5	1.2
Sept.....	1.5	1.4	1.5	1.5	.5	1.5	2.2	1.4	3.2
Oct	1.1	-.1	1.5	1.7	.3	1.8	1.1	.1	2.3
Nov.	1.2r	1.9	1.0r	.9r	-.3	.9r	1.3	1.0	1.7
Dec.	.8r	.2	.9r	1.0r	.3	1.1r	1.3	.2r	2.6r
Jan. 1980	1.6	-.8	2.4	2.8	-2.7	3.0	-.9	-3.8	2.8
Feb.	1.5	-.5	2.0	1.8	5.5	1.7	2.6	2.2	3.2
Mar.	1.4	1.1	1.5	.5	-3.0	.7	-2.2	-2.7	-1.4

1/ Intermediate materials for food manufacturing and feeds.
* Data for November 1979 have been revised to reflect the availability of late reports and corrections by respondents. For this reason, some of the figures shown above and elsewhere in this release may differ from those previously reported.
r= revised.

Prices for consumer goods other than food and energy moved up 0.4 percent, much less than in either January or February. Capital equipment prices rose 0.8 percent, about the same as in most recent months. (See table B.)

Before seasonal adjustment, the Producer Price Index for Finished Goods increased 1.2 percent to 238.2 (1967=100). Over the year, the Finished Goods Price Index advanced 13.9 percent. The index for finished energy goods climbed 82.2 percent from March 1979 to March 1980, the finished consumer foods index rose 3.0 percent, finished consumer goods other than food and energy advanced 11.5 percent, and capital equipment prices were 9.5 percent higher than a year ago. Prices for intermediate goods were up 18.0 percent over the year, and the Producer Price Index for crude materials increased 9.7 percent.

Finished goods

Finished consumer goods. The Producer Price Index for finished consumer goods advanced 1.6 percent in March, seasonally adjusted, the same as in January and slightly less than in February (1.8 percent). Energy prices continued to advance at an unusually rapid pace. Gasoline prices rose 8.5 percent, and prices for home heating oil rose 6.3 percent; both of these increases were about the same as in the preceding month.

The index for finished consumer foods advanced 1.1 percent after declining 0.8 and 0.5 percent in January and February, respectively. Prices turned up sharply for eggs.

Table B. Percent changes in finished goods price indexes, selected periods*

Month	Changes from preceding month, seasonally adjusted						Change in finished goods from 12 months ago (unadj.)
				Finished consumer goods excluding foods			
	Finished goods	Capital equipment	Finished consumer goods	Total	Durables	Nondurables	
Mar. 1979	1.0	0.6	1.1	1.1	0.5	1.4	10.6
Apr.	.8	1.1	.6	1.2	.8	1.5	10.4
May	.5	.5	.5	1.4	.6	1.8	10.2
June	.6	.7	.6	1.4	.6	1.9	9.9
July	1.2	.8	1.3	1.7	.8	2.2	10.3
Aug.	1.1	-.1	1.6	1.7	0	2.7	11.1
Sept.....	1.5	.7	1.8	1.9	1.5	2.2	12.0
Oct.	1.1	.9	1.2	1.8	1.6	2.0	12.3
Nov.	1.2r	.7r	1.4r	1.1r	.9r	1.2r	13.0r
Dec.	.8r	.7r	.7r	1.0r	.8r	1.1r	12.5
Jan. 1980	1.6	1.6	1.6	2.8	3.2	2.6	13.0
Feb.	1.5	.7	1.8	2.9	1.8	3.5	13.3
Mar.	1.4	.8	1.6	1.9	-.4	3.2	13.9

* Data for November 1979 have been revised to reflect the availability of late reports and corrections by respondents. For this reason, some of the figures shown above and elsewhere in this release may differ from those previously reported.

r= revised.

pork, and fresh and dried vegetables after decreasing in February. Price increases accelerated for fish, milled rice, confectionery end products, and cake mixes. On the other hand, prices for beef and veal, refined sugar in consumer size packages, and fresh fruits turned down after rising sharply in the previous month. Prices for processed poultry and roasted coffee also fell but not as much as in February.

Price increases slowed markedly for consumer finished goods other than food and energy in March. Most of the slowdown was due to prices for precious metal jewelry, which declined 11.0 percent after climbing 55.3 percent from November through February. Prices for tires and tubes also declined after a sharp increase in February. Prices for apparel, household furniture, household appliances, mobile homes, sanitary papers and health products, and nonalcoholic beverages rose but not as much as in the preceding month. On the other hand, prices for leather footwear, flatware, and floor coverings turned up after declining in February.

Capital equipment. The index for capital equipment rose 0.8 percent, about the same as in the previous month. Some of the largest advances occurred for pumps and compressors, motor trucks, generators and generator sets, machine tools, commercial furniture, agricultural machinery, oilfield machinery, chemical industry machinery, and industrial process furnaces.

Intermediate materials

The Producer Price Index for intermediate materials, supplies, and components moved up 0.5 percent in March, seasonally adjusted, much less than in either Janaury (2.8 percent) or February (1.8 percent). This slowdown was partly due to lower prices for nonferrous metals, foods, and feeds. In addition, price increases moderated for some energy products.

The intermediate energy index moved up 3.1 percent, following 2 months of more substantial increases. Prices rose less than 1 percent (much less than in February) for electric power, liquefied petroleum gas, residual fuel, and lubricating oil materials. Commercial jet fuel and diesel fuel prices, however, both rose more than 5 percent for the second consecutive month.

The intermediate foods and feeds index fell 3.0 percent, in contrast to a 5.5 percent jump in the preceding month. Prices declined for refined sugar used in food manufacturing, feeds, crude and refined vegetable oils, and flour. On the other hand, corn syrup prices rose sharply.

The index for intermediate materials less food and energy rose 0.3 percent, much less than for any month in over a year. Much of the slowdown was caused by the durable manufacturing materials grouping, which declined 1.7 percent as prices for copper, gold, silver, and jewelers' materials all fell between 15 and 25 percent. Lead prices were also lower. In contrast, the indexes for nickel, tin, and zinc rose substantially.

The construction materials index advanced 1.1 percent, nearly as much as in February. Some of the largest price increases occurred for fabricated structural metal products, nonferrous wire and cable, bituminous paving materials, concrete products, and millwork prices for most other construction materials also moved up. On the other hand, prices for softwood lumber and plywood turned down.

Prices for many nondurable manfacturing materials continued to rise sharply, including industrial chemicals, paper, phosphates, and nitrogenates. In addition, the indexes for finished fabrics, gray fabrics, and synthetic fibers registered substantial

increases after little or no change in the previous month. In contrast, prices for leather and inedible fats and oils declined for the second consecutive month.

In the manufacturing components category, the rate of increase for electronic components slowed considerably. Prices continued to move up substantially, however, for motor vehicle parts, switchgear and switchboards, and internal combustion engines. Among other intermediate goods, prices for photographic supplies were virtually unchanged following an increase of more then 50 percent in February. Price increases also slowed for many types of machinery parts. In contrast, large increases were registered for plastic parts, pesticides, and mixed fertilizers.

Crude materials

The Producer Price Index for crude materials for further processing declined 2.2 percent in March on a seasonally adjusted basis, following a 2.6 percent increase in February. Prices for crude foodstuffs and feedstuffs turned down sharply, following a marked increase in February, and crude nonfood material prices fell 1.4 percent, the sharpest drop since June 1977.

The index for crude foodstuffs and feedstuffs decreased 2.7 percent, following a 2.2 percent increase in February. Prices for raw cane sugar fell 26.4 percent after climbing 43.9 percent in the previous month. Livestock, soybeans, grains, and cocoa beans also fell after rising in February. Poultry prices moved down, but the fall was much less than in February. In contrast, green coffee prices moved up considerably more than in the previous month. Fluid milk prices also rose.

The index for crude nonfood materials less energy fell 4.9 percent, in contrast to a 4.4 percent increase in February. Prices for copper base scrap, cotton, iron and steel scrap, and natural rubber fell following increases in February. Hides and skins and wastepaper moved down considerably for the second consecutive month. On the other hand, prices for aluminum base scrap and potash rose.

Prices for crude energy materials rose 0.6 percent, much less than the 2.4 percent advance in February. Natural gas prices edged down following a substantial rise in February, but crude petroleum and coal prices increased more than in the preceding month.

Brief Explanation of Producer Price Indexes

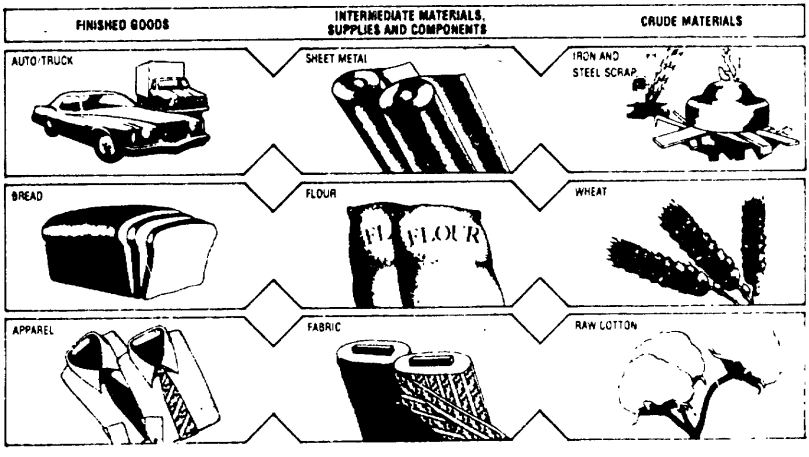
Producer Price Indexes measure average changes in prices received in primary markets of the United States by producers of commodities in all stages of processing. These data were previously presented as the Wholesale Price Index. The name "Producer Price Indexes" is now being used to reflect more accurately the coverage of the data. The sample used for calculating these indexes continues to contain nearly 2,800 commodities and about 10,000 quotations selected to represent the movement of prices of all commodities produced in the manufacturing, agriculture, forestry, fishing, mining, gas and electricity, and public utilities sectors. The universe includes all commodities produced or imported for sale in commercial transactions in primary markets in the United States.

Producer Price Indexes can be organized by stage of processing or by commodity. The stage of processing structure organizes products by degree of fabrication (i.e., finished goods, intermediate or semifinished goods, and crude materials). The commodity structure organizes products by similarity of end-use or material composition.

Finished goods are commodities that will not undergo further processing and are ready for sale to the ultimate user, either an individual consumer or a business firm. Capital equipment (formerly called producer finished goods) includes commodities such as motor trucks, farm equipment, and machine tools. Finished consumer goods include foods and other types of goods eventually purchased by retailers and used by consumers. Consumer foods include unprocessed foods such as eggs and fresh vegetables as well as processed foods such as bakery products and meats. Other finished consumer goods include durables such as automobiles, household furniture, and jewelry and nondurables such as apparel and gasoline.

Intermediate materials, supplies, and components are commodities that have been processed but require further processing before they become finished goods. Examples of such semifinished goods include flour, cotton yarns, steel mill products, belts and belting, lumber, liquefied petroleum gas, paper boxes, and motor vehicle parts.

Crude materials for further processing include products entering the market for the first time which have not been manufactured or fabricated but will be processed before becoming finished goods. Scrap materials are also included. Crude foodstuffs and feedstuffs include items such as grains and livestock. Examples of crude nonfood materials include raw cotton, crude petroleum, natural gas, hides and skins, and iron and steel scrap.



For analysis of general price trends, stage of processing indexes are more useful than commodity grouping indexes. This is because commodity grouping indexes sometimes produce exaggerated or misleading signals of price changes by reflecting the same price movement through various stages of processing. For example, suppose that a price rise for steel scrap results in an increase in the price of steel sheet and then an advance in prices of automobiles produced from that steel. The All Commodities Price Index and the Industrial Commodities Price Index would reflect the same price movement three times—once for the steel scrap, once for the steel sheet, and once for the automobiles. This multiple counting occurs because the weighting structure for the All Commodities Index uses the total shipment values for all commodities at all stages of processing. On the other hand, the Finished Goods Price Index would reflect the change in automobile prices, the Intermediate Materials Price Index would reflect the steel sheet price change, and the Crude Materials Price Index would reflect the rise in the price of steel scrap. (See illustration.)

To the extent possible, prices used in calculating Producer Price Indexes apply to the first significant commercial transaction in the United States, from the production or central marketing point. Price data are generally collected monthly, primarily by mail questionnaire. Respondents are asked to provide net prices or to provide all applicable discounts. BLS attempts to base Producer Price Indexes on actual transaction prices; however, list or book prices are used if transaction prices are not available. Most prices are obtained directly from producing companies on a voluntary and confidential basis, but some prices are taken from trade publications or from other Government agencies. Prices generally are reported for the Tuesday of the week containing the 13th day of the month.

In calculating Producer Price Indexes, price changes for the various commodities are averaged together with weights representing their importance in the total net selling value of all commodities as of 1972. The detailed data are aggregated to obtain indexes for stage of processing groupings, commodity groupings, durability of product groupings, and a number of special composite groupings. Each index measures price changes from a reference period which equals 100.0 (usually 1967, as designated by the Office of Management and Budget). An increase of 85 percent from the reference period in the Finished Goods Price Index, for example, is shown as 185.0. This change can also be expressed in dollars, as follows: "The price of a representative sample of finished goods sold in primary markets in the United States has risen from $100 in 1967 to $185."

A Note about Calculating Index Changes

Movements of price indexes from one month to another are usually expressed as percent changes rather than changes in index points because index point changes are affected by the level of the index in relation to its base period, while percent changes are not. The box below shows the computation of index point and percent changes.

Percent changes for 3-month and 6-month periods are expressed as annual rates that are computed according to the standard formula for compound growth rates. These data indicate what the percent change would be if the current rate were maintained for a 12-month period.

Index Point Change	
Finished Goods Price Index	185.5
less previous index	184.5
equals index point change	1.0
Index Percent Change	
Index point change	1.0
divided by the previous index	184.5
equals	0.005
result multiplied by 100	0.005 x 100
equals index percent change	0.5

A Note on Seasonally Adjusted Data

Because price data are used for different purposes by different groups, the Bureau of Labor Statistics publishes seasonally adjusted as well as unadjusted changes each month.

For analyzing general price trends in the economy, seasonally adjusted data usually are preferred because they eliminate the effect of changes that normally occur at about the same time and in about the same magnitude every year—such as price movements resulting from normal weather patterns, regular production and marketing cycles, model changeovers, seasonal discounts, and holidays. For this reason, seasonally adjusted data more clearly reveal the underlying cyclical trends. Seasonally adjusted data are subject to revision when seasonal factors are revised each year.

The unadjusted data are of primary interest to users who need information which can be related to the actual dollar values of transactions. Individuals requiring this information include marketing specialists, purchasing agents, budget and cost analysts, contract specialist, and commodity traders. Unadjusted data generally are used in escalating contracts such as purchase agreements or real estate leases.

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Table 1. Producer price indexes and percent changes by stage of processing
(1967=100)

Grouping	Relative importance Dec. 1979 1/	Unadjusted index Nov. 1979 2/	Unadjusted index Feb. 1980 2/	Unadjusted index Mar. 1980 2/	Unadjusted percent change to Mar. 1980 from: Mar. 1979	Unadjusted percent change to Mar. 1980 from: Feb. 1980	Seasonally adjusted percent change from: Dec. to Jan.	Seasonally adjusted percent change from: Jan. to Feb.	Seasonally adjusted percent change from: Feb. to Mar.
Finished goods	100.000	226.3	235.4	238.2	13.9	1.2	1.6	1.5	1.4
Finished consumer goods	71.631	227.1	237.3	240.8	15.7	1.4	1.6	1.8	1.6
Finished consumer foods	24.271	238.5	251.6	253.8	5.0	.6	-.6	-.3	1.1
Crude	1.749	228.1	228.8	238.8	-5.6	4.9	-5.2	-3.6	8.8
Processed	22.520	228.6	238.4	231.8	5.7	-.3	-.5	-.3	-.6
Finished consumer goods, excluding foods	47.360	223.1	237.8	242.8	23.0	1.8	2.8	2.9	1.9
Other nondurable goods	30.537	245.5	263.9	270.8	29.1	3.8	2.6	3.9	3.2
Durable goods	16.822	193.5	208.7	193.7	13.8	-.5	3.2	1.8	-.4
Capital equipment	28.369	223.9	230.3	231.8	9.5	.7	1.6	.7	.8
Intermediate materials, supplies, and components	100.000	256.3	271.1	273.2	18.8	.8	2.6	1.6	.5
Materials and components for manufacturing	53.867	245.5	259.2	259.8	15.4	-.1	3.1	1.6	- .3
Materials for food manufacturing	3.369	227.8	245.1	239.8	9.2	-2.2	-2.8	3.8	-5.8
Materials for nondurable manufacturing	18.948	233.6	243.3	246.6	18.2	1.4	2.5	1.8	1.8
Materials for durable manufacturing	29.727	284.6	305.9	301.1	15.6	-1.6	5.3	.2	-1.7
Components for manufacturing	11.824	214.8	222.7	223.2	12.4	1.1	1.5	1.7	1.1
Materials and components for construction	16.359	254.8	261.6	265.1	9.9	1.3	.9	1.3	1.1
Processed fuels and lubricants	12.786	416.5	464.5	481.1	35.8	3.6	4.8	4.2	3.1
Manufacturing industries	5.946	353.2	392.2	397.6	29.8	1.5	2.7	5.3	.1
Nonmanufacturing industries	7.462	510.8	579.7	688.9	74.5	5.8	6.4	9.2	6.8
Containers	2.966	243.8	250.8	253.3	18.5	1.8	2.1	.5	-.3
Supplies 3/	14.884	226.4	238.3	239.9	15.4	.7	1.7	2.6	.7
Manufacturing industries 3/	6.558	215.7	222.8	223.3	13.1	.6	2.6	.5	.6
Nonmanufacturing industries	9.526	233.3	247.8	248.7	13.9	.7	.8	4.1	.3
Foods	1.765	226.9	223.5	219.1	-.1	-1.9	-4.5	.8	-3.2
Other supplies 3/	7.823	237.2	248.6	251.6	17.8	1.2	2.1	4.3	1.2
Crude materials for further processing	100.000	268.8	288.3	303.3	9.7	-1.6	-.8	2.6	-2.2
Foodstuffs and feedstuffs	55.365	246.4	252.6	245.9	-.6	-2.7	-3.8	2.2	-2.7
Nonfood materials	44.637	294.9	413.9	412.2	24.3	-.4	2.8	3.2	-1.4
Nonfood materials except fuel 3/	27.838	284.4	341.5	339.4	23.2	-.6	4.8	2.7	-2.3
Manufacturing 3/	25.688	314.9	356.7	352.1	24.1	-.7	5.1	2.8	-2.5
Construction	2.238	219.8	228.3	229.7	13.8	.6	2.2	1.2	.3
Crude fuel 3/ 3/	16.799	617.4	643.5	663.3	26.3	0	-.7	4.1	0
Manufacturing industries 3/	8.294	667.8	724.4	723.5	38.5	-.1	-.9	4.7	-.1
Nonmanufacturing industries 3/	8.505	589.3	627.7	627.9	22.8	0	-.4	3.5	0
Special groupings									
Finished goods, excluding foods	4/ 75.729	222.8	234.3	237.4	17.7	1.3	2.4	2.8	1.5
Intermediate materials less foods and feeds	5/ 96.931	258.1	273.2	275.7	18.7	.9	3.8	1.7	.7
Intermediate foods and feeds	6/ 3.069	225.9	237.1	232.5	6.1	-2.0	-2.7	3.5	-3.0
Crude materials less agricultural products 3/ 3/	7/ 36.537	625.1	648.8	668.4	26.6	-.1	3.8	2.8	-1.8
Finished energy goods	8/ 10.367	536.8	688.6	649.8	82.2	6.8	6.6	7.3	7.2
Finished goods less energy	9/ 89.633	208.8	215.8	216.9	8.5	.5	1.5	.8	.7
Finished goods less foods and energy	9/ 65.383	201.1	209.8	209.8	10.6	.4	2.1	1.8	.5
Finished consumer goods less foods and energy	9/ 57.013	186.9	197.8	198.3	11.5	.3	2.6	1.5	.6
Intermediate energy goods	10/ 13.596	399.7	446.2	462.1	55.2	3.6	4.7	4.5	3.1
Intermediate materials less food and energy	11/ 81.335	246.1	256 8	257.2	13.9	.5	2.8	1.1	.3
Crude energy materials 3/ 3/	12/ 28.693	338.0	398 8	394.1	37.0	-.6	2.6	6.4	-.6
Crude nonfood materials less energy 3/	13/ 15.974	254.5	284.0	278.8	6.8	-2.1	2.6	6.4	-6.9

1/ Comprehensive relative importance figures are computed once each year in December.
2/ Data for Nov. 1979 have been revised to reflect the availability of late reports and corrections by respondents. All data are subject to revision 4 months after original publication.
3/ Not seasonally adjusted.
4/ Includes crude petroleum.
5/ Excludes crude petroleum.
6/ Percent of total finished goods.
7/ Percent of total intermediate materials.
8/ Formerly titled crude materials for further processing, excluding crude foodstuffs and foodstuffs, plant and animal fibers, oilseeds, and leaf tobacco.
9/ Percent of total crude materials.

Table 2. Producer price indexes and percent changes for selected commodity groupings by stage of processing
(1967=100 unless otherwise indicated)

Commodity code	Grouping	Relative importance Dec 1979 1/	Unadjusted index Feb 1980 2/	Unadjusted index Mar 1980 2/	Unadjusted percent change to Mar. 1980 from: Mar 1979	Unadjusted percent change to Mar. 1980 from: Feb. 1980	Seasonally adjusted percent change from: Dec to Jan.	Seasonally adjusted percent change from: Jan. to Feb.	Seasonally adjusted percent change from: Feb. to Mar
	FINISHED GOODS	100.000	235.4	238.2	13.9	1.2	1.6	1.5	1.4
	FINISHED CONSUMER GOODS	71.631	237.5	240.6	15.7	1.4	1.6	1.8	1.6
	FINISHED CONSUMER FOODS	24.271	231.6	233.0	3.8	.6	-.8	-.5	1.1
01-11	Fresh fruits	.434	242.2	237.5	1.6	-1.9	-1.8	7.7	-3.6
01-13	Fresh and dried vegetables	.418	182.6	182.6	-13.3	0	-6.5	-10.6	7.2
01-7	Eggs	.510	150.4	184.2	-7.9	22.5	-9.9	-11.2	24.8
02-11	Bakery products	2.142	241.5	242.5	13.0	.4	1.6	1.3	.5
02-12-02	Flour base mixes and doughs	.196	212.1	216.4	9.9	2.0	1.2	.6	2.4
02-13	Milled rice	.143	233.0	258.1	58.8	10.8	2.7	6.2	12.2
02-14	Other cereals	.487	242.3	242.3	15.7	0	.3	.5	-.4
02-21-01	Beef and veal	3.554	260.7	260.8	1.9	0	-3.6	2.9	-.3
02-21-04	Pork	1.639	185.5	181.8	-18.9	-2.0	-4.5	-4.4	3.3
02-22	Processed poultry	.806	179.5	174.7	-15.9	-2.7	-1.3	-11.7	-3.0
02-23	Fish	1.165	394.1	400.7	8.9	1.7	.2	.2	2.7
02-3	Dairy products	3.654	221.2	223.3	9.0	.9	1.2	.5	.8
02-4	Processed fruits and vegetables	1.624	223.1	223.6	1.8	.2	.8	.5	.5
02-53-01	Refined sugar, consumer size packages (Dec. 1977 = 100) 3/	.133	178.1	176.6	53.6	-.8	3.4	32.4	-.8
02-55	Confectionery and products (Dec 1977=100) 3/	.895	111.9	113.3	5.7	1.3	0	0	1.3
02-63-01	Roasted coffee	1.062	379.5	378.9	24.5	-.2	-1.6	-2.5	-.8
02-74	Vegetable oil end products	.451	229.2	232.6	8.1	1.5	.8	-.7	.2
02-8	Miscellaneous processed foods 3/	2.418	223.5	224.7	3.3	.5	1.5	-.8	.5
	FINISHED CONSUMER GOODS EXCLUDING FOODS	47.360	237.8	242.0	23.0	1.8	2.8	2.9	1.9
02-61	Alcoholic beverages 3/	1.677	170.0	170.6	8.6	.4	.7	1.1	.4
02-62	Nonalcoholic beverages 3/	1.361	244.5	247.1	10.6	1.1	3.6	1.4	1.1
03-81	Apparel	5.120	167.3	168.3	6.3	.6	1.2	1.5	.7
03-82	Textile housefurnishings	.785	200.0	201.2	7.4	.6	1.3	-.5	.6
04-3	Footwear	1.094	228.1	231.8	10.4	1.6	.2	-.6	1.5
04-41	Luggage and small leather goods	.303	165.3	169.3	7.5	2.4	-1.4	1.3	2.1
05-71	Gasoline	6.630	559.9	604.9	84.1	8.0	5.7	8.3	8.5
05-72-02-01	Kerosene (Feb 1973=100)	.347	605.8	649.6	84.3	7.2	1.7	5.7	7.4
05-73-02-01	Fuel oil No. 2 (Feb 1973=100)	2.485	640.6	676.1	82.2	5.5	2.0	6.7	6.3
05-76	Finished lubricants 3/	.308	288.8	288.8	38.6	0	2.0	4.7	0
06-35	Pharmaceutical preparations, ethical (Prescription) 3/	1.123	148.3	149.7	7.5	.9	1.4	.7	.9
06-36	Pharmaceutical preparations, proprietary (Over-the-counter)	.454	193.8	195.0	10.2	.6	.9	.5	.9
06-71	Soaps and synthetic detergents 3/	.624	210.3	210.6	11.6	.1	2.0	.6	.1
06-75	Cosmetics and other toilet preparations	.886	176.9	178.1	13.3	.7	4.6	0	.3
07-12	Tires and tubes	.700	231.2	231.2	18.6	0	1.4	4.5	-.8
07-13-01	Rubber footwear	.201	207.0	207.0	2.5	0	-.2	.1	.4
07-27	Disposable plastic dinnerware and tableware (June 1978=100) 3/	.190	129.9	130.1	20.1	.2	0	1.0	.2
07-28	Consumer and commercial plastics, not elsewhere classified (June 1978=100) 3/	.354	112.3	112.4	9.8	.1	1.6	.2	.1
09-15-01	Sanitary papers and health products 3/	1.003	306.6	314.3	15.9	2.5	1.6	3.3	2.5
12-1	Household furniture 3/	1.601	196.5	196.9	8.3	.2	.5	.9	.4
12-3	Floor coverings	.685	159.4	160.7	11.6	.8	3.6	-.2	1.0
12-4	Household appliances	1.623	168.7	169.7	6.9	.6	.7	1.1	.5
12-5	Home electronic equipment 3/	.780	88.7	88.8	-3.6	.1	.5	.2	.1
12-6	Other household durable goods	.879	284.2	287.6	32.0	1.2	10.4	.9	1.6
14-11-01	Passenger cars	5.705	182.2	182.4	7.0	.1	2.0	-.4	.6
15-1	Toys, sporting goods, small arms, etc.	1.158	193.2	194.2	13.2	.5	2.4	1.2	.6
15-2	Tobacco products 3/	1.459	236.9	237.1	10.8	.1	4.4	.3	.1
15-51	Mobile homes 3/	.922	146.0	146.6	9.6	.4	.4	1.2	.4
15-61-01	Electronic hearing aids (June 1978=100) 3/	.014	104.6	107.4	4.8	2.7	-.2	.4	2.7
15-94-02	Jewelry, platinum & karat gold (Dec 1978=100) 3/	1.066	237.9	211.7	93.9	-11.0	22.5	16.6	-11.0
15-94-04	Costume jewelry (Dec. 1978=100) 3/	.389	107.5	106.6	4.8	-.8	.1	1.1	-.8
	CAPITAL EQUIPMENT	28.369	230.3	231.8	9.5	.7	1.4	.7	.8
10-42	Hand tools	.308	263.1	264.8	10.3	.6	1.2	.3	.8
11-1	Agricultural machinery and equipment	1.198	249.1	250.4	11.4	.5	2.0	.7	.7
11-2	Construction machinery and equipment 3/	1.719	277.5	278.4	11.9	.3	2.7	.8	.3
11-32	Power driven hand tools 3/	.197	183.5	184.5	8.3	.5	1.6	.2	.5
11-34	Industrial process furnaces and ovens 3/	.162	277.1	281.2	11.9	1.5	1.7	.7	1.5
11-37	Metal cutting machine tools 3/	.505	295.8	300.6	18.4	1.6	1.4	1.2	1.6
11-38	Metal forming machine tools	.253	333.6	336.1	16.3	.7	3.5	1.3	1.0
11-41	Pumps, compressors, and equipment	.407	266.1	277.0	13.8	4.1	2.1	.6	4.2
11-44	Industrial material handling equipment 3/	.794	245.5	246.7	9.9	.5	.5	1.5	.5
11-46	Scales and balances 3/	.046	199.9	202.0	6.7	1.1	1.6	.5	1.1
11-47	Fans and blowers except portable	.140	283.9	284.0	11.4	0	.5	.7	.1
11-48-02	Unitary air conditioners (Dec 1977=100) 3/	.333	118.0	118.0	8.0	0	1.5	1.3	0
11-6	Special industry machinery and equipment 3/	2.787	262.9	265.6	11.1	1.0	1.8	.8	1.0
11-72	Integrating and measuring instruments	.383	179.8	180.3	6.7	.3	.1	2.6	.4
11-73-02	Generators and generator sets 3/	.478	272.9	280.3	19.3	2.7	3.6	6.3	2.7
11-74	Transformers and power regulators 3/	.539	173.6	175.0	7.0	.8	1.1	1.9	.8
11-91	Oilfield machinery and tools 3/	.476	314.2	317.5	13.3	1.0	2.1	.6	1.0
11-92	Mining machinery and equipment	.183	289.7	290.4	8.9	.2	1.9	.5	.4
11-93	Office and store machines and equipment 3/	1.794	138.8	139.5	6.1	.5	1.7	.3	.5
12-2	Commercial furniture 3/	1.112	230.1	232.8	5.2	1.2	.9	1.3	1.2
14-11-01	Passenger cars	3.648	182.2	182.4	7.0	.1	2.0	-.4	.6
14-11-02	Motor trucks	3.468	222.1	222.1	6.9	0	1.1	.2	.5
14-21-11	Fixed wing, utility aircraft (Dec. 1968=100)	1.641	230.5	230.5	9.2	0	3.7	.5	.4
14-4	Railroad equipment 3/	.474	299.3	301.3	12.0	.7	2.1	1.5	.7
15-41	Photographic equipment	.466	122.4	122.5	6.3	.1	.5	1.9	.1
15-71-04	Guards, mechanical power press (June 1978=100) 3/	.022	111.9	111.9	5.7	0	.6	1.7	0

See footnotes at end of table.

Table 2. Producer price indexes and percent changes for selected commodity groupings by stage of processing — Continued

(1967=100 unless otherwise indicated)

Commodity code	Grouping	Relative importance Dec. 1979 1/	Unadjusted index Feb. 1980 2/	Unadjusted index Mar 1980 2/	Unadjusted percent change to Mar 1980 from: Mar. 1979	Unadjusted percent change to Mar 1980 from: Feb. 1980	Seasonally adjusted percent change from: Dec. to Jan.	Seasonally adjusted percent change from: Jan. to Feb	Seasonally adjusted percent change from: Feb. to Mar.
	INTERMEDIATE MATERIALS, SUPPLIES, AND COMPONENTS	100.000	271.1	273.2	18.0	0.8	2.8	1.8	0.5
	INTERMEDIATE FOODS AND FEEDS	5.069	237.1	232.3	6.1	-2.0	-2.7	5.5	-3.0
02-12-01	Flour	.273	188.1	185.0	17.1	-2.7	-2.1	2.8	-4.3
02-53-02	Refined sugar, for use in food manufacturing (Dec. 1977=100) 3/	.674	182.2	166.3	45.4	-8.7	-2.3	39.1	-8.7
02-54	Confectionery materials (Dec. 1977=100) 3/	.234	127.3	136.0	16.2	6.8	-2.2	1.9	6.8
02-71	Animal fats and oils	.069	272.7	271.8	-14.8	-.3	4.9	-4.6	-3.2
02-72	Crude vegetable oils	.312	206.3	195.5	-18.7	-5.2	-10.0	-.5	-11.0
02-73	Refined vegetable oils 3/	.077	186.0	168.1	-30.1	-9.6	-9.4	5.6	-9.6
02-9	Manufactured animal feeds	1.705	219.8	216.8	5	-1.4	-4.4	2.0	-.9
	INTERMEDIATE MATERIALS LESS FOODS AND FEEDS	94.931	273.2	275.7	18.7	.9	3.0	1.7	.7
03-1	Synthetic fibers (Dec 1975=100)	.796	127.1	129.4	13.9	1.8	1.4	-.1	2.0
03-2	Processed yarns and threads (Dec. 1975=100)	.891	117.3	118.9	11.1	1.4	1.3	2.2	.6
03-3	Gray fabrics (Dec. 1975=100) 3/	1.069	131.7	133.7	8.6	1.5	-.2	-.4	1.5
03-4	Finished fabrics (Dec. 1975=100)	1.780	110.8	113.1	7.3	2.1	2.3	.4	1.3
04-2	Leather	.319	340.3	311.0	-16.4	-8.6	4.6	-3.6	-10.0
05-2	Coke	.155	430.6	430.6	.5	0	-.5	-1.3	.3
05-32	Liquefied petroleum gas 3/	.975	644.9	648.6	107.0	.6	6.5	7.8	.6
05-4	Electric power	4.864	299.5	305.7	18.8	2.1	1.3	2.3	.9
05-72-03-01	Commercial jet fuel (Feb 1973=100) 3/	1.142	652.6	704.0	102.9	7.9	4.4	5.4	7.9
05-73-03-01	Diesel fuel (Feb. 1973=100) 3/	1.408	638.8	672.6	90.1	5.3	3.3	7.4	5.3
05-74	Residual fuel	1.976	965.3	974.8	75.0	1.0	12.7	1.6	.3
05-75	Lubricating oil materials 3/	.521	695.5	695.5	81.8	0	2.5	8.2	0
06-1	Industrial chemicals 3/	4.751	306.7	310.7	29.6	1.3	3.8	1.4	1.3
06-21	Prepared paint 3/	.676	223.3	223.3	18.4	0	6.0	0	0
06-22	Paint materials	.771	262.7	266.2	17.3	1.3	2.0	1.8	.2
06-31	Drugs and pharmaceutical materials 3/	[illegible]	198.9	198.9	5.5	0	.4	.7	0
06-4	Fats and oils, inedible	.331	302.2	299.9	-24.7	-.8	1.0	-11.6	-5.8
06-51	Mixed fertilizers	.285	232.9	239.4	26.1	2.8	3.0	1.2	2.8
06-52-01	Nitrogenates 3/	.303	185.6	192.9	28.2	3.9	2.5	4.8	3.9
06-52-02	Phosphates 3/	.387	250.6	265.2	38.1	5.8	3.1	2.8	5.8
06-53	Pesticides 3/	.312	345.3	375.3	8.4	8.7	0	0	8.7
06-6	Plastic resins and materials	1.475	271.1	273.9	29.9	1.0	2.8	1.9	.4
06-79	Miscellaneous chemical products 3/	1.064	233.7	240.8	18.0	3.0	3.8	1.8	3.0
07-11-02	Synthetic rubber	.314	240.6	240.7	25.8	0	5.0	.8	.3
07-12	Tires and tubes	.789	231.2	231.2	18.6	0	1.4	4.5	-.8
07-13-04	Other miscellaneous rubber products	.559	219.9	223.0	15.1	1.4	.6	1.2	1.0
07-21	Plastic construction products (Dec 1969=100)	.291	150.0	150.0	4.1	0	.8	-.1	0
07-22	Unsupported plastic film and sheeting (Dec. 1970=100)	.574	183.8	185.9	11.7	1.1	.9	-1.1	1.1
07-23	Laminated plastic sheets (Dec. 1970=100)	.152	170.3	171.4	11.6	.6	1.2	2.2	.5
07-24	Foamed plastic products (June 1978=100) 3/	.197	118.8	119.1	11.7	.3	1.4	0	.3
07-25	Plastic packaging and shipping products (June 1978=100) 3/	.364	121.8	122.8	18.0	.8	.5	1.4	.8
07-26	Plastic parts and components for manufacturing (June 1978=100) 3/	.703	117.7	123.8	13.2	5.2	1.6	-.2	5.2
08-1	Lumber	2.779	341.5	340.6	-2.8	-.3	-1.8	.7	-1.5
08-2	Millwork	1.379	258.0	264.7	2.7	2.6	1.0	.1	1.0
08-3	Plywood	.873	243.7	240.0	-5.8	-1.5	-1.7	2.3	-.3
08-4	Other wood products	.202	243.4	243.1	4.7	-.1	.7	-.6	-.5
09-11	Woodpulp	.885	358.5	359.0	22.0	.1	5.5	-.1	.3
09-13	Paper	2.327	247.5	250.5	12.2	1.2	.6	.8	1.0
09-14	Paperboard	1.002	223.4	225.9	17.1	1.1	3.5	.7	.6
09-15-03	Paper boxes and containers	2.083	217.0	218.1	13.8	.5	4.7	-.1	.5
09-2	Building paper and board	.346	191.1	198.7	8.8	4.0	.8	2.6	3.7
10-13-01	Semifinished steel mill products	.385	318.9	318.9	12.4	0	6.4	-.4	-.1
10-13-02	Finished steel mill products	6.199	292.6	294.1	8.2	.5	.1	.4	.6
10-15	Foundry and forge shop products	1.063	302.2	303.5	12.6	.4	.9	2.1	-.1
10-16	Pig iron and ferroalloys	.311	308.1	308.1	9.6	0	.2	-.1	.7
10-22	Primary nonferrous metal refinery shapes	2.786	448.0	400.9	49.3	-10.7	26.7	-2.3	-12.0
10-24	Secondary nonferrous metal and alloy basic shapes	.498	318.3	316.8	19.8	-.5	2.0	5.8	-1.4
10-25	Nonferrous mill shapes	1.924	299.4	294.5	15.1	-1.6	.7	3.3	-2.3
10-26	Nonferrous wire and cable	.851	229.2	237.4	31.7	3.6	2.4	8.3	2.9
10-28-01	Zinc castings (June 1977=100) 3/	.139	111.0	112.2	6.0	1.1	.2	0	1.1
10-3	Metal containers	1.895	283.3	287.8	8.8	1.6	1.6	-.5	-.5
10-41	Hardware 3/	.693	216.9	217.9	6.4	.5	.4	.3	.5
10-5	Plumbing fixtures and brass fittings	.337	236.6	242.4	15.6	2.5	1.8	2.3	2.4
10-6	Heating equipment 3/	.376	199.9	202.0	10.1	1.1	1.1	1.3	1.1
10-7	Fabricated structural metal products	3.198	259.5	262.9	9.0	1.3	0	.2	1.3
10-8	Miscellaneous metal products	3.515	242.5	245.1	8.8	1.1	.9	.6	1.1
11-11-51	Tractor parts 3/	.134	177.3	177.3	9.6	0	.9	1.3	0
11-12-51	Parts for farm machinery ex. tractors	.164	202.0	202.1	10.4	0	1.0	1.0	.4
11-28-51	Parts for nonfarm tractors	.296	242.8	242.8	14.5	0	4.5	1.2	.5
11-33-03	Arc welding electrodes	.112	284.8	284.8	10.9	0	1.1	2.6	.2
11-35	Cutting tools and accessories 3/	.401	221.7	223.3	11.1	.7	1.2	.7	.7
11-36	Abrasive products 3/	.336	240.2	242.7	11.7	1.0	1.2	1.6	1.0

See footnotes at end of table.

Table 2. Producer price indexes and percent changes for selected commodity groupings by stage of processing – Continued

(1967=100 unless otherwise indicated)

Commodity code	Grouping	Relative importance Dec. 1979 1/	Unadjusted index Feb 1980 2/	Unadjusted index Mar 1980 2/	Unadjusted 1 percent change to Mar 1980 from Mar 1979	Unadjusted 1 percent change to Mar 1980 from Feb 1980	Seasonally adjusted percent change from Dec to Jan	Seasonally adjusted percent change from Jan to Feb	Seasonally adjusted percent change from Feb to Mar
	INTERMEDIATE MATERIALS, ETC - Continued								
11-37-51	Parts for metal cutting machine tools 1/	.142	280.9	282.8	24.7	0.7	0.9	2.6	0.7
11-38-51	Parts for metal forming machine tools	.093	272.6	273.2	18.9	.3	4.9	2.6	1.2
11-42	Elevators and escalators	.108	225.4	228.8	7.2	1.5	.9	.8	1.8
11-43	Fluid power equipment 1/	.314	191.1	192.1	11.4	.5	1.8	2.6	.5
11-45	Mechanical power transmission equipment	.468	251.3	253.4	11.3	.8	1.5	1.1	1.1
11-47	Fans and blowers except portable	.109	283.9	284.8	11.4	.3	.5	.7	.1
11-48-04	Refrigerant compressors and compressor units (Dec. 1977=100) 1/	.352	116.5	122.1	10.8	4.8	.8	.8	4.8
11-49-01	Valves and fittings	.576	274.5	278.1	11.2	1.3	1.8	.7	1.3
11-49-05	Ball and roller bearings	.257	244.0	250.4	13.5	2.6	2.4	.9	2.8
11-49-06	Plain bearings	.024	247.1	246.3	11.3	- .3	3.6	2.6	-1.4
11-71	Wiring devices	.518	258.8	259.4	9.8	.6	- .2	.8	- .1
11-73-01	Electric motors	.587	244.8	245.1	10.3	.1	3.3	.8	.9
11-75	Switchgear, switchboard, etc. equipment	.597	221.9	226.7	17.0	2.2	3.7	3.4	2.5
11-77	Electric lamps/bulbs 1/	.270	245.4	244.8	10.5	- .2	3.6	1.4	.1
11-78	Electronic components and accessories 1/	1.886	149.6	150.2	14.3	.4	3.8	2.5	.4
11-82-33-81	Parts for mining machinery and equipment	.095	280.2	280.2	7.4	0	1.1	1.3	.6
11-84	Internal combustion engines	.798	254.9	257.8	13.0	1.5	1.2	.9	1.7
13-11	Flat glass 1/	.565	190.9	191.4	4.5	.3	2.4	0	.3
13-22-81-31	Portland cement	.562	383.2	383.2	8.1	0	2.5	.4	.4
13-3	Concrete products	1.784	266.2	268.6	13.8	.9	2.7	.5	1.3
13-4	Structural clay products, ex refractories 1/	.235	233.1	231.5	8.8	- .2	1.2	.7	.2
13-5	Refractories	.207	231.9	234.6	11.6	1.2	.4	1.6	1.9
13-6	Asphalt roofing	.339	372.3	387.6	27.9	4.1	5.7	5.3	3.7
13-7	Gypsum products	.193	262.2	267.6	6.6	2.1	- .2	2.3	2.3
13-8	Glass containers	.626	274.6	274.6	9.5	0	.9	0	.8
13-9	Other nonmetallic minerals	1.043	374.3	386.9	31.4	3.4	1.6	5.9	3.3
14-12	Motor vehicle parts	3.735	239.0	242.1	10.8	1.3	.8	1.0	1.3
15-3	Nations 1/	.173	203.2	207.2	8.9	2.0	3.1	.8	2.0
15-42	Photographic supplies 1/	.602	294.4	295.6	14.5	.4	1.4	51.1	.4
15-71-01	Respiratory protective equipment(June 1978=100) 1/	.014	116.7	116.7	10.7	0	1.9	1.3	0
15-71-02	Eye and face protective equipment (June 1978=100) 1/	.023	111.9	112.8	8.7	.8	1.6	1	.8
15-71-05 15-94-05	Protective clothing (June 1978=100) 1/ Jewelers' materials and findings (Dec. 1978=100) 1/	.013	122.5	124.4	11.6	1.6	.6	.8	1.6
	CRUDE MATERIALS FOR FURTHER PROCESSING	100.000	308.3	303.3	9.7	-1.6	-.9	2.6	-2.2
	CRUDE FOODSTUFFS AND FEEDSTUFFS	55.363	252.6	245.9	-.6	-2.7	-3.8	2.2	-2.7
01-1	Fresh and dried fruits and vegetables	2.130	228.5	218.3	-7.4	-1.8	-5.8	-4.2	4.3
01-2	Grains 1/	10.833	223.3	217.9	13.5	-2.4	-5.8	4.1	-2.4
01-3	Livestock	23.123	257.2	251.8	-8.7	-2.1	-2.9	1.5	-2.1
01-4	Live poultry	2.284	184.6	180.1	-17.2	-2.4	3.3	-13.7	-1.6
01-6	Fluid milk	8.628	243.6	243.1	8.8	-.3	.2	1.3	1.2
01-8	Hay, hayseeds, oilseeds 1/	3.877	224.7	215.9	-13.5	-3.9	-5.3	3.6	-3.9
01-91-81	Green coffee 1/	2.355	441.2	443.9	43.7	6.9	-10.2	1.7	6.9
01-91-82	Cocoa beans	.411	608.8	553.8	-8.7	-7.8	5.8	8.4	-9.3
02-52-81-81	Cane sugar, raw 1/	1.647	373.9	275.2	41.8	-26.4	4.9	43.9	-26.4
	CRUDE NONFOOD MATERIALS	44.637	413.9	412.2	24.3	-.4	2.8	5.2	-1.4
01-5	Plant and animal fibers 1/	1.861	269.5	254.9	28.9	-5.4	7.7	12.8	-5.4
01-92-81-81	Leaf tobacco	1.568	214.8	217.7	7.5	1.4	8	.3	2.3
04-1	Hides and skins	.738	404.8	348.7	-45.5	-13.9	8	-12.6	-15.5
05-1	Coal	5.148	458.7	468.7	3.5	.4	.2	.6	1.0
05-31	Natural gas 1/	12.703	778.8	777.1	35.2	- .2	-1.8	9.6	- .2
05-61	Crude petroleum 1/	18.841	515.1	522.8	61.3	1.5	9.1	.3	1.5
06-52-03	Potash	.187	217.3	230.6	17.4	6.1	6.7	-4.6	5.8
07-11-01	Crude natural rubber	.358	405.8	351.8	21.6	-13.3	8.9	14.4	-14.4
09-12	Wastepaper	.723	223.2	224.9	18.7	.8	6.3	-1.5	+2.6
10-11	Iron ore 1/	.657	236.8	236.8	16.8	0	0	4.8	0
10-12	Iron and steel scrap	3.042	365.7	367.8	-8.7	.6	-3.1	.8	+3.5
10-23	Nonferrous scrap	2.788	351.6	339.4	34.0	-3.5	8.6	9.8	-7.5
13-21	Sand, gravel, and crushed stone	2.413	228.4	229.8	13.8	.6	2.3	1.2	.3

1/ Comprehensive relative importance figures are computed once each year in December. Data shown are expressed as a percent of total finished goods, total intermediate materials, or total crude materials. Data shown will not add up to 100.000 because not all commodity components of each stage-of-processing (SOP) index are shown. Relative importance figures shown account for about 87 percent of total finished goods, about 89 percent of total intermediate materials, and about 98 percent of total crude materials. For each commodity component of the Finished Goods Index which is allocated to both capital equipment and finished consumer goods excluding foods, the relative importance figure shown reflects only the share allocated to the SOP grouping under which it is listed. For example, the relative importance figure shown for household furniture under the SOP grouping for finished consumer goods excluding foods includes the share allocated to that SOP grouping but not the share allocated to capital equipment.

2/ All data are subject to revision 4 months after original publication.

3/ Not seasonally adjusted

4/ Not available.

Table 3. Producer price indexes for selected commodity groupings[1]

(1967=100)

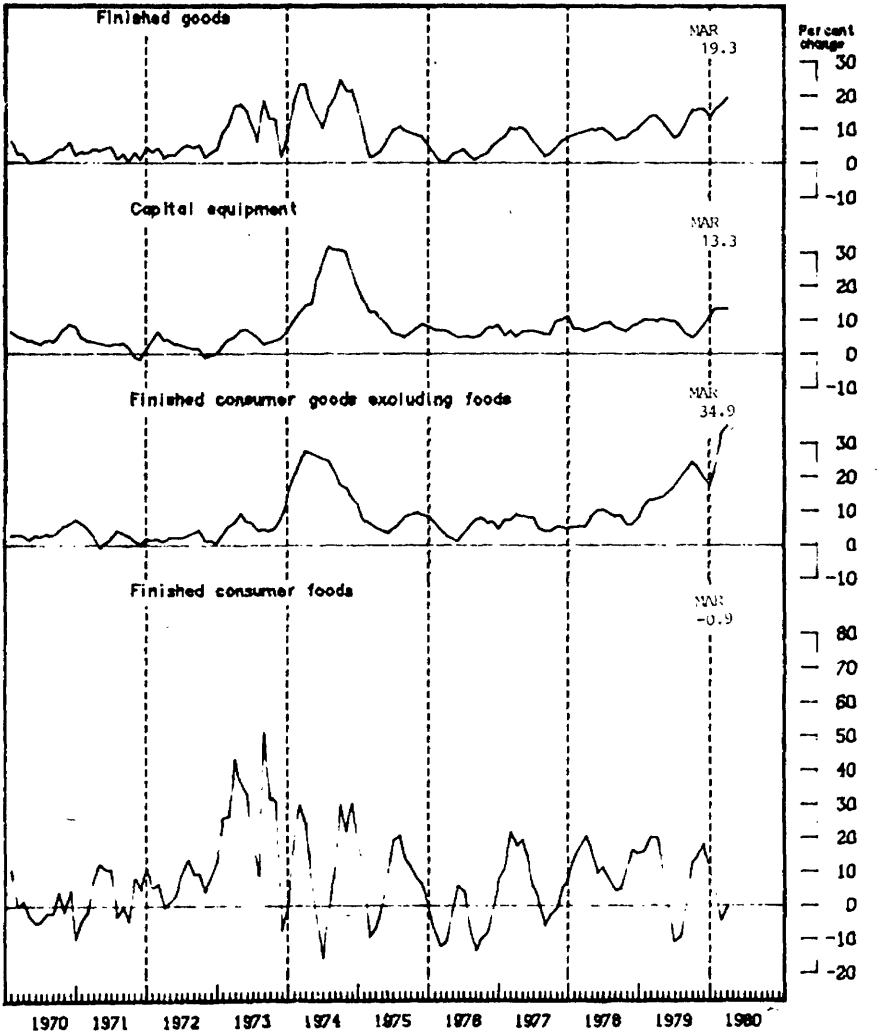
Grouping		Unadjusted index	
		Nov. 1979 2/	March 1980 2/
All Commodities		247.2	251.5
All Commodities (1957-59=100)		262.3	277.5
MAJOR COMMODITY GROUPS			
Farm products and processed foods and feeds		232.3	234.9
Farm products		240.2	239.3
Processed foods and feeds		227.1	231.5
Industrial commodities		250.6	268.2
Textile products and apparel		172.8	178.9
Hides, skins, leather, and related products		248.9	246.8
Fuels and related products and power 3/		476.9	553.5
Chemicals and allied products 3/		236.0	251.6
Rubber and plastic products		204.9	212.7
Lumber and wood products		298.9	295.7
Pulp, paper, and allied products		229.5	241.6
Metals and metal products		271.1	286.3
Machinery and equipment		221.3	231.9
Furniture and household durables		176.4	184.6
Nonmetallic mineral products		257.4	276.1
Transportation equipment (Dec. 1968=100)		194.8	198.8
Miscellaneous products		221.4	256.2
Industrial commodities less fuels and related products and power		226.9	238.4
OTHER COMMODITY GROUPINGS			
01-9	Other farm products	318.3	311.5
02-1	Cereal and bakery products	222.5	231.3
02-2	Meats, poultry, and fish	239.3	239.2
02-5	Sugar and confectionery	222.9	263.6
02-6	Beverages and beverage materials	221.2	226.0
02-63	Packaged beverage materials	368.0	353.1
02-7	Fats and oils	241.9	222.4
04-4	Other leather and related products	208.4	217.9
05-3	Gas fuels 3/	637.0	720.3
05-7	Refined petroleum products 3/	545.4	657.9
06-3	Drugs and pharmaceuticals	163.0	168.9
06-5	Agricultural chemicals and products	229.5	256.0
06-7	Other chemicals and allied products	198.8	214.5
07-1	Rubber and rubber products	223.7	232.3
07-11	Crude rubber	237.2	254.9
07-13	Miscellaneous rubber products	217.1	223.4
09-1	Pulp, paper, and products, excluding building paper and board	231.1	243.1
09-15	Converted paper and paperboard products	219.0	231.3
10-1	Iron and steel	292.0	301.6
10-13	Steel mill products	288.8	295.6
10-2	Nonferrous metals	284.1	320.9
10-4	Hardware	225.5	230.5
11-3	Metalworking machinery and equipment	252.2	264.1
11-4	General purpose machinery and equipment	244.2	255.7
11-7	Electrical machinery and equipment	184.9	195.9
11-9	Miscellaneous machinery and equipment	214.9	222.7
13-2	Concrete ingredients	249.6	266.0
14-1	Motor vehicles and equipment	197.4	200.8
15-4	Photographic equipment and supplies	161.2	219.4
15-9	Other miscellaneous products	293.3	352.3

1/ Indexes for these commodity groupings are not included in Table 2 because their components are divided among different stages of processing.

2/ Data for Nov. 1979 have been revised to reflect the availability of late reports and corrections by respondents. All data are subject to revision 4 months after original publication.

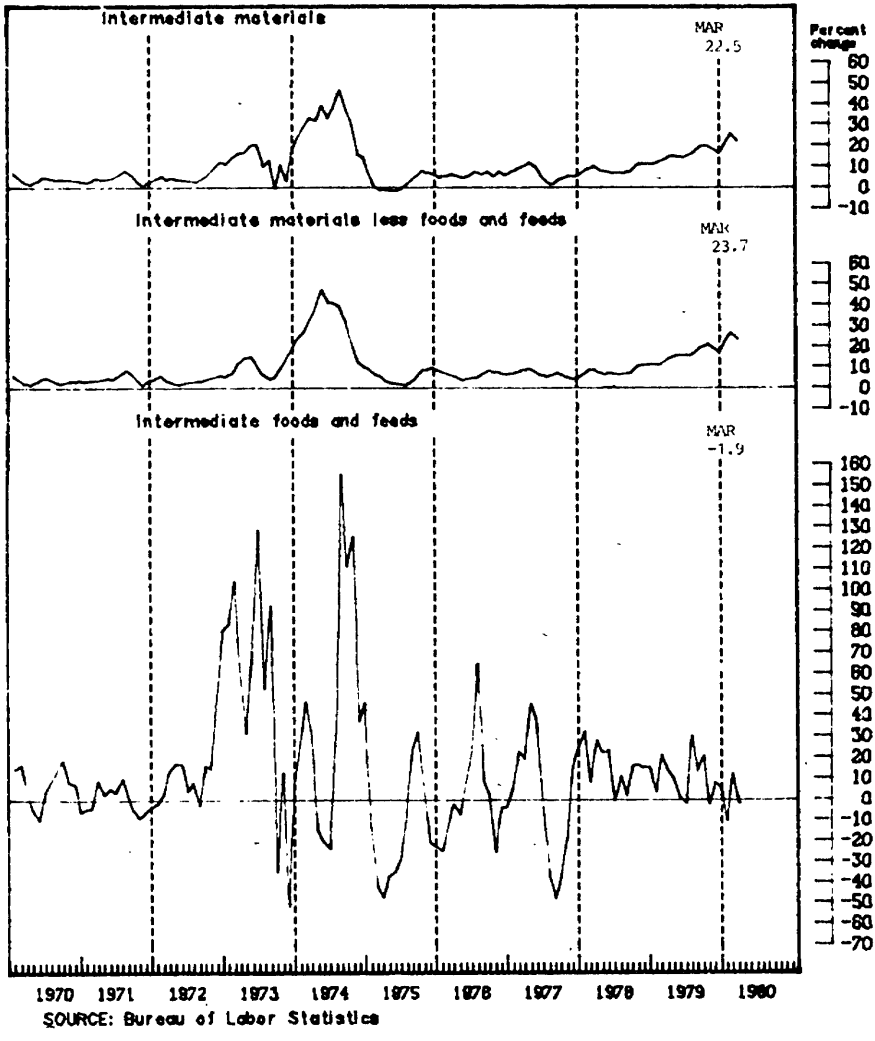
3/ Prices of some items in this grouping are lagged 1 month.

Chart 1
Finished Goods Price Index and its components
1970 – 80
3-month annual rates of change
(Seasonally adjusted)



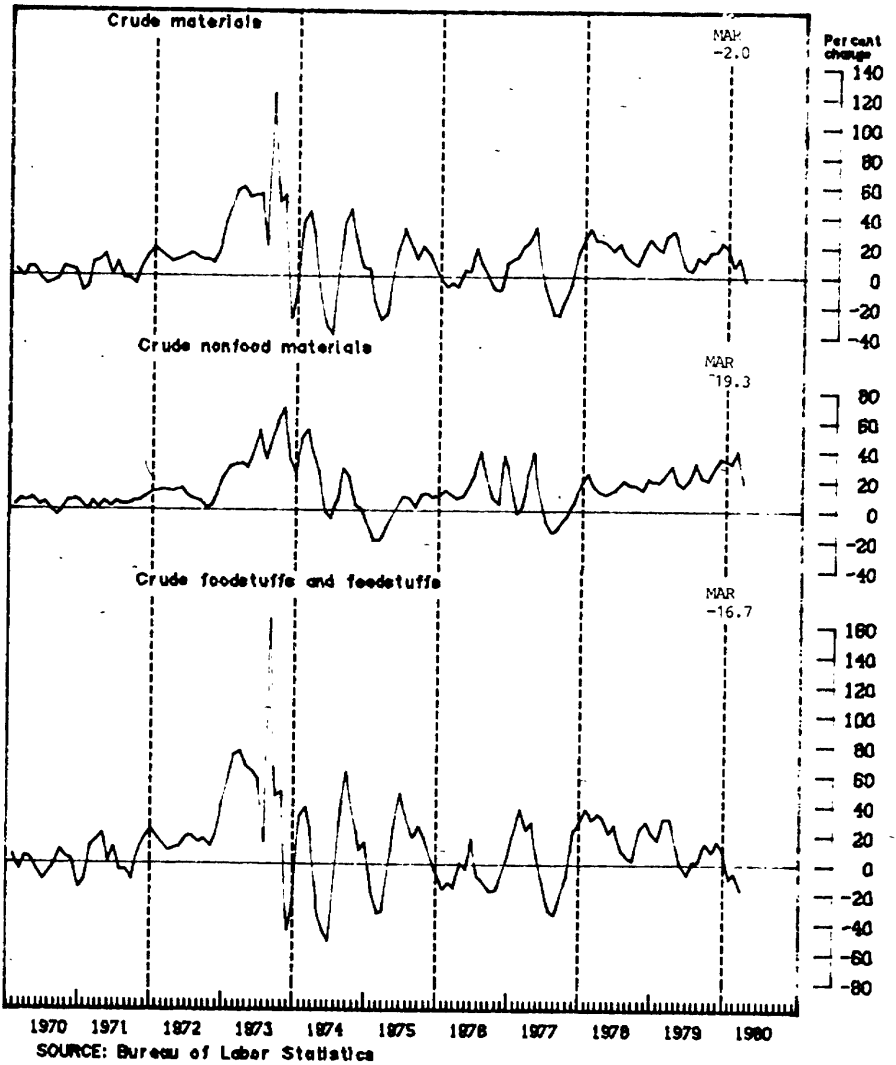
SOURCE: Bureau of Labor Statistics

Chart 2
Intermediate Materials Price Index and its components
1970 – 80
3-month annual rates of change
(Seasonally adjusted)



SOURCE: Bureau of Labor Statistics

Chart 3
Crude Materials Price Index and its components.
1970 – 80
3-month annual rates of change
(Seasonally adjusted)



SOURCE: Bureau of Labor Statistics

Representative BOLLING. I'm not sure that there are many questions to be asked. But I do have a few.

One is, I guess I start out with one that I suppose is a little bit—not unfair, but a little bit difficult. Everybody has been predicting for months, or almost everybody, that we were going to go into a recession and the recession had not appeared. Then there was a spate of at least some people saying that probably we wouldn't have anything except a very mild recession, if any recession at all.

I wonder if these employment figures are significant enough to make it possible to have any judgment that a recession is not far off?

Ms. NORWOOD. I don't think that one can make any judgment about a recession from these figures alone. I think we can say that the first quarter of 1980 showed a clear deterioration after the relative stability that we have had for some 18 months before. I think that the major change in March, of course, was focused primarily in the construction industry. A recession, as you know, Congressman Bolling, is defined generally as being very widespread. We don't have any indication of that yet.

I would say that it is too soon to say. But I have been one of those people who for many, many months has been saying that.

Representative BOLLING. Do you have any idea what occurred to make us all wrong in terms of our suggestions that a recession was going to come earlier? I know that I keep wondering what happened, and I suppose you do, too, along with everybody else, what strength in the economy did we miss?

Ms. NORWOOD. I think everyone underestimated the strong employment growth. I think everyone underestimated the effect of inflationary expectations on the services sector. I think people underestimated the willingness of families to extend their credit. And I think that perhaps some of the problem may have been that most of the forecasts that are made by economists are based upon evidence from the past, and we have had during the decade of the 1970's some very radical social changes.

The number of two-earner families, for example, makes a very important difference, it seems to me. And I think that people's attitudes about what might be happening to the economy have had an effect on their behavior generally.

Representative BOLLING. I notice your comment and even emphasis on the fact that an unusually high percentage of families headed by females have no earner at all. I think that is significant and something to be remembered when we discuss the hardship that results from even a relatively slight recession.

It seems to me that people tend to—not you, of course, but people tend to take refuge in generalizations to avoid the fact of very severe social pain which results from even a relatively mild recession among certain groups.

Ms. NORWOOD. One of the difficulties, obviously, as you so well point out, is that people tend to look at aggregate numbers and don't look below them. I think that is true. When one looks at the effect that inflation may have on various groups of the population, when one looks at the effect that unemployment may have, one sees that different families and different people may be affected in different ways. And that's one of the reasons that we have worked so hard in the

Bureau of Labor Statistics to try to develop a new data base which will permit us to tabulate all of our employment and earnings information which we are now collecting on a quarterly basis in terms of the individuals and the families in which they live.

I think that will give us greater insight into social issues.

Representative BOLLING. It also might give us greater clarity on what we're doing. We might have a better understanding that equality of cuts does not turn out to be equality in treatment.

Do the drops in average hours worked which occurred in construction and nearly all manufacturing industries suggest that a turning point is developing, that unemployment will soon grow much worse?

Ms. NORWOOD. The information on hours is considered a leading indicator. But I think it is significant that the decline in hours was so pervasive in the goods producing sector and that the construction workweek declined by 1.2 hours.

Representative BOLLING. Tell me, how clear is the effect from home-building in the decline in construction? In other words, how does the construction thing divide up?

Ms. NORWOOD. That is very hard to tell from our data. As you know, the Census Bureau information for February showed a significant decline in single-family housing starts, but a rather large increase in multifamily structures. That is a little puzzling. Certainly, the increases in the prime rate and the later increases in mortgage interest rates must be having some effect. This is speculation, of course, on my part.

In the price area, some of the paperboard and a few of the other items seem to show some declines, which one would expect if there were difficulty in the housing market. And yet, some of the other construction materials which are more petroleum-based showed increases this month. So that situation too is somewhat mixed.

Representative BOLLING. Well, there is less flexibility on energy and petroleum prices than there is on some others, is there not? Or does that consistently show up?

Ms. NORWOOD. The difficulties that we have had, of course, have been that energy prices have risen, especially since the middle of 1978, and they have an effect not just at the finished goods level or at the consumer level, but really through the entire manufacturing process. And what we are experiencing is the passthrough of much of that.

Representative BOLLING. Have we ever gotten one of those bubbles passed through before we got another bubble in petroleum? How long do the bubbles float? [Laughter.]

Ms. NORWOOD. That's a little difficult to anticipate. After the oil embargo in 1973 we had a big increase in the first half of 1974 in energy prices. But then relative to other prices at the consumer level energy prices did not continue to go up as much until about the middle of 1978. So there was a period there when prices of energy, especially gasoline, were rising at the consumer level at a rate that was much lower than all the items in the Consumer Price Index.

Representative BOLLING. It's kind of off the subject, but is there any proof in any of the figures that you look at that the price at the pump is having an effect on consumption? Proof?

Ms. NORWOOD. Having stopped this morning to fill up our gas tank, I would say no, sir. I don't know of any. The Energy Department

apparently has some—I have seen some figures that they have published in the newspapers. But I don't have any direct information to give you.

Representative BOLLING. And there isn't any figure or a combination of figures that would lead us to a conclusion that the reason for the seeming relative inflexibility in demand is either the necessity of use or capacity to absorb the increased cost?

The thing that mystifies me is that we really are in a very, very awkward situation to make policy when we don't know the effect of policies after they have been tried for quite a long time. I'm not blaming you. I am blaming us, really, for not doing a better job of insisting on looking. But I don't even know what the things are that you look for, and that is what I'm searching for.

Mr. LAYNG. One thing I read the other day which sort of surprised me was that State government tax receipts on gasoline have declined. It seems to me that would be a good indicator of what is happening to consumption. And there are more and more people talking now about the impact of higher prices on gasoline consumption and more numbers floating around. I heard numbers for 1979 of 5 percent and expectations of 8 or 9 for 1980, and also read one from an oil company that said for every 10-percent increase in price, consumption would go down 1.5 to 2 percent, which is just phenomenal to me, to have people talking about impacts of that large a magnitude, when less than 1 year ago—or about a year ago—we were saying it made no difference what happened to the price of gasoline, consumption would stay the same.

So more and more people are looking at it, and I think part of that reflects the fact that more and more people are doing research in that area. We are doing some ourselves. And there are a great many other people doing research. You may have more analytical work on which to base judgments like that in the next 6 months.

The other thing is that we have not had observations, movements in petroleum prices like this before for consumption to react to. We have many more observations now to try to estimate some of these relationships. Next year you will be a lot better off than you were in the last 5 years with respect to information on the impact of rising prices on consumption.

Ms. NORWOOD. I do think, however, that it is important to note the point that I made earlier about the difference between the rise in gasoline prices in particular and energy after the embargo in 1974, and then between that period and 1978, because at least at that time if people are responding to relative prices, I don't think they were especially worried. That would seem to fit with some of the newspaper reports about shifting models of automobiles.

There was, you recall, after the embargo considerable interest in shifting to automobiles which used less energy. That seemed to begin to change, and for several years, there was not much interest in that shift.

Now, with the very large price increases that we have had since the middle of 1978, there is considerably more interest in it.

Representative BOLLING. I hear—I haven't verified it, but I hear that automobile sales are down very drastically, but that the sale of Cadillacs are down very slightly and the sales of Mercedes are up slightly.

And if that were so, it would be a rather interesting commentary on the mixed nature of the society's response.

Ms. NORWOOD. Of course, the sale of imports is also up. Smaller imports and small cars in general are selling at a premium.

Representative BOLLING. I don't suppose that there was a time when there was a comparable series of events in Europe. I suppose that they always were stuck with relatively high prices, so that we don't have any basis for comparing their experience with increased prices with our own experience.

Ms. NORWOOD. I think that they have had an entirely different situation for years. Prices of energy in European countries have been much higher than they have been here. And over some longer period of time the tax, the national tax on gasoline, has been much higher and has increased considerably more in most European countries than in the United States, where our Federal gasoline taxes increased very little and the State taxes have gone up just slightly.

Representative BOLLING. Well, it is an entirely different situation, and I just wondered if there was anything that we could learn or speed up our learning, because we seem to be having difficulty in understanding what our policies really accomplish.

Now, back to unemployment briefly, and sort of a variation in the standard. Have the increases in unemployment fallen more heavily on certain groups in the labor force, such as blacks?

Ms. NORWOOD. The unemployment rates for blacks, Hispanics, teenagers, and other disadvantaged people are always much higher than for whites. The increase in March, however, was considerable for white men.

This month there was also an increase in unemployment among black females.

Representative BOLLING. But basically, their high relative rate of unemployment continues?

Ms. NORWOOD. Yes.

Representative BOLLING. Nothing happens to change that fundamental set of figures?

Ms. NORWOOD. Well, you know, Congressman, that depends upon the time period at which you look. Certainly over the last year that has happened.

If you go back several years, there has been a decrease in the jobless rates for all people, white and black. So we have had some improvement in this country, without any question, in the employment position of all groups, including the disadvantaged.

Representative BOLLING. Over how long a period? A 10-year period? A 20-year period?

Ms. NORWOOD. Well, I was thinking of a period since the last recession, a period since 1976. The data do show some clear declines, until we reached the sort of plateau that we have been sitting on.

Representative BOLLING. During that plateau it began to go back up? A relative discrepancy—if that's the right word.

Ms. NORWOOD. The relative situation has really not changed much. What has happened is that everything moves, the whole scale moves.

Representative BOLLING. Well, now, if there were any last-hired/first-fired syndrome, that would show up a little bit later. It hasn't shown up yet.

Ms. NORWOOD. That's right, but as you know, we have to be careful about that, because part of the question, really, when there is any kind of significant employment downturn, is where it is occurring; what industries it is occurring in; and what the demographic profile of the labor force of that particular industry is.

And we have to remember that there is a difference in the profile of various industries——

Representative BOLLING. It is no less dangerous to generalize there than anywhere else. Much of the improvement in prices at the intermediate and crude levels resulted from decreases in prices for commodities, whose prices are fairly volatile. These can slow significant reversals from month to month, as you pointed out. These have slowed them.

If you take out the prices of these goods, do you see any trends in prices of any of the three components of the Producer Price Index?

Ms. NORWOOD. Well, we did try yesterday to take out the effects of food and then on intermediate goods, of the gold and silver, and of photographic paper that uses silver. And there was a less marked decline, but there was still a deceleration.

So that it is not entirely those items.

Representative BOLLING. Prices of crude energy materials rose 0.6 percent in March, compared to 2.4 percent in February and 3 percent in January. Do you think this represents a real leveling off of energy prices? Or were there special factors in March that held the increase below our higher trend level?

Mr. LAYNG. There weren't any extremely unusual developments in March. It's true that natural gas prices held down the increases—which had increased a great deal in the previous 2 months.

The other point is that the prices for crude petroleum which are used in computing the Producer Price Index, are only those for domestic crude petroleum and do not include imported crude petroleum.

So we don't really know what is happening to that very significant piece of the market, and the evidence on the other end of the pipe is that they must be going up quite substantially, or something must be happening.

Ms. NORWOOD. We are working on that. We would like very much to produce an index of the prices of imported oil. There are some difficulties in getting the data. We've discussed that with the committee before.

Representative BOLLING. Well, I missed that, and I won't ask you to go over it again.

Foods and feeds fell signnificantly in March, at both the intermediate and crude levels. How will this affect food prices at the consumer level, and when?

Ms. NORWOOD. It is very difficult to know how long it takes, or whether there will be a full passthrough from one stage of processing to another. I just don't think we can speculate about that.

Certainly, we are always encouraged to see reductions in the price increases, at the crude level, and particularly at the intermediate level. The crude index tends to go up and down much more than the other indexes.

Representative BOLLING. What do you consider the reasonable number of months that is necessary to have trend set of figures, before they represent, in fact, a significant, meaningful trend?

Ms. NORWOOD. That is really an extremely interesting question, and one that I have thought a lot about. And I think the answer is that it depends upon the particular series; for example, you'll note that in my statement this month, I emphasized the first quarter of 1980 in the employment situation.

We frequently look at the employment situation over the month and then compare that to the situation over the year. This month my feeling is that it is important to note that we had a considerable period of stability and then we had an increase in unemployment in January and March. February seems to have been an erratic change. Therefore, we should look at the situation over the period of 3 months.

In the price area, we tend to look at certainly the current month, but more importantly, at the 3-month spans compared to previous 3-month spans, or 6 months. It depends in part on what we know is going on.

We also have to look, of course, at all of the other data that are put out by the Government, things like factory orders, housing starts, and things of that sort, in order to be able to determine what is going on. But in general, we try to stay away from 12-monthism.

Representative BOLLING. I'm not really going to get into seasonal adjustment, but I am tempted—years and years ago, I did chair a subcommittee on economic statistics of this committee. And the disease, I think, has always been endemic to be interested in more and more detail, and less and less willing to accept any month as proving much, because there are all kinds of cycles, and I don't need to tell you about that.

And there are also all kinds of revisions that are inevitably involved in figures that are not tentative, but some figures are preliminary, some figures are final but subject to change, and so on and so on. And I think we tend to be a little crude in our handling of those rather delicate figures. And I think they are delicate. And I think they ought to be recognized to be not tentative, precisely, but at a different point of firmness in their life.

They have several particular points in their life. First they are tentative, and they move on. I am not using the professional language because sometimes even it changes.

But it seems to me that we do tend to take too seriously the monthly figures, and not seriously enough the long-range trend figures.

Ms. NORWOOD. Well, I think that is certainly true. I would like to point out that I was pleased to see that in our seasonal adjustment table on the unemployment rate that we attach to the statement, that every single approach brought the same number. That is rather unusual.

I do think that is an important issue, and one which the BLS staff spent a great deal of time discussing yesterday. For example, the weather in January of this year was very much better than the situation last year. And that would have a very big effect on construction.

On the other hand, it is extremely difficult in construction to be sure that, in the preliminary numbers, we are getting all of the births of new establishments in a period of uptrend of employment, and all of the deaths of small establishments, those that are going out of business.

Our analysis, taken together with other data on housing starts, and building permits, gives us a pretty strong feeling that there has been a clear decline in construction employment.

You might take another example, and that is the prices of automobiles. In the past, you will recall the automobile companies used to make a price change once a year—at the introduction of a new model. But about a year or two ago, they announced a different policy—that of announcing price increases throughout the year.

That obviously must have some effect on the seasonal adjustment process, because the seasonal adjustment process goes back over a period of some years.

So we are constantly looking at these things, but all we can give you is our best judgment. That is one of the reasons that we are concerned about seeing a single month's rate annualized and then having headlines saying, "Here is the rate for a full year."

Representative BOLLING. Well, I think we tend to make that—that we at this end of the process tend to make that mistake.

And we tend to make the almost fantastic complexity of the American economy, even within a field—and I suspect that the impacts on construction, generally, have an infinite variation from one end of the spectrum to the other, from the person who builds a very few houses at a time, and is a builder and is very, very subject to the vagaries of weather, and a person at the other end of the process—the corporation that builds substantial structures, which are winterized in a way that certainly is not possible for the man that is building a home.

And you have an entirely different seasonal adjustment factor, because while we have this enormously increased size of the economy, we have probably a geometric increase in the complexity of the components of the economy.

It is not just a simple industry developing. It is complex and extremely difficult to understand variations within industries that we tend to generalize about.

I don't mean that you do, I mean that we do.

Ms. NORWOOD. We try not to.

Representative BOLLING. That, after all, is one of your charges. I guess ours is a little different.

If you have nothing to add—I think that we would be delighted if you have any wisdom to add. We would thank you all very much for being here. And I appreciate the extraordinarily fine quality of the work that you do.

And with that, and our thanks to you at BLS, Ms. Norwood, the committee stands adjourned.

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

EMPLOYMENT-UNEMPLOYMENT

FRIDAY, MAY 2, 1980

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

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

Present: Senator Bentsen.

Also present: John M. Albertine, executive director; Richard F. Kaufman, assistant director-general counsel; Mary E. Eccles and Mayanne Karmin, professional staff members; and Betty Maddox, administrative assistant

OPENING STATEMENT OF SENATOR BENTSEN, CHAIRMAN

Senator BENTSEN. This hearing will come to order.

Commissioner, we are pleased to have you this morning, in spite of the news.

The bottom really dropped out of the labor market last month. In April, after months of false starts and predictions really missed, the recession signaled its arrival with a vengeance. I don't think anybody can question it now.

Some 825,000 Americans were added to the unemployment rolls. As you can see on that chart [indicating] the unemployment rate jumped up to 7 percent. The increase in unemployment—eight-tenths of a percent—was the largest since the recession of 1974–75.

In light of today's figures, a lot of economists will be sharpening their pencils to redo their forecasts.

There's been a lot of talk in recent weeks about the coming recession and how it was going to be shallow, but for the next month at least, I don't think we'll be hearing many predictions about a shallow recession.

I know, Commissioner, you don't like to declare trends on the basis of 1 month's unemployment statistics, but I think that this month, given the depth of the fall, you might agree with me that the recession is here.

Over the past 4 months, in fact—from January through April—the number of Americans out of work has increased by 1.2 million.

Ms. Norwood, we await with interest your report on the state of our country's labor market, so please proceed.

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STATEMENT OF HON. JANET L. NORWOOD, COMMISSIONER, BUREAU OF LABOR STATISTICS, DEPARTMENT OF LABOR, ACCOMPANIED BY W. JOHN LAYNG, ASSISTANT COMMISSIONER, OFFICE OF PRICES AND LIVING CONDITIONS; AND JOHN E. BREGGER, CHIEF, DIVISION OF EMPLOYMENT AND UNEMPLOYMENT ANALYSIS

Ms. NORWOOD. Thank you, sir.

I first would like to introduce John Layng on my right who is an Assistant Commissioner; and John Bregger who heads our division responsible for the unemployment data.

The April figures clearly reflect the marked deterioration in the labor market that many have anticipated. Unemployment rose sharply. Employment, as measured by both major surveys, declined substantially. The average workweek declined further.

The overall unemployment rate was 7 percent, up from 6.2 percent in March, and the number of unemployed persons increased to 7.3 million. Over the past 4 months, the number of jobless workers has risen by approximately 1.2 million. Unemployment among adult men in April increased a full percentage point to 5.9 percent. Unemployment among adult women increased from 5.7 percent in March to 6.3 percent in April. Teenage unemployment, however, remained essentially unchanged.

Following the March employment decline which we reported last month, total employment—as measured by the household survey—fell by 500,000 in April. Most of these declines took place among adult men. Blue-collar workers bore the brunt of the 2-month employment cutback. For factory workers, the unemployment rate was up almost 1.5 percentage points to 7.9 percent.

Senator BENTSEN. Let me understand this. I will interrupt you from time to time if I may because I don't have any other members here. You said blue-collar workers were the ones that bore the brunt of it?

Ms. NORWOOD. That's right.

Senator BENTSEN. Isn't it traditional that when things begin to slow down in the economy, employers generally lay off those people at the lower end of the pay scale and keep their foremen and supervisors to try to give continuity to the business? Does what you see happening to blue-collar workers bear this out?

Ms. NORWOOD. Well, I think certainly some of what you say is true. In addition, I think the point here is that the employment declines are taking place in the durable manufacturing industries where the blue-collar workers are employed. For factory workers, as I've said, the unemployment rate rose to 7.9 percent. The April unemployment rate for automobile workers rose to 21.5 percent and that for construction workers to 15.1 percent.

The employment-population ratio dropped markedly for the second straight month. The 0.4 percentage point decline in April brought the ratio to 58.6 percent; this ratio was as high as 59.4 percent at the end of 1979.

The number of employees on the payrolls of nonfarm industries, as reported by the establishment survey, fell by almost 500,000 in April. Durable goods manufacturing, construction, and retail trade suffered sharp employment declines. By far the largest cutback in durable manufacturing occurred in transportation equipment, which was hard hit by recent auto industry layoffs. Construction employment declined for the third consecutive month. This industry has lost more than 300,000 jobs since January.

The workweek fell for the third straight month both in manufacturing and in nonagricultural industry as a whole. Manufacturing overtime was also down in April. The index of aggregate workers hours—which takes account of reductions in employment as well as in hours—was down by 1.3 percent over the month for all production or nonsupervisory workers and almost 2.5 percent for factory workers.

In summary, the April employment data released this morning show that a labor-market recession is clearly underway. The unemployment rate shot up to 7 percent in April, the highest rate in more than 30 months, as more than 7 milllion persons sought but were unable to find jobs. Employment declined for the second straight month. Workers in the construction and durable manufacturing sectors were especially hard hit. The recent drop in average weekly hours has been widespread.

Other economic statistics, which cover only the first quarter of 1980, confirm that an economic deterioration is underway. Real output, which usually declines during a recession, slowed to just over 1 percent. Productivity performance was dismal, with actual declines in output per person hour occurring both in the nonagricultural business sector and in manufacturing. As has occurred in the early stages of past economic deteriorations, employers cut output faster than they reduced the number of employees on their payrolls. This slow adjustment of employment to the falloff in output growth is characteristic of the downward movement of productivity in a downturn.

Hourly compensation rose and unit labor costs increased during the first quarter of 1980. But, despite these increases, real compensation per hour declined more than 6 percent in nonfarm business and manufacturing—because increases in consumer prices outstripped compensation growth.

Senator BENTSEN. Let me interrupt there. How about in terms of families' income? Has the decline been more moderate because you have more and more two-income families?

Ms. NORWOOD. Certainly the two-earner family has had an effect on the receipts of family. I don't have information here——

Senator BENTSEN. You don't have that number?

Ms. NORWOOD. But I can supply that for the record.

Senator BENTSEN. All right.

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

New BLS data on family earnings show that average family earnings—for families with at least one earner—increased more than 8 percent in current dollars between first quarter 1979 and first quarter 1980. In terms of constant dollars, however, family earnings declined by slightly more than 5 percent. For married couple families with two earners, the constant dollar decline was about the same—4 percent.

Ms. NORWOOD. Real hourly compensation has now declined for eight consecutive quarters in the nonfarm business sector.

Prices at both the consumer and producer levels continued to rise at very high rates during the first quarter of 1980, but some signs of price deceleration began to appear. House prices moderated, gasoline price increases decelerated, and improvement occurred in the producer price indexes for nonfood, nonenergy items at the intermediate and crude levels of processing.

As you know, I have consistently warned against drawing definitive conclusions from a single month's data.

Senator BENTSEN. I knew it would be someplace in your report.

Ms. NORWOOD. But the information released today on the employment situation for April, taken together with data for the previous 3 months, shows a clear deterioration. First, the rise in the unemployment rate from March to April was very large and follows smaller increases in the first quarter of the year. Second, significant employment declines occurred in April for the second straight month. And finally, the employment declines reported by the household survey were confirmed by the business survey and are entirely consistent with the deteriorating economic position shown by production, sales, and productivity data for the first quarter of 1980.

We would be glad to answer any questions you may have.

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

UNEMPLOYMENT RATES BY ALTERNATIVE SEASONAL ADJUSTMENT METHODS

Month and year	Unadjusted rate	X-11 ARIMA method					X-11 method (former official method)	Range (cols. 2-8)
		Official	Concurrent	Stable	Total	Residual		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1979:								
April	5.5	5.8	5.8	5.8	5.8	5.9	5.8	0.1
May	5.2	5.8	5.8	5.8	5.8	5.9	5.8	.1
June	6.0	5.7	5.7	5.5	5.7	5.7	5.7	.2
July	5.8	5.7	5.7	5.7	5.8	5.8	5.7	.1
August	5.9	5.9	5.9	6.0	5.9	5.9	5.9	.1
September	5.6	5.8	5.8	5.6	5.8	5.8	5.8	.2
October	5.6	5.9	5.9	6.0	5.9	6.0	5.9	.1
November	5.6	5.8	5.8	5.9	5.8	5.8	5.8	.1
December	5.6	5.9	5.9	6.0	5.8	5.9	5.9	.2
1980:								
January	6.8	6.2	6.1	6.2	6.2	6.2	6.2	.1
February	6.8	6.0	6.1	6.0	6.1	5.9	6.0	.2
March	6.6	6.2	6.2	6.2	6.2	6.2	6.2	.0
April	6.6	7.0	6.8	6.9	7.0	7.0	7.0	.2

Source: U.S. Department of Labor, Bureau of Labor Statistics, May 1980.

NOTES TO TABLE COLUMN NUMBERS

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

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

(3) Concurrent (X-11 ARIMA method). The procedure for computation of the official rate is followed, except that the data are reseasonally adjusted each month as the most recent data become available. Extrapolated factors are not used at all in this method. For example, the rate for January 1980 would be based, during 1980, on the adjustment of data for the period January 1967 through January 1980. The rates for the current year are shown as first computed. Since the revision pattern and procedure for computation of the rate are identical to the official procedure, the results of this method will be identical to the official rate at the beginning of each year when the most recent observation is December.

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

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

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

(7) X-11 method (former official method). The procedure for computation of the official rate is used except that the series are not extended with ARIMA models and the factors are projected in 12-mo intervals. The standard X-11 program is used to perform the seasonal adjustment.

Methods of adjustment: The X-11 ARIMA method was developed at Statistics Canada by the seasonal adjustment and times series staG under the direction of Estela Bee Dagum. The method is described in the X-11 ARIMA Seasonal Adjustment Method, by Estela Bee Dagnum, Statistics Canada Catalogue No. 12-564E, September 1979.

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

News United States Department of Labor

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USDL 80-288
TRANSMISSION OF MATERIAL IN THIS RELEASE IS EMBARGOED UNTIL 9:00 A.M. (EDT), FRIDAY, May 2, 1980

THE EMPLOYMENT SITUATION: APRIL 1980

Unemployment rose sharply in April and employment declined for the second month in a row, the Bureau of Labor Statistics of the U.S. Department of Labor reported today. The April unemployment rate was 7.0 percent, up from 6.2 percent in March. The number of persons unemployed increased by 825,000 over the month and was up nearly 1.2 million from December.

Total employment--as measured by the monthly survey of households--was down 500,000 in April, following a decline of 300,000 in the previous month. At 97.2 million, total employment has fallen back to the levels which prevailed during the summer of 1979.

Nonfarm payroll employment--as measured by the monthly survey of establishments--dropped by 480,000 in April to 90.3 million. The decrease was concentrated in the manufacturing, construction, and trade industries. Average weekly hours also declined over the month.

Unemployment

In April, the unemployment rate rose 0.8 percentage point to 7.0 percent, the highest rate since August 1977. The number of unemployed increased by 825,000 to 7.3 million. Unemployment increased for nearly all worker groups, including adults, full-time workers, whites, and blacks. The unemployment rate for adult men rose a full percentage point to 5.9 percent; the rate for adult women moved up from 5.7 to 6.3 percent. (See table A-2.)

Unemployment increases were particularly large for workers in construction and durable goods manufacturing. Similarly, unemployment rates in the blue-collar occupations were up markedly in April, with operatives and craft workers registering the most sizeable increases. (See table A-2.)

Job losers (including persons on layoff and those whose jobs were terminated) led the unemployment increase and, in April, constituted half of all unemployed workers. There were smaller, though substantial, increases in the number of unemployed who had voluntarily left their last job and in the number who were reentering the labor force after a period of absence. Average duration of unemployment was about unchanged, as increases occurred not only in the

number of workers recently out of work but also in the number who had been jobless for longer periods of time. (See tables A-5 and A-4.)

The number of nonfarm workers on part-time work schedules for economic reasons (sometimes termed the "partially unemployed") increased by 400,000 in April to 3.8 million. More than 60 percent of the increase was among those who usually worked full time. (See table A-3.)

Employment

Total employment fell by 500,000 in April, and the 2-month decline totaled 800,000 workers. These decreases were most pronounced among adult men, whose employment level dropped by 430,000 in April and by 660,000 over the 2-month period. On an occupational basis, the largest

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

Selected categories	Quarterly averages			Monthly data			Mar.-Apr. change
	1979		1980	1980			
	I	IV	I	Feb.	Mar.	Apr.	
HOUSEHOLD DATA							
	Thousands of persons						
Civilian labor force	102,315	103,749	104,194	104,260	104,094	104,419	325
Total employment	96,425	97,665	97,804	97,953	97,656	97,154	-502
Unemployment	5,890	6,084	6,390	6,307	6,438	7,265	827
Not in labor force	58,255	58,842	59,022	58,951	59,322	59,182	-140
Discouraged workers	740	741	993	N.A.	N.A.	N.A.	N.A.
	Percent of labor force						
Unemployment rates:							
All workers	5.8	5.9	6.1	6.0	6.2	7.0	0.8
Adult men	4.0	4.2	4.7	4.6	4.9	5.9	1.0
Adult women	5.7	5.7	5.7	5.7	5.7	6.3	.6
Teenagers	15.9	16.1	16.2	16.5	15.9	16.2	.3
White	5.0	5.1	5.4	5.3	5.4	6.2	.8
Black and other	11.4	11.2	11.7	11.5	11.8	12.6	.8
Full-time workers	5.2	5.4	5.7	5.6	5.8	6.6	.8
ESTABLISHMENT DATA							
	Thousands of jobs						
Nonfarm payroll employment	88,724	90,108	90,765p	90,845	90,799p	90,320p	-479p
Goods-producing industries	26,486	26,587	26,704p	26,732	26,597p	26,189p	-408p
Service-producing industries	62,238	63,521	64,061p	64,113	64,202p	64,131p	-71p
	Hours of work						
Average weekly hours:							
Total private nonfarm	35.8	35.7	35.5p	35.5	35.4p	35.3p	-0.1p
Manufacturing	40.6	40.2	40.1p	40.1	39.8p	39.6p	-.2p
Manufacturing overtime	3.7	3.2	3.1p	3.1	3.1p	2.8p	-.3p

p=preliminary N.A.=not available

over-the-month employment decline occurred among blue-collar workers. Since April 1979, total employment has risen by only 890,000 or less than 1 percent. (See tables A-1 and A-3.)

With the large decline in employment, the overall employment-population ratio fell 0.4 percentage point over the month to 58.6 percent. The corresponding ratio for adult men dropped from 73.8 to 73.1 percent.

The civilian labor force rose by 325,000 in April to 104.4 million. The labor force participation rate edged upward, to 63.8 percent. Most of the labor force increase occurred among adult women.

Industry Payroll Employment

Nonagricultural payroll employment declined by 480,000 in April to 90.3 million. This was the largest over-the-month reduction since December 1974.

The decline was concentrated in the goods-producing sector, with durable goods manufacturing and construction bearing the brunt of the cutbacks. Employment in the durable goods industries fell by 265,000, with over half occurring in transportation equipment, mainly in automobile production. Sizeable declines were also posted in fabricated metals, lumber and wood products, and stone, clay, and glass products. Employment changes in the nondurable goods industries were generally small. (See table B-1.)

Employment in construction dropped 140,000 in April following a decline of like magnitude in the previous month. This industry has lost 335,000 jobs since January.

In the service-producing sector, employment fell by 130,000 in trade; an additional 30,000 job decline occurred in transportation and public utilities. On the other hand, government employment was up 75,000 in April, on top of a 60,000 increase in March; both gains were due primarily to the hiring of temporary workers for the 1980 Census.

Hours of Work

The average workweek for production or nonsupervisory workers on private nonagricultural payrolls edged down 0.1 hour to 35.3 hours in April; average weekly hours have fallen for 3 consecutive months. The manufacturing workweek, at 39.6 hours in April, dropped 0.2 hour over the month and was down 0.7 hour since January. Factory overtime declined 0.3 hour in April to 2.8 hours. (See table B-2.)

Mainly due to the large employment cutback, the index of aggregate weekly hours of production or nonsupervisory workers on private nonfarm payrolls fell 1.3 percent to 124.5 (1967=100) in April. The manufacturing index dropped 2.4 percent over the month. Whereas the overall index was up slightly over the past year, the factory index was down 2.6 percent. (See table B-5.)

Hourly and Weekly Earnings

Average hourly earnings of production or nonsupervisory workers on private nonagricultural payrolls were unchanged over the month and were 7.9 percent above the April 1979 level (seasonally adjusted). Average weekly earnings declined by 0.3 percent from March but were up 7.9 percent over the year.

Before adjustment for seasonality, average hourly earnings were unchanged over the month at $6.51, 48 cents above April a year ago. Average weekly earnings declined by 65 cents over the month to $228.50; this level was $16.85 above 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 245.6 (1967=100) in April, 0.2 percent higher than in March. The Index was 8.3 percent above April a year ago. In dollars of constant purchasing power, the Index decreased 5.0 percent during the 12-month period ended in March. (See table B-4.)

Chart 1. Civilian labor force and employment
(Seasonally adjusted)

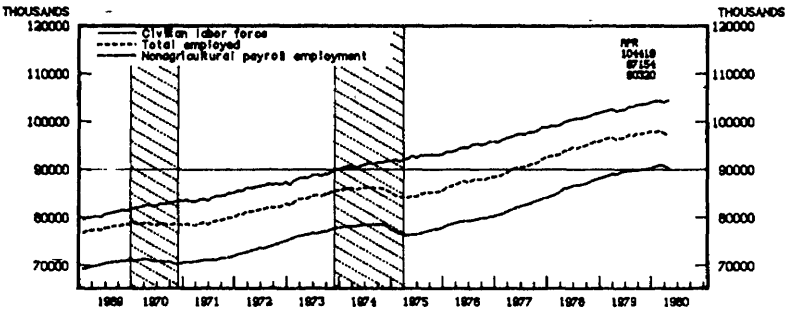


Chart 2. Unemployment rate--all civilian workers

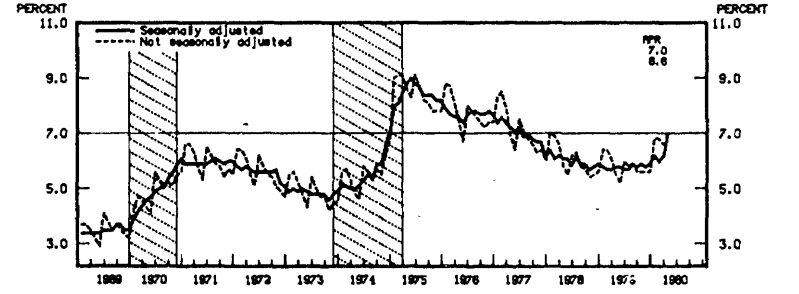
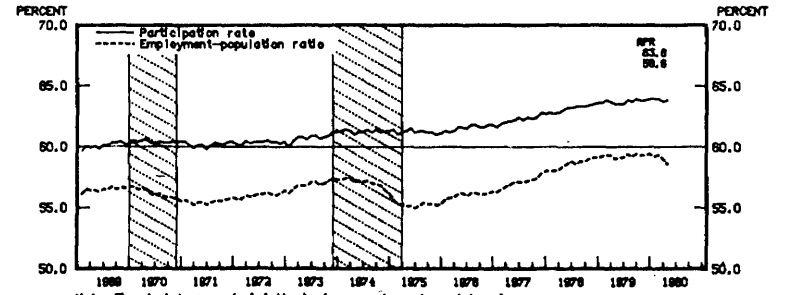


Chart 3. Civilian labor force participation rate
and total employment-population ratio
(Seasonally adjusted)



Note: The shaded areas depict the business cycle peaks and troughs as designated by the National Bureau of Economic Research.

Explanatory Note

This news release presents statistics from two major surveys, the Current Population Survey (household survey) and the Current Employment Statistics Survey (establishment survey). The household survey provides the information on the labor force, total employment, and unemployment that appears in the A tables, marked HOUSEHOLD DATA. It is a sample survey of about 65,000 households that is conducted by the Bureau of the Census with most of the findings analyzed and published by the Bureau of Labor Statistics (BLS).

The establishment survey provides the information on the employment, hours, and earnings of workers on nonagricultural payrolls that appears in the B tables, marked ESTABLISHMENT DATA. This information is collected from payroll records by BLS in cooperation with State agencies. The sample includes approximately 162,000 establishments employing more than 32 million people.

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

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

Coverage, definitions and differences between surveys

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

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

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

The *civilian labor force* equals the sum of the number employed and the number unemployed. The *unemployment rate* is the percentage of unemployed people in the civilian labor force. Table A-4 presents a special grouping of seven measures of unemployment based on varying definitions of unemployment and the labor force. The definitions are provided in the table. The most restrictive definition yields U-1, and the most comprehensive yields U-7. The official unemployment rate is U-5.

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

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

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

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

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

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

Seasonal adjustment

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

Because these seasonal events follow a more or less regular pattern each year, their influence on statistical trends can be eliminated by adjusting the statistics from month to month. These adjustments make nonseasonal developments, such as declines in economic activity or

increases in the participation of women in the labor force, easier to spot. To return to the school's-out example, the large number of people entering the labor force each June is likely to obscure any other changes that have taken place since May, making it difficult to determine if the level of economic activity has risen or declined. However, because the effect of students finishing school in previous years is known, the statistics for the current year can be adjusted to allow for a comparable change. Insofar as the seasonal adjustment is made correctly, the adjusted figure provides a more useful tool with which to analyze changes in economic activity.

Measures of civilian labor force, employment, and unemployment contain components such as age and sex. Statistics for all employees, production workers, average weekly hours, and average hourly earnings include components based on the employer's industry. All these statistics can be seasonally adjusted either by adjusting the total or by adjusting each of the components and combining them. The second procedure usually yields more accurate information and is therefore followed by BLS. For example, the seasonally adjusted figure for the civilian labor force is the sum of eight seasonally adjusted employment components and four seasonally adjusted unemployment components; the total for unemployment is the sum of the four unemployment components; and the official unemployment rate is derived by dividing the resulting estimate of total unemployment by the estimate of the civilian labor force.

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

Sampling variability

Statistics based on the household and establishment surveys are subject to sampling error, that is, the estimate of the number of people employed and the other estimates drawn from these surveys probably differ from the figures that would be obtained from a complete census, even if the same questionnaires and procedures were used. In the household survey, the amount of the differences can be expressed in terms of standard errors. The numerical value of a standard error depends upon the size of the sample, the results of the survey, and other factors. However, the numerical value is always such that the chances are 68 out of 100 that an estimate based on the sample will differ by no more than the standard error from the results of a complete census. The chances are 90 out of 100 that an estimate based on the sample will differ by no more than 1.6 times the standard error from the results of a complete census. At the 90-percent level of confidence--the confidence limits used by BLS in its analyses--the error for the monthly change in total employment is on the order of plus or minus 293,000; for total unemployment, it is 185,000; and, for the overall unemployment rate, it is 0.19 percentage point. These figures do not mean that the sample results are off by these magnitudes but, rather, that the chances are 90 out of 100 that the "true" level or rate would not be expected to differ from the estimates by more than these amounts.

Sampling errors for monthly surveys are reduced when the data are cumulated for several months, such as quarterly or annually. Also, as a general rule, the smaller the estimate, the larger the sampling error. Therefore, relatively speaking, the estimate of the size of the labor force is subject to less error than is the estimate of the number unemployed. And, among the unemployed, the sampling error for the jobless rate of adult men, for example, is much smaller than is the error for the jobless rate of teenagers. Specifically, the error on monthly change in the jobless rate for men is .23 percentage point; for teenagers, it is 1.06 percentage points.

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

Additional statistics and other information

In order to provide a broad view of the Nation's employment situation, BLS regularly publishes a wide variety of data in this news release. More comprehensive statistics are contained in *Employment and Earnings,* published each month by BLS. It is available for $2.75 per issue or $22.00 per year from the U.S. Government Printing Office, Washington, D.C. 20204. A check or money order made out to the Superintendent of Documents must accompany all orders.

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

HOUSEHOLD DATA

Table A-1. Employment status of the noninstitutional population

(Numbers in thousands)

Employment status	Not seasonally adjusted			Seasonally adjusted					
	Apr. 1979	Mar. 1980	Apr. 1980	Apr. 1979	Dec. 1979	Jan. 1980	Feb. 1980	Mar. 1980	Apr. 1980
TOTAL									
Total noninstitutional population[1]	163,008	165,506	165,693	163,008	164,898	165,101	165,298	165,506	165,693
Armed Forces[1]	2,082	2,090	2,092	2,082	2,089	2,081	2,086	2,090	2,092
Civilian noninstitutional population[1]	160,926	163,416	163,601	160,926	162,809	163,020	163,211	163,416	163,601
Civilian labor force	101,236	103,151	103,412	102,158	103,999	104,229	104,260	104,094	104,415
Participation rate	62.9	63.1	63.2	63.5	63.9	63.9	63.9	63.7	63.8
Employed	95,675	96,546	96,566	96,284	97,912	97,804	97,953	97,656	97,154
Employment-population ratio[2]	58.7	58.3	58.3	59.0	59.4	59.2	59.3	59.0	58.6
Agriculture	3,074	2,962	3,031	3,215	3,355	3,270	3,326	3,358	3,242
Nonagricultural industries	92,601	93,584	93,415	93,035	94,553	94,534	94,626	94,298	93,912
Unemployed	5,561	6,605	6,846	5,944	6,087	6,425	6,307	6,438	7,265
Unemployment rate	5.5	6.6	6.6	5.8	5.9	6.2	6.0	6.2	7.0
Not in labor force	59,690	60,065	60,189	58,728	58,810	58,791	58,951	59,322	59,182
Men, 20 years and over									
Total noninstitutional population[1]	69,613	70,896	70,968	69,613	70,594	70,695	70,792	70,896	70,968
Civilian noninstitutional population[1]	67,597	69,238	69,329	67,997	68,960	69,087	69,140	69,238	69,329
Civilian labor force	53,958	54,766	54,842	54,239	54,781	54,855	55,036	54,996	55,114
Participation rate	79.4	79.1	79.1	79.8	79.5	79.4	79.6	79.4	79.5
Employed	51,773	51,624	51,605	52,049	52,478	52,279	52,531	52,300	51,868
Employment-population ratio[2]	74.3	72.8	72.7	74.7	74.3	73.9	74.2	73.8	73.1
Agriculture	2,237	2,217	2,255	2,295	2,427	2,387	2,435	2,394	2,320
Nonagricultural industries	49,536	49,407	49,350	49,754	50,051	49,892	50,096	49,906	49,548
Unemployed	2,185	3,141	3,236	2,190	2,303	2,577	2,507	2,696	3,246
Unemployment rate	4.0	5.7	5.9	4.0	4.2	4.7	4.6	4.9	5.9
Not in labor force	14,039	14,471	14,487	13,758	14,155	14,192	14,102	14,242	14,215
Women, 20 years and over									
Total noninstitutional population[1]	76,645	78,005	78,110	76,645	77,666	77,779	77,890	78,005	78,110
Civilian noninstitutional population[1]	76,532	77,876	77,981	76,532	77,542	77,656	77,766	77,876	77,981
Civilian labor force	38,425	39,491	40,111	38,415	39,679	39,878	39,857	39,751	40,137
Participation rate	50.2	51.4	51.4	50.2	51.1	51.4	51.3	51.0	51.5
Employed	36,401	37,255	37,787	36,216	37,402	37,574	37,604	37,496	37,602
Employment-population ratio[2]	47.6	47.8	48.4	47.3	48.2	48.3	48.3	48.1	48.1
Agriculture	536	471	516	572	582	540	567	582	552
Nonagricultural industries	35,865	37,284	37,271	35,644	36,820	37,034	37,037	36,914	37,051
Unemployed	2,024	2,235	2,324	2,199	2,257	2,304	2,254	2,255	2,534
Unemployment rate	5.3	5.6	5.8	5.7	5.7	5.8	5.7	5.7	6.3
Not in labor force	38,107	38,486	37,870	38,117	37,863	37,778	37,905	38,125	37,844
Both sexes, 16-19 years									
Total noninstitutional population[1]	16,733	16,606	16,595	16,700	16,638	16,627	16,616	16,606	16,595
Civilian noninstitutional population[1]	16,397	16,302	16,291	16,397	16,326	16,317	16,305	16,302	16,291
Civilian labor force	8,853	8,596	8,460	9,544	9,559	9,497	9,365	9,346	9,168
Participation rate	54.0	52.7	51.9	58.2	58.6	58.2	57.4	57.3	56.3
Employed	7,495	7,167	7,174	7,989	8,032	7,952	7,818	7,859	7,483
Employment-population ratio[2]	44.9	43.7	43.2	47.8	48.3	47.8	47.1	47.3	46.3
Agriculture	301	274	311	348	350	344	325	381	370
Nonagricultural industries	7,195	6,893	6,863	7,641	7,682	7,608	7,493	7,478	7,313
Unemployed	1,355	1,429	1,286	1,555	1,527	1,545	1,547	1,487	1,685
Unemployment rate	15.3	16.6	15.2	16.3	16.0	16.3	16.5	15.9	16.2
Not in labor force	7,543	7,706	7,831	6,853	6,767	6,820	6,940	6,956	7,123
White									
Total noninstitutional population[1]	142,771	144,730	144,870	142,771	144,267	144,421	144,570	144,730	144,870
Civilian noninstitutional population[1]	141,123	143,115	143,250	141,123	142,645	142,806	142,951	143,115	143,250
Civilian labor force	85,195	91,204	91,245	89,996	91,575	91,852	91,977	91,821	92,083
Participation rate	61.2	63.7	63.7	63.8	64.2	64.3	64.3	64.2	64.3
Employed	84,997	85,845	85,886	85,497	86,890	86,895	87,081	86,822	86,385
Employment-population ratio[2]	59.5	59.3	59.3	59.9	60.2	60.2	60.2	60.0	59.6
Unemployed	4,199	5,358	5,359	4,499	4,685	4,957	4,896	4,999	5,698
Unemployment rate	4.7	5.9	5.9	5.0	5.1	5.4	5.3	5.4	6.2
Not in labor force	51,928	51,911	52,010	51,127	51,066	50,954	50,975	51,294	51,171
Black and other									
Total noninstitutional population[1]	20,234	20,777	20,822	20,234	20,631	20,680	20,727	20,777	20,822
Civilian noninstitutional population[1]	19,802	20,301	20,346	19,802	20,163	20,214	20,261	20,301	20,346
Civilian labor force	12,041	12,147	12,166	12,191	12,432	12,453	12,362	12,266	12,319
Participation rate	60.8	59.8	59.7	61.6	61.7	61.6	61.0	60.4	60.5
Employed	10,678	10,701	10,610	10,767	11,024	10,979	10,937	10,823	10,771
Employment-population ratio[2]	52.9	51.5	51.1	53.2	53.4	53.1	52.8	52.1	51.7
Unemployed	1,361	1,446	1,457	1,424	1,408	1,474	1,424	1,443	1,549
Unemployment rate	11.3	11.9	12.2	11.7	11.3	11.8	11.5	11.8	12.6
Not in labor force	7,761	8,154	8,179	7,611	7,731	7,761	7,899	8,035	8,027

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

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

Table A-2. Major unemployment indicators, seasonally adjusted

Selected categories	Number of unemployed persons (in thousands)		Unemployment rates					
	Apr. 1979	Apr. 1980	Apr. 1979	Dec. 1979	Jan. 1980	Feb. 1980	Mar. 1980	Apr. 1980
CHARACTERISTICS								
Total, 16 years and over	5,948	7,265	5.6	5.9	6.2	6.0	6.2	7.0
Men, 20 years and over	2,190	3,246	4.0	4.2	4.7	4.6	4.9	5.9
Women, 20 years and over	2,199	2,534	5.7	5.7	5.8	5.7	5.7	6.3
Both sexes, 16-19 years	1,555	1,485	16.3	16.0	16.3	16.5	15.5	16.2
White, total	4,499	5,698	5.0	5.1	5.4	5.3	5.4	6.2
Men, 20 years and over	1,679	2,591	3.5	3.7	4.1	4.0	4.4	5.3
Women, 20 years and over	1,643	1,911	5.0	5.0	5.1	5.2	4.9	5.5
Both sexes, 16-19 years	1,177	1,196	13.9	13.5	14.0	13.8	13.8	14.6
Black and other, total	1,428	1,549	11.7	11.3	11.8	11.5	11.8	12.6
Men, 20 years and over	499	643	8.6	8.6	9.6	9.2	8.3	10.9
Women, 20 years and over	557	624	10.5	10.0	10.0	9.0	10.5	11.4
Both sexes, 16-19 years	368	282	34.3	34.3	34.6	37.9	33.0	29.8
Married men, spouse present	1,093	1,629	2.7	2.8	3.4	3.1	3.4	4.1
Married women, spouse present	1,237	1,607	5.2	5.0	5.2	5.4	5.3	5.7
Women who head families	806	877	8.3	8.4	9.2	8.5	8.7	9.3
Full-time workers	4,637	5,875	5.3	5.4	5.7	5.6	5.8	6.4
Part-time workers	1,291	1,363	8.7	8.5	8.7	8.9	8.3	8.9
Unemployed 15 weeks and over[1]	1,223	1,629	1.2	1.2	1.3	1.2	1.3	1.6
Labor force time lost[2]	--	--	6.4	6.4	6.7	6.6	6.8	7.5
OCCUPATION[3]								
White-collar workers	1,679	1,951	3.3	3.3	3.4	3.4	3.3	3.7
Professional and technical	357	390	2.3	2.3	2.2	2.3	2.3	2.4
Managers and administrators, except farm	240	291	2.3	2.0	1.9	2.2	2.4	2.6
Sales workers	255	295	4.0	3.8	4.4	4.5	4.0	4.7
Clerical workers	827	975	4.5	4.6	4.8	4.7	4.5	5.1
Blue-collar workers	2,366	3,344	6.9	7.2	8.0	7.7	8.0	9.7
Craft and kindred workers	584	910	4.4	4.4	4.9	4.8	5.4	6.7
Operatives, except transport	1,008	1,362	8.5	9.0	9.9	9.2	9.3	11.6
Transport equipment operatives	228	342	5.9	5.0	6.9	6.7	6.6	8.9
Nonfarm laborers	554	730	10.6	12.2	12.3	12.0	13.0	14.1
Service workers	1,022	1,126	7.3	6.6	6.9	6.9	7.1	8.0
Farm workers	95	140	3.4	4.3	4.4	3.9	4.0	5.0
INDUSTRY[3]								
Nonagricultural private wage and salary workers[4]	4,246	5,405	5.7	5.8	6.2	6.0	6.2	7.1
Construction	538	766	10.5	10.3	10.8	10.5	13.0	15.1
Manufacturing	1,212	1,885	5.3	5.9	6.7	6.4	6.5	7.9
Durable goods	642	1,163	4.7	5.5	6.7	6.3	6.4	8.3
Nondurable goods	570	682	6.3	6.4	6.8	6.7	6.7	7.4
Transportation and public utilities	164	257	3.0	4.1	4.4	4.4	3.8	4.6
Wholesale and retail trade	1,231	1,315	6.6	6.4	6.6	6.4	6.3	7.0
Finance and service industries	1,063	1,172	4.8	4.7	4.6	4.6	4.9	5.1
Government workers	565	728	3.7	3.6	3.8	4.0	4.2	4.8
Agricultural wage and salary workers	132	186	8.7	9.4	10.3	9.2	10.2	11.9

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

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

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

[4] Includes mining not shown separately.

Table A-3. Selected employment indicators

[In thousands]

Selected categories	Not seasonally adjusted		Seasonally adjusted					
	Apr. 1979	Apr. 1980	Apr. 1979	Dec. 1979	Jan. 1980	Feb. 1980	Mar. 1980	Apr. 1980
CHARACTERISTICS								
Total employed, 16 years and over	95,675	96,566	96,254	97,912	97,804	97,853	97,656	97,154
Men	55,749	55,858	56,294	56,738	56,686	56,732	56,601	55,698
Women	39,930	41,138	39,960	41,178	41,118	41,121	41,056	41,156
Married men, spouse present	38,800	38,227	38,910	38,924	38,769	38,955	38,745	38,382
Married women, spouse present	22,511	23,218	22,376	23,027	23,111	23,178	23,202	23,060
OCCUPATION								
White-collar workers	49,134	50,474	49,061	49,911	50,313	50,448	50,302	50,405
Professional and technical	15,302	15,775	15,091	15,272	15,337	15,484	15,397	15,542
Managers and administrators, except farm	10,211	10,452	10,398	10,535	10,608	10,971	10,755	10,745
Sales workers	6,180	6,036	6,084	6,346	6,452	6,185	6,113	5,988
Clerical workers	17,441	18,111	17,488	17,758	17,915	17,808	18,037	18,129
Blue-collar workers	31,122	30,550	31,705	32,302	31,862	31,754	31,670	31,127
Craft and kindred workers	12,507	12,581	12,703	13,041	12,814	12,728	12,767	12,773
Operatives, except transport	10,587	10,271	10,770	11,042	10,678	10,661	10,579	10,408
Transport equipment operatives	3,550	3,469	3,564	3,635	3,616	3,571	3,558	3,483
Nonfarm laborers	4,478	4,280	4,668	4,584	4,774	4,785	4,767	4,463
Service workers	12,784	13,015	12,807	12,970	12,975	13,080	12,981	13,038
Farm workers	2,514	2,527	2,654	2,694	2,660	2,764	2,733	2,658
MAJOR INDUSTRY AND CLASS OF WORKER								
Agriculture:								
Wage and salary workers	1,310	1,297	1,379	1,451	1,428	1,437	1,449	1,470
Self-employed workers	1,697	1,529	1,553	1,596	1,594	1,688	1,600	1,581
Unpaid family workers	266	255	291	310	293	283	300	287
Nonagricultural industries:								
Wage and salary workers	85,722	86,356	86,105	87,384	87,578	87,419	87,221	86,741
Government	15,510	15,825	15,359	15,397	15,414	15,540	15,422	15,668
Private industries	70,212	70,533	70,746	71,987	72,163	71,879	71,799	71,072
Private households	1,146	1,095	1,172	1,228	1,132	1,178	1,115	1,123
Other industries	69,066	69,438	69,574	70,759	71,031	70,702	70,684	69,949
Self-employed workers	6,190	6,745	6,463	6,737	6,752	6,899	6,825	6,813
Unpaid family workers	488	382	465	409	379	397	376	363
PERSONS AT WORK[1]								
Nonagricultural industries	87,141	88,282	86,608	89,100	89,454	88,985	88,585	87,660
Full-time schedules	71,411	71,592	71,659	73,227	73,223	73,110	72,769	71,807
Part time for economic reasons	3,023	3,582	3,279	3,519	3,513	3,406	3,418	3,816
Usually work full time	1,256	1,665	1,287	1,491	1,549	1,380	1,463	1,709
Usually work part time	1,767	1,877	1,992	2,028	1,964	2,026	1,955	2,107
Part time for noneconomic reasons	12,707	13,108	11,670	12,524	12,716	12,469	12,418	12,037

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

Table A-4. Duration of unemployment

[Numbers in thousands]

Weeks of unemployment	Not seasonally adjusted		Seasonally adjusted					
	Apr. 1979	Apr. 1980	Apr. 1979	Dec. 1979	Jan. 1980	Feb. 1980	Mar. 1980	Apr. 1980
DURATION								
Less than 5 weeks	2,498	2,672	2,876	2,916	3,188	2,995	2,595	3,389
5 to 14 weeks	1,580	2,004	1,844	1,966	1,907	2,081	2,169	2,391
15 weeks and over	1,683	1,970	1,223	1,230	1,334	1,286	1,363	1,629
15 to 26 weeks	894	1,228	687	711	795	790	776	953
27 weeks and over	588	742	536	519	539	496	587	676
Average (mean) duration, in weeks	12.4	12.7	11.0	10.5	10.5	10.7	11.0	11.3
Median duration, in weeks	6.4	6.8	5.4	5.5	5.2	5.8	5.9	5.7
PERCENT DISTRIBUTION								
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 5 weeks	44.9	42.0	48.1	47.7	49.6	47.1	45.9	45.1
5 to 14 weeks	28.4	29.3	31.5	32.2	29.7	32.7	33.2	32.6
15 weeks and over	26.7	28.8	20.4	20.1	20.8	20.2	20.9	22.2
15 to 26 weeks	16.1	17.9	11.5	11.6	12.4	12.4	11.9	13.0
27 weeks and over	10.6	10.8	9.0	8.5	8.4	7.8	9.0	9.2

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Table A-5. Reasons for unemployment

[Numbers in thousands]

Reason	Not seasonally adjusted		Seasonally adjusted					
	Apr. 1979	Apr. 1980	Apr. 1979	Dec. 1979	Jan. 1980	Feb. 1980	Mar. 1980	Apr. 1980
NUMBER OF UNEMPLOYED								
Lost last job	2,579	3,697	2,520	2,728	2,988	2,907	3,087	3,611
On layoff	839	1,415	839	944	1,019	1,031	1,129	1,428
Other job losers	1,741	2,272	1,681	1,784	1,969	1,876	1,958	2,188
Left last job	751	823	687	800	779	813	788	926
Reentered labor force	1,583	1,705	1,778	1,773	1,797	1,784	1,803	1,967
Seeking first job	648	631	800	858	811	827	805	743
PERCENT DISTRIBUTION								
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Job losers	46.4	53.9	42.4	44.3	46.6	45.9	47.3	49.8
On layoff	15.1	20.7	14.1	15.3	16.0	16.3	17.5	19.6
Other job losers	31.3	33.2	28.3	29.0	30.9	29.6	29.8	30.2
Job leavers	13.5	12.0	14.2	13.0	12.2	12.8	12.2	12.8
Reentrants	27.8	24.9	29.9	28.8	28.2	28.2	28.0	27.1
New entrants	12.4	9.2	13.5	13.9	12.7	13.1	12.5	10.3
UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE								
Job losers	2.5	3.6	2.5	2.6	2.9	2.8	2.9	3.5
Job leavers	.7	.8	.8	.8	.7	.8	.8	.9
Reentrants	1.5	1.6	1.7	1.7	1.7	1.7	1.7	1.9
New entrants	.7	.6	.8	.8	.8	.8	.8	.7

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

Sex and age	Number of unemployed persons (in thousands)		Unemployment rates					
	Apr. 1979	Apr. 1980	Apr. 1979	Dec. 1979	Jan. 1980	Feb. 1980	Mar. 1980	Apr. 1980
Total, 16 years and over	5,948	7,265	5.8	5.9	6.2	6.0	6.2	7.0
16 to 19 years	1,555	1,885	16.3	16.0	16.3	16.5	15.9	16.2
16 to 17 years	754	898	18.7	19.0	19.0	18.7	17.4	18.7
18 to 19 years	790	780	14.3	14.5	14.0	15.1	14.7	14.4
20 to 24 years	1,336	1,748	8.6	9.8	10.1	9.5	9.7	11.9
25 years and over	3,071	4,025	4.0	3.8	4.2	4.1	4.4	5.0
25 to 54 years	2,606	3,518	4.2	4.1	4.4	4.5	4.7	5.4
55 years and over	456	503	3.1	2.7	3.5	2.8	2.8	3.4
Men, 16 years and over	2,999	4,040	5.1	5.2	5.7	5.5	5.7	6.7
16 to 19 years	809	798	16.0	15.6	16.2	15.6	14.8	16.1
16 to 17 years	387	373	17.9	17.9	19.0	18.0	15.9	18.3
18 to 19 years	407	409	14.1	13.6	13.9	14.1	14.0	14.2
20 to 24 years	659	1,028	8.0	9.4	10.4	9.9	10.4	12.3
25 years and over	1,535	2,218	3.3	3.2	3.7	3.6	3.9	4.7
25 to 54 years	1,237	1,686	3.3	3.4	3.8	3.8	4.2	5.0
55 years and over	272	311	3.0	2.6	3.5	2.6	2.7	3.4
Women, 16 years and over	2,965	3,225	6.9	6.8	6.8	6.8	6.8	7.3
16 to 19 years	746	691	16.6	16.8	16.3	17.6	17.3	16.3
16 to 17 years	367	325	19.6	18.0	19.1	19.5	19.2	19.1
18 to 19 years	383	371	14.5	15.5	14.2	16.2	15.6	14.6
20 to 24 years	657	721	9.4	10.2	9.8	9.1	9.0	10.2
25 years and over	1,536	1,815	4.9	4.7	4.9	4.9	5.0	5.5
25 to 54 years	1,369	1,631	5.3	5.1	5.2	5.4	5.5	6.0
55 years and over	184	192	3.2	2.9	3.4	3.0	2.9	3.4

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

[Percent]

Measure	Quarterly averages					Monthly data		
	1979				1980	1980		
	I	II	III	IV	I	Feb.	Mar.	Apr.
U-1—Persons unemployed 15 weeks or longer as a percent of the civilian labor force	1.2	1.2	1.1	1.2	1.3	1.2	1.3	1.6
U-2—Job losers as a percent of the civilian labor force	2.4	2.4	2.5	2.6	2.9	2.8	2.9	3.5
U-3—Unemployed persons 25 years and over as a percent of the civilian labor force 25 years and over	3.9	3.9	3.9	3.9	4.2	4.1	4.4	5.0
U-4—Unemployed full-time jobseekers as a percent of the full-time labor force	5.2	5.2	5.3	5.4	5.7	5.6	5.8	6.6
U-5—Total unemployed as a percent of the civilian labor force (official measure)	5.8	5.8	5.8	5.9	6.1	6.0	6.2	7.0
U-6—Total full-time jobseekers plus ½ part-time jobseekers plus ½ total on part time for economic reasons as a percent of the civilian labor force less ½ of the part-time labor force	7.2	7.2	7.3	7.4	7.7	7.6	7.8	8.7
U-7—Total full-time jobseekers plus ½ part-time jobseekers plus ½ total on part time for economic reasons plus discouraged workers as a percent of the civilian labor force plus discouraged workers less ½ of the part-time labor force	7.9	8.0	8.0	8.1	8.7	N.A.	N.A.	N.A.

N.A.= not available.

Table A-8. Employment status of the noninstitutional population by race and Hispanic origin, not seasonally adjusted

[Number in thousands]

Employment status	Total		White		Black[1]		Hispanic origin[2]	
	Apr. 1979	Apr. 1980	Apr. 1979	Apr. 1980	Apr. 1979	Apr. 1980	Apr. 1979	Apr. 1980
TOTAL								
Civilian noninstitutional population	160,926	163,601	141,123	143,254	16,947	17,331	7,965	8,362
Civilian labor force	101,236	103,412	89,195	91,245	10,198	10,310	5,001	5,317
Percent of population	62.9	63.2	63.2	63.7	60.2	59.5	62.8	63.6
Employment	95,675	96,566	86,997	85,886	8,967	8,966	4,606	4,795
Agriculture	3,074	3,081	2,816	2,833	204	193	218	184
Nonagricultural industries	92,601	93,485	82,181	83,053	8,763	8,773	4,393	4,611
Unemployment	5,561	6,846	4,198	5,359	1,231	1,343	395	522
Unemployment rate	5.5	6.6	4.7	5.9	12.1	13.0	7.9	9.8
Not in labor force	59,690	60,188	51,928	52,010	6,749	7,021	2,964	3,045

[1] Data relate to black workers only. According to the 1970 Census, they comprised about 88 percent of the "black and other" population group.

[2] Data on persons of Hispanic origin are tabulated separately, without regard to race, which means that they are also included in the data for white and black workers. At the time of the 1970 Census, approximately 88 percent of this population was white.

Table A-9. Employment status of male Vietnam-era veterans and nonveterans by age, not seasonally adjusted

(Numbers in thousands)

Veteran status and age	Civilian noninstitutional population		Civilian labor force							
			Total		Employed		Unemployed			
							Number		Percent of labor force	
	Apr. 1979	Apr. 1980	Apr. 1979	Apr. 1980	Apr. 1979	Apr. 1980	Apr. 1979	Apr. 1980	Apr. 1979	Apr. 1980
VETERANS[1]										
Total, 20 years and over	8,494	8,590	8,082	8,124	7,739	7,644	343	480	4.2	5.9
20 to 24 years	595	388	553	341	506	291	47	50	8.5	14.7
25 to 29 years	7,090	7,243	6,843	6,952	6,575	6,583	268	409	3.5	5.9
25 to 26 years	2,013	1,763	1,930	1,646	1,812	1,493	118	153	6.1	9.3
27 to 29 years	3,580	3,595	3,469	3,481	3,353	3,303	116	178	3.3	5.1
25 to 29 years	1,477	1,885	1,444	1,825	1,410	1,747	34	78	2.4	4.3
30 years and over	809	963	686	831	658	810	28	21	4.1	2.5
NONVETERANS[2]										
Total, 25 to 29 years	14,388	15,288	13,602	14,496	13,091	13,579	511	917	3.8	6.3
25 to 26 years	6,554	7,000	6,174	6,603	5,894	6,061	280	540	4.5	8.2
27 to 29 years	4,125	4,487	3,908	4,287	3,783	4,044	125	243	3.2	5.7
25 to 29 years	3,709	3,801	3,520	3,609	3,414	3,474	106	134	3.0	3.7

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

[2] Nonveterans are males who have never served in the Armed Forces. Published data are limited to those 25-29 years of age, the group that most closely corresponds to the bulk of the Vietnam-era veteran population.

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Table A-10. Employment status of the noninstitutional population for the ten largest States

(Numbers in thousands)

State and employment status	Not seasonally adjusted[2]			Seasonally adjusted					
	Apr. 1979	Mar. 1980	Apr. 1980	Apr. 1979	Dec. 1979	Jan. 1980	Feb. 1980	Mar. 1980	Apr. 1980
California									
Civilian noninstitutional population[1]	16,679	17,007	17,034	16,679	16,925	16,954	16,975	17,007	17,034
Civilian labor force	13,718	11,085	11,010	13,815	11,178	11,074	11,013	11,103	11,172
Employed	10,058	10,385	10,307	10,138	10,481	10,434	10,337	10,441	10,382
Unemployed	659	700	773	677	697	640	676	662	790
Unemployment rate	6.2	6.3	7.0	6.3	6.2	5.8	6.1	6.0	7.1
Florida									
Civilian noninstitutional population[1]	6,712	6,908	6,920	6,712	6,852	6,870	6,886	6,904	6,920
Civilian labor force	3,855	3,881	3,904	3,865	3,802	3,794	3,842	3,884	3,815
Employed	3,652	3,692	3,716	3,638	3,598	3,596	3,644	3,683	3,701
Unemployed	203	189	189	227	204	195	198	231	214
Unemployment rate	5.3	4.9	4.8	5.9	5.4	5.1	5.2	5.2	5.5
Illinois									
Civilian noninstitutional population[1]	8,248	8,300	8,305	8,244	8,285	8,290	8,295	8,300	8,305
Civilian labor force	5,205	5,377	5,385	5,281	5,458	5,466	5,463	5,431	5,461
Employed	4,934	4,986	5,008	4,981	5,105	5,077	5,081	5,058	5,057
Unemployed	272	391	376	300	349	389	382	373	404
Unemployment rate	5.2	7.3	7.0	5.7	6.4	7.1	7.0	6.9	7.4
Massachusetts									
Civilian noninstitutional population[1]	4,360	4,400	4,403	4,360	4,389	4,393	4,396	4,400	4,403
Civilian labor force	2,880	2,840	2,833	2,906	2,879	2,827	2,838	2,853	2,858
Employed	2,727	2,680	2,691	2,744	2,719	2,685	2,702	2,716	2,707
Unemployed	152	150	141	162	160	142	136	139	151
Unemployment rate	5.3	5.3	5.0	5.6	5.6	5.0	4.8	4.9	5.3
Michigan									
Civilian noninstitutional population[1]	6,701	6,775	6,781	6,701	6,755	6,762	6,768	6,775	6,781
Civilian labor force	4,284	4,238	4,233	4,272	4,345	4,283	4,273	4,248	4,262
Employed	3,879	3,779	3,710	3,910	3,968	3,875	3,834	3,814	3,741
Unemployed	365	456	523	362	377	408	439	434	521
Unemployment rate	8.6	11.0	12.4	8.5	8.7	9.5	10.3	10.2	12.2
New Jersey									
Civilian noninstitutional population[1]	5,493	5,585	5,589	5,493	5,532	5,536	5,541	5,545	5,589
Civilian labor force	3,419	3,533	3,493	3,490	3,568	3,597	3,563	3,588	3,566
Employed	3,226	3,286	3,275	3,280	3,335	3,348	3,371	3,339	3,332
Unemployed	194	247	218	210	233	249	192	249	234
Unemployment rate	5.7	7.0	6.2	6.0	6.5	6.9	5.4	6.9	6.6
New York									
Civilian noninstitutional population[1]	13,270	13,303	13,304	13,270	13,294	13,298	13,300	13,303	13,304
Civilian labor force	7,933	7,931	7,789	7,938	8,114	8,064	8,161	7,936	7,807
Employed	7,401	7,354	7,262	7,378	7,525	7,480	7,543	7,391	7,261
Unemployed	533	577	537	560	589	624	618	545	546
Unemployment rate	6.7	7.3	6.9	7.1	7.3	7.7	7.6	6.9	7.2
Ohio									
Civilian noninstitutional population[1]	7,901	7,960	7,964	7,901	7,944	7,949	7,956	7,960	7,964
Civilian labor force	4,944	4,926	4,957	5,023	5,069	5,062	5,043	4,991	5,038
Employed	4,670	4,602	4,595	4,738	4,775	4,743	4,733	4,695	4,664
Unemployed	274	324	363	285	294	319	310	296	374
Unemployment rate	5.5	6.6	7.3	5.7	5.8	6.3	6.1	5.9	7.4
Pennsylvania									
Civilian noninstitutional population[1]	8,885	8,934	8,938	8,885	8,920	8,925	8,929	8,934	8,938
Civilian labor force	5,178	5,357	5,321	5,238	5,304	5,283	5,411	5,365	5,381
Employed	4,860	4,941	4,933	4,893	4,930	4,898	5,041	4,998	4,967
Unemployed	320	415	388	345	374	385	370	367	414
Unemployment rate	6.2	7.8	7.3	6.6	7.1	7.2	6.8	6.8	7.7
Texas									
Civilian noninstitutional population[1]	9,448	9,673	9,690	9,448	9,618	9,637	9,655	9,673	9,690
Civilian labor force	6,152	6,310	6,287	6,198	6,342	6,365	6,358	6,327	6,333
Employed	5,810	5,960	5,988	5,917	6,092	6,060	6,089	5,957	5,994
Unemployed	241	350	299	281	250	305	309	370	339
Unemployment rate	3.9	5.6	4.8	4.5	3.9	4.8	4.9	5.8	5.4

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

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

ESTABLISHMENT DATA

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

(In thousands)

Industry	Not seasonally adjusted				Seasonally adjusted					
	Apr. 1979	Feb. 1980	Mar.p 1980	Apr.p 1980	Apr. 1979	Dec. 1979	Jan. 1980	Feb. 1980	Mar.p 1980	Apr.p 1980
TOTAL	88,820	89,417	89,942	90,111	89,036	90,241	90,652	90,845	90,799	90,320
GOODS-PRODUCING	26,252	25,895	26,009	25,881	26,565	26,655	26,783	26,732	26,597	26,189
MINING	932	986	995	1,007	940	991	1,000	1,009	1,010	1,016
CONSTRUCTION	4,413	4,261	4,303	4,412	4,559	4,783	4,893	4,831	4,698	4,558
MANUFACTURING	20,907	20,648	20,711	20,462	21,066	20,881	20,890	20,892	20,889	20,615
Production workers	15,002	14,615	14,668	14,431	15,134	14,865	14,848	14,826	14,822	14,556
DURABLE GOODS	12,697	12,523	12,575	12,342	12,752	12,615	12,601	12,655	12,656	12,395
Production workers	9,105	8,813	8,860	8,632	9,146	8,931	8,894	8,926	8,934	8,672
Lumber and wood products	748.8	710.6	706.7	673.7	761	740	737	740	729	685
Furniture and fixt. ss	687.8	680.7	680.2	674.4	690	683	684	681	681	677
Stone, clay, and glass products	716.6	677.5	683.1	680.4	714	706	708	709	706	687
Primary metal industries	1,259.0	1,199.6	1,198.2	1,193.5	1,260	1,208	1,208	1,210	1,205	1,195
Fabricated metal products	1,723.7	1,706.5	1,710.4	1,681.2	1,732	1,725	1,712	1,724	1,722	1,690
Machinery, except electrical	2,468.0	2,520.8	2,526.5	2,515.7	2,466	2,444	2,512	2,511	2,516	2,513
Electric and electronic equipment	2,066.1	2,138.3	2,149.2	2,136.4	2,101	2,140	2,149	2,147	2,160	2,151
Transportation equipment	2,082.2	1,950.4	1,974.2	1,843.6	2,084	2,019	1,938	1,980	1,984	1,845
Instruments and related products	686.5	701.2	705.0	702.4	689	698	700	703	707	705
Miscellaneous manufacturing	448.0	437.2	441.4	440.5	455	452	453	450	450	447
NONDURABLE GOODS	8,210	8,125	8,136	8,120	8,314	8,266	8,289	8,237	8,231	8,220
Production workers	5,897	5,802	5,808	5,799	5,988	5,934	5,954	5,900	5,888	5,884
Food and kindred products	1,657.3	1,634.9	1,630.2	1,617.1	1,728	1,715	1,707	1,705	1,698	1,666
Tobacco manufacturers	62.5	63.4	60.9	58.7	69	62	64	65	65	65
Textile mill products	890.4	887.9	890.8	891.8	892	893	891	891	893	894
Apparel and other textile products	1,323.7	1,305.9	1,315.0	1,307.0	1,325	1,297	1,309	1,312	1,312	1,308
Paper and allied products	710.8	710.0	711.0	708.3	717	713	718	717	716	714
Printing and publishing	1,231.0	1,274.0	1,276.0	1,274.7	1,234	1,263	1,273	1,274	1,279	1,277
Chemicals and allied products	1,106.7	1,113.0	1,118.0	1,120.5	1,111	1,119	1,123	1,121	1,122	1,125
Petroleum and coal products	210.8	159.1	156.6	179.2	213	217	219	163	160	181
Rubber and misc. plastics products	772.0	738.3	738.7	723.0	781	745	745	744	744	732
Leather and leather products	245.1	238.3	239.1	239.2	244	242	240	241	240	238
SERVICE-PRODUCING	62,568	63,522	63,933	64,230	62,471	63,586	63,869	64,113	64,202	64,131
TRANSPORTATION AND PUBLIC UTILITIES	4,989	5,142	5,155	5,150	5,024	5,223	5,212	5,210	5,212	5,186
WHOLESALE AND RETAIL TRADE	19,957	20,041	20,111	20,235	20,088	20,234	20,428	20,521	20,498	20,367
WHOLESALE TRADE	5,112	5,221	5,243	5,224	5,138	5,218	5,248	5,276	5,280	5,250
RETAIL TRADE	14,845	14,820	14,868	15,011	14,950	15,036	15,180	15,247	15,218	15,117
FINANCE, INSURANCE, AND REAL ESTATE	4,900	5,051	5,074	5,093	4,915	5,056	5,081	5,092	5,103	5,106
SERVICES	16,897	17,294	17,452	17,564	16,880	17,357	17,442	17,522	17,540	17,546
GOVERNMENT	15,825	15,994	16,143	16,188	15,564	15,696	15,706	15,768	15,849	15,924
FEDERAL	2,750	2,803	2,867	2,944	2,758	2,771	2,791	2,823	2,884	2,952
STATE AND LOCAL	13,075	13,191	13,276	13,244	12,806	12,925	12,915	12,945	12,965	12,972

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					
	Apr. 1979	Feb. 1980	Mar. 1980[p]	Apr. 1980[p]	Apr. 1979	Dec. 1979	Jan. 1980	Feb. 1980	Mar. 1980[p]	Apr. 1980[p]
TOTAL PRIVATE	35.1	35.2	35.2	35.1	35.3	35.7	35.7	35.5	35.4	35.3
MINING	42.6	43.2	43.3	43.0	42.9	43.9	44.4	43.7	43.5	43.3
CONSTRUCTION	35.5	35.5	36.1	36.6	35.5	37.1	37.6	36.7	36.2	36.6
MANUFACTURING	38.9	39.8	39.8	39.4	39.1	40.2	40.3	40.1	39.8	39.6
Overtime hours	2.5	2.9	3.0	2.7	2.7	3.2	3.2	3.1	3.1	2.8
DURABLE GOODS	39.3	40.3	40.4	39.9	39.5	40.7	40.8	40.6	40.4	40.1
Overtime hours	2.6	3.0	3.1	2.7	2.7	3.3	3.3	3.1	3.2	2.8
Lumber and wood products	39.1	38.5	38.3	37.3	39.1	39.0	39.5	39.1	38.6	37.3
Furniture and fixtures	37.5	38.3	38.4	38.1	38.1	39.0	39.0	39.0	38.5	38.7
Stone, clay, and glass products	41.1	40.1	40.6	40.3	41.2	41.6	41.3	41.0	40.8	40.4
Primary metal industries	41.7	40.7	40.6	40.2	41.8	40.6	40.6	40.6	40.7	40.3
Fabricated metal products	38.8	40.4	40.8	40.1	39.1	41.0	40.9	40.8	40.6	40.4
Machinery, except electrical	40.3	41.5	41.6	41.1	40.5	41.6	41.7	41.5	41.4	41.3
Electric and electronic equipment	38.8	40.2	40.0	39.5	39.6	40.5	40.4	40.4	40.0	39.7
Transportation equipment	37.9	40.4	40.5	40.3	37.9	41.0	41.0	40.9	40.5	40.3
Instruments and related products	40.0	40.7	40.6	40.4	40.3	40.8	41.5	40.9	40.5	40.7
Miscellaneous manufacturing	37.6	38.8	38.8	38.3	37.6	39.2	39.5	39.2	38.6	38.3
NONDURABLE GOODS	38.2	38.9	39.0	38.7	38.6	39.4	39.5	39.4	39.1	38.9
Overtime hours	2.5	2.8	2.9	2.7	2.7	3.1	3.1	3.0	3.1	2.9
Food and kindred products	39.0	39.0	39.1	38.9	39.6	39.9	40.0	39.6	39.5	39.5
Tobacco manufacturers	37.6	36.9	37.7	37.4	37.6	38.8	38.5	37.7	37.6	37.4
Textile mill products	38.6	40.8	40.9	39.5	38.8	41.0	41.7	41.1	40.8	39.7
Apparel and other textile products	33.9	35.5	35.4	35.3	34.2	35.6	35.9	36.0	35.4	35.6
Paper and allied products	41.6	42.4	42.3	42.4	41.8	42.9	42.8	42.9	42.5	42.6
Printing and publishing	36.8	37.0	37.2	36.7	37.1	37.4	37.8	37.4	37.2	37.0
Chemicals and allied products	41.9	41.6	41.8	41.6	41.7	41.7	42.0	41.9	41.8	41.4
Petroleum and coal products	43.9	39.6	40.1	41.8	43.9	43.5	36.6	40.4	40.3	41.8
Rubber and misc. plastics products	39.4	39.9	39.9	39.5	39.7	39.9	40.6	39.9	39.8	39.8
Leather and leather products	35.3	36.8	36.4	36.1	35.6	36.9	37.2	37.5	36.8	36.4
TRANSPORTATION AND PUBLIC UTILITIES	39.0	39.7	39.7	39.6	39.2	39.8	39.9	39.8	39.9	39.8
WHOLESALE AND RETAIL TRADE	32.5	31.9	32.0	31.9	32.8	32.6	32.5	32.3	32.3	32.1
WHOLESALE TRADE	38.6	38.4	38.4	38.4	38.7	38.9	38.8	38.7	38.5	38.5
RETAIL TRADE	30.6	29.8	29.9	29.8	30.9	30.6	30.5	30.3	30.3	30.1
FINANCE, INSURANCE, AND REAL ESTATE	36.4	36.4	36.5	36.3	36.5	36.4	36.2	36.4	36.6	36.4
SERVICES	32.5	32.5	32.5	32.5	32.7	32.9	32.7'	32.7	32.7	32.7

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

p = preliminary

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

Industry	Average hourly earnings				Average weekly earnings			
	Apr. 1979	Feb. 1980	Mar. 1980 p	Apr. 1980 p	Apr. 1979	Feb. 1980	Mar. 1980 p	Apr. 1980 p
TOTAL PRIVATE	$6.03	$6.46	$6.51	$6.51	$211.65	$227.39	$229.15	$228.50
Seasonally adjusted	6.04	6.46	6.52	6.52	213.21	229.33	230.81	230.16
MINING	8.54	8.88	8.94	9.00	363.80	383.62	387.10	387.00
CONSTRUCTION	9.02	9.60	9.64	9.60	320.21	340.80	348.00	351.36
MANUFACTURING	6.56	6.99	7.06	7.07	254.41	278.20	280.99	278.56
DURABLE GOODS	6.95	7.45	7.53	7.54	273.14	300.24	304.21	300.85
Lumber and wood products	5.90	6.34	6.35	6.28	230.69	244.09	243.21	234.24
Furniture and fixtures	4.94	5.34	5.39	5.40	185.25	204.52	206.98	205.74
Stone, clay, and glass products	6.73	7.13	7.25	7.32	276.60	285.91	294.35	295.00
Primary metal industries	8.92	9.44	9.44	9.54	371.96	384.21	383.26	383.51
Fabricated metal products	6.62	7.12	7.21	7.21	256.86	287.65	292.73	289.12
Machinery, except electrical	7.10	7.71	7.77	7.80	286.13	319.97	323.23	320.58
Electric and electronic equipment	6.11	6.71	6.78	6.81	237.07	269.74	271.20	269.00
Transportation equipment	8.26	8.84	9.02	8.98	313.05	357.14	365.31	361.89
Instruments and related products	6.03	6.58	6.61	6.65	241.20	267.81	268.37	268.66
Miscellaneous manufacturing	4.96	5.33	5.38	5.41	186.50	206.80	208.74	207.20
NONDURABLE GOODS	5.90	6.27	6.30	6.30	225.36	243.90	245.70	246.13
Food and kindred products	6.19	6.64	6.68	6.73	241.41	258.96	261.19	261.80
Tobacco manufacturers	6.80	7.41	7.62	7.77	255.68	273.43	287.27	290.60
Textile mill products	4.48	4.90	4.92	4.94	172.93	199.92	201.23	195.13
Apparel and other textile products	4.19	4.46	4.48	4.47	142.04	158.33	158.95	157.79
Paper and allied products	6.92	7.51	7.53	7.60	287.87	318.42	318.52	322.24
Printing and publishing	6.72	7.25	7.29	7.31	247.30	268.25	271.19	268.28
Chemicals and allied products	7.50	7.99	8.00	8.09	314.25	332.38	334.40	338.54
Petroleum and coal products	9.44	9.40	9.25	9.81	414.42	372.24	370.93	410.06
Rubber and misc. plastics products	5.82	6.25	6.26	6.28	229.31	249.38	250.57	248.06
Leather and leather products	4.18	4.46	4.51	4.55	147.55	164.86	164.16	164.26
TRANSPORTATION AND PUBLIC UTILITIES	7.88	8.59	8.63	8.69	307.32	341.02	342.61	344.12
WHOLESALE AND RETAIL TRADE	5.00	5.36	5.39	5.37	162.50	170.98	172.48	171.30
WHOLESALE TRADE	6.30	6.76	6.82	6.83	243.18	259.58	261.88	262.27
RETAIL TRADE	4.49	4.78	4.79	4.77	137.39	142.44	143.22	142.15
FINANCE, INSURANCE, AND REAL ESTATE	5.23	5.62	5.69	5.68	190.37	204.57	207.69	206.18
SERVICES	5.29	5.70	5.73	5.73	171.93	185.25	186.23	186.23

[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	APR. 1979	NOV. 1979	DEC. 1979	JAN. 1980	FEB. 1980	MAR. P 1980	APR. P 1980	Percent change from—	
								APR. 1979–APR. 1980	MAR. 1980–APR. 1980
TOTAL PRIVATE NONFARM:									
Current dollars	226.8	237.3	239.5	240.5	242.6	245.1	245.6	8.3	0.2
Constant (1967) dollars	107.0	104.1	103.8	102.8	102.3	101.9	N.A.	(2)	(3)
MINING	264.1	271.6	273.2	274.0	275.5	278.8	281.3	6.5	.9
CONSTRUCTION	218.1	225.8	227.6	225.1	229.8	231.2	231.2	6.0	(4)
MANUFACTURING	231.0	242.1	244.3	245.3	248.1	250.3	252.2	9.2	.8
TRANSPORTATION AND PUBLIC UTILITIES	241.7	258.9	260.7	261.2	262.7	265.7	266.7	10.3	.4
WHOLESALE AND RETAIL TRADE	220.9	229.5	231.3	234.7	235.5	237.6	237.0	7.3	-.2
FINANCE, INSURANCE, AND REAL ESTATE	207.5	216.2	216.5	218.6	221.2	226.1	225.0	8.5	-.5
SERVICES	225.0	234.7	237.7	238.0	239.9	242.8	242.7	7.9	(4)

1 SEE FOOTNOTE 1, TABLE B-2.
2 PERCENT CHANGE WAS +5.0 FROM MARCH 1979 TO MARCH 1980, THE LATEST MONTH AVAILABLE.
3 PERCENT CHANGE WAS -.3 FROM FEBRUARY 1980 TO MARCH 1980, THE LATEST MONTH AVAILABLE.
4 LESS THAN 0.05 PERCENT.
N.A. = not available
P=preliminary

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

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

(1967=100)

Industry division and group	1979										1980		
	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.P	Apr.P
TOTAL PRIVATE	123.6	125.4	125.7	125.7	125.5	125.9	125.8	126.3	126.6	127.1	126.8	126.1	124.5
GOODS-PRODUCING	106.8	110.3	110.1	109.9	109.4	109.7	109.0	108.7	109.6	110.6	109.4	107.6	105.1
MINING	152.0	151.6	152.5	148.6	156.7	157.4	158.1	158.6	162.3	165.7	164.4	163.5	164.0
CONSTRUCTION	126.9	133.7	134.4	133.9	134.5	135.6	132.7	133.7	137.1	142.5	137.6	129.5	126.2
MANUFACTURING	102.0	104.7	104.3	104.4	103.3	103.4	103.1	102.5	102.9	103.0	102.5	101.7	99.3
DURABLE GOODS	105.0	108.3	107.9	107.9	106.8	107.1	106.2	105.1	105.6	105.3	105.3	104.7	100.9
Lumber and wood products	112.6	113.3	112.7	111.9	112.3	113.6	113.3	110.1	108.3	109.0	108.2	105.2	96.5
Furniture and fixtures	105.8	103.9	103.3	105.9	104.5	104.8	105.9	106.2	106.4	106.7	105.9	104.5	104.0
Stone, clay, and glass products	111.5	113.1	113.0	111.5	110.8	111.2	110.6	110.4	110.8	110.6	109.6	108.1	103.7
Primary metal industries	99.7	97.9	97.9	97.8	95.9	93.3	94.6	93.1	91.8	92.1	92.2	91.6	89.7
Fabricated metal products	102.7	106.6	107.1	106.7	104.8	105.4	106.1	105.8	106.4	105.1	105.7	105.1	102.1
Machinery, except electrical	113.0	117.4	117.6	118.0	116.2	117.7	114.5	113.6	113.5	117.3	116.6	116.6	113.6
Electric and electronic equipment	104.6	108.2	108.6	108.5	104.7	107.2	107.6	108.1	108.8	109.2	108.7	108.4	106.9
Transportation equipment	94.3	102.6	99.4	100.3	102.6	100.1	97.4	93.7	96.7	90.7	92.9	92.4	82.6
Instruments and related products	127.2	128.1	128.4	128.1	127.2	127.2	127.8	127.8	128.1	130.6	129.4	129.9	130.6
Miscellaneous manufacturing industry	97.5	98.7	100.3	100.7	100.8	99.9	99.9	99.9	101.4	102.2	100.5	99.2	97.9
NONDURABLE GOODS	97.8	99.5	99.1	99.1	98.2	98.1	98.5	98.8	99.0	98.7	98.3	97.4	97.0
Food and kindred products	96.8	97.0	96.8	95.9	94.6	93.0	96.1	96.5	97.0	96.8	95.5	94.3	93.9
Tobacco manufacturers	73.9	76.5	72.6	73.0	66.7	70.5	69.8	61.1	65.4	67.6	67.5	67.3	65.7
Textile mill products	86.7	89.5	89.6	89.8	89.0	89.8	90.6	91.8	91.8	93.5	92.0	91.6	89.2
Apparel and other textile products	86.8	89.5	88.7	89.5	88.0	87.3	87.9	87.3	88.4	90.0	90.5	89.0	89.2
Paper and allied products	100.8	102.3	102.1	103.2	103.1	102.2	101.7	101.8	102.3	103.4	103.8	103.1	102.5
Printing and publishing	104.7	103.1	103.3	104.4	104.7	103.9	104.3	105.9	105.1	107.2	106.2	105.3	104.8
Chemicals and allied products	107.7	108.3	108.4	108.8	108.2	107.6	107.9	108.6	108.6	109.7	108.9	108.5	108.5
Petroleum and coal products	125.7	124.2	123.1	123.0	124.2	126.2	125.1	128.0	126.3	106.3	76.0	72.5	91.5
Rubber and misc. plastics products	148.4	153.4	150.4	150.5	145.8	143.5	143.5	142.5	140.9	143.6	140.7	140.3	137.9
Leather and leather products	63.9	63.4	66.0	61.5	64.9	68.1	65.2	64.9	65.0	65.2	65.3	64.5	63.2
SERVICE-PRODUCING	135.3	133.9	134.5	134.7	134.6	137.2	137.5	138.5	138.4	138.6	138.9	139.0	137.9
TRANSPORTATION AND PUBLIC UTILITIES	109.2	113.4	115.0	114.2	115.2	114.9	115.8	116.9	115.4	115.2	115.1	113.5	114.8
WHOLESALE AND RETAIL TRADE	130.6	130.2	130.0	129.9	129.6	130.4	130.7	131.6	130.9	131.6	131.5	131.0	128.1
WHOLESALE TRADE	131.3	132.8	132.8	132.7	132.4	132.5	133.4	134.3	134.1	134.3	134.3	134.0	133.2
RETAIL TRADE	130.3	129.1	128.9	128.9	128.5	129.6	129.7	130.5	129.7	130.5	130.3	129.9	127.8
FINANCE, INSURANCE, AND REAL ESTATE	145.3	144.5	145.7	146.5	146.3	147.1	146.7	148.3	148.3	148.1	149.6	150.7	150.1
SERVICES	131.0	131.7	132.6	133.5	133.4	133.8	134.1	135.2	135.2	134.8	137.1	137.4	137.2

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
1977				
January	73.0	80.2	86.3	80.5
February	67.2	84.3	84.6	81.4
March	72.4	82.6	84.0	82.8
April	71.5	81.7	82.3	84.6
May	70.3	76.5	79.1	85.2
June	65.1	72.7	77.6	86.6
July	70.3	70.3	75.3	84.9
August	57.8	70.9	76.7	83.1
September	67.2	67.7	79.7	83.1
October	64.2	76.2	80.5	82.8
November	73.3	79.7	84.0	81.1
December	75.3	79.4	82.3	82.0
1978				
January	68.3	80.2	83.1	81.4
February	69.2	75.6	79.1	83.1
March	69.5	77.3	77.6	81.1
April	68.0	69.8	73.5	82.0
May	57.8	67.2	72.7	81.7
June	66.6	66.6	71.2	82.3
July	64.5	69.5	73.0	81.4
August	60.5	67.2	77.3	78.2
September	62.5	71.2	79.7	77.9
October	73.0	78.2	82.3	73.5
November	75.9	81.1	82.3	76.2
December	74.4	82.3	80.5	71.8
1979				
January	70.3	76.5	74.1	71.8
February	65.1	72.1	67.4	70.6
March	60.5	57.8	61.9	63.7
April	44.8	55.2	58.1	64.0
May	54.7	51.5	50.3	61.9
June	57.0	58.4	46.8	58.1
July	61.6	56.7	56.1	57.0
August	48.8	52.0	55.8	54.4
September	46.8	52.9	57.6	51.2p
October	69.8	61.0	61.6	47.4p
November	59.9	66.6	65.7	
December	59.0	64.5	62.2p	
1980				
January	63.4	62.5	45.6p	
February	55.8	54.4p		
March	45.1p	36.3p		
April	27.9p			
May				
June				
July				
August				
September				
October				
November				
December				

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

Senator BENTSEN. I'm not trying to get you to make a prediction as such, but I would like to compare the similarities and dissimilarities from 1974–75. It seems to me we are going back into the worst possible case—with inflation and recession—stagflation I think is the word for that one. How do these numbers compare with what was observed in 1974–75? What are the similarities? What are the dissimilarities? I'm trying to get a feel for how deep or how serious this recession might be if it tracks 1974–75.

Ms. NORWOOD. We did have, in the 1974–75 period, a 1-month sharp increase in the unemployment rate. That was somewhat different from previous periods of recession when the rate increased more gradually over a somewhat longer period.

Senator BENTSEN. Well, it happened to go up 2.8 percent in 5 months in that period of time.

Ms. NORWOOD. Yes.

Senator BENTSEN. Here you've eight-tenths.

Ms. NORWOOD. That's correct, but we now have had a 5-month increase from 5.8 to 7 percent; so we have had a 1.2 percentage point increase. There are some differences I think between the situation now and the situation then.

Senator BENTSEN. Let's hear about them.

Ms. NORWOOD. First of all, we do have, as I've indicated, some important changes in the durable manufacturing industries. There has been considerable employment decline in the automobile industry. Some of that decline during this period is due certainly to credit restraints and the inability of dealers to finance stock and consumers to buy, but some of it is also due to retooling by automobile companies in order to produce smaller cars. There is apparently a shortage of domestically produced smaller cars. So some of those people who have been laid off will be affected by increased production of small cars once that retooling has been completed.

Second, generally speaking, inventories on hand are now fairly lean.

Senator BENTSEN. Let me ask you about that, Commissioner, because I read all the reports too about how inventories are thinner, more lean now than they were in 1974–75, but I also think I remember that in 1974–75 they missed on their forecasts of inventories. They didn't know. They thought inventories were pretty lean and afterwards they found out that there had been more stock on the shelf. Their numbers weren't very solid.

Ms. NORWOOD. Well, I think that's why I was careful to say "generally speaking," I think that there is some question in some people's minds about how good the inventory figures are, but it does appear that most businessmen at least believe that their inventories now are leaner than they were in 1974.

Sentor BENTSEN. How about capital spending? Where are we right now on capital spending?

Ms. NORWOOD. Capital spending is beginning to level off, and certainly, capacity utilization has declined.

Senator BENTSEN. I also recall in 1974 when we were at that economic summit meeting at the White House, Mr. Greenspan, I believe, was Chairman of the Council of Economic Advisers and he assured me then that capital spending was going to be high in 1975, which did not happen. Capital spending went down. I recall asking him a question in

the fall of 1975 before this committee about what happened. One thing I've learned is that you can have an awful lot of water in the capital spending and the board of directors can turn that off very quickly.

Ms. NORWOOD. That's certainly true and it's very much affected by what happens to interest rates. We do not have now the liquidity crisis that we had before. What we have now is very high interest rates. However, interest rates have begun to turn around. I, of course, don't know what will happen to them in the coming months, but if they continue downward I think that would have some effect.

Senator BENTSEN. Well, you certainly expect, or I would, that the short-term rates would go down some more if you're going into this recession, which I think we are. You're going to see a slowdown on demand for credit, so the short-term rates ought to go down. The long-term rates probably won't moderate as much.

But I think it gets back to what I have been trying to urge on the administration earlier, that we do a selective tax cut so that you don't have this boom-and-bust cycle. It looks like we're going right back to the historical pattern, and that's what we should have tried to avoid. If we had made the selective tax cuts, I believe we could have taken a somewhat different approach to credit restrictions in recent months.

Where do you think a worker is going to go these days? Where can he go if he loses his job? Which industries can he go to? To what degree are his skills transferable to something that may be moving up? Is there something that is moving up?

Ms. NORWOOD. There are certainly some employment training programs that are available. As you know, there's been a lot of discussion in the newspapers about trade adjustment assistance for automobile workers.

Senator BENTSEN. Well, that's just a Band-Aid. That's curing the symptoms.

Ms. NORWOOD. It could be, and it could be used for training for other jobs. It has not been used that way before, but it certainly has the potential.

Senator BENTSEN. On that point, you're right.

Ms. NORWOOD. It has the potential I think for doing so. I think part of the question, as I've indicated, is that at least some of the automobile workers will certainly go back to the automobile industry. If interest rates continue to go down and mortgage interest rates drop, there may be some stimulation in construction that would affect construction workers. There has been this month and, to a lesser extent, last month some drop in employment in the retail sales industry which I think reflects the effect of credit restraints.

Senator BENTSEN. Well, let me understand that. We were talking earlier about the fact that unemployment has gone up, particularly in those industries relating to durables.

Ms. NORWOOD. That's right.

Senator BENTSEN. That's what people can put off purchasing if they want to. This unemployment has spread, as I understand you, into retail. How about services? Has it gone into service industries?

Ms. NORWOOD. It's gone into wholesale and retail trade.

Senator BENTSEN. Then it's much more pervasive.

Ms. NORWOOD. It is and it isn't. It's concentrated in construction and in durable manufacturing industries. Almost all of the individual two-digit level durable manufacturing industries had a little bit of

downward shift and some of them, like transportation, lumber and wood, and primary metals had fairly large declines in employment.

In addition, wholesale and retail trade had a drop in employment. The drop in retail trade was somewhere around 100,000. In March there was a small drop in retail trade. That would appear to be perhaps the effect of some of the credit restraints. You know, I saw a big ad in the newspaper this morning from one of the major retailers suggesting that they do have credit available. The psychological effect of the credit restraints is certainly taking hold and that would imply that people are more reluctant to buy some of the big ticket items, the appliances and so on, that are sold by the retail industry.

Senator BENTSEN. I think maybe it's more than psychological. I think you've got a situation where consumer credit is high right now and savings are low, so it becomes a very meaningful problem for people. It's more than psychological: They don't have the money. They don't have the savings and they've got substantial consumer debt and they are trying to make the payments.

Ms. NORWOOD. Yes, Senator Bentsen, that's quite true, but that's been true for some time and people have still been buying. People have been buying and saving very little and their real incomes have been declining for many months. So I think that there is a better realization now that conditions have changed and that that extension of credit is perhaps too large.

Senator BENTSEN. Let me ask you from your data where unemployment has increased, who's hardest hit: the blacks, the whites, the adult men, the adult women, full-time workers, household heads? Where is it the toughest?

Ms. NORWOOD. Any person who's unemployed is, of course, hard hit, but the change——

Senator BENTSEN. It's like if your brother-in-law is unemployed, it's recession; but if you're unemployed, it's depression.

Ms. NORWOOD. The decline in employment this month especially hit adult men. Adult women were also affected but to a somewhat lesser extent than adult men. There was a small labor force increase for adult women and an increase in the unemployment rate, but the unemployment rate for adult men is really very high now by historic standards.

Senator BENTSEN. It's 7 percent unemployment now and we've seen the biggest jump since 1974. I can't see much more of that before the problems of balancing the budget become beyond our reach. With the unemployment rate going up—suppose it gets up as high as 8 percent—do you think it's feasible then to balance the budget?

Ms. NORWOOD. Well, Senator, I think that's something that you're much more expert at than I.

Senator BENTSEN. Thanks a lot.

Well, Commissioner, the numbers you have given us are a matter of real concern and I think you can just forget about this question of whether or not we are having a recession. Now the question is, how deep and how long; and we will have a better answer for that I guess next month.

Thank you very much.

Ms. NORWOOD. Thank you very much.

Senator BENTSEN. The committee stands adjourned.

[Whereupon, at 10:30 a.m., the committee adjourned, subject to the call of the Chair.]

EMPLOYMENT-UNEMPLOYMENT

FRIDAY, JUNE 6, 1980

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

The committee met, pursuant to notice, at 10 a.m., in room 2128, Rayburn House Office Building, Hon. Gillis W. Long (member of the committee) presiding.

Present: Senator Sarbanes; and Representatives Long, Mitchell, Brown, and Rousselot.

Also present: John M. Albertine, executive director; Charles H. Bradford, minority counsel; Mayanne Karmin, Mary E. Eccles, Keith B. Keener, Kent H. Hughes, and Paul B. Manchester, professional staff members; Betty Maddox, administrative assistant; and Stephen J. Entin and Mark R. Policinski, minority professional staff members.

OPENING STATEMENT OF REPRESENTATIVE LONG, PRESIDING

Representative LONG. The hearing will come to order.

Commissioner Norwood, this morning you have some good news and some bad news for the American people.

The Producer Price Index registered its smallest monthly increase since September 1977. It increased in May at an annual rate of 3.7 percent. That is down from the 6.2 percent annual rate recorded in April.

The April and May figures could be good news for American consumers, especially when compared to the 18.6 percentage rate registered in the first quarter of 1980.

Since the beginning of the recession, over 1,700,000 Americans were added to the unemployment rolls.

Even the official economic soothsayers have finally decided what average Americans already knew—this is a severe recession, more severe than had been predicted.

These figures today contain especially bad news about the employment prospects for our Nation's youth. Teenage unemployment increased an astounding 3 full percentage points in May.

The human hardships imposed by this recession are not limited to any particular region of America or group of Americans.

Some areas of the Nation—like central Louisiana and the industrial centers of the North, have been suffering unemployment rates substantially over 10 percent for some time now.

We have with us today Commissioner Norwood and an eminent economic forecaster. We hope they can help us understand what is going on in the economy and how much the unemployment rate is likely to rise and how much the inflation rate is likely to fall.

Representative LONG. Congressman Brown.

OPENING STATEMENT OF REPRESENTATIVE BROWN

Representative BROWN. Thank you, Congressman Long. The unemployment rate released today is shocking. Today's figures show that 1.7 million more people have been added to the unemployment rolls this year and now have over 8 million people unemployed. What is truly frightening is that many economic forecasters believe that unemployment will reach 10 percent before the recession is over.

For the first time in this country's history, we face the possibility of having double-digit inflation and double-digit unemployment at the same time.

And what is so upsetting is that it could have been avoided if the President had shown some courage and leadership and acted when it first became obvious that a slowdown was not going to be mild.

This recession did not sneak up on us. Economic growth slowed in the first part of 1979. For well over a year, it has been obvious that rising taxes and increasing regulations were weakening the economy, and that the monetary restraint needed to slow inflation could tilt the economy into recession. This committee said so very clearly in its 1979 consensus report, and again more urgently in 1980. A year ago, all that was needed to avert this situation was modest economies in Government spending and tax cuts for workers to reduce the cost of living and the cost of hiring and producing for businesses. Senator Bentsen and I called for this in our joint press conference last June.

Instead of actir Mr. Carter last fall sent G. William Miller to the Hill to tell us that "the recession is half over." Then the Carter economic advisers told us the recession "will be mild." While Mr. Carter has done nothing, the economy has sunk into a severe recession that threatens to add 4 million people to unemployment rolls.

The administration is clearly guilty of malign neglect of the economy. It should move at once to make up for lost time. It should adopt the JEC recommendations for a sizable tax cut, half for individuals to encourage work effort and purchasing power, and half for business to lower production costs and encourage investment and hiring. We also need to phase in personal savings incentives to keep capacity growing in the years ahead.

I favor an immediate 10-percent across-the-board marginal tax rate reduction for individuals, plus phased-in individual savings incentives. For business, I support accelerated depreciation proposals, such as 10–5–3, and a gradual reduction in corporate tax rates.

We can't do anything to avoid the recession we are now in, but we can make sure that we do not force the same predicament of high inflation and high unemployment a few years from now.

Representative LONG. Commissioner Norwood, we are glad to have you. Please proceed.

STATEMENT OF HON. JANET L. NORWOOD, COMMISSIONER, BUREAU OF LABOR STATISTICS, DEPARTMENT OF LABOR, ACCOMPANIED BY W. JOHN LAYNG, ASSISTANT COMMISSIONER, OFFICE OF PRICES AND LIVING CONDITIONS; AND JOHN E. BREGGER, CHIEF, DIVISION OF EMPLOYMENT AND UNEMPLOYMENT ANALYSIS

Ms. NORWOOD. Congressman Long and members of the committee, I am pleased to have this opportunity to provide the Joint Economic

Committee with a few brief comments to supplement the Employment Situation and Producer Price Index press releases issued by the Bureau of Labor Statistics this morning at 9 a.m.

The employment situation deteriorated further in May. Unemployment rose sharply for the second straight month. Employment and hours continued to decline.

The overall unemployment rate was 7.8 percent, up from 7 percent in April, and the number of unemployed persons increased to 8.2 million. Since the beginning of the current recession in January, the number of jobless workers has increased by more than 1.7 million and the unemployment rate has jumped a full 1.6 percentage points.

The May increase in unemployment was pervasive; jobless rates rose for whites, for blacks, for adults, for teenagers. The jobless rate for adult men, which stood at 4.7 percent in January rose to 6.6 percent in May, the same level as the May unemployment rate for adult women. The unemployment rate for construction workers reached 17.5 percent, and the rate for workers in durable goods manufacturing increased to 10.5 percent. Still another important indicator of cyclical change was the large increase in the number of persons working part time for economic reasons. This group rose by more than 500,000 to 4.3 million.

As you know, even in recessionary periods, some individuals enter or reenter the labor force, as some find jobs and others become unemployed. The monthly data reflect the net result of these substantial movements in the labor market. In May, the labor force rose to more than 105 million, as a larger than usual number of young workers, under 25 years of age entered the job market. Thus, the decline in the level of employment was much less sharp than the increase in unemployment.

Our establishment survey shows that nonfarm payroll jobs dropped almost 200,000; employment increased somewhat in the services sector but factory jobs declined by 275,000. Declines were widespread throughout most of the durable goods sector, but were particularly large in the transportation equipment, metal, and lumber manufacturing industries. Employment in the construction industry changed very little in May. Since the start of the recession in January, however, construction employment has declined by nearly 300,000 and the number of factory jobs has dropped by more than 550,000. The proportion of the population with jobs edged down to 58.5 percent in May, nearly a full point below the all-time high reached at the end of last year.

The workweek continued to decrease, as did overtime hours in manufacturing. The index of aggregate weekly hours—which takes into account reductions in employment as well as hours—was down over the month and since January.

The latest information on the price situation is the data we released this morning on the behavior of producer prices in May. Prices charged by producers for finished goods increased 0.3 percent in May, the second consecutive small rise and a marked deceleration from the average monthly increase of 1.5 percent registered during the first quarter of this year.

All major components of finished goods contributed to the small rise. Food prices at the producer level were up only 0.1 percent in May. Prices of finished energy goods rose 0.8 percent in May, down sharply

from April's 3.8 percent rise and the smallest increase since September 1978. Prices of other finished goods rose 0.2 percent in May compared with a much larger rise in April.

At the intermediate or semifinished stage of production, price increases were also very moderate in May. Overall prices of intermediate materials increased 0.4 percent, the third moderate increase in a row. While prices of foods and feeds increased 6.1 percent, prices of other items increased only 0.1 percent. Price increases were very small, on average, for both energy and nonenergy items used in the production of goods and services.

Crude material prices rose 1.3 percent in May, a sharp reversal from the nearly 6 percent drop from February to April as crude foodstuffs and feedstuffs turned up. Prices of nonfood crude materials increased only 0.1 percent. Crude energy prices were up 1.6 percent, but other nonfeed crude materials, fell, the third consecutive monthly decline.

In summary, all of the major labor market indicators deteriorated further in May. Since the onset of the recession in January, the unemployment rate has risen steeply, and the number of unemployed persons has increased by 1.7 million. Unemployment has risen for every major demographic and age group of the population. More than 800,000 jobs have been lost in producing industries, and hours of work have contracted sharply. Thus far, the major employment impact of the recession has been in construction and in such durable manufacturing industries as automobiles, lumber, rubber, primary metals, and metal fabrication. In the services sector of the economy, employment growth has slowed, and the average workweek has declined.

In contrast to the deteriorating labor market situation, the news on the price front is indeed encouraging. Producer finished prices rose much less in May then in previous months, and price increases were very small for nonfood intermediate and crude goods. These May producer price data, when taken together with the announced reductions in automobile prices and mortgage interest rates, suggest that there may be continued deceleration in the CPI for May which will be released later this month.

Finally, I would like to report to you that the annual adjustment of establishment data to new benchmarks is scheduled to be completed during June. Establishment data in the next Employment Situation press release, to be published July 3, will reflect the new benchmarks. Updated seasonally adjusted series and new seasonal factors will be introduced at that time.

Mr. Congressman, I have with me on my right, John Layng, who is our Assistant Commissioner in the Office of Prices and Living Conditions; and on my left, John Bregger, who is our expert on current employment analysis, and we would all be very happy now to answer any questions you may have.

Representative LONG. Thank you, Ms. Norwood.

[The table attached to Ms. Norwood's statement, together with the Employment Situation and the Producer Price Index press releases, follows:]

UNEMPLOYMENT RATES BY ALTERNATIVE SEASONAL ADJUSTMENT METHODS

Month and year	Unadjusted rate	X-11 ARIMA method					X-11 method (former official method)	Range (cols. 2-7)
		Official	Concurrent	Stable	Total	Residual		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1979:								
May	5.2	5.8	5.8	5.8	5.8	5.9	5.8	0.1
June	6.0	5.7	5.7	5.5	5.7	5.7	5.7	.2
July	5.8	5.7	5.7	5.7	5.8	5.8	5.7	.1
August	5.9	5.9	5.9	6.0	5.9	5.9	5.9	.1
September	5.6	5.8	5.8	5.8	5.8	5.8	5.8	----------
October	5.6	5.9	5.9	6.0	5.9	6.0	5.9	.1
November	5.6	5.8	5.8	5.9	5.8	5.8	5.8	.1
December	5.6	5.9	5.9	6.0	5.8	5.9	5.9	.2
1980:								
January	6.8	6.2	6.1	6.2	6.2	6.2	6.2	.1
February	6.8	6.0	6.1	6.0	6.1	5.9	6.0	.2
March	6.6	6.2	6.2	6.2	6.2	6.2	6.2	----------
April	6.6	7.0	6.8	6.9	7.0	7.0	7.0	.2
May	7.0	7.8	7.6	7.8	7.8	7.7	7.8	.2

Source: U.S. Department of Labor, Bureau of Labor Statistics, June 1980.

NOTES TO TABLE COLUMN NUMBERS

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

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

(3) Concurrent (X-11 ARIMA method). The procedure for computation of the official rate is followed, except that the data are reseasonally adjusted each month as the most recent data become available. Extrapolated factors are not used at all in this method. For example, the rate for January 1980 would be based, during 1980, on the adjustment of data for the period January 1967 through January 1980. The rates for the current year are shown as first computed. Since the revision pattern and procedure for computation of the rate are identical to the official procedure, the results of this method will be identical to the official rate at the beginning of each year when the most recent observation is December.

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

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

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

(7) X-11 method (former official method). The procedure for computation of the official rate is used except that the series are not extended with ARIMA models and the factors are projected in 12-mo intervals. The standard X-11 program is used to perform the seasonal adjustment.

Methods of adjustment: The X-11 ARIMA method was developed at Statistics Canada by the seasonal adjustment and times series staff under the direction of Estela Bee Dagum. The method is described in the X-11 ARIMA Seasonal Adjustment Method, by Estela Bee Dagum, Statistics Canada Catalogue No. 12 564E, September 1979.

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

News
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USDL 80-373
TRANSMISSION OF MATERIAL IN THIS RELEASE IS EMBARGOED UNTIL 9:00 A.M. (EDT), FRIDAY, JUNE 6, 1980

THE EMPLOYMENT SITUATION: MAY 1980

Unemployment rose sharply for the second straight month and employment continued to decline in May, the Bureau of Labor Statistics of the U. S. Department of Labor reported today. The jobless rate was 7.8 percent, up from 7.0 percent in April and 6.2 percent in March.

Total employment--as measured by the monthly survey of households--edged down in May, as a 300,000 decline in nonfarm employment was partially offset by an over-the-month gain in agriculture. Total employment has declined by nearly 1 million during the past 3 months.

Nonfarm payroll employment--as measured by the monthly survey of establishments--declined by 180,000 in May to 90.3 million. As in April, the drop was concentrated in manufacturing. Average weekly hours fell for the fourth month in a row.

Unemployment

The unemployment rate rose 0.8 percentage point for the second month in a row and stood at 7.8 percent in May, the highest rate since November 1976. The number of persons unemployed increased by 900,000 to 8.2 million. Most of the May increase can be traced to layoffs and job terminations; job losers now comprise more than half of the unemployed total. In the past 2 months, the number of unemployed workers has risen by 1.7 million. (See tables A-1 and A-5.)

Jobless rate increases were pervasive among worker groups. The teenage rate jumped 3 full percentage points to 19.2 percent. The rates for adult men and women continued to rise; each stood at 6.6 percent in May. Joblessness among adult men has been climbing at a faster pace than that for adult women in recent months, and May marked the first time in 2 decades that the rate for men has been as high as that for women. Whites, blacks, and full-time workers also registered markedly higher rates than those posted in April. (See table A-2.)

As in the previous month, unemployment increases were especially large among workers in the construction and manufacturing industries. The rate for blue-collar workers also rose sharply.

The number of nonfarm workers on part-time work schedules for economic reasons (often referred to as the "partially unemployed") increased by 530,000 in May to 4.3 million. Jobholders who usually work full time accounted for two-thirds of the increase. (See table A-3.)

Employment

Following a drop of 800,000 in the February-April period, there was a small decline in total employment in May. Over the past 3 months, the overall employment level decreased by nearly 1 million; about three-quarters of the decline occurred among adult men. The precipitous drop during recent months wiped out about two-thirds of the employment gains which had occurred since

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

Selected categories	Quarterly averages			Monthly data			Apr.-May change
	1979		1980	1980			
	I	IV	I	Mar.	Apr.	May	
HOUSEHOLD DATA							
	Thousands of persons						
Civilian labor force	102,315	103,749	104,194	104,094	104,419	105,142	723
Total employment	96,425	97,665	97,804	97,656	97,154	96,988	-166
Unemployment	5,890	6,084	6,390	6,438	7,265	8,154	889
Not in labor force	58,255	58,842	59,022	59,322	59,182	58,657	-525
Discouraged workers	740	741	993	N.A.	N.A.	N.A.	N.A.
	Percent of labor force						
Unemployment rates:							
All workers	5.8	5.9	6.1	6.2	7.0	7.8	0.8
Adult men	4.0	4.2	4.7	4.9	5.9	6.6	0.7
Adult women	5.7	5.7	5.7	5.7	6.3	6.6	0.3
Teenagers	15.9	16.1	16.2	15.9	16.2	19.2	3.0
White	5.0	5.1	5.4	5.4	6.2	6.9	0.7
Black and other	11.4	11.2	11.7	11.8	12.6	13.9	1.3
Full time workers	5.2	5.4	5.7	5.8	6.6	7.5	0.9
ESTABLISHMENT DATA							
	Thousands of jobs						
Nonfarm payroll employment	88,724	90,108	90,772	90,819	90,508p	90,328p	-180p
Goods-producing industries	26,486	26,587	26,705	26,600	26,210p	25,963p	-247p
Service-producing industries	62,238	63,521	64,067	64,219	64,298p	64,365p	67p
	Hours of work						
Average weekly hours:							
Total private nonfarm	35.8	35.7	35.5	35.4	35.3p	35.1p	-0.2p
Manufacturing	40.6	40.2	40.1	39.8	39.6p	39.4p	-0.2p
Manufacturing overtime	3.7	3.2	3.2	3.2	2.9p	2.6p	-0.3p

p=preliminary N.A.=not available

May a year ago, such that total employment was up only about half a million over the past year. The employment-population ratio was 58.5 percent in May, the lowest it has been in 2 years. (See table A-1.)

There were sharp contrasts in April-to-May movements among the major occupational groups. The number of blue-collar workers fell by 450,000, continuing the steep declines which have been registered in recent months. In contrast, white-collar employment was up 200,000 in May and has maintained a moderate growth pace. (See table A-3.)

The civilian labor force swelled by 725,000 in May to 105.1 million, as a disproportionately large number of persons under 25 years of age entered the labor force; they accounted for more than half of the over-the-month growth. The May labor force activity brought the overall labor force participation rate to a record 64.2 percent, up 0.4 point from April.

Industry Payroll Employment

Nonagricultural payroll employment fell by 180,000 in May and was down more than 500,000 since February. At 90.3 million, payroll employment has grown by less than 1 million over the past year. (See table B-1.)

The over-the-month decline took place almost entirely in manufacturing, where employment fell by 275,000. Most affected by the cutbacks were the durable goods industries, particularly transportation equipment and fabricated metals, each of which lost about 60,000 jobs. The number of jobs in the transportation equipment industry has fallen by about 175,000, or 9 percent, in the past 2 months. Substantial over-the-month declines also were registered in primary metals, lumber and wood products, and stone, glass, and clay products. Employment in nondurable goods manufacturing generally showed only small changes, except for a decrease of 35,000 in rubber and plastic products and an increase of about the same magnitude in petroleum and coal products, where striking workers returned to their jobs.

Elsewhere in the goods-producing sector, mining employment rose over the month and construction jobs were about unchanged. Construction employment had dropped by 300,000 between January and April.

In the service-producing sector, there was slow employment growth. Most of the 70,000 advance was accounted for by an increase in services industry jobs, although finance, insurance,

and real estate also showed a gain. An 85,000 decline in Federal government jobs primarily was due to reductions in the number of temporary workers for the 1980 Decennial Census; Federal employment had shown a rise of nearly 300,000 between February and April.

Hours of Work

The average workweek for production or nonsupervisory workers on private nonfarm payrolls dropped by 0.2 hour to 35.1 hours in May; average weekly hours have fallen for 4 consecutive months. The manufacturing workweek also was down 0.2 hour and has fallen by nearly 1 hour since January. Factory overtime declined 0.3 hour in May to 2.6 hours, following a decline of the same magnitude in April. (See table B-2.)

The index of aggregate weekly hours of production or nonsupervisory workers on private nonfarm payrolls was down 0.7 percent over the month to 123.6 (1967=100) in May, reflecting the declines in both employment and weekly hours. The manufacturing index dropped by 2.5 percent over the month and was down 6.1 percent since January. (See table B-5.)

Hourly and Weekly Earnings

Average hourly earnings of production or nonsupervisory workers on private nonagricultural payrolls rose 0.5 percent over the month and were 7.9 percent above the May 1979 level (seasonally adjusted). Average weekly earnings edged down by 0.1 percent from April but have risen by 6.1 percent over the year.

Before adjustment for seasonality, average hourly earnings rose 4 cents in May to $6.57 and were 48 cents above the May 1979 level. Average weekly earnings were $229.95, up $1.40 over the month and $13.75 over the year. (See table B-3.)

The Hourly Earnings Index

The Hourly Earnings Index--earnings adjusted for overtime in manufacturing, seasonality, and the effects of changes in the proportion of workers in high-wage and low-wage industries--was 247.9 (1967=100) in May, 0.6 percent higher than in April. The Index was 9.0 percent above May a year ago. In dollars of constant purchasing power, the Index decreased 5.2 percent during the 12-month period ended in April. (See table B-4.)

Chart 1. Civilian labor force and employment
(Seasonally adjusted)

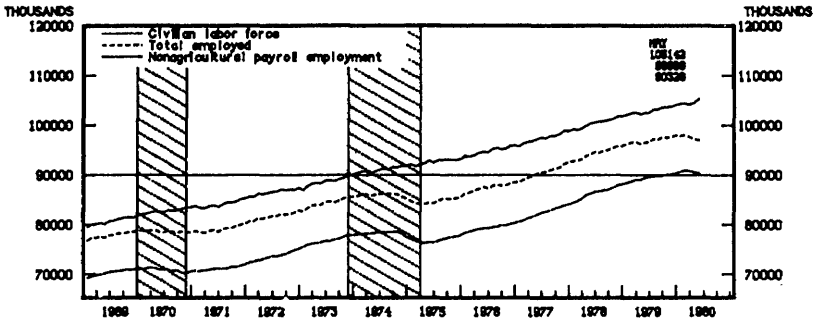


Chart 2. Unemployment rate—all civilian workers

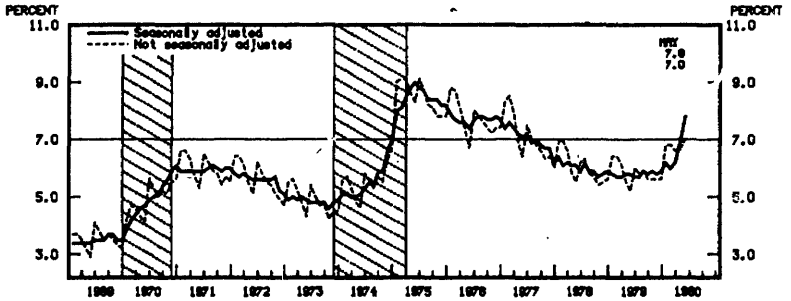
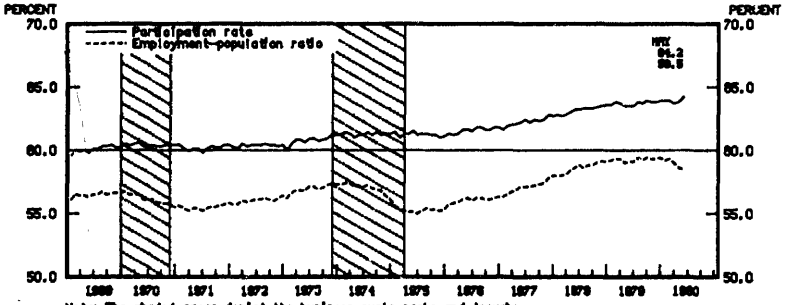


Chart 3. Civilian labor force participation rate
and total employment-population ratio
(Seasonally adjusted)



Note: The shaded areas depict the business cycle peaks and troughs as designated by the National Bureau of Economic Research.

Explanatory Note

This news release presents statistics from two major surveys, the Current Population Survey (household survey) and the Current Employment Statistics Survey (establishment survey). The household survey provides the information on the labor force, total employment, and unemployment that appears in the A tables, marked HOUSEHOLD DATA. It is a sample survey of about 65,000 households that is conducted by the Bureau of the Census with most of the findings analyzed and published by the Bureau of Labor Statistics (BLS).

The establishment survey provides the information on the employment, hours, and earnings of workers on nonagricultural payrolls that appears in the B tables, marked ESTABLISHMENT DATA. This information is collected from payroll records by BLS in cooperation with State agencies. The sample includes approximately 162,000 establishments employing more than 32 million people.

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

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

Coverage, definitions and differences between surveys

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

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

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

The *civilian labor force* equals the sum of the number employed and the number unemployed. The *unemployment rate* is the percentage of unemployed people in the civilian labor force. Table A-7 presents a special grouping of seven measures of unemployment based on varying definitions of unemployment and the labor force. The definitions are provided in the table. The most restrictive definition yields U-1, and the most comprehensive yields U-7. The official unemployment rate is U-5.

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

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

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

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

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

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

Seasonal adjustment

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

Because these seasonal events follow a more or less regular pattern each year, their influence on statistical trends can be eliminated by adjusting the statistics from month to month. These adjustments make nonseasonal developments, such as declines in economic activity or

increases in the participation of women in the labor force, easier to spot. To return to the school's-out example, the large number of people entering the labor force each June is likely to obscure any other changes that have taken place since May, making it difficult to determine if the level of economic activity has risen or declined. However, because the effect of students finishing school in previous years is known, the statistics for the current year can be adjusted to allow for a comparable change. Insofar as the seasonal adjustment is made correctly, the adjusted figure provides a more useful tool with which to analyze changes in economic activity.

Measures of civilian labor force, employment, and unemployment contain components such as age and sex. Statistics for all employees, production workers, average weekly hours, and average hourly earnings include components based on the employer's industry. All these statistics can be seasonally adjusted either by adjusting the total or by adjusting each of the components and combining them. The second procedure usually yields more accurate information and is therefore followed by BLS. For example, the seasonally adjusted figure for the civilian labor force is the sum of eight seasonally adjusted employment components and four seasonally adjusted unemployment components; the total for unemployment is the sum of the four unemployment components; and the official unemployment rate is derived by dividing the resulting estimate of total unemployment by the estimate of the civilian labor force.

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

Sampling variability

Statistics based on the household and establishment surveys are subject to sampling error, that is, the estimate of the number of people employed and the other estimates drawn from these surveys probably differ from the figures that would be obtained from a complete census, even if the same questionnaires and procedures were used. In the household survey, the amount of the differences can be expressed in terms of standard errors. The numerical value of a standard error depends upon the size of the sample, the results of the survey, and other factors. However, the numerical value is always such that the chances are 68 out of 100 that an estimate based on the sample will differ by no more than the standard error from the results of a complete census. The chances are 90 out of 100 that an estimate based on the sample will differ by no more than 1.6 times the standard error from the results of a complete census. At the 90-percent level of confidence--the confidence limits used by BLS in its analyses--the error for the monthly change in total employment is on the order of plus or minus 293,000; for total unemployment, it is 185,000; and, for the overall unemployment rate, it is 0.19 percentage point. These figures do not mean that the sample results are off by these magnitudes but, rather, that the chances are 90 out of 100 that the "true" level or rate would not be expected to differ from the estimates by more than these amounts.

Sampling errors for monthly surveys are reduced when the data are cumulated for several months, such as quarterly or annually. Also, as a general rule, the smaller the estimate, the larger the sampling error. Therefore, relatively speaking, the estimate of the size of the labor force is subject to less error than is the estimate of the number unemployed. And, among the unemployed, the sampling error for the jobless rate of adult men, for example, is much smaller than is the error for the jobless rate of teenagers. Specifically, the error on monthly change in the jobless rate for men is .23 percentage point; for teenagers, it is 1.06 percentage points.

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

Additional statistics and other information

In order to provide a broad view of the Nation's employment situation, BLS regularly publishes a wide variety of data in this news release. More comprehensive statistics are contained in *Employment and Earnings*, published each month by BLS. It is available for $2.75 per issue or $22.00 per year from the U.S. Government Printing Office, Washington, D.C. 20204. A check or money order made out to the Superintendent of Documents must accompany all orders.

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

Table A-1. Employment status of the noninstitutional population

(Numbers in thousands)

Employment status	Not seasonally adjusted			Seasonally adjusted					
	May 1979	Apr. 1980	May 1980	May 1979	Jan. 1980	Feb. 1980	Mar. 1980	Apr. 1980	May 1980
TOTAL									
civil noninstitutional population[1]	163,260	165,693	165,886	163,260	164,701	165,298	165,504	165,693	165,886
Armed Forces[1]	2,078	2,092	2,088	2,078	2,081	2,086	2,090	2,092	2,088
Civilian noninstitutional population[1]	161,182	163,601	163,799	161,182	162,620	163,211	163,414	163,601	163,799
Civilian labor force	101,873	103,693	104,028	102,288	104,228	104,269	104,098	104,519	105,182
Participation rate	63.0	63.7	63.5	63.5	63.9	63.9	63.7	63.8	64.2
Employed	96,220	96,566	96,709	96,695	97,836	97,951	97,656	97,154	96,988
Employment-population ratio[2]	58.9	58.3	58.3	59.1	59.2	59.3	59.0	58.6	58.5
Agriculture	3,309	3,089	3,836	3,246	3,270	3,326	3,358	3,262	3,370
Nonagricultural industries	92,911	93,445	93,273	93,249	94,536	94,626	94,298	93,892	93,618
Unemployed	5,243	6,846	7,319	5,903	6,825	6,307	6,438	7,265	8,154
Unemployment rate	5.2	6.6	7.0	5.8	6.2	6.0	6.2	7.0	7.8
Not in labor force	59,708	60,188	59,771	58,788	58,791	58,951	59,322	59,182	58,657
Men, 20 years and over									
civil noninstitutional population[1]	69,787	70,988	71,093	69,787	70,695	70,792	70,896	70,988	71,083
Civilian noninstitutional population[1]	68,123	69,320	69,428	68,123	69,047	69,150	69,238	69,329	69,428
Civilian labor force	54,105	54,842	55,146	54,288	54,855	55,038	54,996	55,116	55,663
Participation rate	79.4	79.1	79.4	79.7	79.4	79.6	79.4	79.5	79.9
Employed	52,115	51,605	51,834	52,158	52,279	52,531	52,300	51,868	51,796
Employment-population ratio[2]	76.5	72.7	72.9	76.7	73.9	76.2	73.8	73.1	72.9
Agriculture	2,382	2,255	2,822	2,301	2,387	2,435	2,384	2,320	2,388
Nonagricultural industries	49,833	49,350	49,012	49,857	49,892	50,096	49,906	49,548	49,412
Unemployed	1,930	3,236	3,322	2,130	2,577	2,507	2,696	3,246	3,671
Unemployment rate	3.6	5.9	6.0	3.9	4.7	4.6	4.9	5.9	6.6
Not in labor force	14,018	14,487	14,272	13,835	14,192	14,102	14,242	14,215	13,961
Women, 20 years and over									
civil noninstitutional population[1]	76,782	78,110	78,219	76,782	77,779	77,890	78,005	78,110	78,219
Civilian noninstitutional population[1]	76,670	77,981	78,090	76,670	77,656	77,766	77,876	77,981	78,090
Civilian labor force	38,602	40,111	39,970	38,619	39,878	39,857	39,751	40,137	40,246
Participation rate	50.1	51.4	51.2	50.4	51.4	51.3	51.0	51.5	51.5
Employed	36,813	37,787	37,558	36,611	37,578	37,604	37,496	37,602	37,576
Employment-population ratio[2]	47.9	48.4	48.0	47.7	48.3	48.3	48.1	48.1	48.0
Agriculture	597	519	635	577	540	567	582	552	616
Nonagricultural industries	35,816	37,273	36,923	35,838	37,038	37,037	36,914	37,051	36,960
Unemployed	1,989	2,324	2,411	2,208	2,304	2,254	2,255	2,534	2,670
Unemployment rate	5.2	5.8	6.0	5.7	5.8	5.7	5.7	6.3	6.6
Not in labor force	38,268	37,870	38,121	38,051	37,778	37,909	38,125	37,844	37,844
Both sexes, 16-19 years									
civil noninstitutional population[1]	16,692	16,595	16,584	16,692	16,627	16,616	16,606	16,595	16,584
Civilian noninstitutional population[1]	16,389	16,291	16,281	16,389	16,317	16,305	16,302	16,291	16,281
Civilian labor force	8,966	8,460	8,902	9,491	9,497	9,365	9,346	9,168	9,929
Participation rate	54.7	51.9	54.7	57.9	58.2	57.4	57.3	56.3	57.9
Employed	7,632	7,174	7,317	7,926	7,952	7,818	7,859	7,683	7,616
Employment-population ratio[2]	46.7	43.7	44.7	47.5	47.8	47.1	47.3	46.3	45.9
Agriculture	370	311	378	368	344	325	381	376	379
Nonagricultural industries	7,262	6,863	6,939	7,558	7,608	7,493	7,478	7,313	7,237
Unemployed	1,334	1,286	1,585	1,565	1,545	1,547	1,487	1,485	1,813
Unemployment rate	14.9	15.2	17.8	16.5	16.3	16.5	15.9	16.2	19.2
Not in labor force	7,823	7,831	7,378	6,898	6,820	6,940	6,956	7,123	6,852
White									
civil noninstitutional population[1]	142,978	144,870	145,016	142,978	144,021	144,570	144,730	144,870	145,016
Civilian noninstitutional population[1]	141,331	143,258	143,403	141,331	142,806	142,951	143,115	143,258	143,403
Civilian labor force	89,856	91,245	91,698	90,120	91,852	91,977	91,821	92,083	92,535
Participation rate	63.3	63.7	63.9	63.8	64.3	64.3	64.2	64.3	64.5
Employed	85,482	85,886	85,980	85,632	86,895	87,081	86,832	86,385	86,168
Employment-population ratio[2]	59.8	59.7	59.3	59.9	60.2	60.2	60.0	59.8	59.4
Unemployed	3,976	5,359	5,719	4,488	4,957	4,896	4,989	5,698	6,366
Unemployment rate	4.4	5.9	6.2	5.0	5.4	5.3	5.4	6.2	6.9
Not in labor force	51,475	52,010	51,705	51,211	50,954	50,975	51,294	51,171	50,868
Black and other									
civil noninstitutional population[1]	20,282	20,822	20,870	20,282	20,680	20,727	20,777	20,822	20,870
Civilian noninstitutional population[1]	19,850	20,346	20,395	19,850	20,214	20,261	20,301	20,346	20,395
Civilian labor force	12,017	12,448	12,329	12,219	12,453	12,362	12,266	12,319	12,559
Participation rate	60.5	59.8	60.5	61.6	61.6	61.0	60.4	60.5	61.6
Employed	10,738	10,680	10,729	10,816	10,979	10,937	10,823	10,771	10,813
Employment-population ratio[2]	52.9	51.3	51.4	53.3	53.1	52.8	52.1	51.7	51.8
Unemployed	1,279	1,487	1,600	1,403	1,474	1,426	1,443	1,548	1,746
Unemployment rate	10.6	12.2	13.0	11.5	11.8	11.5	11.8	12.6	13.9
Not in labor force	7,833	8,179	8,066	7,631	7,761	7,899	8,035	8,027	7,836

[1] The population and Armed Forces figures are not adjusted for seasonal variation, 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 rate					
	May 1979	May 1980	May 1979	Jan. 1980	Feb. 1980	Mar. 1980	Apr. 1980	May 1980
CHARACTERISTICS								
Total, 16 years and over	5,903	8,154	5.8	6.2	6.0	6.2	7.0	7.8
Men, 20 years and over	2,110	3,671	3.9	4.7	4.6	4.9	5.9	6.6
Women, 20 years and over	2,248	2,670	5.7	5.8	5.7	5.7	6.3	6.6
Both sexes, 16-19 years	1,565	1,811	16.5	16.3	16.5	15.9	16.2	19.2
White, total	4,488	6,384	5.0	5.4	5.3	5.4	6.2	6.9
Men, 20 years and over	1,624	2,923	3.4	4.1	4.0	4.4	5.3	5.9
Women, 20 years and over	1,669	2,001	5.0	5.1	5.2	4.9	5.5	6.8
Both sexes, 16-19 years	1,195	1,537	14.2	14.9	13.8	13.8	14.6	17.4
Black and other, total	1,403	1,786	11.5	11.8	11.5	11.8	12.6	13.9
Men, 20 years and over	659	711	8.4	8.4	9.2	9.3	10.9	12.0
Women, 20 years and over	530	661	10.0	10.0	9.0	10.5	11.4	11.9
Both sexes, 16-19 years	384	373	36.1	38.6	37.9	33.0	29.8	35.2
Married men, spouse present	1,002	1,893	2.5	3.8	3.1	3.8	4.1	4.7
Married women, spouse present	1,227	1,569	5.2	5.2	5.8	5.3	5.7	6.3
Women who head families	624	822	8.6	9.2	8.5	8.7	9.3	8.3
Full-time workers	4,533	6,740	5.2	5.7	5.6	5.8	6.6	7.5
Part-time workers	1,389	1,817	9.3	8.7	8.9	8.3	8.9	9.3
Unemployed 15 weeks and over[1]	1,212	1,722	1.2	1.3	1.2	1.3	1.6	1.6
Labor force time lost[2]	--	--	6.3	6.7	6.6	6.8	7.5	8.8
OCCUPATION[3]								
White-collar workers	1,686	2,049	3.2	3.4	3.4	3.3	3.7	3.9
Professional and technical	326	426	2.1	2.2	2.3	2.3	2.6	2.7
Managers and administrators, except farm	338	302	2.2	1.9	2.2	2.4	2.6	2.7
Sales workers	251	282	4.0	4.4	4.5	4.0	4.7	4.5
Clerical workers	833	1,040	4.5	4.8	4.7	4.5	5.1	5.4
Blue-collar workers	2,318	3,924	6.8	8.0	7.7	8.0	9.7	11.3
Craft and kindred workers	566	1,106	4.2	4.9	4.8	5.4	6.7	8.7
Operatives, except transport	961	1,686	8.2	9.9	9.2	9.3	11.6	14.0
Transport equipment operatives	207	336	5.4	6.9	6.7	6.6	8.9	9.0
Nonfarm laborers	585	799	11.1	12.3	12.0	13.0	14.1	15.4
Service workers	990	1,198	7.2	6.9	6.9	7.1	8.0	8.5
Farm workers	98	137	3.6	4.4	3.9	4.0	5.0	4.9
INDUSTRY[3]								
Nonagricultural private wage and salary workers[4]	4,261	6,327	5.7	6.2	6.0	6.2	7.1	8.2
Construction	506	929	10.0	10.8	10.5	13.0	15.1	17.5
Manufacturing	1,231	2,312	5.4	6.7	6.4	6.5	7.9	9.9
Durable goods	608	1,479	4.4	6.7	6.3	6.4	8.3	10.5
Nondurable goods	623	832	6.9	6.8	6.7	6.7	7.4	8.8
Transportation and public utilities	195	286	3.6	4.4	4.4	3.8	4.6	5.1
Wholesale and retail trade	1,199	1,841	6.4	6.6	6.4	6.3	7.0	7.6
Finance and service industries	1,088	1,317	4.9	4.6	4.6	4.9	5.1	5.7
Government workers	576	700	3.6	3.8	4.0	4.2	4.4	4.2
Agricultural wage and salary workers	146	186	9.3	10.3	9.2	10.2	11.9	11.7

[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. Includes mining, not shown separately.

Table A-3. Selected employment indicators

(In thousands)

Selected categories	Not seasonally adjusted		Seasonally adjusted					
	May 1979	May 1980	May 1979	Jan. 1980	Feb. 1980	Mar. 1980	Apr. 1980	May 1980
CHARACTERISTIC								
Total employed, 16 years and over	96,220	96,709	96,695	97,804	97,953	97,656	97,154	96,988
Men	56,280	55,750	56,372	56,886	56,732	56,681	55,998	55,823
Women	39,941	40,959	40,323	41,318	41,221	41,056	41,156	41,165
Married men, spouse present	39,066	38,187	39,085	38,769	38,955	38,745	38,342	38,147
Married women, spouse present	22,490	23,086	22,587	23,119	23,178	23,202	23,080	23,155
OCCUPATION								
White-collar workers	48,935	50,386	49,136	50,313	50,448	50,302	50,405	50,606
Professional and technical	15,220	15,691	15,100	15,337	15,444	15,397	15,562	15,551
Managers and administrators, except farm	10,312	10,751	10,427	10,608	10,971	10,755	10,765	10,882
Sales workers	6,073	5,982	6,101	6,052	6,185	6,111	5,988	6,022
Clerical workers	17,331	17,952	17,508	17,915	17,848	18,037	18,129	18,152
Blue-collar workers	31,859	30,623	31,904	31,882	31,756	31,670	31,127	30,681
Craft and kindred workers	12,764	12,460	12,820	12,814	12,728	12,767	12,773	12,523
Operatives, except transport	10,683	10,222	10,755	10,678	10,661	10,579	10,408	10,336
Transport equipment operatives	3,689	3,465	3,684	3,616	3,571	3,558	3,483	3,421
Nonfarm laborers	4,762	4,477	4,685	4,774	4,795	4,767	4,463	4,402
Service workers	12,728	12,890	12,772	12,979	13,080	12,981	13,034	12,932
Farm workers	2,698	2,810	2,628	2,660	2,769	2,733	2,658	2,785
MAJOR INDUSTRY AND CLASS OF WORKER								
Agriculture:								
Wage and salary workers	1,486	1,430	1,428	1,428	1,417	1,449	1,370	1,405
Self-employed workers	1,528	1,668	1,519	1,554	1,669	1,600	1,591	1,662
Unpaid family workers	339	342	283	293	281	300	281	289
Nonagricultural industries:								
Wage and salary workers	85,509	85,491	86,232	87,578	87,419	87,221	86,741	86,631
Government	15,729	15,910	15,616	15,414	15,540	15,622	15,668	15,799
Private industries	69,780	69,581	70,616	72,163	71,879	71,599	71,072	70,832
Private households	1,157	1,169	1,195	1,132	1,178	1,115	1,123	1,206
Other industries	68,623	68,412	69,421	71,031	70,702	70,484	69,949	69,625
Self-employed workers	6,870	6,907	6,608	6,752	6,899	6,825	6,813	6,848
Unpaid family workers	532	476	460	379	397	376	363	411
PERSONS AT WORK [1]								
Nonagricultural industries	89,286	89,103	87,785	89,454	88,985	88,585	87,660	87,680
Full-time schedules	73,056	71,798	72,696	73,223	73,110	72,749	71,807	71,224
Part time for economic reasons	3,100	4,113	3,283	3,513	3,406	3,418	3,816	4,349
Usually work full time	1,216	1,863	1,273	1,549	1,380	1,462	1,709	2,064
Usually work part time	1,884	2,150	2,010	1,964	2,026	1,955	2,107	2,285
Part time for noneconomic reasons	13,090	13,196	12,006	12,718	12,469	12,418	12,037	12,106

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

Table A-4. Duration of unemployment

(Numbers in thousands)

Weeks of unemployment	Not seasonally adjusted		Seasonally adjusted					
	May 1979	May 1980	May 1979	Jan. 1980	Feb. 1980	Mar. 1980	Apr. 1980	May 1980
DURATION								
Less than 5 weeks	2,494	3,427	2,823	3,184	2,995	2,995	3,309	3,872
5 to 14 weeks	1,855	2,044	1,919	2,907	2,881	2,169	2,391	2,697
15 weeks and over	1,304	1,848	1,212	1,334	2,244	1,363	1,629	1,722
15 to 26 weeks	768	1,100	705	795	790	776	953	1,016
27 weeks and over	536	749	507	539	496	587	676	709
Average (mean) duration, in weeks	12.1	11.7	10.9	10.5	10.7	11.0	11.3	10.5
Median duration, in weeks	5.7	5.8	5.6	5.2	5.8	5.9	5.7	5.7
PERCENT DISTRIBUTION								
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 5 weeks	47.5	46.8	47.4	49.6	47.1	45.9	45.1	46.7
5 to 14 weeks	27.7	27.9	32.2	29.7	32.7	33.2	32.6	32.5
15 weeks and over	24.8	25.3	20.4	20.8	20.2	20.9	22.2	20.8
15 to 26 weeks	14.6	15.0	11.8	12.4	12.4	11.9	13.0	12.2
27 weeks and over	10.2	10.2	8.5	8.4	7.8	9.0	9.2	8.5

Table A-5. Reasons for unemployment

[Numbers in thousands]

Reason	Not seasonally adjusted		Seasonally adjusted					
	May 1979	May 1980	May 1979	Jan. 1980	Feb. 1980	Mar. 1980	Apr. 1980	May 1980
NUMBER OF UNEMPLOYED								
Lost last job	2,097	3,824	2,356	2,988	2,907	3,047	3,611	4,341
On layoff	572	1,528	725	1,019	1,031	1,123	1,628	1,944
Other job losers	1,525	2,296	1,631	1,969	1,876	1,918	1,982	2,397
Left last job	782	826	940	779	893	788	926	992
Reentered labor force	1,614	1,844	1,767	1,797	1,786	1,803	1,567	2,015
Seeking first job	761	823	824	811	827	805	783	886
PERCENT DISTRIBUTION								
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Job losers	70.9	83.3	80.0	86.9	85.9	87.3	89.8	93.5
On layoff	19.5	20.9	12.3	16.0	16.1	17.5	19.6	23.7
Other job losers	29.0	11.8	27.7	10.9	29.6	29.8	30.2	29.8
Job losers	18.9	11.3	16.0	12.2	12.8	12.2	12.8	12.1
Reentrants	70.7	25.2	30.0	28.2	28.2	28.0	27.1	26.6
New entrants	10.5	11.3	14.0	12.7	13.1	12.5	10.3	10.8
UNEMPLOYED AS A PERCENT OF THE CIVILIAN LABOR FORCE								
Job losers	2.1	3.7	2.3	2.9	2.8	2.9	3.5	4.1
Job losers	.8	.8	.9	.7	.8	.8	.9	.9
Reentrants	1.6	1.8	1.7	1.7	1.7	1.7	1.5	1.9
New entrants	.7	.8	.8	.8	.8	.8	.7	.9

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

Sex and age	Number of unemployed persons (in thousands)		Unemployment rates					
	May 1979	May 1980	May 1979	Jan. 1980	Feb. 1980	Mar. 1980	Apr. 1980	May 1980
Total, 16 years and over	5,903	8,158	5.8	6.2	6.0	6.2	7.0	7.8
16 to 19 years	1,565	1,813	16.5	16.5	16.5	15.9	16.2	19.2
16 to 17 years	767	861	18.2	19.5	18.7	17.6	18.7	21.7
18 to 19 years	824	983	15.0	14.0	15.1	14.7	14.6	17.7
20 to 24 years	1,355	1,982	8.9	10.1	9.5	9.7	11.6	12.7
25 years and over	2,997	4,376	3.9	4.2	4.1	4.4	4.8	5.5
25 to 54 years	2,520	3,816	4.0	4.4	4.5	4.7	5.4	6.9
55 years and over	465	529	3.1	3.5	2.8	2.8	3.4	3.6
Men, 16 years and over	2,941	4,656	5.3	5.7	5.5	5.7	6.7	7.7
16 to 19 years	811	985	16.1	16.2	15.6	14.8	16.1	19.7
16 to 17 years	407	461	18.9	19.0	18.0	15.9	18.3	22.0
18 to 19 years	403	521	14.0	13.9	14.1	14.0	14.2	17.8
20 to 24 years	678	1,163	8.2	10.4	9.9	10.4	12.3	13.7
25 years and over	1,451	2,508	3.1	3.7	3.6	3.6	4.7	5.3
25 to 54 years	1,171	2,155	3.2	3.8	3.8	4.2	5.0	5.7
55 years and over	258	322	2.8	3.5	2.6	2.7	3.6	3.5
Women, 16 years and over	2,962	3,498	6.9	6.8	6.8	6.8	7.3	7.8
16 to 19 years	754	828	16.9	16.3	17.6	17.3	16.3	18.7
16 to 17 years	360	380	18.8	19.1	19.5	19.2	19.1	21.4
18 to 19 years	426	462	16.3	14.2	16.2	15.6	14.6	17.5
20 to 24 years	681	819	9.7	9.8	9.1	9.0	10.2	11.6
25 years and over	1,546	1,874	4.9	4.9	4.9	5.0	5.5	5.9
25 to 54 years	1,367	1,682	5.2	5.2	5.4	5.5	6.0	6.1
55 years and over	207	207	3.6	3.8	3.0	2.9	3.4	3.6

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

(Percent)

Measure	Quarterly ranges					Monthly data		
	1979				1980	1980		
	I	II	III	IV	I	Mar.	Apr.	May
U-1—Persons unemployed 15 weeks or longer as a percent of the civilian labor force	1.2	1.2	1.1	1.2	1.3	1.3	1.6	1.6
U-2—Job losers as a percent of the civilian labor force	2.4	2.4	2.5	2.6	2.9	2.9	3.5	4.1
U-3—Unemployed persons 25 years and over as a percent of the civilian labor force 25 years and over	3.9	3.9	3.9	3.9	4.2	4.4	5.0	5.5
U-4—Unemployed full-time jobseekers as a percent of the full-time labor force	5.2	5.2	5.3	5.4	5.7	5.8	6.6	7.5
U-5—Total unemployed as a percent of the civilian labor force (official measure)	5.8	5.8	5.8	5.9	6.1	6.2	7.0	7.8
U-6—Total full-time jobseekers plus ½ part-time jobseekers plus ½ total on part time for economic reasons as a percent of the civilian labor force less ½ of the part-time labor force	7.2	7.2	7.3	7.4	7.7	7.8	8.7	9.9
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	7.9	8.0	8.0	8.1	8.7	N.A.	N.A.	N.A.

N.A.= not available.

Table A-8. Employment status of the noninstitutional population by race and Hispanic origin, not seasonally adjusted

(Numbers in thousands)

Employment status	Total		White		Black[1]		Hispanic origin[2]	
	May 1979	May 1980	May 1979	May 1980	May 1979	May 1980	May 1979	May 1980
TOTAL								
Civilian noninstitutional population	161,182	163,799	141,331	143,403	16,981	17,343	8,011	8,525
Civilian labor force	101,673	104,028	89,656	91,698	10,197	10,487	4,977	5,431
Percent of population	63.0	63.5	63.3	63.9	60.0	60.2	62.1	63.7
Employment	96,220	96,709	85,482	85,980	9,019	9,019	4,605	4,898
Agriculture	3,309	3,436	3,038	3,166	212	220	222	269
Nonagricultural industries	92,911	93,273	82,444	82,816	8,807	8,799	4,383	4,629
Unemployment	5,253	7,318	3,976	5,719	1,177	1,468	372	533
Unemployment rate	5.2	7.0	4.4	6.2	11.5	13.7	7.5	9.8
Not in labor force	59,708	59,771	51,675	51,705	6,785	6,916	3,034	3,094

[1] Data relate to black workers only. According to the 1970 Census, they comprised about 88 percent of the "black and other" population group.

[2] Data on persons of Hispanic origin are tabulated separately, without regard to race, which means that they are also included in the data for white and black workers. At the time of the 1970 Census, approximately 50 percent of their population was white.

Table A-9. Employment status of male Vietnam-era veterans and nonveterans by age, not seasonally adjusted

(Numbers in thousands)

Veteran status and age	Civilian noninstitutional population		Civilian labor force							
			Total		Employed		Unemployed			
							Number		Percent of labor force	
	May 1979	May 1980	May 1979	May 1980	May 1979	May 1980	May 1979	May 1980	May 1979	May 1980
VETERANS[1]										
Total, 20 years and over	8,516	8,597	8,085	8,160	7,748	7,666	337	494	4.2	6.1
20 to 24 years	579	365	517	326	460	281	57	45	11.0	13.8
25 to 29 years	7,106	7,255	6,867	6,994	6,604	6,579	263	420	3.8	6.0
30 to 34 years	2,003	1,742	1,907	1,639	1,807	1,589	100	150	5.2	9.2
35 to 39 years	3,591	3,589	3,491	3,485	3,366	3,290	125	195	3.6	5.6
40 to 49 years	1,512	1,928	1,469	1,870	1,431	1,795	38	75	2.6	4.0
50 years and over	831	977	781	880	684	811	17	29	2.4	3.5
NONVETERANS[2]										
Total, 20 to 39 years	16,663	15,366	13,721	13,589	13,209	13,673	512	916	3.0	6.3
20 to 24 years	6,597	7,037	6,226	6,640	6,016	6,731	210	509	3.4	7.7
25 to 34 years	4,148	4,526	3,966	4,329	3,847	4,082	119	247	3.0	5.7
35 to 39 years	3,918	3,803	3,529	3,620	3,446	3,460	83	160	2.4	4.4

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

[2] Nonveterans are males who have never served in the Armed Forces. Published data are limited to those 20-39 years of age, the group that most closely corresponds to the bulk of the Vietnam-era veteran population.

HOUSEHOLD DATA

Table A-10. Employment status of the noninstitutional population for the ten largest States

[Numbers in thousands]

State and employment status	Not seasonally adjusted			Seasonally adjusted					
	May 1979	Apr. 1980	May 1980	May 1979	Jan. 1980	Feb. 1980	Mar. 1980	Apr. 1980	May 1980
California									
Civilian noninstitutional population[1]	16,713	17,034	17,062	16,713	16,854	16,979	17,007	17,034	17,062
Civilian labor force	10,774	11,080	11,065	10,832	11,074	11,013	11,103	11,179	11,125
Employed	10,171	10,307	10,330	10,170	10,434	10,337	10,481	10,389	10,332
Unemployed	603	773	735	662	640	676	662	790	793
Unemployment rate	5.6	7.0	6.6	6.1	5.8	6.1	6.0	7.1	7.1
Florida									
Civilian noninstitutional population[1]	6,729	6,920	6,937	6,729	6,870	6,886	6,906	6,920	6,937
Civilian labor force	3,812	3,904	3,908	3,847	3,791	3,842	3,884	3,915	3,945
Employed	3,618	3,716	3,701	3,626	3,596	3,644	3,683	3,701	3,711
Unemployed	194	189	207	221	195	198	201	214	234
Unemployment rate	5.1	4.8	5.3	5.7	5.1	5.2	5.2	5.5	5.9
Illinois									
Civilian noninstitutional population[1]	8,268	8,305	8,310	8,268	8,290	8,295	8,300	8,305	8,310
Civilian labor force	5,188	5,385	5,423	5,282	5,466	5,463	5,431	5,461	5,500
Employed	4,923	5,008	5,027	4,959	5,077	5,081	5,058	5,057	5,066
Unemployed	264	376	396	283	389	382	373	404	434
Unemployment rate	5.1	7.0	7.3	5.4	7.1	7.0	6.9	7.4	7.9
Massachusetts									
Civilian noninstitutional population[1]	4,383	4,403	4,407	4,383	4,393	4,396	4,400	4,403	4,407
Civilian labor force	2,852	2,833	2,870	2,880	2,827	2,838	2,853	2,858	2,819
Employed	2,709	2,691	2,702	2,721	2,685	2,702	2,716	2,707	2,714
Unemployed	143	141	168	159	142	136	139	151	185
Unemployment rate	5.0	5.0	5.8	5.5	5.0	4.8	4.9	5.3	6.6
Michigan									
Civilian noninstitutional population[1]	6,707	6,781	6,787	6,707	6,762	6,768	6,775	6,781	6,787
Civilian labor force	4,317	4,233	4,321	4,334	4,283	4,273	4,248	4,262	4,336
Employed	4,006	3,710	3,714	4,005	3,875	3,834	3,814	3,741	3,711
Unemployed	310	523	607	329	408	439	434	521	625
Unemployment rate	7.2	12.4	14.0	7.6	9.5	10.3	10.2	12.2	14.4
New Jersey									
Civilian noninstitutional population[1]	5,497	5,549	5,554	5,497	5,536	5,541	5,545	5,549	5,554
Civilian labor force	3,459	3,493	3,553	3,500	3,597	3,563	3,588	3,566	3,597
Employed	3,213	3,275	3,263	3,240	3,348	3,371	3,339	3,332	3,296
Unemployed	247	218	289	260	249	192	249	234	301
Unemployment rate	7.1	6.2	8.1	7.4	6.9	5.4	6.9	6.6	8.4
New York									
Civilian noninstitutional population[1]	13,273	13,308	13,306	13,273	13,298	13,300	13,303	13,304	13,306
Civilian labor force	7,844	7,799	7,914	7,913	8,044	8,161	7,936	7,887	7,987
Employed	7,384	7,262	7,327	7,405	7,440	7,543	7,391	7,241	7,351
Unemployed	459	537	587	508	604	618	545	646	636
Unemployment rate	5.9	6.9	7.4	6.4	7.5	7.6	6.9	7.2	8.0
Ohio									
Civilian noninstitutional population[1]	7,906	7,964	7,970	7,906	7,949	7,954	7,960	7,964	7,970
Civilian labor force	4,974	4,959	5,035	5,037	5,062	5,063	4,991	5,038	5,080
Employed	4,729	4,595	4,596	4,732	4,743	4,733	4,695	4,664	4,602
Unemployed	245	363	439	305	319	330	296	374	478
Unemployment rate	4.9	7.3	8.7	6.1	6.3	6.5	5.9	7.4	9.4
Pennsylvania									
Civilian noninstitutional population	8,888	8,938	8,942	8,888	8,925	8,929	8,934	8,938	8,942
Civilian labor force	5,209	5,321	5,301	5,285	5,383	5,411	5,365	5,381	5,379
Employed	4,915	4,933	4,919	4,928	4,998	5,043	4,998	4,967	4,933
Unemployed	294	388	382	357	385	370	367	414	446
Unemployment rate	5.6	7.3	7.2	6.8	7.2	6.8	6.8	7.7	8.3
Texas									
Civilian noninstitutional population[1]	9,473	9,690	9,709	9,473	9,637	9,655	9,673	9,690	9,709
Civilian labor force	6,066	6,247	6,282	6,166	6,365	6,358	6,327	6,333	6,362
Employed	5,824	5,988	5,967	5,959	6,060	6,049	5,957	5,994	5,999
Unemployed	258	259	316	207	305	309	370	339	363
Unemployment rate	4.2	4.1	5.0	3.4	4.9	4.9	5.8	5.4	5.6

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

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

Table B-1. Employees on nonagricultural payrolls by industry

(In thousands)

Industry	Not seasonally adjusted				Seasonally adjusted					
	May 1979	Mar. 1980	Apr. 1980 p	May 1980 p	May 1979	Jan. 1980	Feb. 1980	Mar. 1980	Apr. 1980p	May 1980p
TOTAL	89,671	89,960	90,295	90,606	89,398	90,652	90,845	90,819	90,508	90,328
GOODS-PRODUCING	26,594	26,010	25,899	25,905	26,651	26,783	26,732	26,600	26,210	25,963
MINING	944	996	1,007	1,034	944	1,000	1,009	1,011	1,016	1,034
CONSTRUCTION	4,662	4,305	4,444	4,615	4,648	4,893	4,831	4,[illegible]	4,591	4,601
MANUFACTURING	20,988	20,709	20,448	20,256	21,059	20,890	20,892	20,889	20,603	20,328
Production workers	15,061	14,662	14,398	14,175	15,112	14,848	14,826	14,815	14,522	14,226
DURABLE GOODS	12,739	12,569	12,344	12,149	12,739	12,601	12,655	12,653	12,396	12,153
Production workers	9,129	8,850	8,620	8,399	9,119	8,894	8,926	8,924	8,658	8,393
Lumber and wood products	763.8	708.5	671.1	654.1	762	737	740	736	682	658
Furniture and fixtures	483.9	480.7	475.1	461.3	487	484	481	482	477	465
Stone, clay, and glass products	718.6	682.5	679.8	660.4	715	708	709	703	687	666
Primary metal industries	1,258.6	1,197.9	1,187.7	1,162.0	1,254	1,208	1,210	1,205	1,189	1,157
Fabricated metal products	1,727.8	1,711.0	1,678.8	1,[illegible]4.3	1,730	1,712	1,724	1,723	1,687	1,626
Machinery, except electrical	2,462.6	2,522.9	2,505.2	2,[illegible]99.0	2,471	2,512	2,511	2,513	2,503	2,507
Electric and electronic equipment	2,095.2	2,147.4	2,133.8	2,110.5	2,106	2,149	2,147	2,158	2,149	2,122
Transportation equipment	2,091.8	1,9[illegible].1	1,866.9	1,823.0	2,077	1,938	1,980	1,982	1,869	1,810
Instruments and related products	686.5	704.4	704.3	704.2	688	700	703	707	706	706
Miscellaneous manufacturing	448.9	[illegible]1.4	440.7	435.8	449	453	450	450	447	436
NONDURABLE GOODS	8,249	8,140	[illegible],104	8,107	8,320	8,289	8,237	8,236	8,207	8,175
Production workers	5,932	5,[illegible]	5,778	5,776	5,993	5,954	5,900	5,891	5,864	5,833
Food and kindred products	1,669.8	1,632.5	1,615.7	1,633.8	1,725	1,707	1,705	1,701	1,685	1,688
Tobacco manufactures	61.9	61.1	59.8	59.3	70	64	65	65	66	67
Textile mill products	892.4	890.6	887.1	877.1	893	891	891	893	889	877
Apparel and other textile products	1,327.3	1,317.0	1,304.4	1,301.0	1,324	1,309	1,312	1,314	1,306	1,297
Paper and allied products	712.7	710.7	707.8	702.6	714	718	717	718	714	704
Printing and publishing	1,234.7	1,275.8	1,273.2	1,270.1	1,236	1,273	1,278	1,278	1,276	1,271
Chemicals and allied products	1,110.9	1,118.5	1,121.0	1,121.2	1,114	1,123	1,121	1,123	1,126	1,125
Petroleum and coal products	212.9	156.3	168.2	204.9	213	219	163	160	170	205
Rubber and misc. plastics products	777.0	738.7	727.9	696.4	784	745	744	744	737	703
Leather and leather products	249.2	238.8	239.2	240.9	247	240	241	240	238	238
SERVICE-PRODUCING	63,077	63,950	64,396	[illegible],701	62,747	63,869	64,113	64,219	64,298	64,365
TRANSPORTATION AND PUBLIC UTILITIES	5,125	5,156	5,1[illegible]	5,182	5,130	5,212	5,210	5,213	5,189	5,187
WHOLESALE AND RETAIL TRADE	20,119	[illegible],112	20,217	20,361	20,129	20,428	20,521	20,499	20,349	20,371
WHOLESALE TRADE	5,146	5,241	5,212	5,217	5,156	5,248	5,274	5,278	5,238	5,227
RETAIL TRADE	14,973	14,871	15,005	15,144	14,973	15,180	15,247	15,221	15,111	15,144
FINANCE, INSURANCE, AND REAL ESTATE	4,936	5,07[illegible]	5,092	5,131	4,936	5,081	5,092	5,107	5,107	5,131
SERVICES	17,039	17,4[illegible]	17,596	17,[illegible]38	16,954	17,442	17,522	17,548	17,578	17,650
GOVERNMENT	15,858	16,146	16,338	16,289	15,598	15,706	15,768	15,852	16,075	16,026
FEDERAL	2,773	2,869	3,103	3,029	2,770	2,791	2,823	2,886	3,112	3,026
STATE AND LOCAL	13,085	13,277	13,235	13,260	12,828	12,915	12,945	12,966	12,963	13,000

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					
	May 1979	Mar. 1980	Apr. 1980[p]	May 1980[p]	May 1979	Jan. 1980	Feb. 1980	Mar. 1980	Apr. 1980[p]	May 1980[p]
TOTAL PRIVATE	35.5	35.2	35.0	35.0	35.7	35.7	35.5	35.4	35.3	35.1
MINING	42.8	43.3	42.9	42.8	42.8	44.4	43.7	43.5	43.2	42.6
CONSTRUCTION	37.2	36.0	36.5	36.9	37.1	37.6	36.7	36.1	36.5	36.8
MANUFACTURING	40.1	39.8	39.4	39.4	40.2	40.3	40.1	39.8	39.6	39.4
Overtime hours	3.5	3.0	2.7	2.5	3.5	3.2	3.1	3.2	2.9	2.6
DURABLE GOODS	40.8	40.4	39.9	39.8	40.9	40.9	40.6	40.4	40.1	39.8
Overtime hours	3.6	3.1	2.7	2.5	3.8	3.3	3.1	3.2	2.8	2.6
Lumber and wood products	39.6	38.3	37.1	37.3	39.4	39.5	39.1	38.0	37.1	37.1
Furniture and fixtures	38.2	36.5	36.0	37.2	38.5	39.0	39.0	38.6	38.6	37.5
Stone, clay, and glass products	41.9	40.7	40.4	40.9	41.7	41.3	41.0	40.9	40.5	40.7
Primary metal industries	41.4	40.7	40.6	39.8	41.6	40.8	40.8	40.6	40.7	39.8
Fabricated metal products	40.7	40.6	40.2	39.9	40.7	40.9	40.8	40.6	40.5	39.9
Machinery, except electrical	41.7	41.6	41.1	41.0	42.0	41.7	41.5	41.6	41.3	41.2
Electric and electronic equipment	40.2	40.0	39.6	39.5	40.4	40.4	40.4	40.0	39.8	39.7
Transportation equipment	41.6	40.4	39.7	39.7	41.5	41.0	40.5	40.4	39.7	39.6
Instruments and related products	40.8	40.6	40.4	40.5	40.8	41.5	40.9	40.5	40.7	40.5
Miscellaneous manufacturing	36.5	36.9	36.6	36.4	36.6	39.5	39.2	38.7	36.6	36.5
NONDURABLE GOODS	39.1	38.9	38.7	38.8	39.2	39.5	39.4	39.1	39.0	38.9
Overtime hours	2.9	2.9	2.7	2.6	3.0	3.1	3.0	3.1	2.9	2.7
Food and kindred products	39.6	39.0	38.9	39.7	39.8	40.0	39.6	39.4	39.5	39.9
Tobacco manufacturers	38.9	37.7	38.1	37.9	38.9	38.5	37.7	37.6	38.1	37.9
Textile mill products	40.1	40.9	39.8	40.1	40.0	41.7	41.1	40.8	40.0	40.0
Apparel and other textile products	35.1	35.5	35.3	35.1	35.2	35.9	36.0	35.5	35.6	35.4
Paper and allied products	42.4	42.4	42.2	41.6	42.6	42.6	42.9	42.6	42.4	41.8
Printing and publishing	37.3	37.2	36.8	36.7	37.4	37.8	37.4	37.2	37.1	36.8
Chemicals and allied products	41.8	41.6	41.6	41.4	41.9	42.0	41.9	41.6	41.4	41.5
Petroleum and coal products	43.7	39.4	41.8	42.4	43.7	36.6	40.4	39.6	41.8	42.4
Rubber and misc. plastics products	40.5	40.0	39.7	39.1	40.9	40.0	39.9	39.9	40.0	39.5
Leather and leather products	36.4	36.4	36.6	36.9	36.1	37.2	37.3	36.8	36.9	36.6
TRANSPORTATION AND PUBLIC UTILITIES	39.6	39.5	39.3	39.1	39.8	39.9	r39.5	39.7	39.5	39.3
WHOLESALE AND RETAIL TRADE	32.4	32.0	31.8	31.9	32.6	32.5	32.3	32.3	32.1	32.0
WHOLESALE TRADE	38.9	38.4	38.4	38.5	39.0	38.8	38.7	38.5	38.5	38.6
RETAIL TRADE	30.4	29.9	29.8	29.8	30.6	30.5	30.3	30.3	30.1	29.9
FINANCE, INSURANCE, AND REAL ESTATE	36.1	36.4	36.3	36.3	36.1	36.2	36.4	36.5	36.4	36.3
SERVICES	32.5	32.5	32.5	32.3	32.7	32.7	32.7	32.7	32.7	32.5

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

p=preliminary
r=corrected

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

Industry	Average hourly earnings				Average weekly earnings			
	May 1979	Mar. 1980	Apr. 1980 p	May 1980 p	May 1979	Mar. 1980	Apr. 1980 p	May 1980 p
TOTAL PRIVATE	$6.09	$6.51	$6.53	$6.57	$216.20	$229.15	$228.55	$229.95
Seasonally adjusted	6.09	6.53	6.56	6.57	217.41	231.16	230.86	230.61
MINING	8.45	8.92	9.05	9.05	361.66	386.24	388.25	387.34
CONSTRUCTION	9.14	9.66	9.64	9.68	340.01	347.76	351.86	357.19
MANUFACTURING	6.63	7.06	7.08	7.12	265.66	280.99	278.95	280.53
DURABLE GOODS	7.07	7.54	7.55	7.59	288.46	304.62	301.23	302.08
Lumber and wood products	5.97	6.36	6.28	6.39	236.41	243.59	232.99	238.35
Furniture and fixtures	4.97	5.38	5.42	5.43	189.85	207.13	205.96	203.00
Stone, clay, and glass products	6.78	7.26	7.34	7.42	284.08	295.48	296.54	303.48
Primary metal industries	8.83	9.45	9.53	9.52	365.56	384.62	386.92	378.90
Fabricated metal products	6.77	7.22	7.25	7.30	275.54	293.13	291.45	291.27
Machinery, except electrical	7.25	7.78	7.83	7.89	301.33	323.65	321.91	323.49
Electric and electronic equipment	6.21	6.78	6.79	6.80	249.64	271.20	266.88	268.60
Transportation equipment	8.56	9.01	9.00	9.02	336.10	364.00	357.30	358.09
Instruments and related products	6.11	6.62	6.63	6.71	249.29	268.77	267.85	271.76
Miscellaneous manufacturing	5.00	5.36	5.40	5.47	192.50	208.50	208.44	210.05
NONDURABLE GOODS	5.91	6.30	6.37	6.42	231.08	245.07	248.52	249.10
Food and kindred products	6.22	6.69	6.77	6.82	246.31	260.91	265.33	270.75
Tobacco manufactures	6.83	7.61	7.81	7.70	265.69	286.90	297.36	291.83
Textile mill products	4.52	4.93	4.93	4.92	181.25	201.64	198.21	197.29
Apparel and other textile products	4.20	4.49	4.47	4.44	147.42	159.40	157.79	156.73
Paper and allied products	6.96	7.54	7.62	7.61	295.10	319.70	321.56	316.58
Printing and publishing	6.83	7.30	7.30	7.41	254.76	271.56	268.64	271.95
Chemicals and allied products	7.47	8.04	8.11	8.15	312.25	334.46	337.38	337.41
Petroleum and coal products	9.38	9.32	9.86	10.16	410.34	367.21	411.31	430.78
Rubber and misc. plastics products	5.90	6.27	6.31	6.32	238.95	250.80	250.51	247.11
Leather and leather products	4.18	4.52	4.53	4.57	152.15	164.53	165.80	168.63
TRANSPORTATION AND PUBLIC UTILITIES	7.96	8.64	8.71	8.74	314.42	341.28	342.30	341.73
WHOLESALE AND RETAIL TRADE	5.00	5.40	5.40	5.42	162.00	172.80	171.72	172.90
WHOLESALE TRADE	6.29	6.82	6.84	6.88	244.68	261.89	262.66	264.88
RETAIL TRADE	4.49	4.81	4.81	4.83	136.50	143.82	143.34	143.93
FINANCE, INSURANCE, AND REAL ESTATE	5.22	5.69	5.70	5.70	188.44	207.12	206.91	206.91
SERVICES	5.27	5.74	5.75	5.78	171.28	186.55	186.88	186.69

See footnote 1, table B-2.

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

(1967=100)

Industry	MAY 1979	DEC. 1979	JAN. 1980	FEB. 1980	MAR. 1980	APR. P 1980	MAY P 1980	Percent change from— MAY 1979–MAY 1980	Percent change from— APR. 1980–MAY 1980
TOTAL PRIVATE NONFARM:									
Current dollars	237.5	239.5	240.5	242.6	243.3	246.4	247.9	9.0	0.6
Constant (1967) dollars	106.3	103.8	102.8	102.3	102.0	101.5	N.A.	(2)	(3)
MINING	262.7	273.2	274.0	275.5	278.6	283.2	284.1	8.1	.3
CONSTRUCTION	220.4	227.6	223.1	229.8	231.9	232.0	232.5	5.5	.2
MANUFACTURING	232.3	244.3	245.5	246.1	250.1	252.3	254.3	9.5	.8
TRANSPORTATION AND PUBLIC UTILITIES	243.7	260.7	261.2	262.7	266.2	267.4	268.8	10.3	.5
WHOLESALE AND RETAIL TRADE	231.0	231.5	234.7	235.5	238.0	238.4	239.9	8.5	.6
FINANCE, INSURANCE, AND REAL ESTATE	207.0	218.5	218.6	221.2	226.0	226.0	225.8	9.1	-.1
SERVICES	224.3	237.7	238.0	239.9	243.1	243.6	245.4	9.4	.7

1 SEE FOOTNOTE 1, TABLE B-2.
2 PERCENT CHANGE WAS -5.2 FROM APRIL 1979 TO APRIL 1980, THE LATEST MONTH AVAILABLE.
3 PERCENT CHANGE WAS -.3 FROM MARCH 1980 TO APRIL 1980, 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 change 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, on private nonagricultural payrolls by industry, seasonally adjusted

(1967=100)

Industry division and group	1979 May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1980 Jan.	Feb.	Mar.	Apr. P	May P
TOTAL PRIVATE	125.4	125.7	125.7	125.5	125.9	125.8	126.3	126.6	127.1	126.7	126.0	124.5	123.6
GOODS-PRODUCING	110.3	110.1	109.9	109.4	109.7	109.0	108.7	109.6	110.6	109.4	107.5	105.1	103.3
MINING	151.6	152.5	148.4	156.7	157.4	158.1	158.4	162.9	165.7	164.6	163.7	164.3	164.1
CONSTRUCTION	138.7	134.4	133.9	134.5	135.4	132.7	133.7	137.1	142.5	137.4	129.5	127.2	128.7
MANUFACTURING	104.7	104.5	104.4	103.3	103.4	103.1	102.5	102.9	103.0	102.5	101.7	99.2	98.1
DURABLE GOODS	108.3	107.9	107.9	106.8	107.1	106.2	105.1	105.6	105.3	105.3	104.6	100.7	97.0
Lumber and wood products	113.3	112.7	111.9	112.3	113.6	113.3	110.1	108.3	109.0	108.2	105.3	93.8	89.9
Furniture and fixtures	105.9	103.5	103.9	104.3	104.8	105.9	106.2	106.4	106.7	105.9	104.8	103.7	97.4
Stone, clay, and glass products	113.1	113.0	111.5	110.8	111.2	110.6	110.4	110.8	110.4	109.6	108.6	104.0	100.8
Primary metal industries	97.9	97.9	97.8	95.9	95.3	94.6	93.1	91.8	92.1	92.2	91.7	89.8	84.6
Fabricated metal products	106.6	107.1	106.7	104.8	105.4	106.1	105.8	106.4	105.1	105.7	105.2	102.0	95.7
Machinery, except electrical	117.6	117.8	118.0	116.2	117.7	116.3	113.6	113.5	117.5	116.6	116.2	114.6	114.4
Electric and electronic equipment	108.2	108.6	108.5	104.7	107.2	107.6	108.1	108.8	109.2	109.7	108.2	106.7	103.8
Transportation equipment	101.6	99.4	100.2	102.6	100.1	97.6	93.7	96.7	90.7	92.9	92.1	82.9	78.4
Instruments and related products	128.1	128.6	128.1	127.2	127.2	127.8	127.8	128.1	130.6	129.4	129.6	129.6	127.5
Miscellaneous manufacturing industry	98.7	100.3	100.7	100.8	99.9	99.9	99.9	101.4	102.2	100.5	99.5	98.4	94.9
NONDURABLE GOODS	99.5	99.1	99.1	98.2	98.1	98.5	98.8	99.0	99.7	98.3	97.6	96.8	96.1
Food and kindred products	97.0	96.8	95.9	96.6	95.8	96.1	96.5	97.0	96.8	95.5	94.6	93.8	94.8
Tobacco manufactures	76.5	72.6	73.0	66.7	70.5	69.9	61.1	65.4	67.6	67.5	67.5	69.6	69.2
Textile mill products	89.5	89.6	89.8	89.0	89.8	90.6	91.8	91.8	93.5	92.0	91.6	89.3	87.8
Apparel and other textile products	89.5	88.7	89.5	86.0	87.5	87.9	87.3	88.4	90.0	90.5	89.4	88.9	87.9
Paper and allied products	102.3	102.1	103.2	103.1	102.2	102.7	102.8	103.3	103.4	103.8	103.3	101.8	98.9
Printing and publishing	103.1	103.3	104.4	104.7	103.9	104.3	103.9	103.1	107.2	106.2	105.5	104.6	102.9
Chemicals and allied products	108.3	108.4	108.8	108.1	107.6	107.9	108.6	108.6	109.7	108.9	108.0	107.8	108.2
Petroleum and coal products	124.2	123.1	123.0	124.2	126.2	125.1	128.0	126.3	126.3	76.0	71.3	86.3	114.4
Rubber and misc. plastics products	153.4	150.6	150.5	145.6	143.3	143.5	142.5	140.9	143.6	140.7	140.7	139.1	129.6
Leather and leather products	65.4	66.0	61.3	64.9	66.1	65.2	64.9	65.0	65.2	65.3	64.1	64.0	63.8
SERVICE-PRODUCING	135.9	136.5	136.7	136.6	137.2	137.5	138.5	138.4	138.6	138.8	138.9	138.0	137.7
TRANSPORTATION AND PUBLIC UTILITIES	113.6	115.0	114.2	115.2	114.9	115.8	116.9	115.4	115.2	114.2	114.9	113.8	113.3
WHOLESALE AND RETAIL TRADE	130.2	130.0	129.9	129.6	130.4	130.7	131.6	130.9	131.6	131.3	131.0	129.4	128.0
WHOLESALE TRADE	132.8	132.8	132.7	132.4	132.5	133.4	134.3	134.1	134.3	134.3	134.0	132.7	132.7
RETAIL TRADE	129.1	128.9	128.9	128.5	129.6	129.7	130.5	129.7	130.5	130.3	129.9	128.1	127.6
FINANCE, INSURANCE, AND REAL ESTATE	144.5	145.7	146.5	146.3	147.1	146.7	148.3	148.3	148.1	149.6	150.6	150.1	150.4
SERVICES	151.7	152.6	153.5	153.4	153.8	154.1	155.2	156.5	156.2	157.1	157.6	157.6	157.2

See footnote 1, table B-2.

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
1977				
January	73.0	80.2	86.3	80.5
February	67.2	84.3	84.6	81.4
March	72.4	82.6	84.0	82.8
April	71.5	81.7	82.3	84.6
May	70.3	76.5	79.1	85.2
June	65.1	72.7	77.6	86.6
July	70.3	70.3	75.3	84.9
August	57.8	70.9	76.7	83.1
September	67.2	67.7	79.7	83.1
October	64.2	76.2	80.5	82.8
November	73.3	79.7	84.0	81.1
December	75.5	79.4	82.3	82.0
1978				
January	68.5	80.2	83.1	81.4
February	69.2	75.6	79.1	83.1
March	69.5	77.3	77.6	81.1
April	68.0	69.8	73.5	82.0
May	57.8	67.2	72.7	81.7
June	66.6	66.6	71.2	82.3
July	64.5	69.5	73.0	81.4
August	60.5	67.2	77.3	78.2
September	62.5	71.2	79.7	77.9
October	73.0	78.2	82.3	73.5
November	75.9	81.1	82.3	76.2
December	74.4	82.3	80.5	71.8
1979				
January	70.3	76.5	74.1	71.8
February	65.1	72.1	67.4	70.6
March	60.5	57.8	61.9	63.7
April	44.8	55.2	58.1	64.0
May	54.7	51.5	50.3	61.9
June	57.0	58.4	48.8	58.1
July	61.6	56.7	56.1	57.0
August	48.8	52.0	55.8	54.4
September	46.8	52.9	57.6	51.5
October	69.8	61.0	61.6	47.4p
November	59.9	66.6	65.7	41.0p
December	59.0	64.5	63.1	
1980				
January	63.4	61.5	45.9p	
February	55.8	55.8	38.1p	
March	46.5	34.3p		
April	29.7p	31.1p		
May	34.0p			
June				
July				
August				
September				
October				
November				
December				

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

News
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USDL 80-374
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PRODUCER PRICE INDEXES--MAY 1980

The Producer Price Index for Finished Goods moved up 0.3 percent from April to May on a seasonally adjusted basis, the Bureau of Labor Statistics of the U.S. Department of Labor reported today. This was somewhat less than the 0.5 percent rise in April and was the smallest increase since a 0.2 percent rise in September 1977. Prices for intermediate (semifinished) goods were 0.4 percent higher, the third consecutive monthly advance of half a percent or less. Crude material prices climbed 1.3 percent after declining substantially in both March and April. (See table A.)

Among finished goods, the capital equipment index showed no change, following a large April advance. Energy prices rose 0.8 percent, far less than in any recent month. Food prices edged up 0.1 percent after falling sharply in April. Prices for finished

Table A. Percent changes from preceding month in selected stage-of-processing price indexes, seasonally adjusted*

Month	Finished goods			Intermediate goods			Crude goods		
	Total	Consumer foods	Other	Total	Foods and feeds 1/	Other	Total	Foodstuffs and feedstuffs	Other
May 1979	0.5	-1.0	1.0	1.0	0.1	1.0	0.7	-0.7	2.7
June	.6	-1.0	1.1	1.0	.5	1.0	1.2	0	2.8
July	1.2	.7	1.3	1.6	4.2	1.5	2.2	3.0	1.2
Aug.	1.1	1.5	1.0	1.4	.9	1.5	.2	-.5	1.2
Sept.....	1.5	1.4	1.5	1.5	.5	1.5	2.2	1.4	3.2
Oct.	1.1	-.1	1.5	1.7	.3	1.8	1.1	.1	2.3
Nov.	1.2	1.9	1.0	.9	-.3	.9	1.3	1.0	1.7
Dec.	.8	.3	1.1	1.1	.3	1.2	1.1	.2	2.2
Jan. 1980	1.6r	-.9	2.4r	2.7	-2.6r	3.0r	-.7	-3.8	3.2
Feb.	1.3r	-.5	1.9r	1.8	5.4r	1.6r	2.6	2.2	3.2
Mar.	1.4	1.1	1.5	.5	-3.0	.7	-2.2	-2.7	-1.4
Apr.	.5	-2.8	1.6	.1	-2.7	.3	-3.5	-6.1	-.5
May	.3	.1	.3	.4	6.1	.1	1.3	2.4	.1

1/ Intermediate materials for food manufacturing and feeds.
* Data for January 1980 have been revised to reflect the availability of late reports and corrections by respondents. For this reason, some of the figures shown above and elsewhere in this release may differ from those previously reported.
r= revised.

consumer goods other than foods and energy increased 0.4 percent, somewhat less than in the previous month. (See table B.)

Before seasonal adjustment, the Producer Price Index for Finished Goods rose 0.4 percent to 241.0 (1967=100). Over the year, the Finished Goods Price Index advanced 13.3 percent. From May 1979 to May 1980, finished energy prices climbed 74.3 percent, consumer food prices rose 1.5 percent, the index for finished consumer goods other than foods and energy increased 11.0 percent, and capital equipment prices advanced 9.7 percent. The Producer Price Index for intermediate goods was 15.8 percent higher than a year ago, and crude material prices were up 6.5 percent.

Finished goods

Finished consumer goods. The Producer Price Index for finished consumer goods moved up 0.4 percent in May on a seasonally adjusted basis after showing no change in April. The index for finished foods moved up 0.1 percent, following a 2.8 percent decrease in April. Prices for beef and veal and pork continued to decline, although considerably less than in the preceding month, and processed poultry prices turned up after dropping in April. Prices for refined sugar in consumer size packages climbed 33.4 percent, following a decline in the previous month, and fresh and dried vegetable prices rose about 20 percent after edging up slightly in April. Increases were also registered in May for fresh fruits, dairy products, eggs, flour base mixes and doughs, and packaged cocoa. In

Table B. Percent changes in finished goods price indexes, selected periods*

Month	Changes from preceding month, seasonally adjusted						Change in finished goods from 12 months ago (unadj.)
	Finished goods	Capital equipment	Finished consumer goods	Finished consumer goods excluding foods			
				Total	Durables	Nondurables	
May 1979	0.5	0.5	0.5	1.4	0.6	1.8	10.2
June	.6	.7	.6	1.4	.6	1.9	9.9
July	1.2	.8	1.3	1.7	.8	2.2	10.3
Aug.	1.1	-.1	1.6	1.7	0	2.7	11.1
Sept.....	1.5	.7	1.8	1.9	1.5	2.2	12.0
Oct.	1.1	.9	1.2	1.8	1.6	2.0	12.3
Nov.	1.2	.7	1.4	1.1	.9	1.2	13.0
Dec.	.8	.9	.9	1.2	1.2	1.2	12.6
Jan. 1980	1.6r	1.6r	1.6r	2.9	3.4r	2.7r	13.1
Feb.	1.3r	.6r	1.6r	2.7r	1.3r	3.3r	13.3
Mar.	1.4	.8	1.6	1.9	-.4	3.2	13.9
Apr.	.5	1.9	0	1.4	.2	2.0	13.5
May	.3	0	.4	.4	-.3	.9	13.3

* Data for January 1980 have been revised to reflect the availability of late reports and corrections by respondents. For this reason, some of the figures shown above and elsewhere in this release may differ from those previously reported.

r= revised.

contrast, roasted coffee prices fell for the sixth consecutive month. Declines were also recorded for whole black pepper, fish, milled rice, and vegetable oil end products.

Prices for energy goods rose 0.8 percent in May, much less than in any month since September 1978. Gasoline prices were up only 0.4 percent, compared with an increase of 4.3 percent in April, and prices for home heating oil advanced 1.1 percent, following a rise of 3.0 percent in the previous month.

The index for finished consumer goods less foods and energy rose 0.4 percent after a 0.6 percent increase in April. Prices for passenger cars, silver jewelry, and costume jewelry turned down after increasing a month earlier. Prices for cosmetics, household furniture, mobile homes, and disposable plastic dinnerware and tableware advanced less than in the previous month. On the other hand, prices increased more than in April for nonalcoholic beverages, tobacco products, sanitary papers and health products, and household appliances. Prices for gold jewelry and tires and tubes turned up after declining for 2 consecutive months. Prices for household flatware fell but much less than in April. Apparel prices rose about as much as in each of the 2 preceding months.

Capital equipment. The index for capital equipment was unchanged from April to May, after rising 1.9 percent in April. Prices for motor vehicles and metal forming machine tools turned down after increasing in the previous month. Substantially smaller increases were registered for many other capital goods, particularly plastic and rubber industry machinery, food products machinery, generators, oilfield machinery, construction machinery, and photographic equipment.

Intermediate materials

The Producer Price Index for intermediate materials, supplies, and components rose 0.4 percent from April to May on a seasonally adjusted basis, the third consecutive moderate increase following advances of 1 percent or more during nearly all of 1979 and early 1980. The rate of advance for most kinds of intermediate goods continued to slow down. However, prices for foods and feeds were sharply higher.

The intermediate energy index edged up 0.1 percent, following a 0.9 percent rise in April and much larger advances in each of the 13 months prior to that. Residual fuel prices fell substantially for the second consecutive month, and the rate of increase slowed for commercial jet fuel, diesel fuel, and lubricating oil materials. On the other hand, electric power rates increased more than in April, and liquefied petroleum gas prices turned up after edging down the month before.

The index for intermediate materials less foods and energy also rose 0.1 percent, slightly less than in either of the 2 previous months. The durable manufacturing materials category declined for the third consecutive month, as lower prices were registered for copper, silver, lead, zinc, tin, hardwood lumber, and plastic parts. In contrast, primary aluminum prices continued to rise sharply.

The construction materials index edged down 0.1 percent, following a similar decrease in April. Prices fell for nonferrous wire and cable, millwork, softwood lumber, gypsum products, clay tile, and asphalt roofing. However, large increases were recorded for plywood, concrete products, prepared paint, building paper and board, wiring devices, and plumbing fixtures.

The index for manufacturing components rose 0.3 percent, much less than in any recent month. Prices rose much less than in April for a broad range of items, particularly electronic components, locks, internal combustion engines, and ball and roller

bearings. Switchgear and switchboard prices declined after several months of large increases.

The nondurable manufacturing materials index advanced 1.0 percent, following a 1.5 percent boost in April. Price increases slowed for several items, including woodpulp, plastic resins, synthetic rubber, and processed yarns and threads. Prices turned down for gray fabrics and phosphates, and the indexes for leather and inedible fats and oils both declined for the fourth consecutive month. On the other hand, price increases accelerated for industrial chemicals, synthetic fibers, paper, and paperboard.

Among other intermediate nonfood nonenergy goods, prices fell for photographic supplies, metal forming machine tool parts, and wooden pallets. Prices rose less than in the previous month for mining machinery parts, metal cutting machine tool parts, abrasive products, paper boxes and containers, and mixed fertilizers.

The intermediate foods and feeds index climbed 6.1 percent, following sizable decreases in March and April. The upturn in May was due in large part to a 25 percent advance in prices for refined sugar used in food manufacturing. Feed prices turned up after a sharp drop in April. Prices also rose after declining in the previous month for flour, crude vegetable oils, and animal fats and oils. Corn syrup prices continued to move up, but not as much as in April.

rude materials

The Producer Price Index for crude materials for further processing increased 1.3 percent in May on a seasonally adjusted basis, following a 3.5 percent decrease in April. Foodstuff prices turned up after falling for 2 months, crude energy material prices continued to rise, but prices for other materials fell for the third consecutive month.

The index for crude foodstuffs and feedstuffs increased 2.4 percent in May, in contrast to a decrease of 6.1 percent in the previous month. Prices for raw cane sugar jumped 42.5 percent after climbing 16 percent in April. Prices for grains, green coffee, and soybeans turned up after falling in the previous month. Prices for livestock, live poultry, and cocoa beans moved down but not as much as in April.

Prices for crude energy materials rose 1.6 percent, slightly less than the 2.1 percent advance in April. Natural gas prices increased about as much as in the previous month, but crude petroleum prices rose less.

The index for crude nonfood materials less energy declined 2.7 percent. This index had decreased about 5 percent in each of the 2 preceding months. Prices for iron and steel scrap, aluminum base scrap, and hides and skins all fell more than 10 percent. Wastepaper prices declined substantially after rising sharply in April. Crude natural rubber prices dropped for the third consecutive month. Cotton prices increased but not as much as in the preceding month.

Brief Explanation of Producer Price Indexes

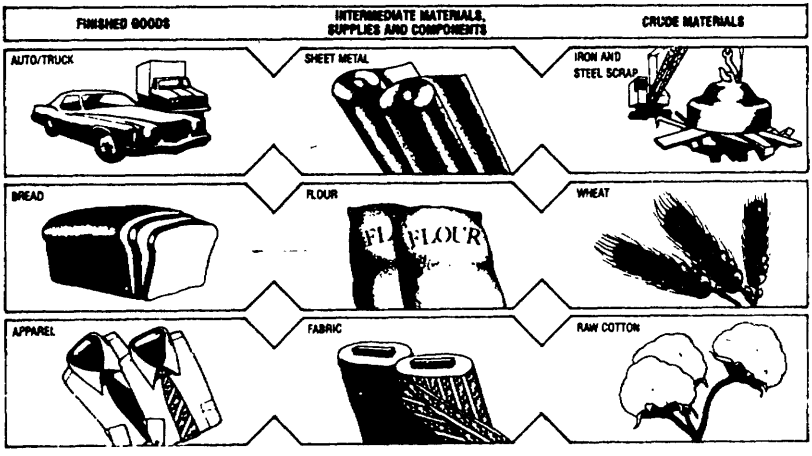
Producer Price Indexes measure average changes in prices received in primary markets of the United States by producers of commodities in all stages of processing. These data were previously presented as the Wholesale Price Index. The name "Producer Price Indexes" is now being used to reflect more accurately the coverage of the data. The sample used for calculating these indexes continues to contain nearly 2,800 commodities and about 10,000 quotations selected to represent the movement of prices of all commodities produced in the manufacturing, agriculture, forestry, fishing, mining, gas and electricity, and public utilities sectors. The universe includes all commodities produced or imported for sale in commercial transactions in primary markets in the United States.

Producer Price Indexes can be organized by stage of processing or by commodity. The stage of processing structure organizes products by degree of fabrication (i.e., finished goods, intermediate or semifinished goods, and crude materials). The commodity structure organizes products by similarity of end-use or material composition.

Finished goods are commodities that will not undergo further processing and are ready for sale to the ultimate user, either an individual consumer or a business firm. Capital equipment (formerly called producer finished goods) includes commodities such as motor trucks, farm equipment, and machine tools. Finished consumer goods include foods and other types of goods eventually purchased by retailers and used by consumers. Consumer foods include unprocessed foods such as eggs and fresh vegetables, as well as processed foods such as bakery products and meats. Other finished consumer goods include durables such as automobiles, household furniture, and jewelry, and nondurables such as apparel and gasoline.

Intermediate materials, supplies, and components are commodities that have been processed but require further processing before they become finished goods. Examples of such semifinished goods include flour, cotton yarns, steel mill products, belts and belting, lumber, liquefied petroleum gas, paper boxes, and motor vehicle parts.

Crude materials for further processing include products entering the market for the first time which have not been manufactured or fabricated but will be processed before becoming finished goods. Scrap materials are also included. Crude foodstuffs and feedstuffs include items such as grains and livestock. Examples of crude nonfood materials include raw cotton, crude petroleum, natural gas, hides and skins, and iron and steel scrap.



For analysis of general price trends, stage of processing indexes are more useful than commodity grouping indexes. This is because commodity grouping indexes sometimes produce exaggerated or misleading signals of price changes by reflecting the same price movement through various stages of processing. For example, suppose that a price rise for steel scrap results in an increase in the price of steel sheet and then an advance in prices of automobiles produced from that steel. The All Commodities Price Index and the Industrial Commodities Price Index would reflect the same price movement three times—once for the steel scrap, once for the steel sheet, and once for the automobiles. This multiple counting occurs because the weighting structure for the All Commodities Index uses the total shipment values for all commodities at all stages of processing. On the other hand, the Finished Goods Price Index would reflect the change in automobile prices, the Intermediate Materials Price Index would reflect the steel sheet price change, and the Crude Materials Price Index would reflect the rise in the price of steel scrap. (See illustration on p. 108).

To the extent possible, prices used in calculating Producer Price Indexes apply to the first significant commercial transaction in the United States, from the production or central marketing point. Price data are generally collected monthly, primarily by mail questionnaire. Respondents are asked to provide net prices or to provide all applicable discounts. BLS attempts to base Producer Price Indexes on actual transaction prices; however, list or book prices are used if transaction prices are not available. Most prices are obtained directly from producing companies on a voluntary and confidential basis, but some prices are taken from trade publications or from other Government agencies. Prices generally are reported for the Tuesday of the week containing the 13th day of the month.

In calculating Producer Price Indexes, price changes for the various commodities are averaged together with weights representing their importance in the total net selling value of all commodities as of 1972. The detailed data are aggregated to obtain indexes for stage of processing groupings, commodity groupings, durability of product groupings, and a number of special composite groupings. Each index measures price changes from a reference period which equals 100.0 (usually 1967, as designated by the Office of Management and Budget). An increase of 85 percent from the reference period in the Finished Goods Price Index, for example, is shown as 185.0. This change can also be expressed in dollars, as follows: "The price of a representative sample of finished goods sold in primary markets in the United States has risen from $100 in 1967 to $185."

A Note about Calculating Index Changes

Movements of price indexes from one month to another are usually expressed as percent changes rather than changes in index points because index point changes are affected by the level of the index in relation to its base period, while percent changes are not. The following example illustrates the computation of index point and percent changes. (See box.)

Percent changes for 3-month and 6-month periods are expressed as annual rates that are computed according to the standard formula for compound growth rates. These data indicate what the percent change would be if the current rate were maintained for a 12-month period.

Index Point Change

Finished Goods Price Index	185.5
less previous index	184.5
equals index point change	1.0

Index Percent Change

Index point change	1.0
divided by the previous index	184.5
equals	0.005
result multiplied by 100	0.005 x 100
equals index percent change	0.5

A Note on Seasonally Adjusted Data

Because price data are used for different purposes by different groups, the Bureau of Labor Statistics publishes seasonally adjusted as well as unadjusted changes each month.

For analyzing general price trends in the economy, seasonally adjusted data usually are preferred because they eliminate the effect of changes that normally occur at about the same time and in about the same magnitude every year—such as price movements resulting from normal weather patterns, regular production and marketing cycles, model changeovers, seasonal discounts, and holidays. For this reason, seasonally adjusted data more clearly reveal the underlying cyclical trends. Seasonally adjusted data are subject to revision when seasonal factors are revised each year.

The unadjusted data are of primary interest to users who need information which can be related to the actual dollar values of transactions. Individuals requiring this information include marketing specialists, purchasing agents, budget and cost analysts, contract specialists, and commodity traders. Unadjusted data generally are used in escalating contracts such as purchase agreements or real estate leases.

Table 1. Producer price indexes and percent changes by stage of processing
(1967=100)

Grouping	Relative importance Dec. 1979 1/	Unadjusted index Jan. 1980 2/	Apr. 1980 2/	May 1980 2/	Unadjusted percent change to May 1980 from: May 1979	Apr. 1980	Seasonally adjusted percent change from: Feb. to Mar.	Mar. to Apr.	Apr. to May
Finished goods	100.000	232.4	240.0	241.0	13.3	0.4	1.4	0.5	0.3
Finished consumer goods	71.632	233.5	241.6	242.8	14.7	.5	1.6	0	.4
Finished consumer foods	24.257	231.4	228.7	230.0	1.5	.6	1.1	-2.0	.1
Crude	1.748	226.0	222.2	227.7	.4	2.5	8.0	-5.2	7.0
Processed	22.509	229.7	227.1	228.1	1.6	.4	.6	-2.6	-.4
Finished consumer goods, excluding foods	47.375	232.3	245.5	246.8	22.1	.5	1.9	1.4	.4
Nondurable goods less foods	30.518	254.7	276.5	279.1	28.6	.9	3.2	2.0	.9
Durable goods	16.857	199.1	200.3	199.7	11.3	-.3	-.4	.2	-.3
Capital equipment	28.368	229.3	235.8	236.0	9.7	.1	.8	1.9	0
Intermediate materials, supplies, and components	100.000	263.9	274.5	275.8	15.0	.5	.5	.1	.4
Materials and components for manufacturing	53.853	255.5	259.7	261.8	13.4	.8	-.3	-.2	.7
Materials for food manufacturing	3.361	226.0	238.7	255.4	14.8	7.0	-3.0	-1.1	6.8
Materials for nondurable manufacturing	18.537	241.1	251.8	254.9	17.6	1.2	1.0	1.5	1.0
Materials for durable manufacturing	20.728	303.7	296.8	293.9	10.4	-.4	-1.7	-1.9	-.4
Components for manufacturing	11.228	219.2	227.4	228.0	11.5	.3	1.1	1.0	.3
Materials and components for construction	16.385	257.7	265.3	265.3	8.2	0	1.1	-.2	-.1
Processed fuels and lubricants	12.690	444.0	486.7	488.3	45.0	.3	3.1	.7	0
Manufacturing industries	5.234	348.5	358.4	363.6	26.5	1.5	.1	-.5	1.5
Nonmanufacturing industries	7.453	550.3	619.5	617.0	60.1	-.4	4.8	1.5	-.9
Containers	2.954	250.9	262.5	263.7	12.5	.5	-.3	3.1	.5
Supplies 3/	14.119	232.5	240.7	240.8	12.7	0	.7	.3	0
Manufacturing industries 3/	4.573	220.9	226.8	228.4	13.3	.7	.6	1.6	.7
Nonmanufacturing industries	9.543	238.7	248.1	247.5	12.3	-.2	.3	-.7	.4
Feeds	1.708	224.4	207.1	210.6	-1.9	1.7	-3.2	-6.8	4.4
Other supplies 3/	7.845	238.3	253.5	251.9	15.4	-.6	1.2	.8	-.6
Crude materials for further processing	100.000	296.0	296.9	300.7	6.5	1.3	-2.2	-3.5	1.3
Foodstuffs and feedstuffs	55.466	243.0	235.5	242.9	-3.4	3.1	-2.7	-6.1	2.4
Nonfood materials	44.534	398.9	413.5	410.4	20.0	-.7	-1.4	-.5	.1
Nonfood materials except fuel 5/	27.895	330.1	336.9	329.2	19.0	-2.3	-2.3	-1.9	-1.1
Manufacturing 5/	25.649	342.1	349.0	340.2	19.5	-2.5	-2.5	-2.2	-1.2
Construction	2.246	226.0	232.4	232.9	13.9	.2	.3	.8	.6
Crude fuel 3/ 4/	16.638	636.3	677.4	690.4	24.0	1.9	0	2.1	1.9
Manufacturing industries 3/	8.198	690.3	740.0	756.7	27.4	2.1	-.1	2.4	2.1
Nonmanufacturing industries 3/	8.443	605.7	639.0	650.6	20.7	1.7	0	1.9	1.7
Special groupings									
Finished goods, excluding foods	6/ 75.743	230.5	241.2	242.0	17.3	.3	1.5	1.0	.3
Intermediate materials less foods and feeds	7/ 94.939	268.4	277.4	278.0	16.2	.2	.7	.3	.1
Intermediate feeds and feeds	7/ 5.061	224.0	227.5	239.7	9.3	5.4	-3.0	-2.7	6.9
Crude materials less agricultural products 5/ 8/	9/ 39.787	452.9	469.4	464.6	22.4	-1.0	-1.0	-.6	-.1
Finished energy goods	6/ 10.335	368.3	474.6	481.0	74.3	1.4	7.9	3.8	.8
Finished goods less energy	6/ 89.665	213.7	216.0	217.4	8.1	.3	.7	.1	.2
Finished consumer goods less energy	6/ 61.297	209.4	211.0	211.8	7.2	.4	.6	-.8	.3
Finished goods less feeds and energy	6/ 65.408	207.3	212.2	212.6	10.5	.2	.5	1.1	.2
Finished consumer goods less feeds and energy	6/ 37.040	195.7	199.7	200.1	11.0	.2	.4	.6	.4
Consumer nondurable goods less feeds and energy	6/ 20.183	182.9	188.8	190.1	11.0	.7	1.0	.9	.8
Intermediate energy goods	7/ 13.580	425.9	468.6	470.6	46.7	.4	3.1	.9	.1
Intermediate materials less energy	7/ 86.420	255.3	260.8	262.0	11.7	.5	.1	0	.5
Intermediate materials less feeds and energy	7/ 81.359	252.8	258.4	258.9	11.9	.2	.3	.2	.1
Crude energy materials 3/ 4/	9/ 28.526	576.3	606.6	616.1	35.3	1.6	.6	2.1	1.6
Crude materials less energy	9/ 71.474	244.0	238.7	241.5	-2.8	1.2	-3.3	-5.8	1.3
Crude nonfood materials less energy 5/	9/ 16.008	268.0	270.2	256.7	-.2	-5.0	-4.9	-5.1	-2.7

1/ Comprehensive relative importance figures are computed once each year in December.
2/ Data for Jan. 1980 have been revised to reflect the availability of late reports and corrections by respondents. All data are subject to revision 4 months after original publication.
3/ Not seasonally adjusted.
4/ Includes crude petroleum.
5/ Excludes crude petroleum.
6/ Percent of total finished goods.
7/ Percent of total intermediate materials.
8/ Formerly titled "Crude materials for further processing, excluding crude foodstuffs and feedstuffs, plant and animal fibers, oilseeds, and leaf tobacco."
9/ Percent of total crude materials.

Note: Relative importance figures have been revised to reflect revisions in December 1979 indexes.

Table 2. Producer price indexes and percent changes for selected commodity groupings by stage of processing
(1967=100 unless otherwise indicated)

Commodity code	Grouping	Relative importance Dec. 1979 1/	Unadjusted index Apr. 1980 2/	Unadjusted index May 1980 2/	Unadjusted percent change to May 1980 from: May 1979	Unadjusted percent change to May 1980 from: Apr. 1980	Seasonally adjusted percent change from: Feb. to Mar.	Seasonally adjusted percent change from: Mar. to Apr.	Seasonally adjusted percent change from: Apr. to May
	FINISHED GOODS	100.000	240.0	241.0	13.3	0.4	1.4	0.5	0.3
	FINISHED CONSUMER GOODS	71.632	241.6	242.8	14.7	.5	1.6	0	.6
	FINISHED CONSUMER FOODS	24.257	228.7	230.0	1.5	.6	1.1	-2.8	.1
01-11	Fresh fruits	.435	229.0	244.3	4.4	6.6	-3.6	-4.5	6.5
01-13	Fresh and dried vegetables	.448	197.8	223.0	13.3	12.7	7.2	.2	20.3
01-7	Eggs	.389	153.3	145.7	-11.1	-5.0	24.8	-8.5	4.3
02-11	Bakery products	2.130	243.0	244.5	13.0	.6	.5	.6	.8
02-12-02	Flour base mixes and doughs	.198	216.3	222.5	13.5	2.9	2.4	.3	4.0
02-13	Milled rice	.142	260.5	254.5	23.1	-2.3	12.2	-3.1	-5.3
02-14	Other cereals	.686	248.2	248.7	10.0	.2	-.4	3.0	.6
02-21-01	Beef and veal	3.550	250.7	254.6	-3.7	1.6	-.3	-8.7	-1.3
02-21-04	Pork	1.637	162.1	163.7	-19.4	1.0	3.3	-7.8	-3.7
02-22	Processed poultry	.805	165.7	165.8	-10.1	.1	-3.9	-5.0	1.0
02-23	Fish	1.162	386.1	355.2	-7.3	-8.0	2.7	-5.2	-6.6
02-3	Dairy products	3.653	227.8	228.9	10.1	.5	.8	1.5	1.5
02-4	Processed fruits and vegetables	1.624	224.5	225.2	1.7	.3	.5	.4	.5
02-53-01	Refined sugar, consumer size packages (Dec. 1977=100) 3/	.133	166.1	221.5	99.0	33.4	-.8	-5.9	33.4
02-55	Confectionery end products (Dec. 1977=100) 3/	.896	113.3	113.3	7.8	0	1.3	0	0
02-63-01	Roasted coffee	1.061	378.5	378.5	18.7	0	-.8	-2.6	-2.1
02-74	Vegetable oil end products	.450	229.9	228.6	4.2	-.6	.2	-2.7	-1.1
02-8	Miscellaneous processed foods 3/	2.427	225.1	223.2	1.4	-.8	.5	.2	-.8
	FINISHED CONSUMER GOODS EXCLUDING FOODS	47.375	245.5	246.0	22.1	.5	1.9	1.4	.6
02-61	Alcoholic beverages 3/	1.670	171.5	172.5	7.3	.6	.4	.5	.6
02-62	Nonalcoholic beverages 3/	1.350	250.4	259.0	15.1	3.4	1.1	1.3	3.4
03-81	Apparel	5.125	169.1	169.7	6.2	.4	.7	.5	.5
03-82	Textile housefurnishings	.784	201.6	202.6	7.8	.5	.6	.7	.9
04-3	Footwear	1.096	231.9	231.9	7.2	0	1.5	-.3	-.2
04-41	Luggage and small leather goods	.302	169.3	172.6	7.5	1.9	2.1	.6	1.3
05-71	Gasoline	6.427	632.5	643.5	77.0	1.8	8.5	4.3	.4
05-72-02-01	Kerosene (Feb. 1973=100)	.346	670.9	674.3	72.2	.5	7.4	3.4	.8
05-73-02-01	Fuel oil No. 2 (Feb. 1973=100)	2.981	694.8	699.1	69.4	.6	6.3	3.0	1.1
05-76	Finished lubricants 3/	.308	385.5	387.8	34.6	.6	0	5.0	.8
06-35	Pharmaceutical preparations, ethical (Prescription) 3/	1.122	153.0	151.3	8.5	-1.1	.9	2.2	-1.1
06-36	Pharmaceutical preparations, proprietary (Over-the-counter)	.453	202.0	202.4	12.9	.2	.9	3.3	.4
06-71	Soaps and synthetic detergents 3/	.622	211.4	211.7	11.0	.1	.1	.4	.1
06-75	Cosmetics and other toilet preparations	.679	192.3	192.9	21.6	.3	.3	8.1	.4
07-12	Tires and tubes	.700	231.3	231.8	17.5	.2	-.8	-.1	.5
07-13-01	Rubber footwear	.201	207.0	207.0	2.2	0	.4	.3	.5
07-27	Disposable plastic dinnerware and tableware (June 1978=100) 3/	.190	133.3	136.2	20.6	.7	.2	4.0	.7
07-28	Consumer and commercial plastics, not elsewhere classified (June 1978=100) 3/	.360	112.8	115.6	6.9	2.5	.1	.4	2.5
09-15-01	Sanitary papers and health products 3/	1.000	314.9	321.1	17.2	2.0	2.5	.2	2.0
12-1	Household furniture	1.603	198.9	200.3	8.4	.7	.6	1.2	.7
12-3	Floor coverings	.684	161.7	163.6	12.1	1.2	1.0	.7	1.1
12-4	Household appliances	1.621	170.2	172.1	8.0	1.1	.5	.5	1.3
12-5	Home electronic equipment 3/	.811	88.9	89.1	-3.6	.2	.1	.1	.2
12-6	Other household durable goods	.808	266.8	265.2	20.8	-.6	1.6	-6.7	-.8
14-11-01	Passenger cars	5.708	187.6	184.6	6.2	-1.6	.6	2.7	-1.4
15-1	Toys, sporting goods, small arms, etc.	1.155	195.3	196.4	12.7	.6	.6	.7	.9
15-2	Tobacco products 3/	1.459	237.6	244.6	14.1	2.9	.1	.2	2.9
15-31	Mobile homes 3/	.924	148.9	149.9	9.3	.7	.4	1.6	.7
15-61-01	Electronic hearing aids (June 1978=100) 3/	.014	107.4	109.0	5.0	1.5	2.7	0	1.5
15-94-02	Jewelry, platinum & karat gold (Dec. 1978=100) 3/	1.071	191.0	193.6	70.9	1.4	-11.0	-9.8	1.4
15-94-03	Other precious metal jewelry 3/	.235	174.8	164.2	55.6	-6.1	3.0	7.7	-6.1
15-94-04	Costume jewelry (Dec. 1978=100) 3/	.386	110.3	108.0	5.6	-2.1	-.8	3.5	-2.1
	CAPITAL EQUIPMENT	28.368	235.0	236.0	9.7	.1	.8	1.0	0
10-42	Hand tools	.306	270.2	272.9	12.8	1.0	.8	2.4	1.3
11-1	Agricultural machinery and equipment	1.203	252.8	254.9	11.7	.8	.7	1.3	1.0
11-2	Construction machinery and equipment 3/	1.715	282.9	284.2	12.0	.5	.3	1.6	.5
11-32	Power driven hand tools 3/	.197	186.2	188.8	10.3	1.4	.5	.9	1.4
11-34	Industrial process furnaces and ovens 3/	.163	287.2	287.0	10.2	-.1	1.5	2.1	-.1
11-37	Metal cutting machine tools 3/	.986	308.6	312.5	19.7	1.3	1.6	2.7	1.3
11-38	Metal forming machine tools	.252	342.7	342.0	16.0	-.2	1.0	2.3	-.6
11-41	Pumps, compressors, and equipment	.416	281.7	284.8	15.4	1.1	4.2	1.8	1.0
11-44	Industrial material handling equipment 3/	.793	249.1	253.1	10.7	1.6	.5	1.0	1.6
11-46	Scales and balances 3/	.047	202.9	206.1	8.0	1.6	1.1	.6	1.6
11-47	Fans and blowers except portable	.140	293.2	293.2	12.9	0	.1	3.2	.3
11-48-02	Unitary air conditioners (Dec. 1977=100) 3/	.336	120.6	120.6	9.0	0	0	2.2	0
11-6	Special industry machinery and equipment 3/	2.702	271.9	273.1	11.4	.4	1.0	2.4	.4
11-72	Integrating and measuring instruments	.384	181.3	181.9	7.3	.3	.4	.8	.4
11-73-02	Generators and generator sets 3/	.468	287.8	287.8	21.6	0	2.7	2.7	0
11-74	Transformers and power regulators 3/	.538	176.9	178.8	9.0	1.1	.8	1.1	1.1
11-91	Oilfield machinery and tools 3/	.477	326.7	330.2	15.2	1.1	1.0	3.0	1.1
11-92	Mining machinery and equipment	.184	381.4	384.1	11.8	.9	.4	3.6	.9
11-93	Office and store machines and equipment 3/	1.793	141.3	140.5	5.7	-.6	.5	1.3	-.6
12-2	Commercial furniture 3/	1.111	233.5	233.8	5.4	.1	1.2	.3	.1
14-11-01	Passenger cars	3.649	187.6	184.6	6.2	-1.6	.6	2.7	-1.4
14-11-02	Motor trucks	3.473	226.1	225.3	6.9	-.4	.5	2.0	-.4
14-21-11	Fixed wing, utility aircraft (Dec. 1968=100)	1.639	233.0	233.0	9.6	0	.4	1.6	.6
14-4	Railroad equipment 3/	.474	383.9	384.6	12.2	.2	.7	.9	.2
15-41	Photographic equipment	.466	123.5	123.5	7.7	0	.1	1.3	.3
15-71-06	Guards, mechanical power press (June 1978=100) 3/	.022	111.9	112.3	5.3	.4	0	0	.4

See footnotes at end of table

Table 2. Producer price indexes and percent changes for selected commodity groupings by stage of processing – Continued

(1967=100 unless otherwise indicated)

Commodity code	Grouping	Relative importance Dec. 1979 1/	Unadjusted index Apr. 1980 2/	Unadjusted index May 1980 2/	Unadjusted percent change to May 1980 from: May 1979	Unadjusted percent change to May 1980 from: Apr. 1980	Seasonally adjusted percent change from: Feb. to Mar.	Seasonally adjusted percent change from: Mar. to Apr.	Seasonally adjusted percent change from: Apr. to May
	INTERMEDIATE MATERIALS, SUPPLIES, AND COMPONENTS...	100.000	274.5	275.8	15.8	0.5	0.5	0.1	0.4
	INTERMEDIATE FOODS AND FEEDS...	5.061	227.5	239.7	9.3	5.4	-3.0	-2.7	6.1
02-12-01	Flour...	.271	176.9	183.5	10.0	3.7	-4.3	-.7	2.7
02-53-02	Refined sugar, for use in food manufacturing (Dec. 1977=100) 3/...	.673	169.7	212.1	82.5	25.0	-8.7	2.0	25.0
02-54	Confectionery materials (Dec. 1977=100) 3/...	.234	148.9	152.3	26.9	2.3	4.8	9.5	2.3
02-71	Animal fats and oils...	.069	273.2	262.5	-23.1	-3.9	-3.2	-6.8	1.3
02-72	Crude vegetable oils...	.312	180.7	177.5	-25.7	-1.8	-11.0	-8.2	1.8
02-73	Refined vegetable oils 3/...	.077	151.0	150.5	-37.0	-.3	-9.6	-10.2	-.3
02-9	Manufactured animal feeds...	1.700	205.4	207.3	-1.7	.9	-.9	-6.1	3.4
	INTERMEDIATE MATERIALS LESS FOODS AND FEEDS...	94.939	277.4	278.0	16.2	.2	.7	.3	.1
03-1	Synthetic fibers (Dec. 1975=100)...	.784	130.7	133.5	13.7	2.1	2.0	.6	1.7
03-2	Processed yarns and threads (Dec. 1975=100)...	.387	122.1	123.5	14.6	1.1	.6	2.9	.7
03-3	Gray fabrics (Dec. 1975=100) 3/...	1.086	136.1	135.3	8.5	-.6	1.5	1.8	-.6
03-4	Finished fabrics (Dec. 1975=100)...	1.786	114.5	115.2	7.7	.6	1.3	1.0	.3
04-2	Leather...	.319	297.6	290.4	-32.4	-2.4	-10.0	-6.5	-4.2
05-2	Coke...	.155	430.6	430.6	0	0	.3	-.5	0
05-32	Liquefied petroleum gas 3/...	.070	641.3	648.6	93.0	1.1	.6	-1.1	1.1
05-4	Electric power...	4.054	310.4	316.4	19.0	1.9	.9	.8	1.9
05-72-03-01	Commercial jet fuel (Feb. 1973=100) 3/...	1.142	727.7	736.7	91.3	1.2	7.9	3.6	1.2
05-73-03-01	Diesel fuel (Feb. 1973=100) 3/...	1.405	690.4	697.8	75.4	1.1	5.3	2.6	1.1
05-74	Residual fuel...	1.979	929.3	866.2	34.5	-6.8	.3	-7.1	-6.2
05-75	Lubricating oil materials 3/...	.520	734.2	748.4	80.6	1.9	0	5.6	1.9
06-1	Industrial chemicals 3/...	4.755	316.8	324.8	27.1	2.5	1.3	2.0	2.5
06-21	Prepared paint 3/...	.675	231.5	236.8	17.6	2.3	0	3.7	2.3
06-22	Paint materials...	.774	271.1	272.9	15.6	.7	.2	.6	.4
06-31	Drugs and pharmaceutical materials 3/...	.238	200.5	200.6	4.8	0	0	.8	0
06-4	Fats and oils, inedible...	.330	298.2	294.7	-29.5	-1.2	-5.8	-1.7	-3.9
06-51	Mixed fertilizers...	.285	244.0	243.9	25.2	0	2.8	1.5	.2
06-52-01	Nitrogenates 3/...	.383	195.4	196.5	26.4	.6	3.9	1.3	.6
06-52-02	Phosphates 3/...	.387	267.0	265.7	35.6	-.5	5.0	.7	-.5
06-53	Pesticides 3/...	.312	375.3	375.3	8.4	0	8.7	0	0
06-6	Plastic resins and materials...	1.471	285.6	287.8	26.0	.8	.4	3.4	.4
06-79	Miscellaneous chemical products 3/...	1.062	249.4	252.6	21.7	1.4	3.0	3.6	1.4
07-11-02	Synthetic rubber...	.315	253.9	255.2	27.9	.5	.3	5.3	.5
07-12	Tires and tubes...	.760	231.3	231.8	17.5	.2	-.8	-.1	.5
07-13-04	Other miscellaneous rubber products...	.559	225.5	227.8	14.1	1.0	1.0	.8	.7
07-21	Plastic construction products (Dec. 1969=100)...	.291	152.1	153.3	5.4	.8	0	1.4	.9
07-22	Unsupported plastic film and sheeting (Dec. 1970=100)...	.573	186.6	186.3	10.2	-.2	1.1	.3	-.1
07-23	Laminated plastic sheets (Dec. 1970=100)...	.151	172.2	173.0	8.5	.5	.5	-.9	.3
07-24	Foamed plastic products (June 1978=100) 3/...	.196	119.5	120.4	10.5	.8	.3	.3	0
07-25	Plastic packaging and shipping products (June 1978=100) 3/...	.364	122.9	123.4	12.1	.4	0	.1	.4
07-26	Plastic parts and components for manufacturing (June 1978=100) 3/...	.697	124.9	123.2	7.6	-1.4	5.2	.9	-1.4
08-1	Lumber...	2.700	310.1	301.3	-15.1	-2.8	-1.5	-9.3	-1.5
08-2	Millwork...	1.377	256.6	250.9	-4.1	-2.2	1.0	-4.0	-2.3
08-3	Plywood...	.872	219.2	229.9	-7.8	4.9	-.3	-8.0	5.9
08-4	Other wood products...	.202	241.7	240.7	1.0	-.4	-.5	-.6	-1.1
09-11	Woodpulp...	.799	386.8	388.0	26.4	.3	.3	6.8	.6
09-13	Paper...	2.321	253.6	256.5	12.9	1.1	1.0	.6	1.3
09-14	Paperboard...	1.001	230.2	239.2	20.1	3.9	.6	.6	-3.6
09-15-03	Paper boxes and containers...	2.913	221.0	222.7	14.0	.8	.5	1.2	.7
09-2	Building paper and board...	.346	201.3	206.8	12.0	2.7	3.7	.5	2.4
10-13-01	Semifinished steel mill products...	.384	322.2	324.2	11.2	.6	-.1	-.3	.8
10-13-02	Finished steel mill products...	6.192	302.9	304.3	10.3	.5	.6	3.0	.7
10-15	Foundry and forge shop products...	1.065	305.2	306.1	11.5	.3	-.1	0	.3
10-16	Pig iron and ferroalloys...	.311	309.5	309.1	4.3	-.1	.7	.6	-.7
10-22	Primary nonferrous metal refinery shapes...	2.789	345.9	334.7	19.7	-3.2	-12.0	-13.5	-3.1
10-24	Secondary nonferrous metal and alloy basic shapes	.497	304.6	292.1	5.2	-4.1	-1.4	-6.0	-4.2
10-25	Nonferrous mill shapes...	1.927	297.4	290.8	8.8	-2.2	-2.3	-.8	-1.9
10-26	Nonferrous wire and cable...	.855	226.5	217.0	15.9	-4.2	2.9	-6.4	-5.0
10-28-01	Zinc castings (June 1977=100) 3/...	.139	112.5	112.8	5.2	.3	1.1	.3	.3
10-3	Metal containers...	1.094	301.1	302.7	12.7	.5	-.5	3.7	1.3
10-41	Hardware, not elsewhere classified 3/...	.692	224.7	225.4	8.5	.3	.5	3.1	.3
10-5	Plumbing fixtures and brass fittings...	.337	243.7	247.4	15.7	1.5	2.4	.4	1.4
10-6	Heating equipment 3/...	.376	284.2	284.0	9.0	-.1	1.1	1.1	-.1
10-7	Fabricated structural metal products...	3.194	268.2	269.4	9.1	.4	1.3	1.9	.6
10-8	Miscellaneous metal products...	3.498	247.1	247.7	8.4	.2	1.1	.8	.2
11-11-51	Tractor parts 3/...	.134	179.0	181.0	8.1	1.1	0	1.0	1.1
11-12-51	Parts for farm machinery ex. tractors...	.163	205.1	208.1	10.9	1.5	.4	1.9	.9
11-28-51	Parts for nonfarm tractors...	.301	246.6	248.1	15.6	.6	.5	1.3	.8
11-33-03	Arc welding electrodes...	.112	287.1	287.8	7.1	.2	.2	.5	-.3
11-35	Cutting tools and accessories 3/...	.400	229.3	233.5	15.0	1.8	.7	2.7	1.8
11-36	Abrasive products 3/...	.334	249.2	251.1	13.0	.8	1.0	2.7	.8

See footnotes at end of table.

Table 2. Producer price indexes and percent changes for selected commodity groupings by stage of processing—Continued

(1967=100 unless otherwise indicated)

Commodity code	Grouping	Relative importance	Unadjusted index		Unadjusted percent change to May 1980 from:		Seasonally adjusted percent change from:		
		Dec. 1979 1/	Apr. 1980 2/	May 1980 2/	May 1979	Apr. 1980	Feb. to Mar.	Mar. to Apr.	Apr. to May
	INTERMEDIATE MATERIALS, ETC - Continued								
11-37-51	Parts for metal cutting machine tools 3/	0.142	298.1	298.8	25.1	0.2	0.7	5.4	0.2
11-38-51	Parts for metal forming machine tools	.093	274.8	271.0	16.2	-1.4	1.2	1.4	-2.3
11-42	Elevators and escalators	.109	232.6	234.1	9.6	.6	1.9	1.7	.9
11-43	Fluid power equipment 3/	.314	196.7	197.8	13.7	.6	.5	2.4	.6
11-45	Mechanical power transmission equipment	.448	258.3	259.9	12.6	.6	1.1	2.2	.2
11-47	Fans and blowers except portable	.109	293.2	293.2	12.9	0	.1	3.2	.3
11-48-04	Refrigerant compressors and compressor units (Dec. 1977=100) 3/	.359	122.1	122.1	10.5	0	4.8	0	0
11-49-01	Valves and fittings	.576	285.2	287.8	12.3	.9	1.3	2.4	.6
11-49-05	Ball and roller bearings	.257	257.7	264.7	17.2	2.7	2.0	3.3	.8
11-49-06	Plain bearings	.029	263.8	262.5	6.8	-.5	-1.4	-1.3	-1.0
11-71	Wiring devices	.515	261.3	262.9	9.4	.6	-.1	.3	1.1
11-73-01	Electric motors	.585	245.2	245.8	9.4	.2	.4	.4	.4
11-75	Switchgear, switchboard, etc., equipment	.606	230.4	228.8	14.1	-.7	2.5	1.7	-1.0
11-77	Electric lamps/bulbs 3/	.270	245.6	245.6	9.6	0	.1	0	.4
11-78	Electronic components and accessories 3/	1.688	153.1	154.1	15.8	.7	.4	1.9	.7
11-92-53-01	Parts for mining machinery and equipment	.095	311.8	311.8	15.1	0	.6	8.5	.6
11-94	Internal combustion engines	.798	261.9	263.0	13.0	.4	1.7	1.9	.9
13-11	Flat glass 3/	.564	191.4	191.4	4.5	0	.3	0	0
13-22-01-31	Portland cement	.566	309.8	310.7	9.7	.3	.4	.6	.6
13-3	Concrete products	1.782	273.0	275.0	13.8	.7	1.3	1.5	1.1
13-4	Structural clay products, ex refractories 3/	.234	234.4	229.5	6.4	-2.1	.2	1.3	-2.1
13-5	Refractories	.206	262.6	265.2	16.1	1.0	1.9	3.7	1.4
13-6	Asphalt roofing	.342	404.7	398.2	25.3	-1.6	3.7	2.1	-.7
13-7	Gypsum products	.192	264.0	256.5	3.1	-2.8	2.3	-1.7	-3.1
13-8	Glass containers	.626	294.6	294.6	11.1	0	-.8	5.3	-2.1
13-9	Other nonmetallic minerals	1.041	399.5	399.5	31.8	0	3.3	3.3	.3
14-12	Motor vehicle parts	3.753	243.7	244.3	9.1	.2	1.3	.2	.7
15-3	Notions 3/	.172	216.8	217.0	13.9	.1	2.0	4.6	.1
15-42	Photographic supplies 3/	.600	281.4	257.0	58.6	-8.7	.4	-4.8	-8.7
15-71-01	Respiratory protective equipment (June 1978=100) 3/	.014	121.2	121.9	14.0	.6	0	3.9	.6
15-71-02	Eye and face protective equipment (June 1978=100) 3/	.023	113.2	113.8	8.6	.5	.8	.4	.5
15-71-05	Protective clothing (June 1978=100) 3/	.013	125.5	126.0	6.8	.4	1.6	.9	.4
15-94-05	Jewelers' materials and findings (Dec. 1978=100) 3/	.315	194.3	194.2	71.9	-.1	-15.9	-12.1	-.1
	CRUDE MATERIALS FOR FURTHER PROCESSING	100.000	296.9	300.7	6.5	1.3	-2.2	-3.5	1.3
	CRUDE FOODSTUFFS AND FEEDSTUFFS	55.466	235.5	242.9	-3.6	3.1	-2.7	-6.1	2.4
01-1	Fresh and dried fruits and vegetables	2.135	223.0	243.8	6.8	9.3	4.3	-6.2	13.4
01-2	Grains 3/	10.052	210.8	219.0	4.1	3.9	-2.4	-3.3	3.9
01-3	Livestock	23.166	230.5	233.3	-16.9	1.2	-2.1	-10.5	-2.5
01-4	Live poultry	2.290	171.9	171.3	-20.8	-.3	-1.0	-3.2	-1.3
01-6	Fluid milk	8.644	265.4	265.4	9.7	0	1.2	2.2	1.5
01-8	Hay, hayseeds, oilseeds 3/	3.884	205.1	206.7	-14.1	.8	-3.9	-5.0	.8
01-91-01	Green coffee 3/	2.360	448.9	472.3	34.4	5.2	4.9	-3.0	5.2
01-93-02	Cocoa beans	.412	517.8	476.0	-16.2	-8.1	-9.3	-7.1	-2.5
02-52-01-07	Cane sugar, raw 3/	1.650	319.3	454.9	133.2	42.5	-26.4	16.0	42.5
	CRUDE NONFOOD MATERIALS	44.534	413.5	410.4	20.8	-.7	-1.4	-.5	1
01-5	Plant and animal fibers 3/	1.864	266.9	272.7	31.4	2.2	-5.4	4.7	2.2
01-92-01-01	Leaf tobacco	1.571	218.0	(4)	(4)	(4)	(4)	(4)	(4)
04-1	Hides and skins	.739	328.6	289.7	-56.6	-11.8	-15.5	-13.2	-13.3
05-1	Coal	5.000	463.3	464.8	3.1	.3	1.0	-.2	-.7
05-31	Natural gas 3/	12.527	797.8	817.0	31.7	2.4	-.2	2.4	2.4
05-61	Crude petroleum 3/	10.861	533.9	540.1	60.9	1.2	1.5	2.1	1.2
06-52-03	Potash	.187	230.6	230.6	16.3	0	5.0	-.1	.0
07-11-01	Crude natural rubber	.359	340.8	328.6	7.7	-3.6	-14.4	-3.1	-2.0
09-12	Wastepaper	.724	242.5	226.1	9.7	-6.8	-2.6	8.4	-6.7
10-11	Iron ore 3/	.658	246.1	246.1	16.2	0	0	3.9	0
10-12	Iron and steel scrap	3.848	352.9	301.5	-8.2	-14.6	-3.5	-6.2	-10.3
10-23	Nonferrous scrap	2.793	293.2	260.7	-6.8	-11.1	-7.5	-18.4	-8.6
13-21	Sand, gravel, and crushed stone	2.417	232.5	233.0	13.9	.2	.3	.8	.6

1/ Comprehensive relative importance figures are computed once each year in December. Data shown are expressed as a percent of total finished goods, total intermediate materials, or total crude materials. Data shown will not add up to 100.000 because not all commodity components of each stage-of-processing (SOP) Index are shown; relative importance figures shown account for about 87 percent of total finished goods, about 89 percent of total intermediate materials, and about 96 percent of total crude materials. For each commodity component of the Finished Goods Index which is allocated to both capital equipment and finished consumer goods excluding foods, the relative importance figure shown reflects only the share allocated to the SOP grouping under which it is listed. For example, the relative importance figure shown for household furniture under the SOP grouping for finished consumer goods excluding foods includes the share allocated to that SOP grouping but not the share allocated to capital equipment.

2/ All data are subject to revision 4 months after original publication.

3/ Not seasonally adjusted.

4/ Not available.

Note: Relative importance figures have been revised to reflect revisions in December 1979 indexes.

Table 3. Producer price indexes for selected commodity groupings[1]

(1967=100)

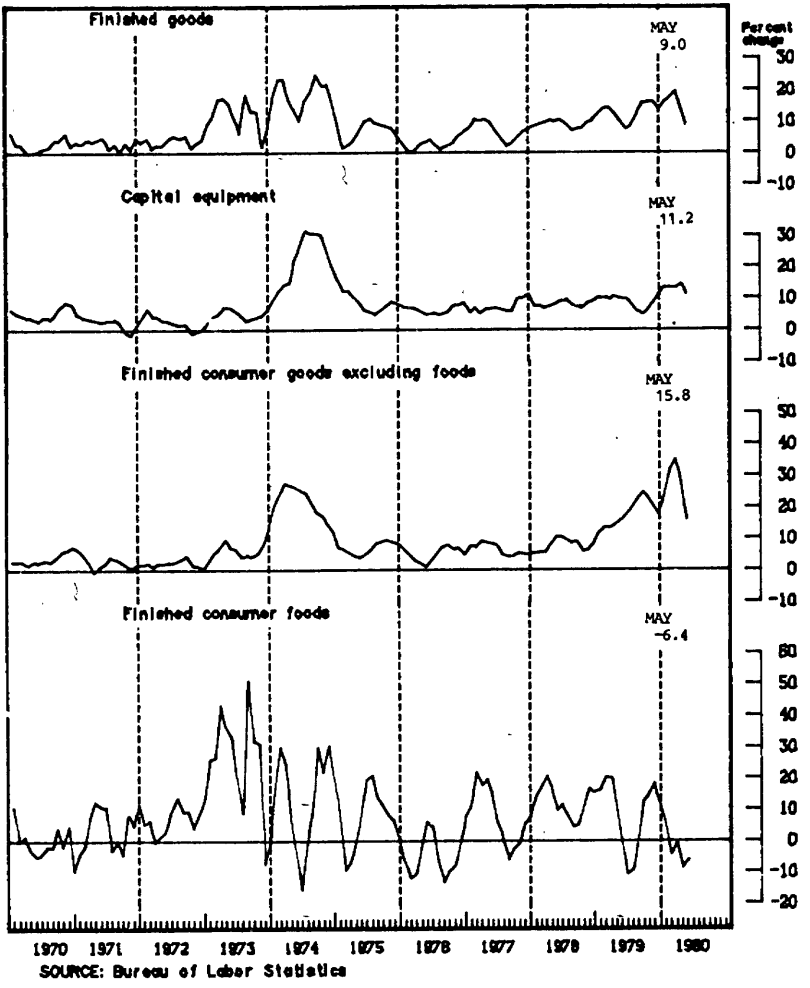
Grouping	Unadjusted Index	
	Jan. 1980 2/	May 1980 2/
All Commodities	254.9	263.7
All Commodities (1957-59=100)	270.4	279.8
MAJOR COMMODITY GROUPS		
Farm products and processed foods and feeds	231.9	233.9
Farm products	236.4	233.6
Processed foods and feeds	228.5	233.1
Industrial commodities	260.6	271.2
Textile products and apparel	175.2	181.5
Hides, skins, leather, and related products	255.7	240.7
Fuels and related products and power 3/	508.8	571.9
Chemicals and allied products 3/	246.8	261.1
Rubber and plastic products	207.8	215.1
Lumber and wood products	290.8	271.6
Pulp, paper, and allied products	237.4	248.9
Metals and metal products	284.6	281.9
Machinery and equipment	227.6	237.0
Furniture and household durables	183.4	184.1
Nonmetallic mineral products	268.4	282.9
Transportation equipment (Dec. 1968=100)	198.7	201.1
Miscellaneous products	242.9	250.9
Industrial commodities less fuels and related products and power	234.7	239.9
OTHER COMMODITY GROUPINGS		
01-9 Other farm products	301.1	311.0
02-1 Cereal and bakery products	225.4	233.5
02-2 Meats, poultry, and fish	239.6	224.8
02-5 Sugar and confectionery	235.0	327.4
02-6 Beverages and beverage materials	224.0	231.4
02-63 Packaged beveraged materials	360.8	355.5
02-7 Fats and oils	225.1	212.1
04-4 Other leather and related products	213.1	217.5
05-3 Gas fuels 3/	677.5	744.8
05-7 Refined petroleum products 3/	583.3	680.6
06-3 Drugs and pharmaceuticals	166.5	171.8
06-5 Agricultural chemicals and products	241.9	258.3
06-7 Other chemicals and allied products	209.4	225.0
07-1 Rubber and rubber products	226.1	235.3
07-11 Crude rubber	252.7	263.0
07-13 Miscellaneous rubber products	215.9	227.5
09-1 Pulp, paper, and products, excluding building paper and board	239.2	250.3
09-15 Converted paper and paperboard products	227.7	236.1
10-1 Iron and steel	297.6	304.7
10-13 Steel mill products	293.6	305.5
10-2 Nonferrous metals	326.3	289.8
10-4 Hardware	228.2	238.2
11-3 Metalworking machinery and equipment	258.9	272.6
11-4 General purpose machinery and equipment	251.0	262.3
11-7 Electrical machinery and equipment	190.6	199.2
11-9 Miscellaneous machinery and equipment	220.3	226.9
13-2 Concrete ingredients	265.0	271.1
14-1 Motor vehicles and equipment	200.7	203.1
15-4 Photographic equipment and supplies	165.9	200.0
15-9 Other miscellaneous products	351.6	339.1

1/ Indexes for these commodity groupings are not included in Table 2 because their components are divided among different stages of processing.

2/ Data for Jan. 1980 have been revised to reflect the availability of late reports and corrections by respondents. All data are subject to revision 4 months after original publication.

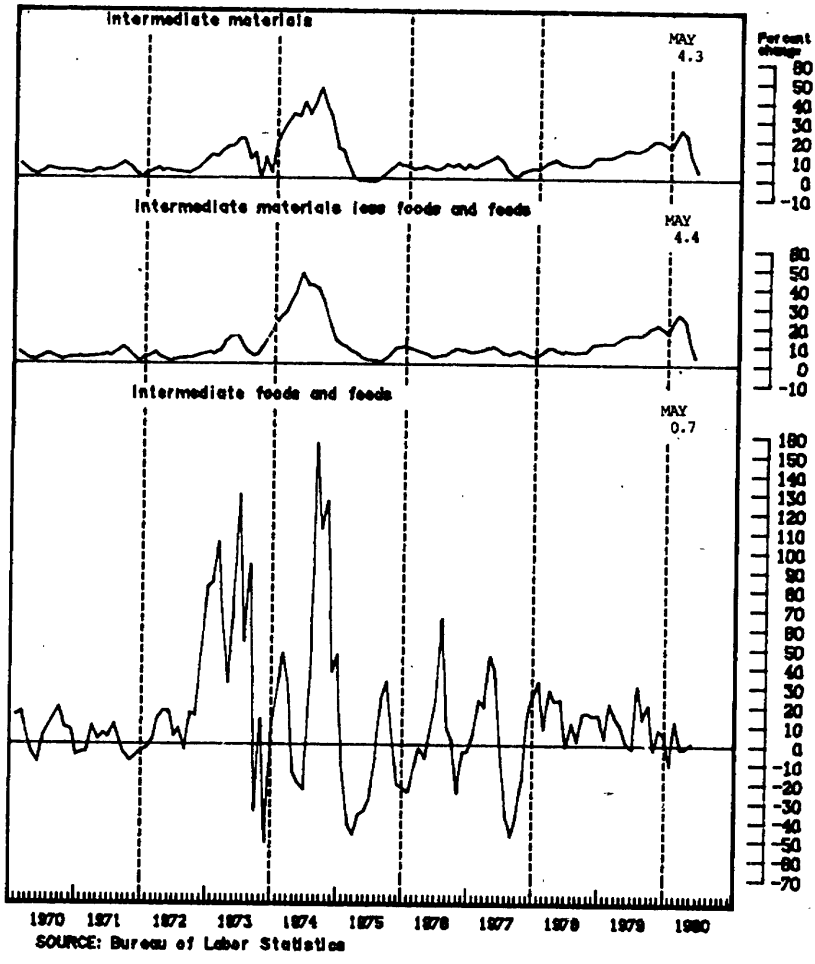
3/ Prices of some items in this grouping are lagged 1 month.

Chart 1
Finished Goods Price Index and its components
1970 – 80
3-month annual rates of change
(Seasonally adjusted)



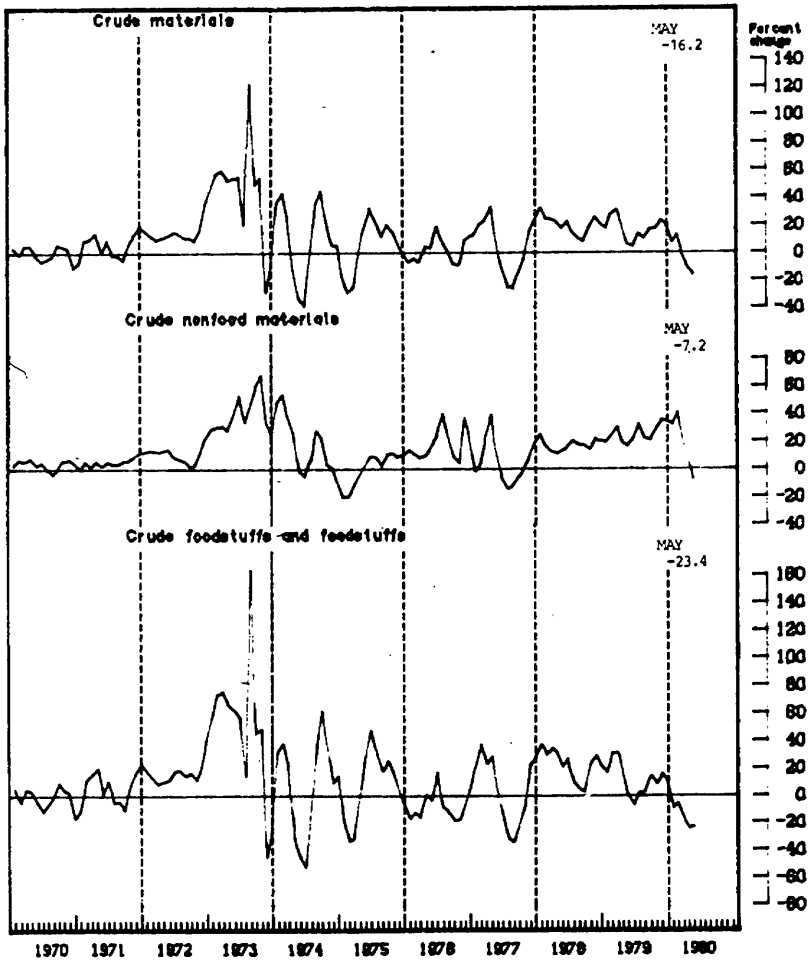
SOURCE: Bureau of Labor Statistics

Chart 2
Intermediate Materials Price Index and its components
1970 – 80
3-month annual rates of change
(Seasonally adjusted)



SOURCE: Bureau of Labor Statistics

Chart 3
Crude Materials Price Index and its components
1970 – 80
3-month annual rates of change
(Seasonally adjusted)



SOURCE: Bureau of Labor Statistics

Representative LONG. Without dismissing the seriousness of the situation for any particular group of individuals, tell us, if you would, which categories are the most vulnerable in the sense of the degree of difficulty of finding another job or having some form of income support to fall back on until they do.

Ms. NORWOOD. Well, Mr. Congressman, any group of the population that is unemployed has difficulty, especially in a period of economic contraction. This recession so far has been focused to a very large extent in the durable goods manufacturing industries. That is why the rates for male workers have gone up to rapidly since January. The rates for blue-collar workers are also reflecting that difficulty. Obviously, disadvantaged members of the population, teenagers who always have difficulty in good times as well as bad, will have greater difficulty in a period of shrinking jobs.

We also, of course, have had a considerable downturn since January in construction industry employment and that too has hit primarily a predominantly male labor force.

Representative LONG. Commissioner Norwood, how severe is this recession in comparison to the recession of 1974–75?

Ms. NORWOOD. There has been a great deal of discussion in the press and elsewhere about that and a great deal of speculation. I think that it is important to note that no two recessions are ever really exactly alike. We can learn a good deal from history, but we also have to remember that history does not repeat itself.

The last recession in particular was somewhat different from some of the preceding recessions because it took some months from the time designated by the National Bureau of Economic Research as the peak, which was November of 1973, for the big downturn to occur.

In the current period we have had, as you well know, a period since last January 1979 of essentially sideways movement, when we have had a relative stability in the unemployment rate somewhere within the 5.7 to 5.9 percent rate. Since January 1980, however, there has been a steep drop, but I think that it is important also to remember that it is much easier to evaluate the rates of increase in an expansion than it is to assess the rate of decline in a contraction. That is because, in general, the rates of increase in expansions have been somewhat more uniform among business cycles of the past than have been the rates of decline.

Economic forecasting is a very difficult art. I think one needs only to look at the record of many of the economists to see that the forecasts keep changing from one week to the next as new data become available, and I think that that will continue as we move forward.

Representative LONG. If we look at the chart here, Commissioner Norwood, we see what's happened in the last 4 months to the unemployment rate. The incline that is shown there is really one that begins to worry many of us, and the rhetoric that has gone on that we shall not cure inflation by having people unemployed seems to be getting close to having been nothing but rhetoric. It's of great concern to us.

We are fast approaching, in a relatively short period of time, the high unemployment levels that we reached in the 1973, 1974, and 1975 period, and that, also, is of concern to us.

Another thing that has concerned me is that the labor base at which we started has been higher than the base was at that time. Many of

us tend to think of unemployment in terms of the number of automobile workers that are unemployed or the number of construction workers that are unemployed. If we look at some of the rural areas particularly, if you take the latest figures for some areas of rural Louisiana—you have the town of Oak Grove in West Carroll Parish, La., where the unemployment rate is 21.9 percent. In the town of Oakdale in Allen Parish, La., it's 19 percent. So we are talking figures, in some instances, nearly three times the national average. Tallulah, La., 17.4, a town of 50,000. My home town of Alexandria, La., we have something like 10 percent.

The overall way in which the figures are growing are very, very disturbing to me.

Congressman Mitchell.

Representative MITCHELL. Thank you, Congressman Long.

I'm going to talk very carefully and very slowly this morning because I don't want anyone to misinterpret what I'm saying.

Shortly after Miami exploded, a number of people in the press contacted me for questions. I tried to answer their questions as honestly and as effectively as I could. I answered that it was not the sudden influx of Cuban refugees that was really the cause of that explosion. It was not the single act of police brutality against the black man, nor was it the series of acts of police brutality in the black community. These were not causal.

The root cause of the explosion in Miami was the permanent unemployment that has been permitted to exist in the black community in Miami.

In my further replies to their questions, I pointed out that in any major city that permits black unemployment to reach and remain at absolutely intolerable rates, there is the potential for that kind of explosion in every such circumstance.

This is not a warning. This is not a threat. It is merely a recitation of fact.

This Government and this Congress, in its fight against inflation, has pursued fiscal policies which will exacerbate black unemployment. This Government, through its monetary policies, is pursuing policies and practices that will exacerbate black unemployment.

I think it is utterly insane to permit this to happen. To permit the potential for explosions to exist in our Nation and after the explosions go in and pay enormous sums of money to clean up what has happened is insane. We could have prevented Miami.

Are we going to continue our same fiscal policy and monetary policy? My prediction, based upon advice from my economists, suggests that if indeed they are pursued, we are going to reach 9 percent national unemployment—9 percent—before the end of December. That is intolerable.

I am also advised that the duration of the recession, if we continue these same insane policies, will last at least 24 months—24 additional months.

I do not know when we will reach bottom or when we will start pulling out. Whenever we do, the black and minority communities will be the last to pull out long after the white communities pull out.

My community was just beginning to upturn from the impact of the 1974–75 recession. Now, before we have a chance to come out of it, we're thrown into another one.

I am not attempting to chastise the witnesses in any way. However, I have to get this out of my system. When will this Nation learn that you cannot permit a selectively large segment of America to remain permanently unemployed? When are we going to stop selectively pressuring the same group of Americans to the point that they become desperate?

Congressman Long and members of the committee, this committee has the singular and sobering responsibility of demanding a reassessment of our present fiscal and monetary policies. That is our responsibility. If we do not assume that responsibility and we do not make the changes, I predict that we are in for some very difficult times in America.

I have told everyone who asked. I do not expect the cities to explode this summer. I hope they don't. I hope to God they don't. But, if we continue the present policies, as this silly balanced budget that isn't balanced at all, it will be the summer of 1981 that we will have to watch. When the full impact of the recommended cuts in human resource programs and the dysfunctioning of the economy come together in 1981, that is when we must be careful of explosion.

It is useless. Perhaps it is really useless for me to sit here and make this statement because this Congress is not going to change the budget. This Congress is not going to change its policies. However, I've got to articulate what I see as a grave and terrible danger to this Nation.

Obviously, I do not have any questions for the witnesses. The questions are before all of us. We don't have to articulate them. Thank you.

Senator SARBANES. Would the Congressman yield?

Representative MITCHELL. Yes, I shall.

Senator SARBANES. I simply want to say it's not useless. I have seen the Congressman articulate similar concerns on other issues in the past and when it might have appeared useless, in the end it proved not to be, and his voice in the end prevailed; and I want to commend him on his statement this morning.

Representative MITCHELL. I thank you. Now, however, we have a slightly different circumstance. We are on a new economic course. As a result of selfish international and domestic economic policies; a stubborn economic attitude; and a Congress obsessed with political expediency rather than economics; I don't think we have the same circumstances that we have had in the past.

Representative LONG. Congressman Brown.

Representative BROWN. Thank you, Congressman Long.

Ms. Norwood and my colleagues, while I agree with my colleague, Congressman Mitchell, that unemployment falls most cruelly on the blacks and the teenagers and the women and the unskilled in this economy, I would have to say that the unemployment rate released today is shocking for all Americans, not just the black/white issue, when 7.8 percent of our people are unemployed and when 7.5 percent of all the skilled workers in this country are now not working and producing goods in our society.

We had last week the report that the economic statistics of this country have reached the highest level of discouragement that we have ever had. We are in a major recession.

We could make sure that we don't force this administration into high inflation and high unemployment in the years to come—this adminis-

tration and what I think will be the next, because my guess is that President Carter will join the unemployed in the fall—that we don't force ourselves into a long-range unemployment/high inflation picture by following stupid policies now, the same policies that have created this situation where we saw in good times unemployment rates that had been unacceptable only a few years ago in the bad times, and that's our problem.

We cannot have this continue indefinitely in this way. Steps should be taken now to cure the problem.

Representative MITCHELL. Would the gentleman yield?

Representative BROWN. I would be happy to yield.

Representative MITCHELL. It has been a good experience for me to work with you on this committee. I know of your commitment, your sincerity and your ability. I must say, however, that this Congress in which we both serve must share the blame with the administration.

Representative BROWN. I agree with that.

Representative MITCHELL. It is good politics to personalize this issue. I am convinced that the President has made many serious mistakes. However, we have three branches of government each sharing equal power. The Congress, comprised of this House and this Senate, has pursued policies that have added to the unemployment that we face.

Representative BROWN. I couldn't agree with you more.

Representative MITCHELL. Let me just say that the hearings that you and I both had less than a year ago—at that time, which was a fairly good time in employment, we had 30 percent minority unemployment in this country. Now that's not a good situation and we were both concerned about it, and the problem is that in that good time we had 6 percent general unemployment in this country and, just as I said, two recessions back, that 6 percent was considered unacceptable in bad times when we had a recession going on at that time.

Look at the charts that have been presented to us here today. You know, President Ford is proud of the fact that he got inflation down to 4.8 percent when we had high employment in the last recession, but that 4.8 percent was higher than the 4.1 percent that moved President Nixon to put on wage and price controls.

Now the administration tells us that the good news in the inflation rate is that we may get it down to 9 or 10 percent. Well, great. I think that's a tragedy for our society, if this Congress can accept ever-higher inflation rates and ever-higher unemployment rates. When we get into the good times as well as the bad times that lie ahead of us, we must address the fundamental cause of the failure of the U.S. economy to keep up with the world.

I must say that in my district I have the new Honda plant. It strikes me as a rather peculiar anomaly that Honda is building a plant in my district to employ Americans in the middle of the recession for the American automobile industry. Honda is the third largest Japanese automobile manufacturer. Our third largest American automobile manufacturer is Chrysler. Now something is wrong with the direction this country has been going—not just in this administration but for some time, and I must say that if the blame should be placed on one of the branches of Government, perhaps it might be placed on the U.S. Congress most of all because that Congress has had rather consistent policies of deficits without regard to who the President was, and infla-

tionary policies with reference to regulations and to uncontrolled Government spending.

Congressman, I don't know whether my time is up. I didn't time myself and I'm not sure whether we're being timed. I did want to ask a couple questions.

Representative LONG. If the gentleman will yield to Senator Sarbanes for a time, then we will come back to you.

Senator SARBANES. Thank you, Congressman.

Commissioner Norwood, 2 months ago the unemployment rate was 6.2 percent. Today you report to us the distressing information—and I appreciate you're only the messenger—of 7.8 percent. That is an increase in unemployment of over 25 percent in 2 months; is that correct?

Ms. NORWOOD. Yes; it was an increase of about 25 percent.

Senator SARBANES. When was the last time this Nation's economy experienced such a sharp jump in unemployment in a 2-month period?

Ms. NORWOOD. We have never had such a sharp jump in a specific 2-month period, sir.

Senator SARBANES. This is the largest jump in unemployment the Nation's economy has ever experienced within a 2-month period; is that correct?

Ms. NORWOOD. Yes, sir. At least since we have been measuring unemployment.

Senator SARBANES. I understand it would be hard to make the judgment prior to that time.

In the recession of 1974 to 1975, which as I understand it was the worst downturn we had experienced since the depression years of the 1930's, what was the largest 2-month jump in employment?

Ms. NORWOOD. 1.4 percent.

Senator SARBANES. Over a 2-month period?

Ms. NORWOOD. Yes, sir.

Senator SARBANES. And that in percentage terms was what? Because I think we started from a lower unemployment rate, did we not?

Ms. NORWOOD. We will provide that to you. The unemployment rate went from 6.6 to 8.0. So a 1.4-percentage point increase on a base of 6.6 gives a slightly smaller percentage, because we started from a smaller figure.

Senator SARBANES. Now in 1974–75—was it August of 1974 when the unemployment rate first started going up noticeably? That recession ran really from August 1974 to May of 1975; is that correct?

Ms. NORWOOD. That is a good point; yes, sir.

Senator SARBANES. What was the rate in August of 1974?

Ms. NORWOOD. 5.4 percent.

Senator SARBANES. And in May of 1975?

Ms. NORWOOD. 9.0.

Senator SARBANES. And that was the highest it reached?

Ms. NORWOOD. Yes, sir.

Senator SARBANES. Now, there's a story in the morning paper that, on a weekly survey, unemployment claims filed over this past week are at a peak level. is that correct?

Ms. NORWOOD. Yes, it is.

Senator SARBANES. Now, would the latest report be encompassed within the survey conducted for arriving at this unemployment figure, or were those unemployment claims subsequent thereto?

Ms. NORWOOD. The initial claims for unemployment insurance were at a peak during the same week as the survey that we are reporting today. There has been another week added, with only a slightly smaller number of initial claims.

Senator SARBANES. Now how much of a predictor is that? In other words, on the basis of that, are we to infer that when you come back to report in a month's time, we're going to be confronted with another 0.6 or 0.8 or a percentage point jump in the unemployment rate?

Ms. NORWOOD. Senator Sarbanes, there is a correlation between the initial claims and the overall unemployment rate as reported. It is too soon, however, I think, to make any estimate based upon the initial claims data because there are several weeks still between the survey week for next month and the claims that are now reported. These claims really relate to the data we are putting out today.

We had, this month, a rather large increase in the labor force and that increase in the labor force was disproportionately people under the age of 25. We don't know, of course, what will happen next month for younger workers.

Normally, in the month of June, we expect a large increase into the labor force of people coming out of schools. Some of that may have occurred this month.

Senator SARBANES. Well, going back a month ago, did the unemployment insurance claims increase at that point?

Ms. NORWOOD. Yes, sir; they did.

Senator SARBANES. In other words, the prospect is very bleak. We have these figures, the largest 2-month jump in our history, a jump of 25 percent. We went from 6.2 to 7 percent and we have now gone to 7.8 percent, and on top of that, while you still have a few weeks to go before the next survey, the figures we have for the period subsequent to the survey show unemployment insurance claims at a level, which if they have any indicative value, suggest that the unemployment rate will continue to go up in the next reporting period; isn't that correct?

Ms. NORWOOD. I think one of the things that we must be a little bit careful about, sir, is the fact that the civilian labor force increased between April and May by more than 700,000 people. The change from January to May was really only slightly higher. That is one of the reasons that the increase in unemployment is larger than the decline in employment, a large part of this jump was the jump in the labor force. That's clearly related to the economic contraction that is going on and I'm not suggesting anything different, but I think that is a factor which may or may not occur next month.

Senator SARBANES. One of the trends that is very marked in this unemployment report you're submitting this morning is that full-time workers are being laid off; is that correct?

Ms. NORWOOD. Yes, sir.

Senator SARBANES. In other words, this really shows that a lot of full-time workers in durable goods and the construction industry in particular have lost their jobs. At the same time, that may lead to an increase in people entering the labor market, since the spouse who previously may not have had to work or had refrained from being in the labor market is suddenly compelled to enter the labor market. So what you have is now two people seeking a job: The person who had a job and lost it, and the spouse who now has to seek a job because the family breadwinner is out of work. Isn't that correct?

Ms. NORWOOD. We certainly have a large number of dual earner families. In fact, we already have a majority of families in this country with more than one earner in the labor force. How much more that will increase is something that we don't know.

Senator SARBANES. Well, I want to give a very human example, I had a young woman on my staff who left in order to raise a family. Her husband was a steelworker at the Bethlehem Steel plant in Baltimore. Her husband lost his job. She has come back to us to seek employment again.

Now, fortunately, we are in a position to be able to give it to her. She's an enormously able person, but she was prompted to reenter the labor market by the loss of her husband's job.

So you have a dual effect reflected in these unemployment figures. That is, full-time workers are losing their jobs, and therefore their spouses being compelled in effect to enter or reenter the labor market because a wife has got to go back to work and substitute for her husband as the breadwinner. I think that, in part, this increase in people entering the labor force may well be attributable to that factor.

Ms. NORWOOD. Well, certainly, that is an important development. I think that at least equally important is the fact that the unemployment or the drop in employment has been focused in only some industries, as you indicated, and is spreading out now from construction to lumber, from automobiles to steel and glass and rubber. It has not yet permeated the services sector. Many of the women in this country—a disproportionately large number of women are employed in the services sector. That's one of the reasons that the male permanent or full-time male worker rate has gone up so much.

Certainly, we should expect to see some more of that. I think it's interesting to note that in 1973 around the time of the last recession, only 44 percent of the families in the United States—the husband and wife families—were dual earner families, and now we have over half. So there has been a big increase even before the increase in the unemploymnt rate.

Senator SARBANES. Congressman, you have been very good to me on the time. I just want to follow up that answer with one more question.

Thinking back over your past experience, let me ask you whether, in looking at the unemployment figures, and keeping in mind the severe unemployment problem we are experiencing in major industries, such as autos and construction—does the problem eventually work through the economy and permeate other industries where the figures may not yet reflect the seriousness of the unemployment in those particular sectors? In other words, are we to expect that given a very bad unemployment situation in certain central economic sectors—not at the fringes of the economic activity, although I very frankly don't regard unemployment wherever it is as being at the fringes—there will be a ripple effect from these figures that would lead one to conclude that this rate is going to continue to climb and climb?

Ms. NORWOOD. I think there are some points that can be made.

First of all, interest rates are heading downward. That could mean some stimulation in investment. Inventories are not yet out of line as they have been in previous recessions and that I think augurs well for the future.

In addition, it is clear that other countries, though they seem to be moving toward recession—are not yet in the same position that we are, and we may well move through our recession before they get down further.

So there are some indications I think that overall the situation is somewhat different from 1974 when we had such steep increases in unemployment, but, of course, only time will tell that.

Senator SARBANES. Well, I see my time has expired. Thank you, Congressman Long.

Representative LONG. Congressman Rousselot.

Representative ROUSSELOT. I'll yield to my colleagues. I apologize that I was not able to hear the whole statement and I'm still going through it.

Representative LONG. Congressman Mitchell had a question he would like to ask.

Representative ROUSSELOT. Go ahead.

Representative MITCHELL. I have one question. I thank the gentleman.

Assuming that that 7.8 percent does not go up and assuming that it stays pretty much at that level for a year, what does it cost the American public to sustain that rate of unemployment? What is the cost in dollars and cents?

Ms. NORWOOD. I don't know in terms of dollars and cents. It certainly costs the American people a lot for unemployment.

Representative MITCHELL. Let me pursue this just a bit further. Do you accept the generally stated figures that 1 percent of unemployment per year may cost the American taxpayer as much as $17 billion? Most economists state a range of $14 billion to $19 billion.

Senator SARBANES. Would the Congressman yield on that point?

Representative MITCHELL. Yes.

Senator SARBANES. I think those are the figures for what it costs the Federal Treasury in terms of lost revenues and increased outlays, but they do not reflect what the society loses through lost production, which is something we tend to neglect. That 1 percent is a million people, roughly.

Ms. NORWOOD. Yes, sir.

Senator SARBANES. So that figure—the $20 billion—is what the million people would have paid in taxes and what we would have saved in payments to them, but it doesn't reflect the output that those million people could have produced to help make America stronger. That is lost, which is the utterly insane aspect of permitting this unemployment to exist.

Representative MITCHELL. The gentleman is absolutely correct. To be more accrate you would have to calculate across the board. But if we take the minimum figure of $14 billion a year, for every 1 percent of unemployment, and multiply that by 7.8 percent, we are going to pay out staggering sums of money to keep people unemployed, which places us in an "Alice in Wonderland" kind of world.

No further questions, Congressman.

Representative LONG. Congressman Rousselot, do you have any questions?

Representative ROUSSELOT. Yes, Congressman Long.

Representative LONG. Proceed.

Representative ROUSSELOT. Ms. Norwood, we keep hearing this following calculation—as a follow-on to what my colleague from Maryland mentioned—that 1-percent unemployment means about $5 billion in added Federal spending and about $20 billion loss of revenue. Do you accept that general thesis? I realize it's not very precise.

Ms. NORWOOD. I just can't comment on that, sir. I'm not familiar with those numbers.

Representative ROUSSELOT. You don't look at them all?

Ms. NORWOOD. I'm not familiar with those numbers. I think that's a very, very difficult area, as I think Senator Sarbanes indicated. Certainly one can look at the cost in unemployment insurance and one can look at the cost in added food stamps and so on; those are costs to the Government. It's really very difficult to get a dollar figure for the total cost of unemployment.

Representative ROUSSELOT. Well, then, maybe we shouldn't base our estimates on that formula because in our budget calculations we always get into these great projections and how we should do it.

Ms. NORWOOD. Yes, sir.

Representative ROUSSELOT. Should we disband that?

Ms. NORWOOD. I'm not suggesting that. I'm merely suggesting——

Representative ROUSSELOT. That you don't know?

Ms. NORWOOD. That the Bureau of Labor Statistics is not involved in those calculations and I really can't comment on them.

Representative ROUSSELOT. You can't make a suggestion on them. OK. Well, I'll pass it up. So much for the balanced budget, because you realize that in our budget projections we are going to be anywhere from 1 to 2 percent above the unemployment rates assumed by the Budget Committee in their budget resolution. So I guess we only have a balanced budget now on a hope and a prayer on the basis of the most recent actual figures. So I don't know how we can proceed any longer on the idea that we are going to have a balanced budget on the basis of the recent calculations relating to unemployment and other figures you have given us.

Well, thank you, Commissioner.

Representative LONG. Congressman Brown.

Representative BROWN. Thank you, Congressman.

Ms. Norwood, I want to go back and address specifics of the areas where unemployment now focuses. My colleague and I, Congressman Mitchell, have discussed minority unemployment earlier and it's clear that minorities are benefited most during a recovery period—that is, more of them by percentage are employed—and are also hurt more by the downslide period because there's sort of a first into the job, first out of the job inventory of minority groups in this country; but I'm also concerned about the fact that the unemployment rate for full-time workers has hit 7.5 percent, and as I look at the breakdown of your statistics, I see that blue-collar workers have jumped from February to May from 7.7 to 11.3 percent unemployment.

Ms. NORWOOD. That's right.

Representative BROWN. That's a 3.6 percent on 7.7. That's not quite a 50-percent increase in their unemployment, but a rather sharp increase.

Then, when we get into craft and kindred workers, it's gone up from 4.8 to 8.1 percent. I take that as 3.4, which is well over a 50-per-

cent—something like 60- or 70-percent increase. And then operatives except for transport, which I assume are skilled operatives—tool and dye kind of operatives—have gone from 9.2 to 14 percent—4.8 percent. That would infer that the heavy industries of this country are those which are experiencing the sharpest unemployment.

Do we have any history that establishes whether the trades or the job skills that supply these industries precede them in unemployment increases or do they follow them? In other words, can we expect, because the major industries are now experiencing sharp unemployment, that some of the minor industries or infrastructure support industries will now have follow-on high unemployment?

Ms. NORWOOD. Well, we are already experiencing some of that, as I indicated before. We have had a big drop in automobile manufacturing employment. We are now——

Representative BROWN. Where does the unemployment hit first though? Does it hit in the manufacturing of the automobile? Does it hit in the parts supply field? Does it hit in the automobile dealership salesmen or does it follow in those areas after the automobile manufacturing has collapsed?

Ms. NORWOOD. Clearly, in this period, it is following because we had great difficulty in automobiles long before we moved into the current problems and the current recession. Generally, recessions hit in durable goods manufacturing industries and then spread out into the others.

Representative BROWN. So what we're seeing is it hitting in the durable goods industry now?

Ms. NORWOOD. Yes.

Representative BROWN. And we can anticipate that it will spread out through the rest of the economy?

Ms. NORWOOD. It has already spread, as I indicated. For example, construction workers became unemployed and now we are having some increases in unemployment in the lumber and wood products industries. Employment declines have not been as great yet in the nondurable goods manufacturing industries, although there is beginning to be some. Further declines may or may not occur. That is related to a lot of other kinds of developments.

Representative BROWN. Now it's been widely stated that this recession might be—or widely speculated, I should say, that this recession might be a short, sharp recession because inventory levels have not been extremely high as we go into the recession, but the demand for items—the inventory items drop sharply as people are unemployed. Does that suggest that the inventory cushion will bring us out of the recession more quickly or is there a picture of that yet?

Ms. NORWOOD. I think that all that the inventory situation tells us is that we do not have a serious problem at this point, although the latest figures which were released went up slightly. We do not have large amounts of inventory at this point. Obviously, if sales decline, there will be some increase in the amount of inventories until production is cut. That is, the relationship at this point is still fairly good. The reason that everybody is talking about inventories is because they are different from the period in 1974 when we had such a steep drop and when inventories were so far out of balance.

Representative BROWN. You mean they were low?

Ms. NORWOOD. They were high.

Representative BROWN. They were high. Now were they high as we went into the steep drop or were they high during the drop or were they high at the end of the drop? Because it seems to me it makes a difference.

Ms. NORWOOD. They were high as we moved into the recession and they were——

Representative BROWN. But as the demand falls, then, the inventories may be high as we proceed in this recession also; isn't that correct?

Ms. NORWOOD. Unless production is cut.

Representative BROWN. I have a lot of automobile dealers in my district who might think that their inventories were a little too high right now because the automobiles are not moving, and that's the reason that the production was cut and they are concerned about those inventories. They are concerned really about the fact that they haven't moved them I guess.

Ms. NORWOOD. Of course, the high interest rates have had some effect in curtailing the stock of automobiles or other kinds of production.

Representative BROWN. Yes, indeed. Now can we go to another point, and that is the question of inflation and the prospects for inflation?

Let's take a look at those automobiles or any other product that might be at this point a drag on the market. It seems to me there's a good deal of cost built into that item as it sits on the floor that probably makes it impossible for the price to the consumer to be cut very radically on those vehicles or those items for sale.

My question is: Can we anticipate really the inflation rate dropping rapidly? In other words, are we going to be back to the $3,000 automobile within the next couple months? It seems unlikely to me that that's about to occur. So we will still have rather high-priced items for sale with fewer people being able to buy.

Ms. NORWOOD. Well, I think the automobile situation is one with a number of special issues. The decline in the automobile industry really began in part at least because of the problem of large cars versus small cars and the high cost of energy and the fact——

Representative BROWN. Let's not focus on the automobile. Let's talk about clothing.

Ms. NORWOOD. The prices of clothing have not been going up at the rates that the prices of automobiles have been going up.

Representative BROWN. But can I expect the local haberdashery to offer me a suit for less than $100 or $75 very quickly?

Ms. NORWOOD. Well, I certainly cannot predict what will happen. I expect that, because of already announced reductions for automobiles and mortgage interest rates, that the Consumer Price Index for May will also show some considerable deceleration. Now how long that will continue or whether it will go down as much as many people would like, I don't know.

Representative BROWN. Let me ask a couple other questions. I don't want to monopolize the time. but I do have some that relate to the particular, peculiar nature of this recession. Costs in taxes and nontax costs induced by Government such as regulations—are they higher as we go into this recession than they were as we went into the last recession?

Ms. NORWOOD. Yes.

Representative BROWN. They are. Well, now the impact of that, then, on what happens when we come out of the recession and on businesses' ability to return to a productive operation or on its profits—could you give me some picture as to what we might anticipate in terms of future profit reports of business or future cost factors in terms of business getting back into operation quickly?

Ms. NORWOOD. No, I really cannot. I think that depends to a very large extent on what happens to capital investment and what happens to productivity and productivity typically——

Representative BROWN. When you say capital investment, you're talking about the replacement of equipment and the expansion of plants and so forth?

Ms. NORWOOD. And new equipment.

Representative BROWN. And when you're talking about productivity, you're talking about new equipment that might do the job quicker and cheaper than the existing equipment in the plant?

Ms. NORWOOD. Yes. Typically, productivity falls at this stage of a recession and then improves. I think that the issue of Government regulation depends upon its cost and its effect on the efficiency of workers and the efficiency of production because it's not always a negative factor. It depends on the situation.

Representative BROWN. Now the productivity improvement interests me because of some other statistics that you presented this morning, and that is that it seems to me that the workweek is shortening for people. In other words, we are getting less overtime. As a matter of fact, in some instances, the worker is not getting his full 40 hours. He may be let go earlier on the weekend or some such thing. But you said something about productivity would increase as the recession progresses.

I gather that that's—or maybe I should ask the question this way—isn't it historically true that unemployment continues to increase after we get into the trough and head into recovery from business generally?

Ms. NORWOOD. Well, the point that I was making was that, as you know, productivity is very much affected by the size of the factory work force. As employees are dropped from the factory work rolls, the issue then is whether output will decline less than employment. Generally speaking, we have had, as you certainly have indicated, a rather dismal productivity picture. Productivity has been declining, but as employees are let go and removed from the work rolls, that could begin to have a downward effect on unit labor costs.

Representative BROWN. Let's go back to the automobile showroom and talk about human nature for just a minute. In the automobile showroom as the customers don't come in, there's a certain natural optimism that carries beyond that point where the automobile dealer tends not to let his salesmen go. He continues to advertise in the hope that he can attract people into that showroom. As he suddenly realizes that none of that works and that they are not going to come in, then he's obliged to cut out his advertising—not cut it out but reduce it, to reduce the number of salesmen in his showroom and addresses the problem of reducing his cost and not just continue to try to increase his sales; is that correct?

Ms. NORWOOD. That is so.

Representative BROWN. And as the recovery begins then, he doesn't

rush to hire the additional salesmen because the natural pessimism of the recession carries through and there's a tendency for him to say, well, one or two salesmen can handle it for a while; and not until he begins to see a customer standing there waiting for 15 or 20 minutes before a salesman grabs him does he hire those new people.

Now that results in the unemployment recovery lagging behind the actual recovery in terms of business activity. Is that not correct?

Ms. NORWOOD. Well, that has certainly been a pattern in previous recessions. In the last recession, productivity turned around before——

Representative BROWN. Before the recession was over and before the employment began to pick up, because you just simply gave the guys 45 hours before you hired the additional worker on. Hence, back to Representative Mitchell's point about the underskilled and the unskilled being the last ones to be brought into a job situation.

The President, about 4 years ago, when we had the last recession of significance—Carter was not in office then and I think Arthur Okun came up with something called the Misery Index, which measured both inflation and recession at the same time. The President discussed this on several different occasions and I'm wondering if anybody keeps that unofficial "Misery Index" down at the Bureau of Labor Statistics now.

Ms. NORWOOD. The Bureau of Labor Statistics measures what happens in the economy and reports on it.

Representative BROWN. But not the "Misery Index." I guess we'll have to look and see what that specific is. As I understand it, that was the inflation rate and the unemployment rate combined in some kind of a quantum to see whether we were getting better or worse. I hope we will be getting better soon.

Thank you, Ms. Norwood. I want you to know, too, and your colleagues, that in no way do we hold you responsible for the problem. You have been on the job through some of the—at least in terms of employment, although I must say that when you came in you did let inflation get out of hand there for a while. I hope you can get both of them back in hand shortly, at least in your reporting to us. Thank you.

Ms. NORWOOD. Thank you.

Representative LONG. Congressman Rousselot.

Representative ROUSSELOT. Ms. Norwood, to follow up on my other colleagues here, then you expect, on the basis of your previous experience, that unemployment will continue to rise?

Ms. NORWOOD. As you know, I prefer not to speculate about the future.

Representative ROUSSELOT. I understand that, but on the basis of your past experience, what do you think?

Ms. NORWOOD. I think it depends on a variety of factors. In particular, we need to look at what's going to happen to the labor force next month. If we have had an unusual influx of young people who would normally have been coming into the labor force next month and instead have come in somewhat earlier, because of the recession. I think that that would ease the situation a little bit next month. It depends, too, on what happens in terms of sales, in terms of production, and in terms of businessmen's decisions.

Representative ROUSSELOT. Then can we expect unemployment to go down? Is that what you're saying?

Ms. NORWOOD. I'm saying that one needs to examine the changes that

may occur in the labor force as well as the drops in employment that may occur. I understand that you're having as your next witness a representative of one of the important forecasting groups, and I try to leave the forecasting to them.

Representative ROUSSELOT. I appreciate that, but also you have been a judge of these statistics for a long time and you have watched it and followed it. Can we expect a reduction in unemployment next month?

Ms. NORWOOD. I don't really know. I think it is extremely unusual to have two such very large increases in a 2-month period. It is also unusual to have such a large increase in the labor force in a single month. So one needs to look at these data over a longer period of time.

Representative ROUSSELOT. Do you think that the productivity decline of the last year ahead of the recession primed businessmen to start layoffs faster this time than in previous recessions?

Ms. NORWOOD. No, I don't think that has been happening.

Representative ROUSSELOT. No relationship?

Ms. NORWOOD. We have had considerable slowdown during 1979 in the growth of employment, but we have not had declines in payroll employment which one would expect under those circumstances.

Representative ROUSSELOT. Thank you, Congressman Long.

Representative LONG. Congressman Brown.

Representative BROWN. Congressman Long, I thank you for coming back to me again. I did want to focus on specific details other than unemployment in two areas. Again, Congressman Mitchell and I have discussed minority unemployment, but with reference to specific industries, you talked about construction, automobiles, and durable goods industries. Can you tell me which other industries currently have unemployment rates of over 10 or 15 percent as a benchmark figure? In other words, which are the other industries most severely affected in the current recession?

Ms. NORWOOD. There is a very high unemployment rate in the automobile industry.

Representative BROWN. I have heard the figure that that could go as high as 60 percent. The current figure is what?

Ms. NORWOOD. 29 percent.

Representative BROWN. And is there an indication——

Ms. NORWOOD. And a year ago it was 4.5 percent. I think that is an indication of the tremendous decline in the automobile sector. If you look at domestic automobiles the decline in sales is very much related to the decline that has occurred in employment.

Representative BROWN. Do you have the construction industry separately broken down?

Ms. NORWOOD. Yes. That's 17.5 percent. In January it was 10.8 percent.

Representative BROWN. Do you have something separate for housing?

Ms. NORWOOD. No, we do not. We just have overall construction figures.

Representative BROWN. What other industries? Appliances?

Ms. NORWOOD. No, we do not generally have data for the industries that are so narrowly defined.

Representative BROWN. Steel?

Ms. NORWOOD. We have primary metal. We can provide some further breakdown for the record. I don't have them here.

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

UNEMPLOYMENT RATES FOR SELECTED DETAILED MANUFACTURING INDUSTRIES, MAY 1979 AND MARCH–MAY 1980, SEASONALLY ADJUSTED

	May 1979	March 1980	April 1980	May 1980
Durable goods:				
Lumber and wood products	9.0	11.9	15.7	15.2
Furniture and fixtures	7.1	8.5	8.8	9.6
Stone, clay, and glass products	6.0	6.3	9.1	11.6
Primary metals industries	3.9	7.5	8.2	8.0
Fabricated metal products	5.2	5.5	9.6	14.6
Machinery, except electrical	2.7	2.8	4.8	4.0
Electric equipment	4.4	5.2	4.9	7.9
Transportation equipment	3.7	10.7	14.0	17.9
Auto manufacturing	4.5	16.0	21.5	29.0
Other transportation	3.9	4.7	5.1	6.3
Nondurable goods:				
Food and kindred products	8.9	8.5	8.5	9.8
Textile mill products	7.7	7.1	7.6	9.5
Apparel and other textiles	10.6	8.5	10.0	12.3
Printing and publishing	5.5	6.1	5.8	6.1
Chemicals and allied products	3.5	4.5	4.5	3.3
Petroleum and coal products	1.3	1.9	5.2	2.8
Rubber and plastics products	5.2	7.6	7.5	10.7

Representative BROWN. Before I leave that, are there any industries that you see currently immune from this situation? I understand that the entertainment industries or recreation industries—maybe I should call it amusement parks and that sort of thing—are still doing a pretty good business.

Ms. NORWOOD. The service sector in general, which is very large now—much larger than it was in the last recession—has not been hit as hard as durable manufacturing or even nondurable manufacturing. For example, some of the food industries, and textile mill industries are experiencing unemployment rate increases, but they do not now have extremely high unemployment rates.

Representative BROWN. When you say at least now, you stimulate the thought that historically they decline later than the other industries and the service industries also decline later; is that correct?

Ms. NORWOOD. They may, but that also depends on what happens to retail sales, to credit, to interest rates, to people's attitudes about purchasing and about the future.

Representative BROWN. Could you speak to the geography of this particular unemployment report? I understand that Michigan has the highest unemployment rate, which is consistent with the automobile industry—14.4 percent—and I understand that my own State of Ohio is at 9.4.

Ms. NORWOOD. Michigan has the highest unemployment rate that has been reported ever, but that's largely because of the effect on the automobile industry.

Representative BROWN. The highest unemployment rate ever recorded in Michigan?

Ms. NORWOOD. Yes.

Representative BROWN. At 14.4 percent?

Ms. NORWOOD. I think that's correct.

Representative BROWN. Is that the highest for any individual State historically?

Ms. NORWOOD. I don't know that. I could check it. Alaska is typically higher, but we can look at that and check it for you.

Representative BROWN. Do you have the States following Michigan in order or can we presume that they are the traditional industrial States of the Union?

Ms. NORWOOD. I have discussed with you I believe on other occasions the problems of the local area unemployment data. We have from the Current Population Survey each month now in our release only the unemployment rates for the 10 largest States. So that's all I can talk to today. We do have unemployment rates not for May but for March for some of the other States and we could provide you with a list in order if you like.

Representative BROWN. And finally, agricultural employment. Is that up or down?

Ms. NORWOOD. This month agriculture was up slightly. That is, employment increased slightly in agriculture.

Representative BROWN. Seasonally adjusted?

Ms. NORWOOD. Yes, of course.

Representative BROWN. So that still, if the State is balanced in its economic potential in various industries from durable goods and nondurable goods and from agriculture to lumber, it has a better chance of surviving a recession or at least without the depths to which Michigan has been drawn?

Ms. NORWOOD. Yes. There is a measurement or a definitional problem really, because as you know in rural areas there's a great deal of underemployment which does not get counted. I do have some figures here showing that if you divide the country into the four broad regions, that over the year from May of 1979 to May of 1980, the north-central region jobless rate just about doubled. It went from 4.8 percent unemployment to 8.3, whereas the South went only from 4.9 to 6. So the jump was much greater in the north-central region where many of these durable manufacturing firms are located.

Representative BROWN. The other is the Northeast.

Ms. NORWOOD. The Northeast went from 5.9 percent to 7.1 and the West went from 5.5 to 6.8.

Representative BROWN. And again my final question, do you have any index or has the Bureau of Labor Statistics or is there in any other services—Commerce or someplace else—an index that would indicate the impact of the recession—the impact of unemployment on individuals in this recession as opposed to a previous recession based on the inbuilt support mechanisms in the society? I have in mind unemployment compensation, union support programs, food stamps—the kinds of social support agencies that are built in at the Federal, State, or local level.

Ms. NORWOOD. I'm not aware of any specific statistical series. There are, of course, a number of studies that have been carried out both in the Government and in academia. We in the Bureau of Labor Statistics, in part as the result of the recommendations of the National Commission on Employment and Unemployment Statistics, are beginning to pull together a great deal of data on income and other information on benefits to try to look at the whole question of labor-market-related hardships.

Representative BROWN. May I suggest quite seriously, if there is to be a "Misery Index," that is an index of impact in a recessionary situation where unemployment has increased, where inflation is still high, that we also ought to look at some of these things to see really where we come out in balance in our society generally because I think that's the concern Congressman Mitchell has and certainly it's mine, and I think all the Members of Congress feel that responsibility.

Thank you very much, Ms. Norwood.

Representative LONG. Ms. Norwood, on the basis of the figures that you have seen, how would you characterize this recession? Would you characterize it as a severe recession?

Ms. NORWOOD. I think any unemployment and any increase in unemployment is a serious problem. I think that the reduction in the rates of price increase are extremely encouraging. The question needs to be looked at over a much longer period of time before we can make any real judgment about the severity.

Representative LONG. You would say basically the same with respect to the length of the recession?

Ms. NORWOOD. Yes, sir.

Representative LONG. Of course, that has a great deal to do with the severity of it because the longer it lasts——

Ms. NORWOOD. Yes. Just this week, on Wednesday, the National Bureau of Economic Research announced the peak or the turning point for this recession as January 1980. Since January 1980, if you look at the indicators, there has been a relatively steep drop in many of them. On the other hand, if you compare recent developments in the indicators to what happened from November 1973 onward, you really see that some of the pattern of last year, and what has been characterized as a sort of sideways movement, is quite similar to what happened in the earlier period of the last recession.

So it depends in large part on the time period that you pick. Certainly, since January, there has been a fairly steep decline and I believe that Mr. Feldstein in indicating the National Bureau's decision suggested that.

Representative LONG. In closing, one additional factor, along the lines of what Congressmen Mitchell and Brown were speaking of the human cost of unemployment. There's an interesting story in the Washington Post about the construction worker being laid off and what was happening to him. As an example, the cost in terms of mental stress, and how it was on the rise as a result of this, and quoting a psychiatrist from somewhere—I think he was from Johns Hopkins—as saying that the economy is the most profound stress in our society today. Harvey Brenner of Johns Hopkins University, a sociologist and an expert in the field of money problems and mental illness, went on to say: "Can inflation drive you crazy?" He says when you add it to the existing pressures, the answer is yes.

We do appreciate you coming, Commissioner. We well recognize, as both Congressman Brown and Senator Sarbanes said, that you are the conduit of the information and the messenger for bringing the news, as we know you understand from your years of experience; and to the gentlemen with you, we thank you for your contribution.

Ms. NORWOOD. Thank you, sir. We try to do our best to tell you what is happening.

Representative LONG. You do a fine job and we appreciate that.

Our next witness is Lawrence Chimerine, chief economist at Chase Econometrics.

Mr. Chimerine, would you proceed in your own manner. We are pleased to have you.

STATEMENT OF LAWRENCE CHIMERINE, CHIEF ECONOMIST, CHASE ECONOMETRICS, BALA CYNWYD, PA.

Mr. CHIMERINE. Thank you, Congressman. I have submitted a rather lengthy prepared statement which I will try to very briefly summarize this morning and I think I should focus in my summary on what seem to me to be the three critical issues right now.

No. 1, how severe and how long will this recession be? No. 2, what is likely to happen to the economy after the recession ends? No. 3, what is appropriate policy in this kind of environment, given the scenario that we currently have?

Representative LONG. Without objection, your prepared statement will be printed in the hearing record.

Mr. CHIMERINE. Thank you, Congressman. I appreciate that.

Let me begin by focusing on the duration and magnitude of the recession. Obviously, this is a very serious, sizable, significant and, if you would like to use the word "severe" we can use that terminology as well, recession.

By the time it ends later this year, I think this will be the second worse recession we have had since World War II. It won't quite reach the magnitude, in my view, of the recession of 1974–75 for some of the reasons I will outline in a moment, but outside of that recession, this one will be the worst, in fact, of any recession we have had since the thirties.

By the time it ends later this year I expect a total decline in gross national product of between 3.5 and 4 percent. That compares with about 5.7 percent in 1974–75. I expect to see unemployment exceed 8.5 percent. It could go to 9 percent, and slightly above that is certainly a possibility. Again, even though some industries are suffering more than they did 4 or 5 years ago, overall, this, by most indicators, would be a somewhat less severe recession than 1974–75, but, again, very significant.

I think there are some who are now becoming overly gloomy by extrapolating the last 2- or 3-months decline for a year or longer and are talking about 15-percent unemployment. It is generally very dangerous to use 1 or 2 months' worth of data as the basis for a projection for several years. For example, when everybody seemed to be taking the recession out of their forecast in January and February, primarily because the economy was holding up well at that time, despite the fact, in my view, that the underlying fundamentals were actually weakening and weakening very rapidly.

Well, unfortunately, this lesson, in my view, has not been learned and now many are taking the last couple months' downturn, which has been very sharp, and projecting it to continue for a relatively long period, when, in my judgment, what we are getting is a very sharp but nonetheless a very short, compact recession. I will offer five or six reasons why the downturn is happening very quickly and is occurring in a very short period of time.

First, we rarely have recessions that involve a decline at a slow, even pace for a long period of time. Every recession generally has a short period within that time frame during which the bulk of the decline occurs. Sometimes it is early in the recession. Sometimes it is in the middle portion of it and frequently it occurs in the latter stages.

And, in fact, there is absolutely no correlation between the speed of the decline in the early months and the total magnitude of decline during the entire recession period.

For example, as you might recall, the 1974–75 recession started out very slowly. It wasn't until the last 4 or 5 months that most of the decline actually occurred. I think in this particular case we are getting a reversal of that process and I think in order to describe why, it is necessary to review the major causes of this recession.

I think there are two such causes. First, there has been a sharp deterioration in the financial position of most households or individuals in the United States, particularly during early 1980 but also in great part during the course of 1979. The biggest part of that deteriorating financial position has been the sharp squeeze on household purchasing power that almost every family in this country has experienced during this time.

Very few families received income increases that kept pace with the inflation during this period, and that has been compounded by an increase in effective tax rates. Therefore, purchasing power on an after-tax basis has dropped very sharply during this period.

There are some charts, by the way, in my prepared statement which indicate the magnitude of this decline.

Add to that the fact that the savings rate is now at a record low. The household debt burden, causing very large debt repayments, is at a record high.

Add to that the worsening of job prospects.

In recent years a lot of families were supplementing income by sending out another member of their family to generate a second income, and in some cases a third. Not only is that no longer happening, but the basic breadwinner is in jeopardy of losing his income, and many have in recent months.

Add to that several other factors; in particular, the declines in home prices, in common stock prices, and in the bond prices—prior wealth that has been accumulated by households also deteriorated very rapidly when measured in real terms.

We reached a point several months ago when there was nothing left to finance more consumer spending. Consumers used up every option they had to keep going and a decline in living standards was absolutely inevitable despite the fact that many forecasts were being changed in the other direction.

On top of that, the inflation which sapped away the purchasing power has pushed up interest rates and, of course, policies designed to fight that inflation added to the rise in interest rates. In today's world, without usury laws to restrict the rise in mortgage rates and with the thrifts' ability to issue money market certificates at competitive money market rates, and then pass those higher interest costs along in the form of high mortgage rates, we have had an unprecedented rise in mortgage rates.

The typical American family has been priced out of the housing market as a result. Most families cannot afford the big step up in monthly payments from selling their existing home and buying a new one. As a result, the normal migration process—selling an existing home after several years and purchasing a larger home has been stopped cold.

Existing home sales started declining late last year as a result, and that ultimately means a sharp decline in new housing construction and, as you know, that's what's in progress currently.

These are the two factors that have caused the recession.

There are several reasons why I believe that the recession will be sharp but short and compact. First, the sharp erosion of household purchasing power and the sharp rise in mortgage rates are now being corrected to a degree. The lower inflation rate that we see clear evidence of already, and we'll see more of it later in the year, will stop the decline in household purchasing power so consumer spending will not continue to spiral downward.

Mortgage rates are already beginning to ease from the 15 or 16 percent level they reached a couple of months ago. We expect them to decline to about 11.5 percent by the end of the year. That's still relatively high by historical standards and it suggests that many families will still be unable to afford a new home, especially first-time buyers. Nonetheless, there will be more people in the housing market than there were at 16 percent rates, and I expect the decline in housing to end some time within the next 4 or 5 months and at least a modest recovery to start.

So the basic forces causing the recession are being corrected. On top of that, there were two or three other developments that lead me to conclude that the recession is happening very quickly.

For example, the Federal Reserve's credit controls which were announced as part of the anti-inflation program in March—which obviously was not very timely in light of what has happened since and, in my judgment, what was already in progress—but in any case, I think they frightened many people. There were many people who apparently believed that they could not use their credit cards any more at all as a result of the controls, which was not the case whatsoever.

In my view, those credit controls have shortened the period during which the downward adjustment in consumer spending is taking place. It was likely to have stretched out over 8 months to a year. Instead, it is happening quickly because of the psychological and real effects of reduced credit availability.

To give you some idea of magnitude, by the time the May retail sales numbers are released, we will have experienced roughly a 10-percent decline in real terms in retail sales in the 4-month period between January and May. This is unprecedented.

Second, the decline of housing starts has been very rapid. It cannot continue at that rate. Starts will be negative shortly if it does. And you could make the same argument about automobile sales. There is a minimum replacement demand which we are currently awfully close to, so it's conceivable that the speed of decline can continue. Third, as I think Congressman Brown pointed out before, high interest rates have been the major factor which are causing most companies to respond more quickly than they ever have before in response to lower sales or lower orders by cutting their own orders and cutting their own production. I can never remember the steel industry in particular shutting down so quickly, cutting production and laying off workers in response to lower orders, as they have done this time.

They generally wait several months to make sure there has been a significant change, rather than a temporary decline. But companies in all industries cannot wait very long when they are paying 20 or 25 percent to finance inventories. This is another reason why we are getting a severe recession but one that's occurring in a short period of time. I think the recession will end by the end of the year, with the bulk of the decline in the second and third quarters. The fourth quarter probably will be down somewhat as well. By the end of the year the economy will have reached its trough and a recovery will start.

The recession will be less severe than 1974–75, because we did enter this recession with less inventory, less excessive inventory, than we entered the 1974–75 recession. Production will go down in response to lower sales, but they won't go down additionally in order to liquidate the excessive inventories that existed at the start. Second, capital spending while it will weaken, will hold up far better than the 17 percent drop we experienced in the last recession.

High energy prices are actually stimulating a significant amount of capital spending in the economy. We can point to the automobile industry. Here is an industry that is in very serious condition, yet is increasing capital expenditures sharply and basically rebuilding all their facilities to retool and build capacity for smaller cars. That's the result of energy prices—the indirect effect of higher gasoline prices.

The airlines are buying new aircraft because their fuel expense has gotten so enormous that it pays for them to buy new, more fuel efficient aircraft and scrap the less fuel efficient aircraft.

Energy R. & D. oil drilling—all of those industries are booming, despite the recession, because of high energy prices.

So there are enough pockets of strength in capital spending, particularly related to the energy situation, which will cushion the recession to a degree.

What is going to occur after the recession is over? Here I think I'm relatively pessimistic. I think we are in for an extremely slow recovery for at least the next 2 years. This is in marked contrast with the normal pattern in the United States, which is for very rapid growth in the early stages of expansions. We are likely to get a rate of recovery which will be less than half of the normal recovery rate in the early post-recession period this time, and I can cite four or five reasons for this expectation.

First of all, while inflation is moderating, underlying labor cost trends and the expectation of still higher energy prices, because OPEC will raise prices further and we have domestic decontrol, the underlying inflation rate will not fall below 9 or 10 percent and, as a result, household incomes, while they will stabilize in real terms, they will not rebound sharply.

The causes of this recession are, by and large, not transitory, like those caused by defense cutbacks after a war or an inventory cutback; when they are completed, the economy can resume a normal strong growth pattern. The deterioration of the household financial position and high mortgage rates are not transitory or temporary conditions and they will show up by holding down the recovery because consumer spending will grow very slowly, and housing will recover slowly.

Second, we have a very restrictive budget; even though I predict that the budget deficit will exceed $50 billion and probably will be as

much as $70 billion in the next fiscal year, it is still a restrictive budget because of all the tax increases built into the budget. The economy is going to be so weak that revenues are going to be reduced and certain expenditures such as unemployment benefits will be higher than expected. Third, monetary policy will be restrictive if the Federal Reserve keeps to their goal of modest growth in the money supply.

Four, OPEC will continue to raise oil prices and will experience a large and continuous balance-of-payments surplus for many years, unlike the 1976–77 period. That means big deficits for most other countries, with high interest rates and conservative economic policies throughout the world.

We are already starting to see that now. That will feed back into the United States by slowing down our recovery by holding down our exports.

If you add all these factors together—still high interest rates and mortgage rates, flat real income, and the OPEC and policy considerations—and I think we are in for a very modest recovery unless policies are changed.

What should be changed? In my judgment, a tax cut—a large one—should be enacted immediately. I suggest one of at least $25 billion.

In my judgment, the tax cut should be comprised of two parts. No. 1, it should include a significant reduction in useful lives for newly purchased capital goods, to stimulate capital expenditures. This, in my view, is one of the best ways to stimulate capital formation. It is essential now because the recession itself will reduce capital spending. It always does, during recessions, because of excess capacity and lower profits.

I think we have to counter that reduction in the expected rate of return on new capital spending projects by speeding up depreciation which allows companies to improve their expected return and recover their investment more rapidly.

The second part of the tax cut, in my judgment, should be a rollback of social security taxes or, at a minimum, a postponement of the enormous social security tax increase which is scheduled for next January, just at the time the economy is likely to be at its worst point.

I recognize that the social security trust fund is in poor condition, and it is going to get a lot worse in the next year or two. Either a shift of medicare into general revenues, or a shift to general revenues to finance part of the social security trust fund would therefore be necessary as well.

The reason I advocate a cut in social security taxes is that it will accomplish two things directly. No. 1, it will restore some of the lost purchasing power for households by cutting their taxes. Second, it is anti-inflationary. Business passes on their half of the social security tax increase just like they pass on any other cost increase, including higher interest rates. So it will work toward holding down unit labor costs and to that extent will probably reduce inflation during this period.

The higher deficit that will result, in my judgment, will not affect the inflation rate at all in an economy that will be characterized by extremely high unemployment and lots of excess capacity during this period.

So I advocate immediately a large tax cut with those two components. If social security taxes are not reduced, my alternative would be a significant reduction in personal income taxes as the other portion of that tax reduction.

Thank you, Congressman Long.

Representative LONG. Thank you. Mr. Chimerine.

[The prepared statement of Mr. Chimerine follows:]

PREPARED STATEMENT OF LAWRENCE CHIMERINE

My name is Lawrence Chimerine, Chairman and Chief Economist of Chase Econometrics. I appreciate the opportunity to testify before the Joint Economic Committee on the Outlook for the U.S. Economy.

The reluctant recession has finally arrived, and, as is generally the case, it has come swiftly and sharply. The economy has deteriorated very rapidly since February, despite the small rise in real GNP for the first quarter as a whole. Early indications for May (auto sales, retail sales, insured unemployment claims) point to a further weakening.

BASIC CAUSES

Unlike most other recessions in the post war period, the current downturn is not being caused by a weakening of the enterprise sector, or by a postwar decline in military spending. Declines in capital spending because of prior excesses, or major inventory liquidation, have often led recessions—1957–1958 and 1960–1961 are major examples. While both will occur to some extent during this decline, they will be caused by other factors, rather than leading the recession. A sharp reduction in defense spending was a major (though not necessarily the only) factor in the 1948–1949, 1953–1954, and 1969–1970 recessions.

It is the significant weakening in the financial position of households, and the resulting decline in spending for goods, services, and new homes, that is the principal factor underlying the current downturn. The weakened financial position of households in turn is the result of:

1. The precipitous decline in employee real income during the last fifteen months as inflation has accelerated to nearly 18 percent. Figure 1 shows real income per employee (after tax), calculated both with the total consumption deflator and the CPI. In both cases, the recent performance represents a significant change from the performance of recent years, which had already lagged well behind the sixties and early seventies in real income gains. Since the consumption deflator reflects changes in the allocation of spending, and calculates housing costs on a rental-equivalence basis, it probably is a better measure to use. Nonetheless, real incomes have been falling recently even using this measure.

Real incomes in the first quarter were buoyed by $10 million of additional tax refunds which are being phased in evenly during the entire year. Higher effective tax rates during recent years due primarily to bracket creep for personal income taxes and higher social security taxes, has been a contributing factor to weak real incomes.

2. Most household assets fell sharply in price early this year. Common stock prices were down about 20 percent (or about $100 billion)—the recent decline was one of the steepest ever during such a short period of time. Bond prices fell even more sharply, affecting the value of pension funds and mutual fund shares that many households own. Gold and silver have given back much of their earlier gains—many individuals now have big losses on purchases made last year or early in 1980. Prices of boats, used cars, and other consumer durables have also weakened. Finally, and most important, existing home prices are down slightly during the last six months, after rising at an annual rate of between 15 and 20 percent for several years.

In real terms, household wealth is considerably below what it was in late 1979, even with the recent improvement in stock and bond prices. This will not only affect future spending decisions because of its psychological impact, but realized capital gains through sales or refinancing helped sustain household spending through much of last year. Declining asset values have significantly reduced the amount of such gains.

3. Household debt relative to income is at a record high, even with the slower rise in consumer borrowing last year and in early 1980. Debt servicing on con-

sumer installment loans (principal plus interest) now accounts for an increased share of disposable income, at a time when incomes are being further squeezed by inflation, and refunding of debts has become extremly difficult.

4. Employment has begun to decline—a sharp rise in employment helped offset weak real wage rates and buoyed income last year, preventing a steeper decline in household spending.

5. As has been discussed often, the saving rate was recently hovering at about 3 percent, the lowest level in over 30 years. In real terms, households have been increasing their savings at a rate which is below half the rate of increase in prior years. Furthermore, this came at a time when the real value of prior accumulated savings fell sharply—it is unlikely that the saving rate can fall any further in these circumstances.

6. The reduced availability and high cost of credit are making it difficult or too expensive to increase borrowing. The Fed's credit controls come on top of increased reluctance by lenders to make additional loans because payments are being stretched out and delinquencies are rising, and state usury laws are making consumer loans unprofitable in many areas. Finally, as mentioned earlier, available capital gains to monetize or borrow against have also fallen.

Thus, households have used up all sources of funds to maintain previous spending levels—the continued decline in purchasing power is now finally starting to bite and the inevitable reduction in household spending is occurring.

The impact of inflation on household demand is also showing up in the housing market. Unlike prior periods of tight money, when reduced availability of mortgage funds was primarily responsible for depressing the housing market, the problem is now on the cost side. Inflation, and monetary policies designed to reduce it, have pushed mortgage rates up to levels which have priced many families out of the market for existing or new homes. The existence of money market certificates, and the suspension of usury ceilings on mortgage rates, have enabled such rates to climb in response to inflation and the general rise in interest rates. However, the monthly payment on a typical home purchased today at recent mortgage rates was more than twice as high as two years ago, assuming the same financing terms, and was about four times higher than as recently as in 1973. This created a strong disincentive for buying and selling existing homes, even for those who could obtain mortgage money, and resulted in the sharp decline in new construction. Declining real income, and high fuel and maintenance costs only aggravated these trends. Housing completions have only recently begun to fall in response to declining starts—thus, the major impact of lower starts on economic activity and construction worker unemployment still lies ahead.

Of most significance is that the factors discussed above are not transitory, unlike the causes of many other recessions, and will be reversed very slowly.

The speed with which the economy is deteriorating has led to a dramatic change in expectations regarding the magnitude of the recession. Only as recently as February and early March, following the release of most of the January data the attitude was developing that perhaps there would be no recession at all or that at worst a very short and mild one might occur during the course of 1980. The Administration itself actually revised its projections in mid-March considerably moderating the downturn built into its forecast despite the fact that the new forecast was presented at the same time that significant restrictive policy changes were being announced. Now scarcely ten weeks later forecasts are becoming more bearish by the day—while much of this represents forecast revisions of previous relatively optimistic outlooks in our view some of the gloom appears to be unwarranted by the evidence.

The big error in our judgment was the more optimistic tone to the forecasts in February and March (as evidenced for example by the consensus forecast) despite major weaknesses that were developing which made a significant downturn inevitable. Part of the upward revision in the forecasts reflected the very strong performance of retail sales and many other indicators in January—some of it appeared to be based on the anticipation of a big rise in defense spending, or strong capital expenditures, to offset weakness elsewhere. And, finally, pure frustration over the fact that a recession had not yet developed, despite numerous forecasts (including ours) that one was imminent all during 1979, probably began influencing many forecasts.

However, as discussed earlier, the underlying fundamentals were weakening rapidly at that time; the ability of households to maintain current living stand-

ards was especially deteriorating sharply because of declining real incomes and real wealth, record low savings, a high debt burden, rising interest rates, and worsening job prospects. Furthermore, mortgage money was becoming less and less available, and more and more expensive—both existing and new home sales were already falling sharply at that time, so that further declines in housing starts were very likely. Furthermore, defense spending is too small, nor were likely increases large enough, to offset expected declines in housing and consumer spending; this is also the case for capital spending. And finally, overreacting to one month's numbers is always a danger, especially in view of the seasonal adjustment problems associated with January data.

Thus, much of the decline in the consensus forecast is a correction to the unrealistically optimistic forecasts of recent months. However, the speed with which the economy is declining has now generated fears of an extremely long and severe recession, one that would make even the one in 1974–1975 appear relatively mild. In our view, this excessive gloom is unwarranted; this is discussed below, along with a review of those factors which will begin to produce a turnaround by early next year.

HOW DEEP?

While we expect a very sizable recession—very likely the second worst since World War II—we continue to believe that it will be less severe than the one in 1974–1975. In fact, our current forecast of a peak-to-trough decline of about 3½ percent in real GNP is little changed from our last several forecasts. It now appears that the decline in real GNP will be about 7½ percent (annual rate) this quarter. (There is a possibility that retail sales for April will be revised downward very sharply, which could lead to a larger second-quarter decline.) However, almost all recessions in the U.S. have included a relatively short period during which the bulk of the decline occurred, rather than exhibiting an evenly spread, consistent rate of decline. In some cases, as in 1948–1949, 1953–1954, and 1969–1970, most of the drop occurred early in the recessionary period; in others, such as 1957–1958 and 1974–1975; it occurred in the later stages. Furthermore, there is little correlation between the speed of the decline in the early months of recession and its ultimate magnitude. Table 1 shows the decline in industrial production in the first three months, and the total decline, in prior post-war recessions—as can be seen, the two worst post-war recessions (1957–1958 and 1974–1975), started out more slowly than the others.

There are several additional reasons which suggest that the rapid deterioration in the economy thus far reflects a quick, compact adjustment rather than the start of an extremely severe recessions:

1. Mild winter weather helped make the seasonally adjusted data, especially for construction and retail sales, look better than they were in January and has made the deterioration in recent months look even worse. This is especially true because the last several years were characterized by cold and snowy winters, especially in the Northeast and Midwest. Since the seasonals are revised annually to incorporate more recent data, the poor weather of recent years has inflated the seasonals now. This is especially significant for January, since unadjusted retail sales and construction activity are extremely low in that month—the adjustment factor dominates the data. In effect, because of mild weather, consumers purchased items in January that would ordinarily have been bought in succeeding months, and work proceeded more rapidly on construction projects, relative to recent years.

2. The imposition of consumer credit controls in mid-March has speeded up the downward adjustment in consumer spending that was already in progress. Retail sales already declined in February and early March, even before the Federal Reserve program was announced. However, both real and perceived difficulties in obtaining credit, particularly via the use of credit cards, probably cause a sharper decline in household spending in late March and April than would have occurred as a result of declining real incomes. However, sizeable downward household retrenchment with reduced borrowing, was inevitable—the psychological effects of the Fed's program only speeded it up.

3. The decline in new housing construction has been very rapid and cannot continue at that rate. Housing starts were slightly above one million in April, and probably were about 900,000 units or less in May—this represents a decline of about 50 percent in just eight months. Even at the mortgage rates which prevailed as recently as one month ago, demographic forces, mobility (in part financed by corporations who move existing or newly hired employees), and

minimal replacement of worn down housing, would generate a minimum level of starts of at least 600,000–700,000. Thus, even before accounting for the turnaround in mortgage rates and shirply declining short-term rates, which should alleviate the deposit outflows from the thrifts, we were reaching the bottom in housing starts.

4. Auto sales have fallen to a near 7 million rate in early and mid-May, a very low level. This in part reflects the impact of higher gasoline prices, over and above recession-related declines. Again, minimal replacement demand suggests that little additional decline in auto sales is likely, however.

5. Record high interest rates are causing businesses to keep as tight a rein on inventories as possible. In particular, most businesses appear to be reacting to lower sales and orders by cutting production very quickly—this condenses the decline of production into a shorter period.

Thus, we expect very sharp declines in real output stretching through the summer and early fall, but a recession that will be significantly less in overall magnitude than 1974–1975 (see Table 2). Of course, some industries, notably housing and autos, will suffer declines almost as large. However, this reflects factors other than just the recession. Autos are being hurt by rising gasoline prices, which are causing greater cutbacks in driving than after the earlier round of OPEC price increases in 1973–1974. Housing construction is reacting more sharply than usual because of the unprecedented rise in mortgage rates, in part the result of the suspension of state usury laws which provided for ceilings on mortgage rates. Nonetheless, as can be seen in Table 2, most overall measures show smaller forecasted declines in this recession than in 1974–1975.

Two major factors will prevent a more serious recession:

1. Inventories were in better shape when we entered this recession than in 1973. While we do expect significant inventory liquidation during the remainder of the year as stocks are brought into line with lower sales levels, the more favorable starting point will mean less liquidation than in 1974–1975. With final sales in real terms expected to be about 3 percent lower by year end, than in the first quarter, stocks will have to be reduced by about $10 billion (in 1972 dollars, not at annual rate) just to keep inventory sales ratios at first-quarter levels. Of course, if some involuntary accumulation occurs in the next several months, this will cause more liquidation later in the year (and defer some of the overall decline in economic activity until that time).

In addition to a larger buildup of involuntarily held inventories during 1974, inventories actually rose sharply all during 1973 ($16.5 billion in 1972 prices for the year as a whole), prior to the recession (see Figure 2). Much of this represented stockpiling of basic materials in anticipation of shortages, a situation which did not develop prior to this recession. Thus, the depressing effect of inventory liquidation will be less than in 1974–1975. As Table 2 indicates, the decline in final sales in this recession, however, will exceed that of 1974–1975.

2. While capital spending is beginning to weaken as anticipated, we expect a far smaller decline than the near 17 percent drop in the last recession. Higher energy prices are now stimulating capital formation, unlike 1974–1975.

(a) Despite weak sales, spending by the auto industry for retooling and additional capacity to produce smaller cars will prevent a significant decline in overall capital expenditures by that industry, unlike the last recession. In fact, General Motors recently announced an acceleration of their capital spending program, offsetting cuts announced by other producers.

(b) Fuel costs are now over one-third of total operating expenses for the average airline, as compared with less than 10 percent in the early seventies. Thus, expenditures for new aircraft, and to develop a more fuel-efficient generation of aircraft, will remain high in the next several years. Some orders will be cancelled because of falling traffic and profits, but equipment expenditures by the air transportation industry fell in half during the last recession—a repeat is not likely this time.

(c) Several companies are closing down highly fuel-efficient plants and relocating, or are modernizing such plants.

(d) Oil drilling is up sharply and will likely stay at high levels in view of petroleum industry profits. Expenditures for development of alternative fuels also are rising rapidly.

Furthermore, neither capacity utilization or profits is likely to fall as sharply as in the last recession which will bolster other capital spending as well.

DOWNSIDE RISKS

There are still two major downside risks that could make the recession more severe.

1. Our forecast implies a slow steady rise in the personal saving rate from the near 3 percent record low of early this year (see Figure 3). However, in view of spreading fears concerning job security, a quicker adjustment is possible. The recent improvement in common stock and bond prices has alleviated some of the prior sharp decline in household wealth, but real incomes are still declining. Furthermore, no significant improvement has yet occurred in the real estate market to reverse to decline in the real value of existing homes, which is a major form of savings for many households. Thus, a more severe consumer retrenchment cannot be ruled out, which would deepen the recession. However, such a development would likely speed the recovery relative to what we currently expect (to be discussed later) as additional increases in the saving rate in 1981 and 1982 would likely not occur.

2. A simultaneous worldwide recession, combined with widespread protectionism, could slow U.S. exports and add to our decline. However, the decline in U.S. interest rates, and in the dollar, has reduced the likelihood of tighter monetary policies overseas, a development which would have greatly increased the probability of significant recessions overseas.

With oil demand falling and inventories building, the risk of an oil shock causing a much more severe recession has fallen, especially since Iranian production has declined to only about 5 percent of total OPEC output from nearly 20 percent prior to the revolution. Nonetheless, a sharp rise in oil prices caused by supply disruptions still represents an additional downside risk.

FACTORS SHAPING THE RECOVERY

Several factors will combine to start the recovery process by late this year or early next year.

1. The sharp decline in interest rates has improved prospects for the housing industry. Mortgage rates are already falling from the 16- to 17-percent rates of early April—we expect rates on conventional mortgages to continue declining to the 12-percent range by year end. This will have a material effect on housing demand by dramatically reducing carrying costs for potential homebuyers. Furthermore, the decline in short-term rates will likely reverse the outflow of deposits from the thrifts, increasing the supply of funds available for new mortgages—there is some evidence that this has begun in May. And the higher personal saving rate will also increase the supply of such funds.

There is some concern that the Federal Reserve will attempt to reverse the decline in rates because of the weakening dollar in recent days, and thus prolong the recession. However, we expect the U.S. trade deficit to improve during the remainder of the year as our recession takes hold. Furthermore, with inflation improving, the depressing effect on our currency of the large differential between U.S. and other country inflation rates will ebb. Foreign demand for the dollar to finance oil purchases will remain high. Thus, there is every reason to expect that the dollar will hold up fairly well, thus obviating the need for tighter Fed policies.

Furthermore, the sharp decline in the money supply in April, while in part due to the use of new seasonal factors and the Treasury's more rapid processing of tax payments, will make the Fed cautious about further slowing the growth in reserves. And sharply rising unemployment will also lead to easier Federal Reserve policies, especially with the inflation numbers looking considerably better. Thus, while interest rates may move higher in response to increased credit demands in the next month or two, they are not likely to be pushed in this direction by tighter credit policies.

The Federal Reserve just recently took the first step toward dismantling the credit controls adopted in mid-March by:

(a) Reducing from 15 to 7½ percent the special deposit requirement for retailers and others who provide revolving consumer credit.

(b) Reducing from 10 to 5 percent the reserve requirement imposed on Eurodollars, large CDs, and other managed liabilities of member banks and large nonmembers banks and raising the base from which the reserve requirement is calculated.

(c) Modifying its guidelines on bank loans to attempt to channel more of such loans into autos, housing and other critical sectors.

These changes will directly affect interest rates by lowering the cost of funds to banks by over one-half percentage point. Furthermore, when these restrictions are completely removed in coming months, additional downward pressure will occur. The easing of these credit restraints will have little direct effect on the economy because credit demands have fallen so sharply that they are in effect inoperative.

Housing starts are likely to remain very depressed for several more months due to recent declines in building permits and in mortgage commitments, plus some excessive inventory. However, the decline in interest rates should start benefitting new starts by the fall. We continue to expect only a moderate recovery in starts in view of still high mortgage rates, rising unemployment, and depressed real incomes. Nonetheless, the rebound in housing, and its secondary effects throughout the economy, will help the recovery process along. And, to a more limited extent, the decline in interest rates and increased availability of funds will help other categories of final demand as well.

2. It appears that the easing in inflation that was anticipated for the second half of the year has already begun. Both producer and consumer prices moderated significantly in April, with the 0.9 percent rise in the CPI the smallest in nearly a year. And several factors suggest that this improvement will continue. (a) Sensitive materials prices have dropped very rapidly (Figure 4), reflecting lower demand. While the impact on finished goods prices will not be great, there will be some effect. (b) The decline in interest rates will have a significant effect by lowering business interest expense, and because of lower mortgage rates in the CPI. (c) Energy prices will rise much more slowly for the remainder of the year. In fact, such prices already slowed dramatically in April (see Table 3) and accounted for much of the deceleration in the overall indexes. While gasoline prices and other refined product prices will rise about 4¢ per gallon as a result of the latest round of OPEC price increases, the increases will be considerably less than earlier this year. Furthermore, it now appears that the import fee will not materialize, which will more than offset these increases.

OPEC countries are cutting production to prevent a severe glut from developing, so price cutting (as in 1975–1976) seems unlikely. OPEC prices will likely continue to drift upwards very slowly, but no major additional increases are expected. Figure 5 shows average oil import prices—even the relatively small increases we expect in the next two years represent a dramatic change from 1974–1975. Thus, while energy prices will rise more slowly than earlier this year, even when domestic decontrol is included, they will rise more rapidly than in the 1975–1976 recovery, leading to higher inflation than at that time.

The slowing in inflation to about a 10 percent rate later this year and next will end the decline in real incomes that are currently causing sharp declines in household spending. This will help stabilize consumer spending and end the recession.

3. We continue to expect tax reductions later this year, or early 1981 at the latest. While a tax rebate is one possibility because it would not permanently affect the deficit, we expect it to take the form of a personal income tax cut combined with accelerated depreciation on newly purchased capital goods. A rollback of social security taxes (or postponement of scheduled increases) is also a possibility, but the trust fund is in such terrible condition that we view this as unlikely.

While these forces will help end the recession, we continue to expect only a very modest recovery, with real GNP rising at about a 3 percent average rate during 1981 and 1982 (this compares with a 6 percent rate during the 1975–1976 recovery). Consumer real incomes will not rise much in the years ahead, thus limiting the rebound in household spending. And, economic policies here and abroad will not be as stimulative as in the 1975–1976 recovery period because of higher inflation and balance of payments deficits, in part due to OPEC pricing. The slowness of the recovery can be seen in Table 4, which shows that both real GNP and real final sales will not return to the pre-recession peak for over two years, in both cases comparable to 1974–1975, and longer than for any other prior recession-recovery period.

FORECAST HIGHLIGHTS

Table 5 shows a summary of our forecast. The highlights are:

1. Real GNP will drop by 1.4 percent, on a year-over-year basis in 1980, and rise by 0.4 percent and 3.3 percent in 1981 and 1982, respectively.

2. Unemployment will continue to rise in the next several months and will exceed 8 percent by late summer, and reach 8½ percent by year end. A gradual decline will occur in 1981 and 1982. Unemployment will be highest among workers deepndent on housing or consumer spending, particularly for durables. Regionally, almost all areas will experience some weakness, although increased energy R&D will cushion the recession in the Southwest and Far West.

3. The Consumer Price Index will rise by 14.3 percent this year and 10.8 percent in 1981, slightly lower than the previous forecast. These numbers include a significant easing during the course of 1980, but also imply a near 10 percent underlying inflation rate.

4. Corporate Profits are already declining significantly in most industries, especially those related to housing or consumer spending. Only higher inventory profits have prevented a more sizable decline thus far, but these will now fall along with operating profits. For 1980 as a whole, pre-tax profits will drop by 3.8 percent, but this masks a 19 percent peak-to-trough decline expected during the next three quarters. Profits will rise during the recovery in 1981, but the low level at the start of the year implies no growth on a year-over-year basis.

5. Housing Starts will rise to 1.4 million units next year, 35 percent above the level expected this year, and will increase further in 1982.

6. Auto Sales will recover very slowly because of slower replacement demand in response to a decline in miles driven, and to slow growth in real income. Sales will average 9-4 million units next year, and will reach 10½ million units in 1982.

7. Federal Expenditures for fiscal year 1981 will exceed the Administration's revised budget estimate by about $20 billion. This, combined with an expected tax cut and the absence of the oil import fee, will produce a near $70 billion deficit in fiscal year 1981 rather than a balanced budget. We have also included an additional tax cut in 1982 in response to still high unemployment. (Without our assumed tax cut, the peak-to-trough decline in real GNP would be about 4 percent.)

8. Interest Rates will ease further, especially the prime rate and longer-term rates. The prime will reach about 11 percent by year end and remain close to that level through much of the next two years.

ECONOMIC POLICY

As mentioned earlier, we expect Federal Expenditures in fiscal year 1981 to exceed the Administration's revised budget estimate by nearly $20 billion, for several reasons. First, the $10 billion upward revision from the original budget request is not sufficient to account for the underestimation in January in that the CPI will grow more than the 11.75 percent currently estimated by the Administration, increasing the cost of indexed programs. Second, the Administration forecast contains a very mild recesion; however, the downturn is already considerably worse than they forecast, which will cause higher unemployment benefits. Third, differences of opinion within the Congress may prevent an agreement on specific cuts; many of the reductions in the original budget proposal (hospital cost containment, federal pay reform) have already greeted with lukewarm response. Finally, as the recession deepens, policy may be reversed again. As a result, it is unlikely that the budget will be balanced in fiscal year 1981, even without tax cuts. My assumptions do imply about $8 billion of budget cuts, however.

Despite the magnitude of the budget numbers, Federal spending levels will not be sufficient to provide significant stimulus to the economy. In fact, in real terms, only military spending will experience significant growth over the next two year. Real military outlays will rise over this period by nearly 10 percent, mostly for procurement rather than for more armed forces. In other budget areas, inflation and population increases will account for almost or all of the expected expenditure increases. Furthermore, the budget proposals include significant tax increases for next year.

Table 6 shows one measure of fiscal thrust; the change in Federal expenditures (less unemployment benefits) plus changes in Federal receipts due to tax rate changes only, as a percent of GNP. As can be seen, current policies would be relatively restrictive during during 1981. The large net tax increase for that year includes both the windfall profits tax and the schedule social security tax increase. This measure of fiscal thrust would be only about one-third of its value in 1975, when substantial tax cuts were combined with sharp increases in expenditures for public works and public service jobs. Inflation is causing a further

drag on the economy by raising effective tax rates (not included in Table 6)—this amounts to over $15 billion per year.

There has been much concern expressed over the potential effects of the defense buildup in the budget. In fact, after trending down for many years, real defense spending will rise at about a 4½ percent annual rate during the next several years and will increase as a share of GNP after many years of decline. Much of the increase will be for military weapons and hardware, including new missiles, and for transport planes to increase armed forces mobility.

The currently planned defense buildup should be put in some perspective, however, in order to assess its impact on the economy. First, because defense spending is now only 22 percent of the total Federal budget, and about 5 percent of GNP, these increases are not significant enough to dramatically alter the outlook for economic activity or inflation, although some bottlenecks in certain industries are likely to occur. Because of a sharp increase in orders for commercial aircraft, the aerospace industry is operating at very high utilization rates, and is being plagued by a shortage of skilled workers. Furthermore, shortages of some metals such as titanium and cobalt will be aggravated by the defense buildup, but the impact on the overall inflation measures will be small. Secondly, as discussed earlier the budget contains very modest increases in spending for most nondefense categories. Thus, the total increase in Federal expenditures will still be relatively modest. Third, the expected buildup is small in relation to the massive buildup during Vietnam, which involved a 36 perecnt increase over three years in real outlays. Furthermore, many "great society" programs were also being enacted at that time, pushing up other categories of the budget, and the economy was already booming in response to the 1964 tax cut. This time, we expect the rise in defense spending to take place while domestic demand is falling, and, as mentioned, other programs are cut back. Thus, the inflationary consequences will not be nearly as severe as during the Vietnam period.

If the recession does develop as I expect, however, I would favor a package of tax reduction to stimulate the economy later this year, even though it would increase the size of the deficit. Tax reductions are preferable because of the difficulty in curtailing spending programs in subsequent years, and because new spending programs would increase the size of government. I do not view a rising deficit during a period of slack and rising unemployment as inflationary. Furthermore, the current inflation is heavily dominated by cost factors rather than excess demand—expenditure cuts or tax increases would have little effect on slowing this type of inflation. And, as discussed above, current budget policy would be highly restrictive in an environment of a steep recession and prospects for only a modest recovery.

I suggest that any tax reductions be based on the following criteria:

1. A large portion should be aimed at households to offset some of the loss in purchasing power currently taking place, especially that part due to the increase in effective tax rates caused by inflation.

2. One-third or more should accrue to corporations in a way that would best promote capital spending and improve productivity. In my judgment, a reduction in useful lives which would result in faster write-offs for capital goods is the best method of achieving this objective. Accelerated depreciation is advantageous because it gets directly at the problem of underdepreciation in an inflationary environment; it would make the U.S. more competitive relative to most other industrialized countries, who generally have shorter write-off periods than we do in the U.S.; and it would affect the rate of return on new investment directly. I believe accelerated depreciation is preferable to measures designed to increase household savings, since increases in such savings do not automatically result in more capital spending. In fact, by reducing consumer spending from already weak levels, and causing a larger buildup in excess capacity, such policies may actually discourage capital spending in the environment expected during the next several years. A weak economy with substantial excess capacity has historically always caused a decline in capital spending, because the expected return on new investment prospects fall sharply. Despite very high saving rates in Japan and most European countries, capital spending actually declined during the mid-'70s because of substantial excess capacity. Furthermore, the U.S. personal saving rate was also low relative to other countries all during the 1960s, but investment spending rose sharply, reflecting strong growth in demand, and high utilization rates.

The recession this year will lower the expected rate of return on many new capital spending projects, as will the increase in energy costs, and the recent increase in the price of capital goods. Policies designed to stimulate capital for-

mation should be aimed at offsetting the adverse effect of these factors on expected profitability.

3. A reduction in cost-related taxes, such as payroll taxes, would be ideal in the current environment because it would reduce some of the cost pressures that are pertaining the current inflation. In my view, increases in cost-related taxes, and other federal programs which have raised business costs, have had a far bigger impact on inflation in recent years than Federal spending, or the Federal deficit. A reversal of this pattern would be both stimulative and anti-inflationary at the same time.

The ideal package of tax changes to meet these criteria would be a personal tax cut, accelerated depreciation on newly purchased capital goods via a uniform reduction of existing useful lives, and a rollback of the social security tax increase scheduled for next year. Removing Medicare from the trust fund, or earmarking windfall profits tax revenues to finance social security benefits, would ease the burden on the trust fund.

One big risk in the outlook is that wage rates could accelerate sharply in response to last year's inflation and reduction in real incomes. Thus, I believe serious study should now be given to the use of tax-based inflation policies in the years ahead. Rewarding those who hold down wages and prices by providing matching tax cuts would not only slow the wage-price spiral but would also inject stimulus into the economy whenever required.

While I strongly applaud the efforts in the Congress to reduce Federal expenditures where possible, I cannot support any legislation that would determine Federal spending based upon some inflexible rule such as a fixed ratio to GNP. The current debate concerning Federal expenditures overlooks a significant change in the prior trend during the last several years. Federal expenditures as a share of GNP have declined in each of the last four years, by a total of about two percentage points, from the peak in 1975. In several of those years, actual expenditures were actually below budgeted levels. In part, this reflects the new Congressional budget process which has helped stop the proliferation of many new spending programs, as had been the case during much of the prior ten or fifteen years.

It is true that the ratio of Federal expenditures to GNP has begun to rise again and will likely continue to rise during the next year or longer. There are two major reasons for this. First, about one-third of the Federal budget is now indexed (mostly to the CPI) and much of the remainder is also directly affected by inflation. In fact, because of the impact of imported oil prices and rising mortgage rates on the CPI, it appears that the cost of government programs is now accelerating more rapidly than the price of domestically produced goods and services—this is exerting upward pressure on the Federal expenditure/GNP ratio. This is occurring despite the absence of any major new Federal programs. Significant cutbacks in other programs would be necessary in order to meet a legislated ratio, but a better solution to the problem would be to eliminate indexing, or alter the indexation formula. Retirees and other recipients of government transfers are now receiving far better cost-of-living protection than most workers, as evidenced by recent wage increases.

Second, the ratio of Federal expenditures to GNP almost always rises during recessions, reflecting increases in anticyclical programs and the decline in private production, and will do so in the recession that is now beginning. This legislation would require significant cuts in government spending just at the time when stable or rising Federal expenditures may be necessary to provide some cushion for the economy. This would likely significantly aggravate the recession. Any assessment of the performance of these automatic stabilizers would have to conclude that they have been one major factor in limiting the severity of U.S. recessions in the last forty years.

In sum, which I do favor cuts in the budget where possible, I cannot support any legislation that either does not address the basic factors which are affecting Federal expenditures, or reduces the flexibility of the Congress to use budget policy to impact the economy. It must also be pointed out that budget cuts and/or a balanced budget will have only a minimal effect on inflation in the current environment.

Only a comprehensive program of reducing government regulations and other programs, cost related taxes, slower growth in government spending, stronger energy policies designed to reduce dependence on OPEC (and therefore protect the dollar), accelerated depreciation and other incentives to speed capital formation, and more creative incomes policies will significantly reduce inflation in the long run. No single policy, by itself, will be successful.

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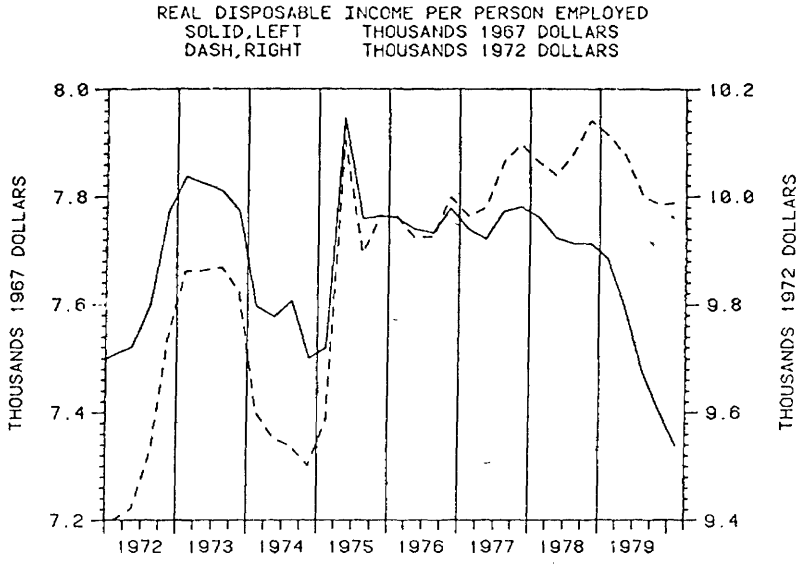

Figure 1

TABLE 1.—INDUSTRIAL PRODUCTION

[In percent]

Recession	Decline 1st 3 mo after peak	Total decline
1948–49	3.1	9.9
1953–54	3.4	9.4
1957–58	2.2	12.6
1960–61	2.6	8.6
1969–70	3.0	6.8
1974–75	1.5	15.1
1980	2.7	----------

TABLE 2.—COMPARISON OF POST-WAR RECESSION, PEAK-TO-TROUGH

[Percent decline]

	Real GNP	Industrial producers	Real fixed business inventory	Pretax profits	Housing starts	New passenger car sales	Trough unemployment rate
Recession dates:							
1948.4 to 1949.4	1.4	7.5	16.0	23.7	19.9	NA	7.0
1953.2 to 1954.2	3.3	8.0	3.9	23.7	10.1	18.1	6.0
1957.3 to 1958.1	3.2	11.1	14.7	27.1	5.4	29.8	7.4
1960.1 to 1961.1	1.2	7.5	4.5	18.6	28.1	22.4	7.0
1969.3 to 1970.4	1.1	5.6	8.0	21.7	26.3	31.0	6.0
1973.4 to 1975.1	5.7	13.9	16.6	27.2	59.7	39.3	8.9
Forecast:							
Forecast: 1980.2 to 1980.4	3.5	5.0	9.0	18.7	51.6	39.0	8.3

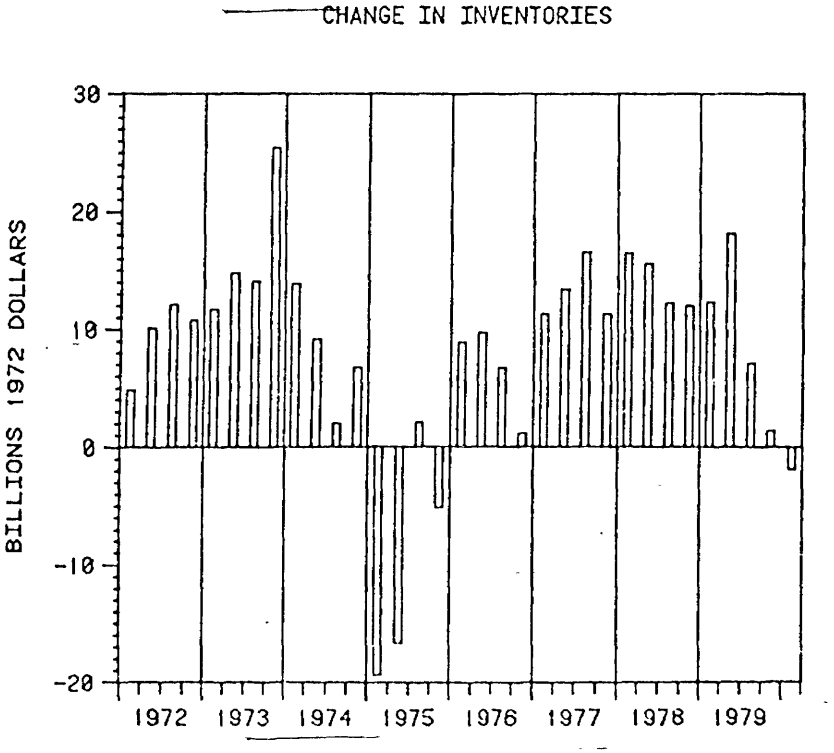

Figure 2

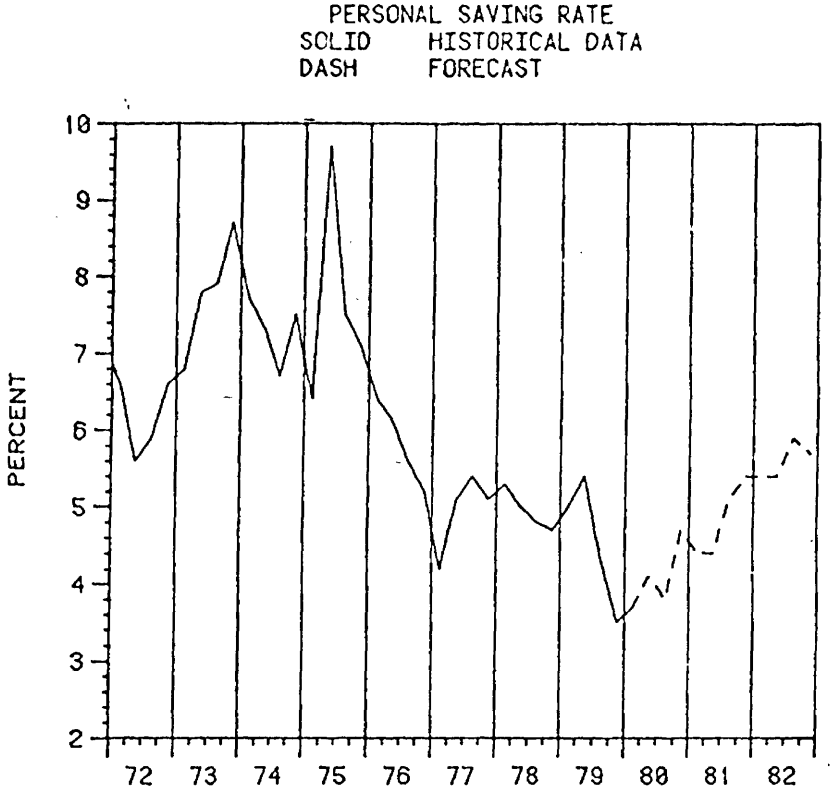
PERSONAL SAVING RATE
SOLID HISTORICAL DATA
DASH FORECAST
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Figure 3.

CHANGE IN SENSITIVE PRICES
(PERCENT)

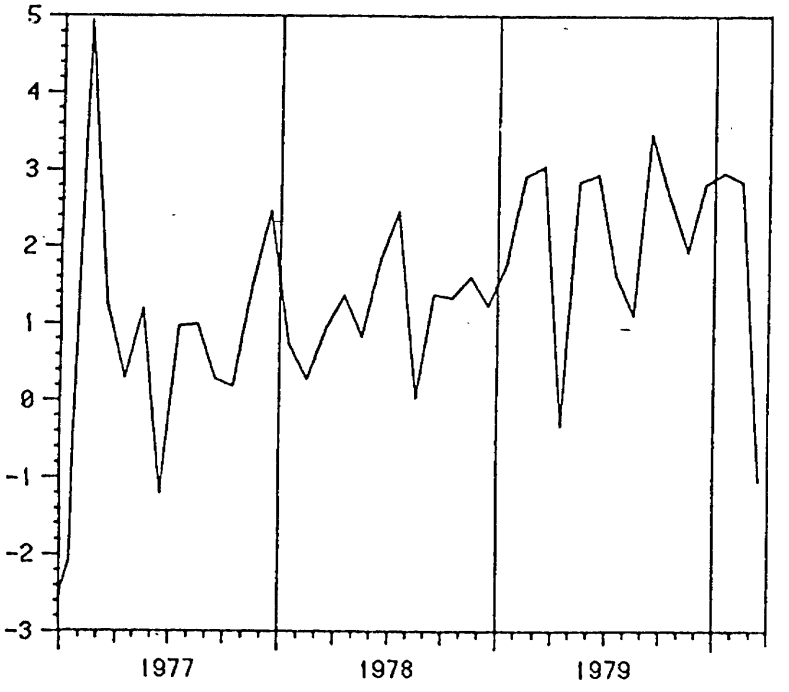

Figure 4

TABLE 3.—ENERGY PRICES

[Percent change]

	Producer price index	Consumer price index
December 1979	2.1	2.3
January 1980	4.7	4.6
February 1980	4.5	5.1
March 1980	3.1	3.0
April 1980	.9	.9

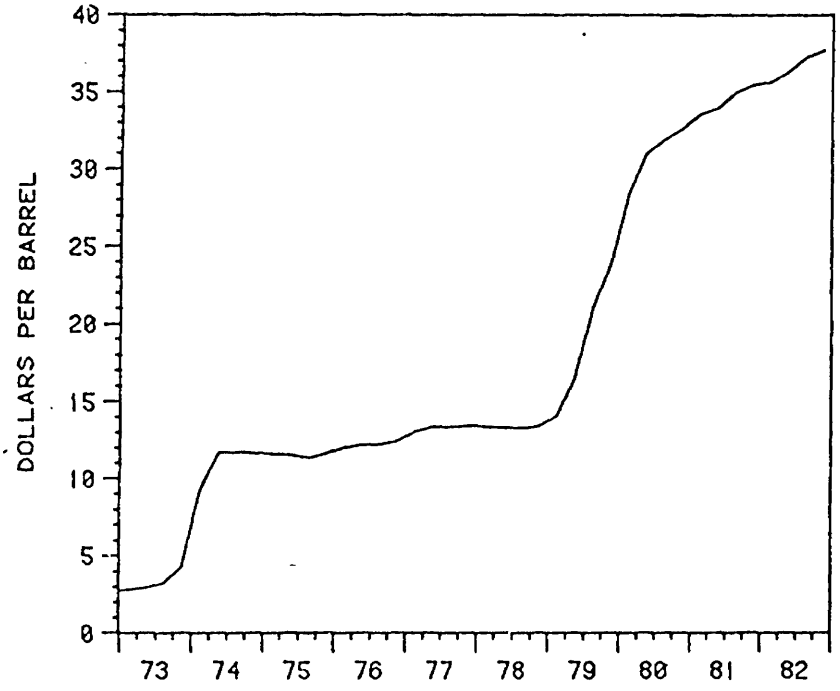

Figure 5

TABLE 4.—QUARTERS—PEAK TO PEAK

	Recession						
	1948.4–1949.4	1953.2–1954.2	1957.3–1958.1	1960.1–1961.1	1969.3–1970.4	1973.4–1975.1	1980.2–1980.4
Real GNP	5	7	5	5	6	9	8
Real final sales	2	4	4	2	2	9	9
Total Employment	6	8	8	6	6	6	8
Profits before tax	8	7	8	10	12	6	9

TABLE 5.—CHASE ECONOMETRICS FORECAST OF MAY 22, 1980—STANDARD FORECAST—RECESSION IN 1980

TABLE 1.1.—MAJOR ECONOMIC INDICATORS, PRODUCT AND INCOME

	1980.1	1980.2	1980.3	1980.4	1981.1	1981.2	1982.3	1981.4	1982.1	1982.2	1982.3	1980	1981	1982
Gross national product	2,516.1	2,527.8	2,543.1	2,593.8	2,669.8	2,755.9	2,825.4	2,915.2	3,002.9	3,091.2	3,185.5	2,545.2	2,791.6	3,141.4
GNP in 1972 dollars	1,442.6	1,415.2	1,393.6	1,392.4	1,402.1	1,413.3	1,420.3	1,432.4	1,443.5	1,454.9	1,469.5	1,410.9	1,417.0	1,463.3
Index of industrial production, total	152.1	146.7	144.7	146.4	148.6	151.3	153.0	155.4	157.4	159.6	162.2	147.5	152.1	161.0
Index of industrial production, manufacturing	152.7	146.5	144.2	146.0	148.4	151.2	152.9	155.4	157.5	159.9	162.5	147.3	152.0	161.3
Consumption expenditures	1,628.7	1,642.2	1,670.6	1,708.6	1,743.4	1,785.4	1,826.7	1,869.1	1,919.8	1,971.3	2,026.4	1,662.5	1,806.2	2,000.0
Durable goods	220.4	201.0	201.1	205.7	210.5	219.3	225.8	231.7	240.5	248.3	256.8	207.1	221.8	252.8
Nondurable goods	650.6	661.6	674.1	691.5	707.2	720.9	735.5	751.1	768.2	785.9	805.2	669.4	728.7	795.8
Services	757.8	779.6	795.3	811.4	825.7	845.3	865.4	886.3	911.2	937.0	964.4	786.0	855.7	951.5
New car sales, SAAR	10.7	8.4	8.5	8.7	9.0	9.4	9.6	9.6	10.1	10.3	10.5	9.1	9.4	10.4
Gross private investment	384.0	365.0	339.5	332.4	364.0	394.3	410.1	434.2	457.2	478.5	497.3	355.2	400.7	487.8
Fixed investment	383.9	367.3	357.5	358.2	372.5	389.5	407.7	427.7	448.1	467.4	485.9	366.7	399.3	476.3
Nonresidential	273.3	273.8	271.1	267.1	270.9	277.6	285.0	295.1	307.5	319.0	331.1	271.3	282.2	325.3
Structures	103.1	102.3	101.9	100.5	101.2	104.2	107.7	112.3	117.7	123.5	129.5	102.0	106.3	126.7
Equipment	170.2	171.5	169.2	166.6	169.7	173.5	177.4	182.8	189.8	195.5	201.6	169.4	175.8	198.6
Residential structures	110.5	93.5	86.4	91.1	101.6	111.8	122.7	132.6	140.6	148.5	154.7	95.4	117.2	151.0
Change in inventories	0.1	−2.3	−18.0	−25.8	−8.4	4.8	2.4	6.5	9.1	11.1	11.4	−11.5	1.3	11.5
Total private housing starts	1.26	0.93	0.88	1.13	1.24	1.35	1.50	1.54	1.59	1.62	1.64	1.05	1.41	1.63
Net exports, goods plus services	−14.0	−11.8	−9.9	−6.4	−9.6	−8.6	−9.7	−4.6	−4.3	−2.8	3.5	−10.5	−8.1	1.2
Exports	304.2	312.4	323.4	337.1	351.2	365.2	377.9	396.0	409.5	424.1	446.0	319.3	372.6	436.5
Imports	318.2	324.2	333.3	343.5	360.8	373.8	387.5	400.6	413.8	426.9	442.6	329.8	380.7	435.3
Government purchases	517.4	532.3	542.6	559.7	572.4	584.7	598.2	617.1	630.8	644.8	658.8	538.0	593.1	652.9
Federal	186.2	192.9	195.7	204.6	209.3	213.5	218.4	228.4	233.5	238.1	242.8	194.8	217.4	241.5
National defense	119.6	120.9	124.1	132.0	135.3	138.1	141.2	148.2	151.3	154.2	157.3	124.2	140.7	156.9
Other	66.6	72.0	71.6	72.6	74.1	75.4	77.2	80.3	82.2	83.9	85.5	70.7	76.7	84.7
State and local	331.2	339.4	346.9	355.1	363.1	371.2	379.9	388.7	397.4	406.7	416.0	343.1	375.7	411.3
Federal government surplus or deficit	−21.6	−48.3	−67.0	−88.2	−65.6	−56.8	−67.4	−58.9	−70.3	−64.0	−68.6	−56.3	−62.2	−64.2
Personal income	2,057.2	2,075.7	2,106.2	2,153.9	2,196.4	2,251.1	2,319.3	2,383.4	2,438.8	2,507.0	2,590.6	2,098.3	2,287.6	2,549.6
Disposable personal income	1,736.2	1,758.6	1,782.0	1,838.0	1,870.1	1,914.2	1,971.9	2,023.3	2,078.4	2,134.6	2,204.8	1,778.7	1,944.9	2,169.8
Corporate profits before taxes	257.1	232.3	211.5	209.1	210.1	218.0	227.1	252.9	255.0	263.8	280.1	227.5	227.0	275.6
Corporate profits after taxes	155.5	142.1	130.3	129.2	129.4	133.6	138.9	153.4	163.0	168.4	178.1	139.3	138.8	175.4
Capacity utilization, percent	81.9	77.4	75.3	75.4	76.4	77.4	77.4	77.8	78.0	78.6	79.3	77.5	77.3	79.0
Unemployment rate	6.1	7.4	8.1	8.3	8.3	8.1	8.2	8.1	8.0	7.8	7.6	7.5	8.2	7.7
Savings rate	3.7	4.1	3.8	4.7	4.4	4.4	5.1	5.4	5.4	5.4	5.9	4.1	4.8	5.6

TABLE 5.—CHASE ECONOMETRICS FORECAST OF MAY 22, 1980—STANDARD FORECAST—RECESSION IN 1980—Continued

TABLE 1.2.—MAJOR ECONOMIC INDICATORS, PRICE AND MONETARY

	1980.1	1980.2	1980.3	1980.4	1981.1	1981.2	1981.3	1981.4	1982.1	1982.2	1982.3	1980	1981	1982
Implicit GNP deflator	174.4	178.6	182.5	186.3	190.4	195.0	198.9	203.5	208.0	212.5	216.8	180.5	197.0	214.6
Consumer Price Index	237.1	245.7	252.8	259.2	265.2	272.4	278.7	285.1	291.1	297.5	304.0	248.7	275.5	300.7
Wholesale price index, total	258.7	261.6	268.3	275.1	283.7	288.9	294.5	301.2	307.8	314.6	321.0	255.9	232.1	317.7
Wholesale price index (ind comm)	264.6	272.6	277.9	284.8	293.0	298.3	301.7	312.8	319.5	362.2	332.9	275.0	302.2	329.7
Money supply, no TD (M1B)	391.4	390.2	403.0	410.9	417.8	424.3	432.5	441.0	449.5	457.3	466.0	398.9	428.9	461.9
Money supply plus TD (M2)	1,543.5	1,554.4	1,588.4	1,620.1	1,650.0	1,679.1	1,710.3	1,742.4	1,775.4	1,803.4	1,843.7	1,676.6	1,695.5	1,827.1
Federal fund rate	15.05	13.27	10.22	9.47	9.42	9.51	9.63	9.37	9.38	9.42	9.51	12.00	9.48	9.42
Treasury bill rate, 91 day	13.47	10.63	8.68	8.42	8.44	8.52	8.66	8.52	8.58	8.66	8.75	10.30	8.54	8.66
Commercial paper rate, 4–6 mo	14.25	11.31	8.96	8.59	8.83	9.09	9.18	8.98	9.00	9.05	9.14	10.78	9.02	9.06
Prime commercial bank rate	16.40	17.26	13.00	11.45	10.96	11.10	11.23	11.14	10.55	10.58	11.13	14.53	11.11	10.84
AA utility bond rate	13.55	12.15	11.33	11.53	11.47	11.75	11.70	11.54	11.36	11.27	11.10	12.14	11.62	11.14

TABLE 5.—CHASE ECONOMETRICS FORECAST OF MAY 22, 1980—STANDARD FORECAST—RECESSION IN 1980—Continued

TABLE 3.1.—GROSS NATIONAL PRODUCT IN CONSTANT DOLLARS

	1980.1	1980.2	1980.3	1980.4	1981.1	1981.2	1981.3	1981.4	1982.1	1982.2	1982.3	1980	1981	1982
Gross national product	1,442.6	1,415.2	1,393.6	1,392.4	1,402.1	1,413.3	1,420.3	1,432.4	1,443.5	1,454.9	1,469.5	1,410.9	1,417.0	1,463.3
Consumption expenditures	936.0	917.7	911.6	912.9	911.0	913.4	916.4	919.0	925.3	931.3	938.8	919.5	914.9	935.5
Durable goods	145.5	130.8	129.0	129.8	130.8	134.3	136.3	137.6	140.7	143.2	145.9	133.8	134.8	144.6
Nondurable goods	353.0	347.2	344.8	347.0	346.5	345.0	345.7	346.3	347.5	348.7	350.6	348.0	345.9	349.9
Services	437.6	439.7	437.9	436.1	433.7	434.1	434.4	435.0	437.1	439.4	442.2	437.8	434.3	441.0
Gross private investment	202.2	190.2	174.1	168.2	178.5	187.5	190.5	196.7	201.0	205.6	203.6	183.7	188.3	207.8
Fixed investment	204.1	191.3	182.8	180.4	182.4	185.4	189.5	193.9	197.2	201.1	203.0	189.6	187.8	203.1
Nonresidential	152.1	148.4	143.6	139.3	138.4	138.8	139.8	141.9	144.3	146.6	149.2	145.9	139.7	147.9
Structures	50.5	49.1	48.1	46.5	45.6	45.6	46.0	46.6	47.5	48.5	49.6	48.5	45.9	49.1
Equipment	101.6	99.3	95.4	92.8	92.9	93.2	93.9	95.2	96.8	98.1	99.5	97.3	93.8	98.8
Residential structures	52.0	42.9	39.2	41.1	43.9	46.6	49.6	52.1	52.9	54.4	55.8	43.8	48.1	55.2
Nonfarm	49.4	40.4	36.8	38.7	41.5	44.2	47.2	49.7	50.5	52.0	53.4	31.3	45.7	52.8
Farm	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.6	1.0
Product durable equipment	1.5	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Change in inventories	−1.9	−1.1	−8.7	−12.2	−3.9	2.1	1.0	2.7	3.8	4.5	4.6	−6.0	0.5	4.6
Nonfarm	−2.0	−1.1	−7.7	−11.2	−3.6	2.4	1.3	3.0	3.8	4.5	4.6	−5.5	0.8	4.6
Farm	0.2	0.0	−1.0	−1.0	−0.3	−0.3	−0.3	−0.3	0.0	0.0	0.0	−0.4	−0.3	0.0
Net exports, goods plus services	24.3	25.6	25.7	28.0	28.5	27.4	27.1	29.4	28.8	28.6	30.7	25.9	28.1	30.2
Exports	130.0	130.4	130.7	132.9	135.4	136.7	137.8	141.8	143.2	144.5	149.2	131.0	137.9	147.6
Imports	105.6	104.7	105.0	104.9	106.9	109.3	110.8	112.5	114.4	115.9	118.6	105.1	109.9	117.5
Government purchases	280.0	281.7	281.9	283.5	284.3	284.9	286.4	287.7	288.7	289.7	290.7	281.8	285.8	290.1
Federal	104.3	106.0	106.1	107.2	107.7	108.1	109.1	110.0	110.6	111.2	111.7	105.9	108.7	111.4
National defense	67.0	66.4	67.3	69.2	69.6	69.9	70.5	71.4	71.7	72.0	72.4	67.5	70.3	72.4
Other	37.3	39.6	38.8	38.0	38.1	38.2	38.6	38.7	38.9	39.2	39.3	38.4	38.4	39.1
State and local	175.7	175.7	175.8	176.4	176.6	176.8	177.3	177.7	178.1	178.5	178.9	175.9	177.1	178.7

TABLE 5.—CHASE ECONOMETRICS FORECAST OF MAY 22, 1980—STANDARD FORECAST—RECESSION IN 1980—Continued

MAJOR ECONOMIC INDICATORS (PERCENT CHANGE, ANNUAL RATES)

	1980.1	1980.2	1980.3	1980.4	1981.1	1981.2	1982.3	1981.4	1982.1	1982.2	1982.3	1980	1981	1982
Gross national product	10.0	1.9	2.4	8.2	12.2	13.5	10.5	13.3	12.6	12.3	12.8	7.4	9.7	12.5
GNP (in 1972 dollars)	0.6	−7.4	−6.0	−0.3	2.8	3.2	2.0	3.4	3.1	3.2	4.1	−1.4	0.4	3.3
Total consumption (in 1972 dollars)	0.3	−7.6	−2.6	0.5	−0.8	1.0	1.3	1.1	2.8	2.6	3.2	−0.5	−0.5	2.2
Fixed nonres investment (in 1972 dollars)	4.3	−9.4	−12.4	−11.4	−2.5	0.9	3.2	5.9	7.1	6.6	7.1	−2.0	−4.2	5.9
Government purchases (in 1972 dollars)	4.3	2.5	0.3	2.3	1.9	0.9	2.0	1.9	1.4	1.3	1.4	2.7	1.4	1.5
Index of industrial production, total	−0.3	−13.3	1−5.4	4.8	6.3	7.3	4.6	6.3	5.2	5.9	6.5	−3.1	3.1	5.9
GNP deflator	9.3	10.0	9.0	8.6	9.2	10.0	8.3	9.6	9.1	8.8	8.4	9.1	9.2	9.0
Consumer Price Index	16.9	15.5	12.0	10.5	10.7	10.3	9.5	9.6	8.7	9.1	8.9	14.3	10.8	9.1
Corporate profits before taxes	25.3	−33.3	−31.3	−4.4	1.9	15.9	17.8	53.7	3.5	14.5	27.1	−3.8	−0.2	21.4
Corporate profits after taxes	25.9	−30.2	−29.3	−3.3	0.5	13.6	16.9	48.8	27.4	14.0	25.1	−3.3	−0.3	26.3
Disposable personal income	13.2	5.3	5.4	13.2	7.2	9.8	12.6	10.8	11.3	11.3	13.8	9.5	9.3	11.6
Disposable personal income (in 1972 dollars)	0.6	−5.9	−4.1	3.9	−1.9	0.8	4.1	2.2	2.8	2.7	5.2	−1.1	0.1	3.0

TABLE 6.—FISCAL POLICY

[In billions of dollars]

Calendar year	Change in Federal spending, excluding unemployment benefits (1)	Change in Federal receipts due to tax changes (2)	(1)-(2) (3)	(3) as percent of GNP (4)
1969	7.8	11.4	−3.6	−0.4
1970	14.0	−8.6	22.6	2.3
1971	14.6	−7.3	21.9	2.1
1972	24.3	−3.2	27.5	2.3
1973	21.6	8.0	13.6	1.0
1974	31.9	3.2	28.7	2.0
1975	46.8	−15.3	62.1	4.1
1976	30.1	7.2	22.9	1.3
1977	39.7	−1.2	40.9	2.1
1978	41.3	3.2	38.1	1.8
1979	47.3	−6.6	53.9	2.3
1980	69.3	16.3	53.0	2.1
1981	66.6	29.3	37.3	1.3

Representative LONG. Mr. Chimerine, your prediction, or forecast, that the speed of the economy's decline is not necessarily central to the ultimate depth of the recession is interesting and your arguments in support of that are interesting. Have the figures that Ms. Norwood presented here today, and particularly the sharp increase in the unemployment rate, affected your thinking in that regard?

Mr. CHIMERINE. No, Congressman, they haven't. We expected a rise in unemployment in May to about 7.5 percent. It exceeded that, as you point out.

But I think it's extremely important to bear in mind that most of the increase in unemployment in May, and in our view certainly the increase in excess of 7.5 percent, was due to a sharp rise in the labor force. I do not remember the last month during which we had a 700,000 increase in the labor force in the United States. It is particularly difficult to interpret at this time of year because of the influx of graduates and students looking for summer employment, which distorts the picture frequently because the seasonal adjustment factors in May and June often do not cope very effectively with this influx.

It would not surprise me to see a drop in the labor force the next month. In fact, traditionally, when we do get a large rise in the labor force in 1 month, either because of a problem with the seasonals or for any other reason, we generally observe a decline in the month thereafter.

So I don't think this morning's report changes anything. I still think unemployment will rise further, at least to 8.5 or 9 percent, but it does not mean that it will go higher than that. In fact, the Producer Price Index report shows that inflation may be moderating more rapidly than we expected, which reinforces our views on household purchasing power and consumer spending later in the year.

Representative LONG. What will be the leader out of this, in your opinion, when the recovery begins? Which industries will be the ones to lead us out of it?

Mr. CHIMERINE. Well, there are some industries, Congressman, that are experiencing no recession impact, and have been very strong for quite a while. Included in these are those that are closely related to oil drilling, or to developing new energy sources.

Second, I think some of the service sectors are holding up reasonably well, and they will continue to hold up reasonably well during this period.

While we are not likely to return to 2 million housing starts for several years, we do expect a recovery of from below a million units to 1.2 or 1.3 by mid-1981—that's a 30-percent increase. So measured in that way, housing will do reasonably well and some industries that support housing will show some recovery. I think these are the primary ones, Congressman.

Representative LONG. I'd like to pursue some of the traditional things that might be done with respect to heading off a very weak recovery, or stimulate the recovery that you see coming at the beginning of the year.

Of course, we know the social security tax increases in 1981 are going to amount to some $20 billion. We offset that by $25 billion, as you're projecting or contemplating—a $25 billion tax decrease. What else might be done in that regard?

Mr. CHIMERINE. I would support a larger tax cut, Congressman Long. I would prefer avoiding a massive increase in Federal expenditures. I think the historical experience shows very clearly that once these spending programs, which we claim are temporary and designed primarily to stop the recession or speed the recovery, are initiated, they have the tendency to stay on forever.

So I would prefer stimulating the economy primarily on the tax side, and I think it's important, Congressman, for another reason. One way to help slow inflation—and I think this committee would agree with this in the longer term—is to improve productivity. One of the most significant ways you increase productivity is by stimulating capital spending, because of the replacement of old equipment with more efficient, more productive, newer equipment.

Not only do we need incentives for capital formation, but the lesson we should have learned from the 1974–75 recession, both here and abroad, is that a prolonged period of recession and economic weakness with lots of excess capacity is the biggest detriment to capital formation. Capital formation throughout the world was extremely weak all during the mid-1970's, even when the world economy started recovering from the 1974–75 worldwide recession, because of enormous excess capacity that plagued almost all countries.

I don't think that a highly depressed economy, with lots of unemployment and lots of excess capacity, is a satisfactory solution for inflation in the long term because you aggravate the productivity problem, and we are now witnessing that.

One of the reasons why productivity is so horrendous right now is because of poor capital formation for the last 5 or 6 years, and for the most part that was because the economy was relatively weak, with a lot of excess capacity, at least until 1978 or 1979.

So I think it's essential to stimulate consumer spending and speed up the recovery to provide another incentive for capital spending.

Representative LONG. Thank you. Congressman Brown.

Representative BROWN. I would yield to Congressman Rousselot.

Representative ROUSSELOT. Mr. Chimerine, how soon should we implement these tax cuts of which you are speaking in the testimony and the rollback of the social security tax?

Mr. CHIMERINE. Congressman, I think deliberations should begin in the Congress, with some initiative from the administration, as rapidly as possible.

Representative ROUSSELOT. Well, before the end of the year?

Mr. CHIMERINE. Absolutely. In my judgment, I would like to see a tax relief begin as early as July, certainly for any personal tax cuts that might be enacted. I think it's probably best to hold off on accelerated depreciation until the start of the year in order to avoid a timing problem regarding reported depreciation. The social security tax increase is scheduled for January, and I would enact legislation as soon as possible to rescind that so everybody would become aware as early as possible that it will not go into effect. There is no longer, Congressman, any reason to wait. We know the recession is steep already.

Representative ROUSSELOT. The only reason we are waiting, as you know, is the President says he doesn't want any. That kind of discourages action here in Congress, since it's controlled by the same party of which he's a member. So we have a little trouble getting approval.

Mr. CHIMERINE. Well, Congressman, my own feeling is that there will be a tax cut later this year, and that the budget balancing movement will fade away rather quickly when it becomes more widely recognized that it will be impossible to balance the budget. I think you mentioned a hope and a prayer. I think we are even beyond that right now. There's absolutely no way the budget can be balanced.

I think when that becomes more widely recognized, and if a $40 or $50 billion deficit is already in prospect, I think the resistance to tax cuts will start to subside as well. Second, if unemployment continues to rise, that too will speed the movement in that direction.

Representative ROUSSELOT. You have described the ideal types of tax changes in your prepared statement. How much of a personal tax cut are you talking about and would it be for more than 1 year?

Mr. CHIMERINE. I would make it a permanent reduction, Congressman. I would like to see at least a third of it in the form of accelerated depreciation, which would mean roughly a 25-percent reduction across the board in existing useful lives, and the remainder should be either the social security tax cut or the personal income tax cut, or a combination of both.

Representative ROUSSELOT. How much of a personal income tax reduction?

Mr. CHIMERINE. Something that's in the $16 to $18 billion range as an absolute minimum.

Representative ROUSSELOT. Would you reduce the tax rates?

Mr. CHIMERINE. Yes, I would reduce tax rates.

Representative ROUSSELOT. Across the board?

Mr. CHIMERINE. In order to speed up the process, I think that's the most logical thing to do. Otherwise, it's going to take a long time to get the legislation through the Congress.

Representative ROUSSELOT. Would you reduce the number of brackets again?

Mr. CHIMERINE. Congressman, to be honest, I haven't thought that through in terms of the specifics, whether or not we reduce the brackets and whether we should reduce the tax rate a little more in some categories than in others. I wouldn't object right now to an across-the-board personal tax cut, leaving the brackets the way they are simply to make sure we get some legislation through as quickly as possible.

Representative ROUSSELOT. What percentage cut?

Mr. CHIMERINE. Well, if we use that minimum of $16 to $18 billion, if my memory is correct, Congressman, that would be probably in the range of 10 percent, and again I would not argue and would support an even bigger one, but as an absolute minimum that's where I would start.

Representative ROUSSELOT. Thank you, Congressman.

Representative LONG. Congressman Brown.

Representative BROWN. Mr. Chimerine, what if we had had the tax cut that you propose or, even better, the tax cut that the Joint Economic Committee, Senator Bentsen and I, proposed last year? What would have it done to ameliorate the situation?

Mr. CHIMERINE. If everything else would have been the same, we would still have had a recession, Congressman. It would still have been a fairly steep recession, but it obviously would not have been as bad as it is right now.

Representative BROWN. It would take the bottom out of it?

Mr. CHIMERINE. Congressman, you will have to refresh my memory. It's been a while.

Representative BROWN. We proposed a $25 billion tax cut.

Mr. CHIMERINE. If we had enacted a $25 billion tax cut last year, my guess is that the unemployment rate would have been roughly a half percent less than it's going to be.

Representative BROWN. The comments you made about the housing industry interest me, because you said that a great percentage of potential purchasers of housing have now been priced out of the market, and I can't see anything in this current situation which is going to particularly lower the cost of housing manufacturing—that is, the production of housing—and I wonder how quickly then people will be able to get back into the housing market.

Now clearly, you take off interest, you knock down the interest rates, you improve the situation somewhat, but aren't we still going to have very expensive housing in this country in the future?

Mr. CHIMERINE. Congressman, absolutely, and as I indicated earlier, that's one of the reasons I expect a fairly modest recovery, because housing will still be expensive; but don't underestimate the difference that a 12- or 11.5-percent mortgage rate means relative to 16 percent in terms of monthly payments. That's a large, large difference and it will allow more people to afford housing than was the case a few months ago. But you're quite right; it will still be expensive.

Representative BROWN. If I can make a quantum leap, earlier there was discussion, particularly by Senator Sarbanes, that we lose in this society production when we have a recession and unemployment but we also lose in this society, don't we, when we have sharp inflation over a period of time because we never quite get back to the cost levels and the opportunities for the average citizen or below that we had before if we don't get that inflation rate back down to very low rates?

Mr. CHIMERINE. Congressman, I agree with you, although I think the source of inflation is extremely important, and has to be kept in mind. For example, if we have an inflation which in large part is the result of higher OPEC prices such as we have had over the last year, that is the worst possible situation for the country because that infla-

tion represents funds that are flowing overseas to those who collect the oil revenues, and thus is not available to use for consumption in the United States.

If we have an inflation which is due mostly to a wage-price spiral, that really isn't as harmful to the system. I think the source of inflation is important. Any inflation has some harmful effects on many people, regardless of what the level or cause is, but not all inflations are the same and the differences can be very substantial.

Representative BROWN. I certainly don't want to differ with you radically on that and discount the impact of the higher energy prices, but I must say that we also have some other things, and that is the very high tax rate. The percentage takeout of the private sector that Government now has is 22-plus percent rather than the 18 percent or whatever it was a few years ago when I first came to Congress; and we also are having a large impact in terms of nonproductive costs related to regulations, not that that's again necessarily harmful to the economy as long as we all are vigorous healthy souls and get out there and jog and do all those wonderful things without breathing bad air and stuff, but—I'm inspired by the fact that I saw Senator Proxmire running to work this morning—but that is an impact or a drag on the economy, is it not?

Mr. CHIMERINE. Yes, it is, and as a matter of fact, Congressman, I think you and I discussed this the last time I testified a few months ago. I'm a little distressed about the preoccupation with balancing the budget because, while I do not like to see any unnecessary Federal expenditures, the biggest impact on inflation in the United States from Government in the last several years has not come from spending or deficits. It has come from increased regulation; from higher minimum wages; from farm support programs; from the lack of an energy policy; and from other policies which either directly or indirectly increase business costs, which get passed on in the form of higher prices. It has in part been due to tax policy which has raised business costs, such as social security tax increases, unemployment insurance, and so on; and tax policies which discourage capital spending and reduce productivity also increase costs and inflation.

These are the policies that have to be changed in order to lower the inflation rate in the United States. Cutting $2 or $3 billion or $5 billion from the budget is not going to reduce inflation in the current environment.

Representative BROWN. One other observation. We had Secretary Miller in here a few months back and he said that he thought it was a sound policy over the past years every time the cost of energy went up to have speeded up the printing presses so we could turn out more money to pay for that energy. The only thing I suggest with that is that the result of that has been that we don't have less inflation: we just have taken the decision that we will pay for the energy with dollars that are worth less, because dollars are also worth less on everything else we buy; and we didn't make the hard decision to substitute either more energy for less of something else in our society or what would have been a better choice perhaps, substitute less energy for the traditional things in the society.

On that point, how confident are you that the Fed will address the money supply problems with precision and rationality within the next few months?

Mr. CHIMERINE. Congressman, I must point out—and I think you're aware of it—that higher OPEC prices cause a very difficult decision for the Federal Reserve System. If they validate the oil-induced inflation by, in effect, speeding up the money supply or the availability of credit, they limit the adverse recessionary impact of those higher oil prices.

If they don't adopt policies to offset some of the restrictive aspects of higher OPEC prices, then we experience a steeper, more severe downturn in the economy.

Representative BROWN. I would have to say it depends on how you address it. If you rush out and buy a Citation perhaps rather than a Subaru, you might really stimulate the economy just a little here and reduce the impact of the energy. There are choices to be made.

Mr. CHIMERINE. Congressman, I'm not overly optimistic about the automobile industry for the next several years. I think they are in for a very modest recovery, and one of the reasons is that higher gasoline prices are causing most people to cut down on their driving. This increases the life of existing cars, and reduces replacement demand and therefore new car sales.

I do not think the argument that people will trade in their gas guzzlers more quickly for smaller cars is correct. Because of the recent behavior of used and new car prices, whatever would be gained in terms of gasoline saving, would be lost in the trade-in value. As a result, people are buying smaller cars when their old big gas guzzler falls apart, but they are not rushing out to do so more quickly.

Representative BROWN. In my case, we have bought our Citation, but we held on to the convertible.

Thank you, Congressman.

Representative LONG. Thank you, Congressman Brown. Thank you very much, Mr. Chimerine.

The committee stands adjourned.

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

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