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STUDY PAPER NO. 6

THE EXTENT AND NATURE OF  
FRICTIONAL UNEMPLOYMENT

BY

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

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MATERIALS PREPARED IN CONNECTION WITH THE  
STUDY OF EMPLOYMENT, GROWTH, AND  
PRICE LEVELS

FOR CONSIDERATION BY THE  
JOINT ECONOMIC COMMITTEE  
CONGRESS OF THE UNITED STATES



NOVEMBER, 19, 1959

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## STUDY OF EMPLOYMENT, GROWTH, AND PRICE LEVELS

(Pursuant to S. Con. Res. 13, 86th Cong., 1st sess.)

OTTO ECKSTEIN, *Technical Director*  
JOHN W. LEHMAN, *Administrative Officer*  
JAMES W. KNOWLES, *Special Economic Counsel*

**This is part of a series of papers being prepared for consideration by the Joint Economic Committee in connection with their "Study of Employment, Growth, and Price Levels." The committee and the committee staff neither approve nor disapprove of the findings of the individual authors. The findings are being presented in this form to obtain the widest possible comment before the committee prepares its report.**



## LETTERS OF TRANSMITTAL

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NOVEMBER 13, 1959.

*To Members of the Joint Economic Committee:*

Submitted herewith for the consideration of the members of the Joint Economic Committee and others is Study Paper No. 6 "The Extent and Nature of Frictional Unemployment."

This is among a number of subjects which the Joint Economic Committee has requested scholars to examine and report on to provide factual and analytic materials for consideration in the preparation of the staff and committee reports for the study of "Employment, Growth, and Price Levels."

The papers are being printed and distributed not only for the use of the committee members but also to obtain the review and comment of other experts during the committee's consideration of the materials. The findings are entirely those of the authors, and the committee and the committee staff indicate neither approval nor disapproval by this publication.

PAUL H. DOUGLAS,  
*Chairman, Joint Economic Committee.*

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U.S. DEPARTMENT OF LABOR,  
BUREAU OF LABOR STATISTICS,  
*Washington 25, D.C., November 3, 1959.*

HON. PAUL H. DOUGLAS,  
*U.S. Senate, Washington, D.C.*

DEAR SENATOR DOUGLAS: I transmit herewith the report, "The Extent and Nature of Frictional Unemployment," which was prepared at your request by the Bureau of Labor Statistics. A supplement to this report, dealing with unemployment in cyclically vulnerable and chronically distressed areas, is in preparation, and will be transmitted separately upon its completion.

The present report identifies and measures the various types of unemployment which are to be expected even in times of prosperity. Sources of data which have not been previously exploited in the same way have been used to elicit a considerable amount of new information.

I have been privileged to appear before you regularly during the past several years to deliver testimony and submit reports in which emphasis has been given to the problem of unemployment. During this long period of fruitful cooperation between the Bureau of Labor Statistics and your committee, your committee has stood as patron and sponsor for a number of useful studies and provided a forum for the dissemination of wanted information.

It is my hope that the information contained in the present report will contribute further to the general understanding of the nature of unemployment and lead us closer to the day when its harmful aspects can be eliminated or greatly mitigated.

This report was compiled in the Bureau's Division of Manpower and Employment Statistics, Harold Goldstein, Acting Chief. It was prepared under the supervision and guidance of Joseph S. Zeisel by Robert L. Stein with substantial assistance contributed by Messrs. Arnold Katz, Irving Stern, and Herman Travis.

Sincerely yours,

EWAN CLAGUE,  
*Commissioner of Labor Statistics.*

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NOVEMBER 3, 1959.

Hon. PAUL H. DOUGLAS,  
*Chairman, Joint Economic Committee,  
U.S. Senate, Washington, D.C.*

DEAR SENATOR DOUGLAS: Transmitted herewith is the sixth in the series of papers being prepared for the study of "Employment, Growth, and Price Levels." As is noted in the transmittal letter to you from Commissioner Clague, this paper has been prepared by the Bureau of Labor Statistics.

Additional papers in the series are being prepared by outside consultants and members of the staff and deal with studies of price changes, economic growth and other aspects of employment and unemployment. All papers are presented as prepared by the authors for consideration and comment by the committee and staff.

OTTO ECKSTEIN,  
*Technical Director,  
Study of Employment, Growth, and Price Levels.*

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## STUDY PAPER NO. 6

# THE EXTENT AND NATURE OF FRICTIONAL UNEMPLOYMENT

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### SUMMARY

This report summarizes an attempt to identify and measure some of the types of frictional unemployment which must be expected even in periods of prosperity. The focus of this study was the period 1955-57, years of relatively full employment on the whole. Some of the principal findings are as follows:

1. The continuing entry of new workers into the labor market (including those who reentered after a period of absence) accounted for about 20 percent of the unemployed (ch. II). In the 1955-57 period, most new entrants were finding jobs after a relatively brief search.

2. Voluntary shifting from one job to another (job mobility) accounted for roughly 10 percent of the unemployed (ch. III). Persons changing jobs had a very high rate of unemployment (one in three) but only a small proportion of the work force (4 percent) was involved in such shifting at all.

3. Seasonal fluctuations in employment accounted for an estimated 20 percent of the unemployed (ch. IV). It is likely that the percentage would have been slightly higher had more detailed data been available to measure this factor.

4. Changes in the composition of the labor force affected the composition of the unemployed but were an almost negligible factor in the slight rise in the overall unemployment rate since the early postwar period. These changes will play a more prominent role during the 1960's.

5. A more significant factor was the tendency for the rate of unemployment to rise among workers in goods producing industries. These changes have raised unemployment by about 8-10 percent in the decade following World War II (ch. V).

There remain, of course, significant components of unemployment that have not been measured. For example, there is the problem of geographic pockets of unemployment (distressed areas) which will be the subject of a future report. There are also numerous short-term dislocations, e.g., secondary effects of labor disputes, which have not yet been measured systematically for the labor force as a whole. There may be a group of relatively unskilled or otherwise less employable persons who, except in periods of acute labor shortages, tend to become unemployed repeatedly during the course of a year. These and other aspects of the unemployment problem will have to be explored in future research.

## EXTENT AND NATURE OF FRICTIONAL UNEMPLOYMENT

A more detailed discussion of the focus and results of the present study is included in the introductory chapter which follows.

### INTRODUCTION

It has been generally recognized that some unemployment is unavoidable in a free market economy where employers and workers are constantly adjusting to changes in the level and structure of demand and to opportunities for employment or increased income. This so-called frictional unemployment is in contrast with the cyclical unemployment resulting from periodic generalized dislocations between production and effective demand.

Frictional unemployment may be defined as that level of joblessness that could not be reduced significantly in the short run by increased aggregate spending. At this level of employment and unemployment, increased demand would theoretically result in heightened inflationary pressure rather than increased employment and reduced unemployment.

The acceptance of the fact of an unavoidable minimum level of unemployment in our economy raises the inevitable question of what that level ought to be. Federal Government action to minimize unemployment without unduly stimulating inflationary pressures demands, as a prerequisite, as complete an understanding as possible of the nature of frictional unemployment. This is especially true since frictional unemployment is not a single form of unemployment, but rather a complex of many factors—economic, institutional, and personal.

An extremely important portion of frictional unemployment is a direct result of seasonal fluctuations in employment, which reflects the effects upon both production and distribution of weather, crop cycles, model changeovers in industry, holidays, etc. A second form of frictional unemployment results from the tremendous movement into and out of the labor force each month. A third source of frictional unemployment is the very high degree of mobility between jobs in the American labor force.

Frictional unemployment has been popularly identified with short-term unemployment. Also included, however, may be unemployment of a longer duration associated with long-term declines in occupations, industries, and areas, reflecting the development of new products, changing tastes, developing technology, etc.—sometimes called structural unemployment. This is a form of long-term frictional unemployment. However, to complicate identification and estimation even further, long-term unemployment is not necessarily a function exclusively of structural changes in the economy. It may also be associated with personal characteristics of workers, such as age, color, sex, education, physical condition, and so forth.

Our present system for collecting employment and unemployment statistics, although relatively comprehensive and technically refined, is not currently designed to include inquiries of employees as to the reason for layoff or unemployment. It is doubtful that respondents would have the knowledge to provide an answer, even if asked. This is especially true in the case of continuing unemployment. Whereas a person might know the specific reason for his having become unemployed, it probably would be impossible for him to provide a meaningful answer as to why he continued to be unemployed, since this depends

on various factors: the state of the labor market, the actions of the individual himself, of employers, etc. In any case, there is no direct information of this kind on a regular monthly basis. However, this study does attempt to measure indirectly the extent of unemployment accounted for by the several major components of frictional unemployment: seasonal fluctuations in employment; job mobility; entrance into the labor market; and structural dislocations in the economy. It should be pointed out, however, that the tools for measurement are imprecise in many respects. Furthermore, the categories of unemployment as they are measured in this report cannot be considered exhaustive or even mutually exclusive; there is some degree of overlap that cannot be readily estimated.

It is in the measurement of structural unemployment that our present data are least adequate. However, studies of the characteristics of the unemployed in relation to the duration of their unemployment provide much light on this subject, since structural unemployment is more likely than other types to result in long-term unemployment. In addition, entirely apart from its value as a measure of the underlying nature of unemployment in periods of full employment, a study of duration is important in its own right from the standpoint of personal and social welfare; the duration of unemployment is probably more significant than the causes, although a knowledge of the latter is vital for remedial action.

The focus of this study is a detailed description of unemployment in the period 1955-57, years for the most part of high and rising employment. The unemployment rate averaged 4.3 percent of the labor force during this period. The availability, for the first time, of some unique forms of data was also a significant factor in determining the period for study. See appendix II, chapter I, for additional discussion of these matters.

#### THE EXTENT OF SHORT-TERM FRICTIONAL UNEMPLOYMENT

There are many temporary situations in the working lives of individuals that generate unemployment even in periods of relatively full employment. The general striving of workers to improve their economic and social status often involves a job shift and a brief period of unemployment. The high rate of voluntary mobility in the United States is frequently cited as an important reason why the level of frictional unemployment in this country is significantly higher than in virtually any foreign nation. A special retabulation of information from the 1956 Census Bureau study relating to job mobility indicates that groups who left their jobs to improve their status, or because of dissatisfaction with the kind of work or conditions of employment, accounted for about 15 percent of unemployed persons. Moreover, it is estimated that if these persons had been subject only to unemployment from causes other than job mobility, total unemployment in 1955 would have been reduced by about 10 percent. (See ch. III.)

A more significant factor in determining the level of frictional unemployment is the effect of entry of new workers into the labor market (or the reentry of workers—mainly married women—who have been temporarily out of the labor force). These entries are estimated to account for roughly one-fifth of the unemployed total in an average month (ch. II).

Unemployment resulting from entry into the labor market or from voluntary job change is likely to be brief in periods of full employment, because a decision to look for another job, or to change jobs, is often made only if there is some previous knowledge that openings are readily available. The labor force behavior of teenagers and married women during the postwar period reflects this tendency, as indicated by changes in their rates of labor force participation. These groups are most likely to enter the labor force in good years. Data on factory quit rates also reflect this general psychology in relation to job shifts; the quit rate rises in periods of expanding economic activity, and falls in periods of declining activity.

Still more important than either voluntary job shifting or entrance into the labor market as a factor in determining the level of frictional unemployment are the very sharp seasonal variations in the level of production and employment in many American industries. It is estimated that variation in the level of employment in industry because of seasonal reasons (including the effects of weather, regular model changeovers, vacation, etc.) is a factor causing at least 20 percent of total unemployment in a year of high employment (ch. IV).

It is true that unemployment resulting from each of these kinds of situations (seasonal reasons, voluntary job shifting or labor force entrance) is likely to be of relatively short duration, at least for any given spell. Over the course of the year, however, the cumulative time lost by workers between seasons or between jobs is substantial. This point is dramatically made by the data from work experience studies covering an entire year, which are incorporated in this report. Moreover, there is evidence that the off season in outdoor work, such as farming and construction, is long enough so that at least some of those laid off in the winter turn up as long-term unemployed by March or April. The post-Christmas lull in trade also adds slightly to the total of long-term unemployed several months later. However, the effect of seasonality on long-term unemployment is not great, except in certain industries, since many of those who are dismissed from seasonal industries are women and teenagers who withdraw from the labor force immediately, or after a brief search for other jobs.

#### LONG-TERM UNEMPLOYMENT

Whereas the terms "frictional" unemployment and "short term" unemployment have sometimes been used interchangeably, not all frictional unemployment is short term. As already noted, even some of the seasonally unemployed may become long-term unemployed before they are recalled. Moreover, some of the persons involved in frictional unemployment due to entry into the labor market or to voluntary job shifting may remain jobless for more than 15 weeks, perhaps because of unrealistic job aspirations or other personal characteristics. In addition, as defined in this study, frictional unemployment includes layoffs resulting from long run structural changes in the economy, which by their very nature tend to cause long-term unemployment.

As we have noted, personal characteristics sometimes obscure this latter relationship; the reason for unemployment is not the sole determinant of duration. Individual spells of unemployment of long duration, however, are more likely to result from basic developments

in the economy—changes in skill requirements, the movement of an industry, and the like. Unemployment lasting 15 weeks or over—long-term unemployment—averaged 560,000 in 1957, or about 20 percent of the unemployed total. Included among these were 240,000, or 8 percent, out of work for more than 6 months in one continuous spell.

These figures, however, do not reflect the full extent of the long-term unemployment problem. A more meaningful estimate can be obtained from data relating to cumulative weeks of unemployment during an entire calendar year. Such data for 1957, based on the regular Census Bureau survey of the annual work experience of the population, showed a total of 1½ million workers with more than 26 weeks of unemployment over the course of the year (cumulating weeks lost in all spells of unemployment). About 900,000 of the 1½ million had more than one spell of unemployment, but from a welfare standpoint, it really makes little difference as to whether this much unemployment was experienced in a single continuous stretch or in several different spells. Manufacturing and closely allied industries such as mining and transportation accounted for 500,000 of the 1½ million very long-term unemployed. Farm and construction workers accounted for some 400,000.

Long-term unemployment tends to be a problem of particular industries and areas. Because of the geographic concentration of many manufacturing industries, a decline in demand for a particular product might affect many firms in a labor market area. Workers laid off by one employer would thus have considerable difficulty in finding other jobs in that area. Similarly, the movement of an industry away from one part of the country to another may result in long-term unemployment because it leaves unemployed workers with few alternative opportunities in their own communities. Most basic changes in the economy, such as automation, which lead to the obsolescence of skills may call for major readjustments on the part of individual workers, such as transfer to another line of work and possibly movement to another community. The difficulties involved in such changes usually require a relatively long period of time to overcome, except perhaps in the case of young unmarried persons.

Analysis of monthly labor force data has indicated that unemployment spells of long duration are a particular problem of the aged and of nonwhite groups. The work experience data substantiate these relationships but bring out some additional facts: Men are more likely than women to have more than one spell of unemployment in a year; older workers (especially those 45 and over) are more subject to repeated layoffs during the year; nonwhites not only have higher unemployment rates, but are more subject than whites to repeated spells of unemployment.

Taking the number unemployed 15 weeks or more during a calendar year as a percentage of all workers in a given age, industry, or occupation group provides an interesting new perspective on the incidence of unemployment. On this basis, boys 18 to 24 years of age are seen to have the highest rate of such long-term unemployment—about 8 to 10 percent of their number in the labor force, as compared with about 5 percent for older workers (45 to 64 years). Similarly the high rate of unemployment of nonwhites in conjunction with the

longer average duration of their unemployment results in their having a rate of long-term unemployment almost three times the rate for whites (11.3 percent for nonwhite males; 4.3 percent for white males).

It is long-term unemployment that generates most of the concern on the part of policymakers and other students of the employment situation. The workers involved in long-term unemployment face serious problems in terms of wage loss and the possible psychological effects of prolonged idleness. Many of the long-term unemployed exhaust their rights to unemployment insurance benefits. In some cases the existence of long-term unemployment is symptomatic of underlying maladjustments in the economy. For these reasons, as well as considerations of individual welfare, the characteristics of both the short and long-term unemployed are presented in considerable detail.

#### STRUCTURAL UNEMPLOYMENT

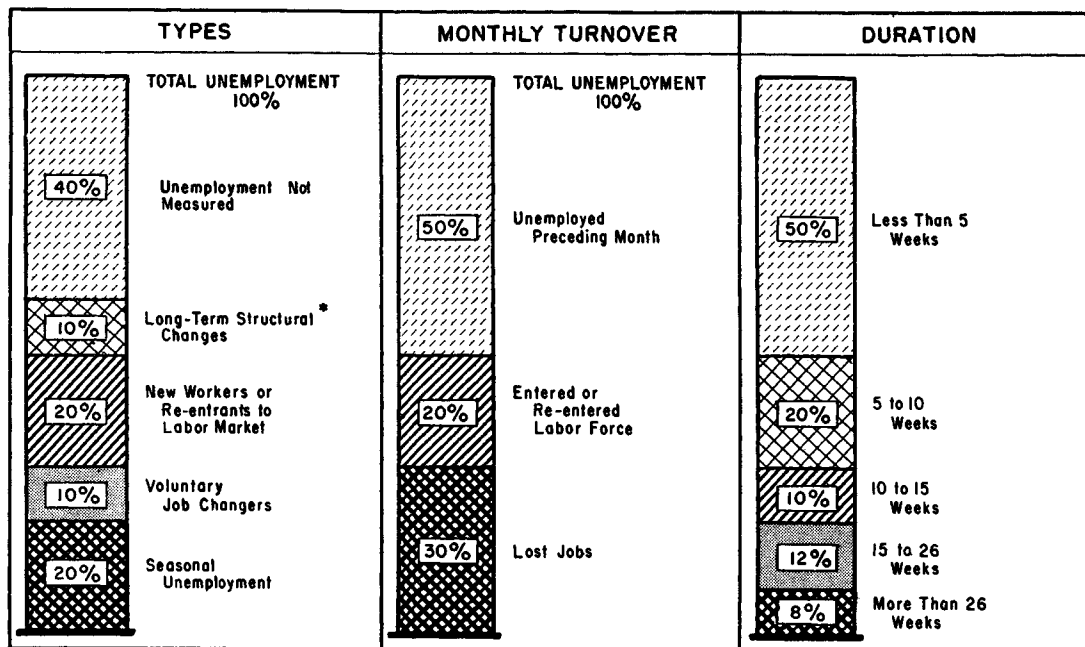
Chapter V of this report analyzes changes in unemployment during the postwar period resulting from structural changes in the economy. Major trends in the composition of the labor force were studied, together with unemployment trends within specific occupational and industrial groupings. The major findings were: (1) the absence of any significant trend in the overall rate of unemployment due to labor force changes since World War II; (2) a slight rise due to structural changes.

In 1956, about 8 to 10 percent of the unemployed could be considered jobless as a result of structural changes over the postwar period. Probably the most significant development was the continuing shift of emphasis within the economy from goods-producing to service-rendering activities. The unemployment rate among wage workers in goods-producing industries (agriculture, mining, construction, manufacturing) taken as a group rose from 4.1 to 5 percent, with each industry showing some increase. The unemployment rates in service-type industries (including transportation, trade, finance, government, and personal and professional services) either remained the same or declined somewhat. The rise in unemployment among goods producers did not reflect an increased number of different persons becoming unemployed, but rather, longer duration on the average for those who did become unemployed.

For the future, it is likely that the rate of unemployment will edge upward as a result of the increasing numbers and proportions of both older and younger workers in the labor force. The changed age composition of the labor force alone could lead to an increase of about 0.5 percent in the rate of unemployment by 1975, assuming that the age-specific unemployment rates remain at about 1955-57 levels.

A forthcoming report will compare unemployment and other labor force characteristics in depressed areas with those in nondepressed areas. Special tabulations are being prepared for this study, in order to provide detailed characteristics for four groupings of labor market areas, classified according to their history of unemployment levels over the past 3 years. These data may provide useful new information on cyclically vulnerable as well as chronically distressed localities whose extensive and persistent unemployment has caused national concern.

**CHART 1**  
**SUMMARY CHARACTERISTICS OF UNEMPLOYMENT**  
**IN A PERIOD OF HIGH EMPLOYMENT**



UNITED STATES DEPARTMENT OF LABOR  
 BUREAU OF LABOR STATISTICS

\* Includes only limited aspects measured in this report.

## CHAPTER I. SHORT- AND LONG-TERM UNEMPLOYMENT

## CURRENT MONTHLY SURVEY DATA

In a typical week during 1957, a year of relatively high employment,<sup>1</sup> about 1.5 million, or half the 2.9 million unemployed, had been seeking work or were on layoff for less than 5 weeks. This short-term group included 150,000 persons on temporary layoff with definite instructions to return to work within 30 days, and 100,000 persons who were scheduled to begin new jobs within 30 days. An additional 650,000, or 22 percent of the jobless total, had been unemployed for 5 to 10 weeks at the time of the survey.

Unemployment lasting 15 weeks or longer—long-term unemployment—averaged 560,000 in 1957 or about 20 percent of the unemployed total. Included among these long-term unemployed were 240,000 persons out of work for more than 6 months in one continuous spell, 8 percent of the jobless total. The total long-term group represented a little under 1 percent of the total labor force (70¼ million).

Short-term unemployment is, to a certain extent, seasonal unemployment and the range of seasonal variation in short-term unemployment in recent good years has been from a low of about 1.2 million to a high of about 2 million. The low point is generally reached in early spring and early fall, when layoffs in outdoor work and new entries into the labor market are both at a minimum. The peak is usually reached in June with the influx of students into the labor force in search of summer jobs. Other relatively high months are November, due to holiday season jobseekers, and January, reflecting cutbacks in trade and outdoor work (table I-1).

<sup>1</sup> See apps. I and 2, ch. I, for description of sources of duration data, and reasons for selection of 1957 as the main focus for this study.



TABLE I-1.—Persons unemployed 4 weeks or less, by industry group: January 1955–December 1957

[In thousands]

Industry group <sup>1</sup>	Year	January	February	March	April	May	June	July	August	September	October	November	December
Total <sup>2</sup> .....	1957	1,645	1,335	1,167	1,251	1,398	2,028	1,582	1,386	1,438	1,272	1,724	1,593
	1956	1,612	1,352	1,391	1,254	1,469	2,152	1,685	1,343	1,306	1,182	1,586	1,479
	1955	1,679	1,338	1,114	1,183	1,218	1,773	1,470	1,433	1,340	1,265	1,477	1,351
Agriculture and construction.....	1957	363	241	183	236	202	234	242	250	237	197	332	372
	1956	392	284	222	191	199	235	293	221	188	183	339	362
	1955	340	249	235	213	185	216	226	280	192	213	290	322
Manufacturing.....	1957	393	352	302	372	425	422	409	369	398	410	500	515
	1956	419	381	412	396	416	454	443	348	365	301	389	359
	1955	497	375	294	387	369	358	371	356	366	317	393	351
Mining and transportation.....	1957	101	80	100	71	80	88	91	79	94	97	124	125
	1956	91	88	107	76	83	82	133	70	73	63	75	79
	1955	116	95	86	109	64	100	75	77	70	97	68	72
Wholesale and retail trade.....	1957	359	273	208	221	226	263	237	245	239	193	268	203
	1956	320	265	245	232	247	272	234	220	230	247	283	217
	1955	317	301	193	164	162	315	237	151	247	242	247	210
Service and public administration.....	1957	296	271	219	201	256	429	304	292	287	233	269	223
	1956	268	212	251	216	258	488	292	343	307	246	306	270
	1955	271	213	212	221	283	408	293	353	302	249	291	237
New workers.....	1957	80	77	92	101	178	564	253	112	141	99	159	105
	1956	55	67	83	93	228	590	254	102	114	102	124	97
	1955	57	48	48	45	103	326	230	126	129	114	98	84

<sup>1</sup> Industry relates to last full-time job, for wage and salary workers. Unemployment based on new definitions.

<sup>2</sup> Includes forestry and fisheries and a small number of self-employed and unpaid family workers not shown separately.

Longer term unemployment also shows a pattern of seasonality—although less pronounced. It is related, of course, to a seasonal rise in unemployment some months previous. For example, the construction layoffs that come in the fall with bad weather are the genesis of a seasonal increase in the number out of work 15 weeks or longer in the early spring.

The range of seasonal variation in the number unemployed 15 weeks or longer was from 450,000 to 700,000 in 1957. The high point is reached in spring, reflecting the accumulation of winter layoffs in outdoor work such as agriculture and construction (table I-2). On the whole, however, seasonality accounted for only a small proportion of the annual average level of long-term unemployment in 1957.

TABLE I-2.—*Persons unemployed 15 weeks or longer, by industry group: January 1955–December 1957*

[In thousands]

Industry group <sup>1</sup>	Year	January	February	March	April	May	June	July	August	September	October	November	December
Total <sup>2</sup> .....	1957	500	617	663	706	637	508	494	470	456	523	523	626
	1956	551	642	682	648	602	501	482	470	470	420	437	485
	1955	874	974	1,062	1,111	879	648	586	460	458	451	423	498
Agriculture and construction.....	1957	67	106	164	132	102	67	49	39	50	52	48	78
	1956	58	88	147	104	101	69	54	54	52	37	42	48
	1955	95	131	191	195	137	105	77	56	47	41	49	53
Manufacturing.....	1957	188	200	195	214	233	186	207	210	194	227	196	245
	1956	161	176	201	241	225	198	234	187	187	141	158	161
	1955	308	339	289	329	275	192	167	139	140	137	137	153
Mining and transportation.....	1957	42	50	49	51	40	36	39	42	36	33	42	40
	1956	43	59	66	51	50	27	25	49	33	39	33	35
	1955	124	143	164	181	103	90	77	61	24	33	33	40
Wholesale and retail trade.....	1957	74	101	90	97	91	59	66	63	55	62	39	52
	1956	82	110	106	84	91	91	78	81	81	67	58	84
	1955	114	130	157	152	125	81	108	69	61	75	65	62
Service and public administration.....	1957	78	98	83	118	98	96	83	70	72	73	80	94
	1956	107	103	104	123	85	69	61	64	81	76	71	87
	1955	145	170	180	148	169	128	115	98	125	114	66	103
New workers.....	1957	44	33	56	58	50	44	29	32	43	62	54	63
	1956	62	58	39	36	38	32	23	34	30	48	54	55
	1955	62	44	50	74	42	38	34	25	47	43	55	58

<sup>1</sup> Industry relates to last full-time job for wage and salary workers. Unemployment based on new definitions.

<sup>2</sup> Includes forestry and fisheries and a small number of self-employed and unpaid family workers not shown separately.

The current monthly survey data, however, do not provide a direct measure of final duration of unemployment because the figures relate only to the duration for persons still unemployed at the time of the survey. The data for any single month do not reveal, for example, how many of the unemployed will end their spell of unemployment immediately after the survey week and how many will remain unemployed and move into a longer duration category. Some indication of the relationship between duration of unemployment at the time of the survey and final duration at the time of reemployment or labor force withdrawal can be obtained by use of a cohort method, that is, tracing the experience of the same individuals over a period of months. This technique is a little more precise when data for single weeks of unemployment are used. However, estimates for single weeks were first tabulated in 1959; April-July 1959 data are used here for illustrative purposes even though the level and rate of unemployment were about 20 percent higher than in 1957.

In April 1959, there were 3.6 million unemployed—about 5 percent of the civilian labor force. The short-term unemployed (less than 5 weeks) included 1.4 million persons. The experience of these workers in the following 3 months was:

(a) 950,000 were no longer unemployed in May; 450,000 continued to be unemployed in May.

(b) 150,000 (of the 450,000) were no longer unemployed in June; 300,000 continued to be unemployed in June.

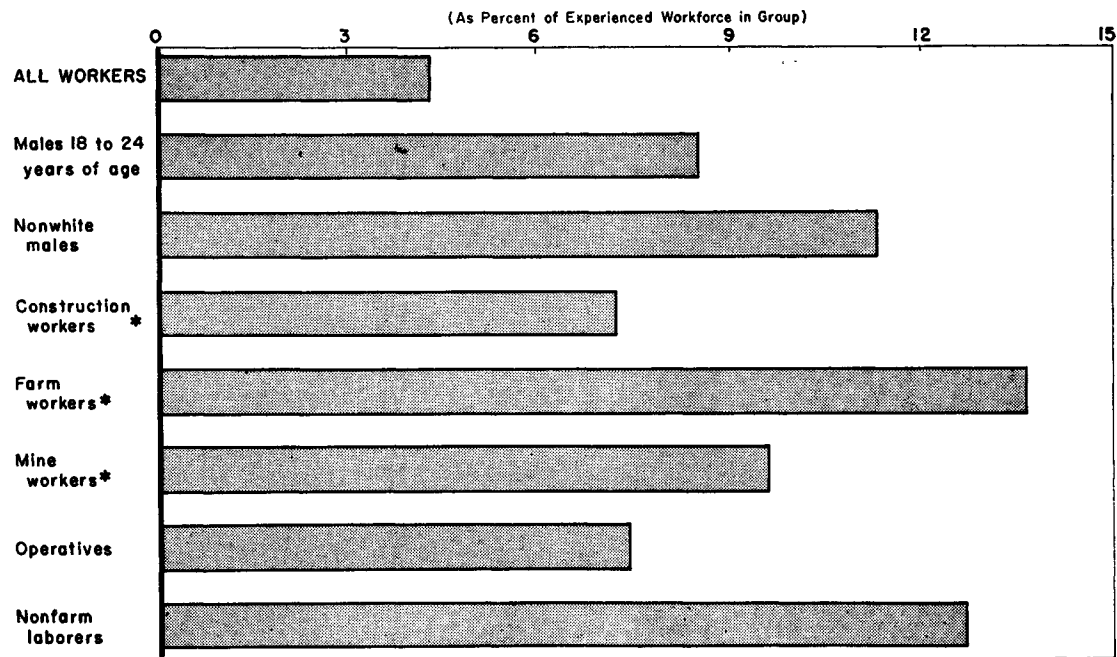
(c) 170,000 (of the 300,000) were no longer unemployed in July; 130,000 continued to be unemployed in July.

Thus, of the original group of 1.4 million newly unemployed, 130,000—less than 10 percent—definitely moved into the long-term group and another 170,000 ended their unemployment somewhere between 10 and 18 weeks. On the basis of the data for single weeks, it has been estimated that about 70,000 of the latter group eventually experienced from 15 to 18 weeks of unemployment.

#### ANNUAL WORK EXPERIENCE SURVEY DATA

Another way of looking at the extent of unemployment is to study the work history of the population over an entire calendar year. From this viewpoint, we want to know how many different people were unemployed at any time during the year, and the total number of weeks they were unemployed, counting all the spells of unemployment they may have had during the year. This kind of information is available from the survey of work experience during the entire year, which is conducted annually.

CHART 2  
UNEMPLOYMENT TOTALING 15 WEEKS OR LONGER FOR SELECTED GROUPS  
DURING CALENDAR YEAR 1957



UNITED STATES DEPARTMENT OF LABOR  
BUREAU OF LABOR STATISTICS

\* Wage and salary

The 1957 work experience data showed that there were 10.6 million different persons who had lost some working time during the year because of unemployment or layoff. About 3.6 million—or one-third of the total—lost less than 5 weeks. Another 2.3 million lost from 5 to 10 weeks. More than half (55 percent) of those experiencing any unemployment lost a total of 10 weeks or less.

There were some 3.4 million—one-third of the total—who experienced 15 weeks or more of unemployment. This group included 1.5 million (14 percent of the total) who had over 26 weeks of unemployment during the course of the year.

As compared with the data for a single month (or an average of monthly data) the work experience data necessarily show a much smaller proportion with unemployment of less than 5 weeks and a much larger proportion with 15 weeks or more. One reason is that the work experience data reflect an aggregate of all spells of unemployment; about 4.4 million of the annual total of unemployed had more than one spell. Another reason for the longer duration is that by and large the data reflect completed spells of unemployment rather than duration of those still unemployed. Moreover, there are indications that unemployment is underreported when respondents are asked to recall their experience during a whole year, and a short period of unemployment is more likely to be overlooked than are longer spells or a succession of short spells.

#### CHARACTERISTICS OF THE SHORT- AND LONG-TERM UNEMPLOYED IN 1957

##### *Age and sex*

In just about every age group, men are more likely than women to have a higher proportion of long-term unemployed and a lower proportion of short-term unemployed.<sup>2</sup> At the same time, for both men and women, duration of unemployment tends to lengthen with age. The differences are especially marked at the two extremes of the age scale. For those under 18, the short-term unemployed outnumber the long-term by 6 to 1. For those 65 and over, the numbers of short- and long-term unemployed are virtually equal (table I-3).

<sup>2</sup> Rates of long-term unemployment in the sections through p. 27 represent the number unemployed 15 weeks or longer as a percent of all the unemployed in a given group.

TABLE I-3.—Duration of unemployment, by age and sex: annual average, 1957

[Number in thousands]

Age and sex	Unemployment rate	Total number	4 weeks or less	5 and 6 weeks	7 to 10 weeks	11 to 14 weeks	15 weeks and over			As a percent of total unemployed		Percent distribution	
							Total	15 to 26	27 and over	4 weeks or less	15 weeks and over	4 weeks or less	15 weeks and over
Total.....	4.3	2,936	1,485	258	392	240	560	321	239	50.6	19.1	100.0	100.0
14 to 17.....	10.7	307	187	28	39	23	32	22	10	60.9	10.4	12.6	5.7
18 and 19.....	10.9	266	151	25	30	21	38	25	13	56.8	14.3	10.2	6.8
20 to 24.....	7.1	430	228	46	61	36	59	41	18	53.0	13.7	15.4	10.5
25 to 44.....	3.5	1,072	541	90	150	93	197	115	82	50.5	18.4	36.4	35.2
45 to 64.....	3.3	748	334	60	99	59	196	101	95	44.7	26.2	22.5	35.0
65 and over.....	3.4	111	43	9	13	8	38	17	21	38.7	34.2	2.9	6.8
Male.....	4.1	1,893	916	170	259	160	386	217	169	48.4	20.4	61.7	68.9
14 to 17.....	10.6	192	110	19	25	16	23	15	8	57.3	12.0	7.4	4.1
18 and 19.....	12.3	159	84	16	21	16	23	16	7	52.8	14.5	5.7	4.1
20 to 24.....	7.8	283	144	31	42	25	41	28	13	50.9	14.5	9.7	7.3
25 to 44.....	3.1	653	326	57	89	58	123	71	52	49.9	18.8	22.0	22.0
45 to 64.....	3.4	522	222	42	73	41	144	73	71	42.5	27.6	14.9	25.7
65 and over.....	3.4	83	30	6	9	6	32	14	18	36.1	38.6	2.0	5.7
Female.....	4.7	1,043	568	88	133	79	174	104	70	54.5	16.7	38.2	31.1
14 to 17.....	11.0	115	77	9	14	7	9	7	2	67.0	7.8	5.2	1.6
18 and 19.....	9.4	107	67	9	9	5	15	9	6	62.6	14.2	4.5	2.7
20 to 24.....	6.0	147	34	15	19	11	18	13	5	57.1	12.2	5.7	3.2
25 to 44.....	4.5	419	215	33	61	35	74	44	30	51.3	17.7	14.5	13.2
45 to 64.....	3.1	226	112	18	26	18	52	28	24	49.6	23.0	7.5	9.3
65 and over.....	3.4	28	13	3	4	2	6	3	3	(1)	(1)	.9	1.1

<sup>1</sup> Percent not shown where base is less than 50,000.

In age groups under 25, duration of unemployment is shorter than average; in age groups over 45, it is above average. Altogether, persons under 25 accounted for 37 percent of the short-term, but only 23 percent of the long-term unemployed. These proportions were just about reversed for those 45 and over.

These age-sex patterns are the same in both the monthly survey data and in the work experience data relating to cumulative weeks of unemployment for the entire calendar year. The monthly data reflect the fact that each continuous spell of unemployment tends to be longer for men than for women, and longer for older workers than for younger workers. The work experience data reflect the additional fact that men are more likely than women to have more than one spell of unemployment in a year, and that older workers (especially those 45 and over) are more subject to repeated layoffs (more than one spell) during the year (table I-4).



TABLE I-4.—*Cumulative weeks of unemployment, by age and sex: Calendar year 1957 (based on survey of annual work experience)*

[Numbers in thousands]

Age and sex	Total number	4 weeks or less	5 to 10 weeks	11 to 14 weeks	15 weeks and over			As a percent of total with unemployment			Percent distribution	
					Total	15 to 26	27 and over	4 weeks or less	15 weeks and over	2 or more spells	4 weeks or less	15 weeks and over
Total.....	9,528	2,443	2,339	1,394	3,352	1,898	1,454	25.7	35.2	45.9	100.0	100.0
14 to 17.....	392	194	71	38	90	41	49	49.2	23.3	39.0	7.9	2.7
18 and 19.....	655	247	116	84	210	102	108	37.9	31.7	41.8	10.1	6.3
20 to 24.....	1,455	449	363	196	443	246	197	30.9	30.5	38.5	18.4	13.2
25 to 44.....	4,207	1,063	1,103	659	1,383	837	546	25.3	32.8	45.4	43.5	41.3
45 to 64.....	2,556	465	615	334	1,092	614	478	18.2	42.7	52.1	19.0	32.6
65 and over.....	263	25	71	33	134	58	76	9.9	51.4	55.5	1.0	4.0
Male.....	6,576	1,477	1,643	1,032	2,426	1,387	1,039	22.5	36.9	48.2	60.5	72.4
14 to 17.....	251	109	53	29	61	27	34	43.0	24.7	40.6	4.5	1.8
18 and 19.....	413	133	78	56	148	64	84	32.4	35.4	46.5	5.4	4.4
20 to 24.....	1,013	278	261	152	320	189	131	27.5	31.7	41.5	11.4	9.5
25 to 44.....	2,919	653	788	497	981	620	361	22.4	33.6	47.1	26.7	29.3
45 to 64.....	1,771	285	414	270	802	438	364	16.1	45.3	54.2	11.7	23.9
65 and over.....	209	19	49	28	114	49	65	9.1	54.5	58.9	.8	3.4
Female.....	2,952	966	696	362	926	511	415	32.8	31.5	40.9	39.5	27.6
14 to 17.....	141	85	18	9	29	14	15	60.3	20.6	36.2	3.5	.9
18 and 19.....	242	114	38	28	62	38	24	47.1	25.6	33.9	4.7	1.8
20 to 24.....	442	171	102	44	123	57	66	38.7	28.0	31.7	7.0	3.7
25 to 44.....	1,288	410	315	162	402	217	185	31.8	31.3	41.8	16.8	12.0
45 to 64.....	785	180	201	114	290	176	114	23.1	36.8	47.4	7.4	8.7
65 and over.....	54	6	22	5	20	9	11	11.1	37.0	42.6	.2	.6

NOTE.—Excludes 1,100,000 persons who worked 50 to 51 weeks but had 1 or 2 weeks of layoff, and 900,000 persons who did not work at all but looked for work at some time

during the year. Characteristics data for these persons are not available.

In general, the groups with the shorter average duration are also the ones with the higher rates of unemployment. That is, a larger proportion of their numbers in the labor force is subject to unemployment, but is unemployed a shorter period of time in any given spell. The unemployment rate for teenage boys is three times that for adult men 25 years and over. Youngsters are in the process of adjusting to the labor market and experience a good deal of unemployment in the course of finding or changing jobs during the year. This kind of unemployment is apparently shorter, however, than that experienced by regular workers who lose their jobs.

#### *Marital status*

Married men living with their families report a lower rate of unemployment over the course of a calendar year than do other men, and also less long-term unemployment. About a third of the married men with unemployment or layoff had lost as much as 15 weeks of working time during 1957 as compared with two-fifths of the single men 20 years of age and over, and nearly one-half of all other men (widowed, divorced, separated, etc.). In part, these differences could be related to the age distributions of the various marital groups. Those who are widowed, divorced, or married but living apart from their wives tend to be older and because of age alone would have greater difficulty in finding another job once unemployed. More recent data from the 1959 monthly surveys show, however, that married men have shorter average duration of unemployment age by age than other men who had been (but are not currently) married. Apparently, the marital status of men is itself a factor which leads to less unemployment, in part, because responsibilities exert more pressure on such men to find and hold a job, in part, because men who are married have other personal characteristics which make them more employable.

Marital status makes little difference in the average duration of unemployment among women, and none at all in the extent of long-term unemployment. About one-third of both married and single unemployed women (among single women only those age 20 and over are included in the comparison) had 15 weeks or more of unemployment in 1957 and one-third of each group also reported short duration unemployment, i.e., less than 5 weeks of unemployment.

#### *Color*

The average monthly rate of unemployment for nonwhite workers was twice that of white workers in 1957 (8 percent versus 4 percent), the usual relationship in most postwar years. There was also a slightly greater tendency for nonwhite workers than white workers to be among the long-term unemployed (table I-5). The difference in duration shows up much more sharply in the work experience data because the nonwhites not only have higher unemployment rates, but are more subject than the whites to repeated spells of unemployment. As a result, 44 percent of the nonwhites who experienced any unemployment were long-term unemployed (on an annual basis) as compared with 33 percent of the whites (table I-6).

TABLE I-5.—Duration of unemployment by color and sex: Annual average, 1957  
[Number in thousands]

Color and sex	Unemployment rate	Total number	4 weeks or less	5 and 6 weeks	7 to 10 weeks	11 to 14 weeks	15 weeks and over			As a percent of total unemployed		Percent distribution	
							Total	15 to 26	27 and over	4 weeks or less	15 weeks and over	4 weeks or less	15 weeks and over
Total.....	4.3	2,936	1,485	258	392	240	560	321	239.	50.6	19.1	100.0	100.0
White.....	3.9	2,350	1,205	206	311	191	436	253	183	51.3	18.6	81.2	77.7
Male.....	3.7	1,519	745	137	208	129	299	169	130	49.0	19.7	50.2	53.3
Female.....	4.3	832	460	69	103	62	137	84	53	55.3	16.5	31.0	24.4
Nonwhite.....	8.0	585	279	52	81	48	125	69	56	47.7	21.4	18.8	22.3
Male.....	8.4	374	171	33	51	31	88	49	39	45.7	23.5	11.5	15.7
Female.....	7.4	211	108	19	30	17	37	20	17	51.2	17.5	7.3	6.6

TABLE I-6.—Cumulative weeks of unemployment by color and sex: Calendar year, 1957 (based on survey of annual work experience)  
[Numbers in thousands]

Color and sex	Total number	4 weeks or less	5 to 10 weeks	11 to 14 weeks	15 weeks and over			As a percent of total with unemployment			Percent distribution	
					Total	15 to 26	27 and over	4 weeks or less	15 weeks and over	2 or more spells	4 weeks or less	15 weeks and over
Total.....	9,528	2,443	2,339	1,394	3,352	1,898	1,454	25.7	35.2	45.9	100.0	100.0
White.....	7,736	2,106	1,957	1,111	2,563	1,497	1,066	27.2	33.1	43.9	86.2	76.5
Male.....	5,420	1,287	1,403	842	1,888	1,095	793	23.7	34.8	46.5	52.7	56.3
Female.....	2,316	819	554	269	677	404	273	35.4	29.2	37.8	33.5	20.2
Nonwhite.....	1,792	338	381	283	789	401	388	18.9	44.0	55.4	13.8	23.5
Male.....	1,156	190	240	189	537	292	245	16.4	46.5	56.7	7.8	16.0
Female.....	636	148	141	94	252	109	143	23.3	39.6	52.8	6.1	7.5

NOTE.—See table I-4.

One reason for the difference is the concentration of nonwhite workers in laboring and other relatively unskilled jobs. Among all laborers, white and nonwhite, the proportion who lose an aggregate of more than 15 weeks due to unemployment runs as high as 44 percent of those with any unemployment.

Nonwhite workers account for an especially large proportion of those with unemployment cumulating to more than one-half year. They represented 27 percent of the very long-term unemployed, although they constituted only 11 percent of the total number of workers.

### *Industry*

For any given spell of unemployment, the duration tends to be longer for factory workers than for those losing nonmanufacturing jobs. Duration is comparatively short for workers previously employed in agriculture, construction, trade, services, and for those without previous work experience (table I-7). Over the course of an entire year, however, workers from industries which are highly seasonal and/or in which job attachments are relatively unstable (agriculture, construction, domestic service) lose a comparatively large number of weeks due to unemployment (table I-8). Over 60 percent of the workers in these activities who had any unemployment experienced two or more spells of unemployment.

TABLE. I-7.—Average monthly duration of unemployment by industry, 1957

[Numbers in thousands]

Industry division	Unem- ployment rate	Total number	4 weeks or less	5 and 6 weeks	7 to 10 weeks	11 to 14 weeks	15 weeks and over			As a percent of total unemployed		Percent distribu- tion	
							Total	15 to 26	27 and over	4 weeks or less	15 weeks and over	4 weeks or less	15 weeks and over
Total.....	4.3	2,936	1,485	258	392	240	560	321	239	50.6	19.1	100.0	100.0
Experienced workers.....	3.9	2,640	1,322	231	356	220	512	295	217	50.1	19.4	89.0	91.4
Agriculture.....	2.1	131	77	11	16	12	16	10	6	58.8	12.2	5.2	2.9
Nonagricultural industries.....	4.1	2,508	1,245	220	340	208	496	285	211	49.6	19.8	83.8	88.6
Wage and salary <sup>1</sup> .....	4.5	2,438	1,206	216	332	204	479	275	204	49.5	19.6	81.2	85.5
Mining.....	5.7	40	17	2	5	3	14	8	6	( <sup>2</sup> )	( <sup>2</sup> )	1.1	2.5
Construction.....	9.8	368	184	36	48	33	67	43	24	50.0	18.2	12.4	12.0
Manufacturing.....	5.0	904	406	81	128	82	208	118	90	44.9	23.0	27.3	37.1
Durables.....	4.9	505	222	44	70	49	119	68	51	44.0	23.6	14.9	21.2
Nondurables.....	5.3	400	184	37	58	33	88	49	39	46.0	22.0	12.4	15.7
Transportation.....	3.1	148	78	11	20	12	27	17	10	52.7	18.3	5.3	4.8
Trade.....	4.5	466	245	41	66	37	77	42	35	52.6	16.5	16.5	13.7
Services.....	3.2	442	241	38	60	34	68	41	27	54.5	15.4	16.2	12.1
Public administration.....	2.0	61	32	6	6	2	16	5	11	52.5	26.2	2.2	2.9
Self-employed and unpaid.....	1.0	71	39	4	8	4	17	10	7	64.9	23.9	2.6	3.0
New workers.....	( <sup>3</sup> )	296	164	27	36	20	48	26	22	55.4	16.2	11.0	8.6

<sup>1</sup>Includes forestry and fisheries, not shown separately.<sup>2</sup>Percent not shown where base is less than 50,000.

Not applicable.

TABLE I-8.—Cumulative weeks of unemployment, by industry division of longest job: 1957 (based on survey of annual work experience)

[Numbers in thousands]

Industry divisions	Total number	4 weeks or less	5 to 10 weeks	11 to 14 weeks	15 weeks and over			As a percent of total with unemployment			Percent distribution	
					Total	15 to 26	27 and over	4 weeks or less	15 weeks and over	2 or more spells	4 weeks or less	15 weeks and over
Total.....	9,528	2,443	2,339	1,394	3,352	1,898	1,454	25.7	35.2	45.9	100.0	100.0
Agriculture.....	584	126	125	71	262	115	147	21.6	44.9	67.0	5.2	7.8
Nonagricultural industries..	8,942	2,317	2,212	1,321	3,091	1,786	1,305	25.9	34.6	44.6	94.8	92.2
Wage and salary <sup>1</sup> .....	8,597	2,267	2,133	1,267	2,929	1,695	1,234	26.4	34.1	43.8	92.8	87.4
Mining.....	152	36	35	24	57	28	29	23.7	37.5	51.3	1.5	1.7
Construction.....	1,347	246	323	229	548	312	236	18.3	40.7	60.7	10.1	16.3
Manufacturing.....	3,360	927	892	495	1,046	608	438	27.6	31.1	39.0	37.9	31.2
Durables.....	1,999	575	557	296	571	341	230	28.6	28.6	36.2	23.5	17.0
Nondurables.....	1,361	352	335	199	475	267	208	25.9	34.9	43.2	14.4	14.2
Transportation.....	512	124	142	66	180	126	54	24.2	35.2	43.6	5.1	5.4
Trade.....	1,565	443	371	210	541	317	224	28.3	34.6	39.5	18.1	16.1
Services.....	1,479	432	331	220	496	269	227	29.2	33.5	44.7	17.7	14.8
Public administration.....	182	59	39	23	61	35	26	32.4	33.5	29.1	2.4	1.8
Self-employed and unpaid.....	345	50	79	54	162	91	71	14.5	47.0	66.7	2.0	4.8

<sup>1</sup> Includes forestry and fisheries, not shown separately.

NOTE.—See table I-4.

Tables I-9 shows the number with 15 weeks or more of cumulative unemployment during 1957 by number of spells. The unemployed factory workers in the long-term group (about 1 million) were about equally divided between those who had one spell of unemployment and those who had more than one spell during the year. On the other hand, about three-fourths of the unemployed farm, construction, and domestic service workers with 15 weeks or more of unemployment had two or more spells.

One group with comparatively high rates of long-term unemployment in both the monthly and annual surveys are the nonfarm self-employed. This group probably includes many persons in highly seasonal or marginal enterprises who are obligated to seek wage work during the off season.

It is difficult to generalize about the relationship between an industry's unemployment rate and the duration of individual spells of unemployment. Construction is one example of a high rate of unemployment associated with relatively short duration for each spell. In trade and services, on the other hand, the rates of unemployment are only average or slightly below and the duration is also shorter than average.

## 24 EXTENT AND NATURE OF FRICTIONAL UNEMPLOYMENT

TABLE I-9.—*Persons unemployed a cumulative total of 15 weeks or longer, by spells of unemployment, by selected characteristics: Calendar year 1957 (based on survey of annual work experience)*

[Numbers in thousands]

Selected characteristics	Total	1 spell	2 or more spells	2 or more as a percent of total
Age and sex, total.....	3,352	1,303	2,049	61.1
Male.....	2,426	891	1,535	63.3
14 to 19.....	209	76	133	63.6
20 to 24.....	320	146	174	54.4
25 to 44.....	981	348	633	64.5
45 to 64.....	802	279	523	65.2
65 and over.....	114	42	72	63.2
Female.....	926	412	514	55.5
14 to 19.....	91	30	61	67.0
20 to 24.....	123	66	57	46.3
25 to 44.....	402	191	211	52.5
45 and over.....	310	125	185	59.7
Color and sex:				
White.....	2,563	1,030	1,533	59.8
Male.....	1,888	707	1,181	62.6
Female.....	677	325	352	52.0
Nonwhite.....	789	273	516	65.4
Male.....	537	184	353	65.7
Female.....	252	89	163	64.7
Industry:				
Agriculture.....	262	57	205	78.2
Nonagricultural wage and salary:				
Mining.....	57	17	40	70.2
Construction.....	548	146	402	73.4
Manufacturing.....	1,046	513	533	51.0
Durables.....	571	290	281	49.2
Nondurables.....	475	223	252	53.1
Transportation.....	180	72	108	60.0
Trade.....	541	239	302	55.8
Services.....	496	185	311	62.7
Public administration.....	61	38	23	37.7
Nonagricultural self-employed and unpaid.....	162	34	128	79.0
Occupation:				
White-collar.....	507	230	277	54.6
Professional and managerial.....	193	73	120	62.2
Clerical.....	204	110	94	46.1
Sales.....	110	47	63	57.3
Blue collar.....	2,168	854	1,314	60.6
Craftsmen.....	530	176	354	66.8
Operatives.....	1,060	475	585	55.2
Laborers.....	578	203	375	64.9
Service.....	443	163	280	63.2
Private household.....	111	25	86	77.5
Other.....	332	138	194	58.4
Farm laborers.....	224	49	175	78.1



*Occupation*

White-collar workers—especially those previously employed in clerical occupations—tend to remain unemployed for shorter periods of time than do blue-collar workers (table I-10). The differences are magnified when a whole year's experience is considered, as the blue-collar workers are more likely to suffer more than one spell of unemployment. The blue-collar group includes a sizable number of construction craftsmen and laborers who are particularly subject to periodic layoffs (table I-11).

As noted in the industry discussion, farm laborers and domestic service workers have frequent spells of unemployment (60 to 70 percent have at least two during the year). Although each stretch may be relatively brief, the cumulative total of lost time exceeds 15 weeks for over two-fifths of the workers in these two occupations who had any unemployment.

TABLE I-10.—Average monthly duration of unemployment, by major occupation group, 1957

[Numbers in thousands]

Major occupation group	Unemployment rate	Total number	4 weeks or less	5 and 6 weeks	7 to 10 weeks	11 to 14 weeks	15 weeks and over			As a percent of total unemployed		Percent distribution	
							Total	15 to 26	27 and over	4 weeks or less	15 weeks and over	4 weeks or less	15 weeks and over
Total.....	4.2	2,863	1,438	291	355	223	556	313	243	50.2	19.4	100.0	100.0
White-collar.....	1.9	516	280	45	58	34	99	51	48	54.3	19.2	19.5	17.8
Professional and managerial.....	1.1	144	74	12	17	13	28	11	17	51.4	19.4	5.1	5.0
Clerical.....	2.8	263	147	25	31	16	44	27	17	55.9	16.7	10.2	7.9
Sales.....	2.6	109	59	8	10	5	27	13	14	54.1	24.8	4.1	4.9
Blue-collar.....	5.9	1,573	749	154	207	137	326	187	139	47.6	20.7	52.1	58.6
Craftsmen.....	3.8	345	167	32	44	28	74	36	38	48.4	21.4	11.6	13.3
Operatives.....	6.3	845	395	86	112	81	171	103	68	46.7	20.2	27.5	30.8
Laborers.....	9.4	383	187	36	51	28	81	48	33	48.8	21.1	13.0	14.6
Service.....	4.7	376	201	36	43	26	70	38	32	53.5	18.6	14.0	12.6
Private household.....	3.7	81	46	5	7	7	16	8	8	56.8	19.8	3.2	2.9
Other service.....	5.1	295	155	31	36	19	54	30	24	52.5	18.3	10.8	9.7
Farm.....	1.9	115	66	9	13	9	18	10	8	57.4	15.7	4.6	3.2
Farmers.....	.3	9	4	-----	2	1	2	1	1	(1)	(1)	.3	.4
Farm laborers.....	3.7	106	62	9	11	8	16	9	7	58.5	15.1	4.3	2.9
New workers.....	(1)	283	142	47	34	17	43	27	16	50.2	15.2	9.9	7.7

1 Percent not shown where base is less than 50,000.

\* Not applicable.

NOTE.—Data based on quarterly months only (January, April, July, and October). The distribution for the total, therefore, differs from that shown on other tables.

TABLE I-11.—Cumulative weeks of unemployment, by occupation of longest job in 1957 (based on survey of annual work experience)

[Numbers in thousands]

Major occupation group	Total number	4 weeks or less	5 to 10 weeks	11 to 14 weeks	15 weeks and over			As a percent of total with unemployment			Percent distribution	
					Total	15 to 26	27 and over	4 weeks or less	15 weeks and over	2 or more spells	4 weeks or less	15 weeks and over
Total.....	9,528	2,443	2,339	1,394	3,352	1,898	1,454	25.7	35.2	45.9	100.0	100.0
White-collar.....	1,870	661	447	256	507	322	185	35.3	27.1	33.9	27.1	15.1
Professional and managerial.....	557	130	146	88	193	131	62	23.3	34.6	39.3	5.3	5.8
Clerical.....	932	391	226	112	204	121	83	42.0	21.9	30.5	16.0	6.1
Sales.....	381	140	75	56	110	70	40	36.7	28.9	34.1	5.7	3.3
Blue-collar.....	5,944	1,354	1,515	907	2,168	1,237	931	22.8	36.5	47.8	55.4	64.7
Craftsmen.....	1,542	348	416	248	530	293	237	22.6	34.4	51.4	14.2	15.8
Operatives.....	3,069	768	789	452	1,060	610	450	25.0	34.5	43.5	31.4	31.6
Laborers.....	1,333	238	310	207	578	334	244	17.9	43.4	53.4	9.7	17.2
Service.....	1,183	307	265	169	443	242	201	26.0	37.4	46.7	12.6	13.2
Private household.....	304	78	80	35	111	53	58	25.7	36.5	60.5	3.2	3.3
Other.....	879	229	185	134	332	189	143	26.1	37.8	41.9	9.4	9.9
Farm.....	531	121	113	64	233	98	135	22.8	43.9	67.0	5.0	7.0
Farmers.....	45	8	22	6	9	6	3	(1)	(1)	(1)	.3	.3
Farm laborers.....	486	113	91	58	224	92	132	23.3	46.1	68.3	4.6	6.7

<sup>1</sup> Percent not shown where base is less than 50,000.

NOTE.—See table 7.

*Long-term unemployed as a percent of all workers*

It is also meaningful to examine the number of long-term unemployed in relation to the entire work force within each group. The problem of long-term unemployment is placed in a somewhat different perspective when shown as a percentage of all workers in a given age, industry, or occupation group. (See table I-12.) The reason is that such rates reflect not only the duration of any given spell and the proportion with more than one spell, but also the overall rate of unemployment in the group.

On this basis, for example, boys 18 to 24 years of age are seen to have the highest rate of long-term unemployment (8 to 10 percent of their number in the annual labor force, as compared with 5 percent for men 45 to 64). The much higher incidence of unemployment among young men on a calendar year basis apparently outweighs the fact that older men tend to remain unemployed longer once out of a job and also are more likely to have more than one spell.

TABLE I-12.—Persons unemployed a cumulative total of 15 weeks or longer as a percent of total with work experience, by selected characteristics, calendar year 1957 based on survey of annual work experience

[Numbers in thousands]

Selected characteristics	Total with work experience	Part-year workers with unemployment or layoffs			
		Number	Percent of total	15 weeks and over	
				Number	Percent of total
Age and sex, total.....	77,664	9,528	12.3	3,352	4.3
Male.....	48,709	6,576	13.5	2,426	5.0
14 to 17.....	2,730	251	9.2	61	2.2
18 and 19.....	1,558	413	26.5	148	9.5
20 to 24.....	3,926	1,013	25.8	320	8.2
25 to 44.....	21,474	2,919	13.6	981	4.6
45 to 64.....	15,876	1,771	11.2	802	5.1
65 and over.....	3,145	209	6.6	114	3.6
Female.....	28,955	2,952	10.2	926	3.2
14 to 17.....	1,987	141	7.1	29	1.5
18 and 19.....	1,511	242	16.0	62	4.1
20 to 24.....	3,356	442	13.2	123	3.7
25 to 44.....	11,974	1,288	10.8	402	3.4
45 to 64.....	8,933	785	8.8	290	3.2
65 and over.....	1,189	54	4.5	20	1.7
Color and sex:					
White.....	69,116	7,736	11.2	2,563	3.7
Male.....	43,958	5,420	12.3	1,888	4.3
Female.....	25,158	2,316	9.2	677	2.7
Nonwhite.....	8,546	1,792	21.0	789	9.2
Male.....	4,751	1,156	24.3	537	11.3
Female.....	3,795	636	16.8	252	6.6
Industry:					
Agriculture.....	8,355	584	7.0	262	3.1
Wage and salary.....	2,469	506	20.5	237	9.6
Nonagricultural wage and salary:					
Mining.....	795	152	19.1	57	7.2
Construction.....	4,022	1,347	33.5	548	13.6
Manufacturing.....	19,409	3,360	17.3	1,046	5.4
Durable.....	11,112	1,999	18.0	571	5.1
Nondurable.....	8,297	1,361	16.4	475	5.7
Transportation.....	4,887	512	10.5	180	3.7
Trade.....	12,407	1,565	12.6	541	4.4
Service.....	16,929	1,479	8.7	496	2.9
Private household.....	3,370	382	11.3	154	4.6
Other.....	13,559	1,097	8.1	342	2.5
Public administration.....	3,318	182	5.5	61	1.8
Nonagricultural self-employed and unpaid.....	7,541	345	4.6	162	2.1
Occupation:					
White-collar.....	30,833	1,870	6.1	507	1.6
Professional and managerial.....	14,499	557	3.8	193	1.3
Clerical.....	11,071	932	8.4	204	1.8
Sales.....	5,263	381	7.2	110	2.1
Blue-collar.....	28,589	5,944	20.8	2,168	7.6
Craftsmen.....	9,659	1,542	16.0	530	5.5
Operatives.....	14,384	3,069	21.3	1,060	7.4
Laborers.....	4,546	1,333	29.3	578	12.7
Service.....	10,169	1,183	11.6	443	4.4
Private household.....	3,068	304	9.9	111	3.6
Other.....	7,101	879	12.4	332	4.7
Farm laborers.....	4,741	486	10.3	224	4.7

This approach toward measurement of long-term unemployment does not alter the previously observed comparisons by sex and color. The rates of unemployment among men are higher than among women in every age group, as is the proportion of long termers among the unemployed. Similarly, the proportion of unemployed is higher in the nonwhite than in the white labor force. This fact, taken together with the longer duration of those nonwhite workers who become unemployed, results in a rate of long-term unemployment (as a percentage of those who worked at any time during the year) three times that of white workers.

When viewed in this broader context, however, construction workers fare the worst of any industry group in terms of long-term unemployment. Some 14 percent of those whose longest job was in that industry during 1957 had 15 weeks or more of unemployment as compared with only 4 percent for all workers. Farm wage workers had the second highest rate of long-term unemployment (10 percent). In these two groups, the especially high rates of unemployment (one-third and one-fifth, respectively) combine with a high proportion who are hit several times during the year to produce an especially high rate of long-term unemployment, even though each individual spell may be comparatively brief.

On the other hand, public administration workers and the nonfarm self-employed have the smallest overall incidence of long-term unemployment. This is the case despite the fact that a high proportion of those who do become unemployed remain out of work for over 15 weeks, and results from the fact that only a small proportion of these kinds of workers ever become unemployed at all.

In terms of occupation, the fact that unemployment is a much more serious problem for blue-collar than for white-collar workers again is brought out more sharply. The unemployment rate for blue-collar workers is three times that of white-collar workers; the rate for unskilled laborers is nearly eight times that of professional, technical, and managerial workers. Blue-collar workers with any unemployment are also more likely to be out of work two or more times. For the year as a whole,  $7\frac{1}{2}$  percent of all blue-collar workers had 15 or more weeks of unemployment as compared with  $1\frac{1}{2}$  percent of all white-collar workers.

#### APPENDIX I TO CHAPTER I

##### SOURCE OF DURATION AND TURNOVER DATA

Monthly estimates of the duration of unemployment have been compiled from the Census Bureau's Current Population Survey for nearly two decades. Each respondent identified as unemployed in the survey is asked the number of continuous weeks he was looking for work (through the survey week). Duration also reflects the time that respondents would have been looking for work except for temporary illness, or belief that no work was available in their line or in the community. For persons on layoff, duration of unemployment represents the number of full weeks since the termination of their most recent employment.

The current duration of unemployment, as measured in the monthly surveys, is not necessarily the final duration for any given spell of unemployment. Current duration and final duration are the same only for those persons who actually find a job or leave the labor force immediately after the survey week. Another limitation is that the data represent only the most recent unbroken spell of unemployment. It is useful, therefore, to supplement the current survey data with information from surveys of work experience. These work history surveys measure the extent of employment and unemployment over the course of an entire calendar year. They reflect all spells of unemployment and the aggregate amount

of time lost because of unemployment during the calendar year. Moreover, they provide information as to the proportion of unemployed workers who had more than one spell of unemployment.

The monthly Current Population Survey also provides data on turnover among the unemployed. These data are based on tabulations for individuals who are in the sample for 2 consecutive months (each month, 25 percent of the sample is replaced by new households and 75 percent continue to be in the sample). By a matching process, it is possible to estimate the changes in status from one month to the next for identical persons. These data are designated as "gross" changes, as contrasted with "net" changes. An illustration would be a situation in which unemployment, for example, might be unchanged over the month (net change) even though 1 million persons found jobs; 1 million other persons lost jobs (gross changes).

## APPENDIX II TO CHAPTER I

### SELECTION OF PERIOD FOR STUDY

For a number of technical reasons, the year 1957 was selected as the primary focus for this study of unemployment:

1. The survey data on labor force, employment, and unemployment were based on the current sample design (instituted in May 1956) of 35,000 households in 330 areas, the largest, most widespread, and most reliable sample ever used for CPS.

2. The survey data were based on the current definitions of unemployment, adopted in January 1957. The change in definitions shifted the temporary layoffs and persons waiting to begin new jobs in 30 days from the employed to the unemployed.

3. The timing of the survey week (reference week for the activity or status of respondents) in 1957 was the same as at present. The timing was changed in July 1955 from the week containing the 8th to the week containing the 12th of the month, a change which affected seasonal patterns in some months.

4. The year 1957 was also the first in which information was compiled from the survey on more detailed occupation and industry groupings, including two-digit detail within manufacturing, although duration of unemployment data for these more detailed groups are not available prior to 1959.

From an analytical standpoint, the selection of 1957 appears to be satisfactory. The average level and rate of unemployment in 1957—2.9 million or 4.3 percent of the civilian labor force—were not significantly different from 1955 or 1956 levels. Although the recession began in the second half of 1957, unemployment did not rise more than seasonally until November and the big jump did not occur until January 1958. For the year as a whole, the basic characteristics of the unemployed were also largely the same as in the 2 preceding years.

In terms of duration, the year 1957 was fairly representative of good postwar years. If anything, there appeared to be a slightly lower rate of short-term and a higher rate of long-term unemployment in 1957 than in earlier postwar years, so that conclusions about the extent of short-term unemployment can be taken as conservative, and estimates of long-term unemployment can be regarded as a little on the high side for a full-employment year.

The selection of the year 1957 does not imply that 1957 levels of unemployment constitute either normal or minimum levels. Its only significance is that 1957 represented a fairly typical post-World War II good year in terms of high employment levels, even though the signs of recession were unmistakable during the year. It was also unaffected by any special conditions such as the partial mobilization during the Korean period, by postwar readjustment or by the rapid expansion typical of postrecession years. There were no major labor disputes, nor any major legislation affecting employment, wages and hours, unemployment insurance, etc., during 1957.

## CHAPTER II. TURNOVER, OR GROSS CHANGES, IN UNEMPLOYMENT

## HOW MUCH TURNOVER

The extent of turnover among the unemployed is indicated by the fact that in a typical month during 1957, about 1½ million of the unemployed in 1 month had moved out of an unemployed status the following month and were replaced by an approximately equal number of newcomers to the unemployed.<sup>3</sup> About 900,000 of those leaving unemployment in any month had first become unemployed in the preceding month.

Of the 1½ million who leave the unemployed each month, about 1 million move into employment while one-half million withdraw from the labor force. Usually these are replaced by equivalent numbers who leave jobs or enter the labor market to look for jobs (table II-1).

This extensive turnover in the unemployed explains in part why there were 10.6 million different persons with unemployment during 1957, even though the average level was only 2.9 million. In fact, with 1½ million persons becoming unemployed each month, the total for the entire year would have been much higher except for the fact that many of the unemployed are "repeaters"—that is, they become unemployed two or more times during the year. About 4.4 million of the 10.6 million who lost any working time due to layoff or unemployment during 1957 had two or more spells of unemployment.

TABLE II-1.—*Gross changes in unemployment, by type of change: Annual average, 1957*

[Numbers in thousands]

Type of change	Total	Male	Female	Percent distribution		
				Total	Male	Female
Unemployment.....	2,936	1,893	1,043			
Total gross changes.....	1,515	898	617			
Percent of total.....	51.6	47.4	59.2			
Total gross changes.....	1,515	898	617	100.0	100.0	100.0
Type (or source) of change:						
Employment.....	966	670	296	63.8	74.6	48.0
Agriculture.....	68	57	11	4.5	6.3	1.8
Nonagricultural industries.....	898	613	285	59.3	68.3	46.2
Full time.....	543	379	164	35.8	42.2	26.6
Part time.....	355	234	121	23.4	26.1	19.6
Economic reasons.....	189	136	53	12.5	15.1	8.6
Other reasons.....	166	98	68	11.0	10.9	11.0
Not in labor force.....	549	228	321	36.2	25.4	52.0
Housework.....	237		237	15.6		38.4
School.....	149	92	57		10.2	9.2
Other.....	163	136	27	10.8	15.1	4.4

NOTE.—Gross monthly entries and withdrawals to and from each status have been averaged without regard to net change.

<sup>3</sup> The turnover figures cited in this report are averages for 12 monthly observations during 1957. The actual figures for specific months would vary around the mean because of seasonality, among other reasons. The additions and reductions have also been averaged, thus disregarding the slight uptrend in the series during the year.



## PATTERNS OF GROSS CHANGES IN LABOR FORCE AND UNEMPLOYMENT

In 1957 and other recent years, an average of  $3\frac{1}{4}$  million persons—mostly housewives, students, and older semiretired men entered the labor force each month (on the average) while an almost equal number withdrew. Of this total of  $3\frac{1}{4}$  million, an average of about 550,000 persons entered the labor market to seek work and thus became unemployed, replacing about the same number of unemployed who left the labor force. Entries into the labor market accounted for close to an average of 20 percent of all the unemployed.

About half of these withdrawals from the labor force occurred after a period of unemployment ranging from 1 week up to 2 months. Only a little over 100,000, on the average, remained unemployed for 15 weeks or longer and then withdrew from the labor force. Many of these were housewives and students rather than year-round labor force members.

Postexhaustion studies of the Bureau of Employment Security show that, under relatively favorable employment conditions, the great majority of exhaustees remain in the labor force even after a rather lengthy spell of unemployment.

One reason why only 550,000 of those entering the labor force become unemployed is that the largest part of the  $3\frac{1}{4}$  million gross changes involves farm employment and part-time jobs. Most of these changes are accounted for by women and teenagers who apparently begin working on farms or at part-time jobs without passing through a stage of unemployment. (See tables II-2 and II-3.)

TABLE II-2. *Gross changes in the labor force, by type of change: Annual average, 1957*

[Numbers in thousands]

Type of change	Total	Male	Female	Percent distribution		
				Total	Male	Female
Civilian labor force.....	67,946	45,882	22,064	-----	-----	-----
Total gross changes.....	3,265	1,148	2,117	-----	-----	-----
Percent of total.....	4.8	2.5	9.6	-----	-----	-----
Total gross changes.....	3,265	1,148	2,117	100.0	100.0	100.0
Type (or source) of change:						
Employment.....	2,716	920	1,796	83.2	80.1	84.8
Agriculture.....	685	272	413	21.0	23.7	19.5
Nonagricultural industries.....	2,030	648	1,382	62.2	56.4	65.3
Full time.....	690	214	476	21.1	18.6	22.5
Part time.....	1,341	434	907	41.1	37.8	42.8
Economic reasons.....	167	57	110	5.1	5.0	5.2
Other.....	1,174	377	797	36.0	32.8	37.6
Unemployment.....	549	228	321	16.8	19.9	15.2

NOTE.—See table II-1.

## 34 EXTENT AND NATURE OF FRICTIONAL UNEMPLOYMENT

TABLE II-3.—*Gross changes in the labor force by age and sex: Annual average, 1957*  
[Numbers in thousands]

Age and sex	Civilian labor force	Gross changes	Percent of labor force	Percent distribution
Total.....	67,946	3,265	4.8	100.0
14 to 17.....	2,860	773	27.0	23.7
18 and 19.....	2,433	239	9.8	7.3
20 to 24.....	6,068	301	5.0	9.2
25 to 44.....	30,673	903	2.9	27.7
45 to 64.....	22,622	730	3.2	22.4
65 and over.....	3,290	320	9.7	9.8
Male.....	45,882	1,148	2.5	35.2
14 to 17.....	1,812	429	23.7	13.1
18 and 19.....	1,290	112	8.7	3.4
20 to 24.....	3,626	107	3.0	3.3
25 to 44.....	21,302	125	.6	3.8
45 to 64.....	15,375	173	1.1	5.3
65 and over.....	2,478	202	8.2	6.2
Female.....	22,064	2,117	9.6	64.8
14 to 17.....	1,048	344	32.8	10.5
18 and 19.....	1,144	127	11.1	3.9
20 to 24.....	2,442	194	7.9	5.9
25 to 44.....	9,371	778	8.3	23.8
45 to 64.....	7,246	557	7.7	17.1
65 and over.....	813	118	14.5	3.6

NOTE.—See table II-1.

Marginal workers do not add significantly to the unemployed since they fill jobs as seasonal demands increase or as they become aware of available job openings, to a large extent without any active search. Special studies have shown that only about 10 to 15 percent of the unemployed are actively seeking part-time jobs. Only about 5 percent of the unemployed were previously engaged in agriculture. Most of the seasonal expansion and contraction in the farm work force is accounted for by housewives, students, and older men who remain outside the labor force when their services are not required on the farm.

### PATTERNS OF GROSS CHANGES BETWEEN EMPLOYMENT AND UNEMPLOYMENT

With unemployment at about 3 million, and with no significant trend during the year, about 1 million persons can be expected to leave their jobs (due to seasonal and nonseasonal causes) each month and become unemployed. An approximately equal number will become reemployed, although not necessarily in the same job they held before. Stated another way, about 1 million previously employed persons leave jobs for a variety of voluntary and involuntary reasons and become unemployed, while another 1 million previously unemployed persons find jobs. About 600,000 of the 1 million who find jobs were in the short-term duration group in the preceding months. Their total completed spell of unemployment ranged from a minimum of 1 week to 8 or 9 weeks' duration.

Most of the shifts between employment and unemployment involve full-time, nonfarm employment. Moreover, half the gross changes that do take place between unemployment and part-time employment

involve persons working part time involuntarily due to economic reasons. In terms of age and sex, the major part of the gross changes between employment and unemployment occur among adult men rather than women or teenagers, since a relatively large proportion of the women and youngsters leave the labor force on losing their jobs, rather than enter unemployment (table II-4).

TABLE II-4.—*Gross changes in unemployment, by age and sex: Annual average, 1957*

[Numbers in thousands]

Age and sex	Unem- ployed	Gross changes	Percent of unem- ployed	Percent distribu- tion of gross changes	Gross changes between unem- ployment and not in labor force		
					Number	Percent of unem- ployed	Percent distribu- tion
Total.....	2, 936	1, 515	51. 6	100. 0	549	18. 7	100. 0
14 to 17.....	308	203	65. 9	13. 4	131	42. 5	23. 9
18 and 19.....	266	140	52. 6	9. 2	59	22. 2	10. 7
20 to 24.....	429	198	46. 2	13. 1	70	16. 3	12. 8
25 to 44.....	1, 072	545	50. 8	35. 9	154	14. 4	28. 1
45 to 64.....	749	367	49. 0	24. 2	104	13. 9	18. 9
65 and over.....	112	63	56. 3	4. 2	31	27. 7	5. 6
Male.....	1, 893	898	47. 4	59. 3	228	12. 0	41. 5
14 to 17.....	192	120	62. 5	7. 9	75	39. 1	13. 7
18 and 19.....	159	77	48. 4	5. 1	25	15. 7	4. 6
20 to 24.....	283	118	41. 7	7. 8	27	9. 5	4. 9
25 to 44.....	653	308	47. 2	20. 3	38	5. 8	6. 9
45 to 64.....	522	230	44. 1	15. 2	41	7. 9	7. 5
65 and over.....	83	47	56. 6	3. 1	23	27. 7	4. 2
Female.....	1, 043	617	59. 2	40. 7	321	30. 8	58. 5
14 to 17.....	115	83	72. 2	5. 5	56	48. 7	10. 2
18 and 19.....	107	63	58. 9	4. 2	34	31. 8	6. 2
20 to 24.....	147	80	54. 4	5. 3	43	29. 3	7. 8
25 to 44.....	419	237	56. 6	15. 6	116	27. 7	21. 1
45 to 64.....	226	137	60. 6	9. 0	63	27. 9	11. 5
65 and over.....	28	16	( <sup>1</sup> )	1. 1	8	( <sup>1</sup> )	1. 5

<sup>1</sup> Percent not shown where base is less than 50,000.

NOTE.—See table II-1.

On the average, the probability of reemployment is related to the prior duration of unemployment. The shorter the period of time a person has been out of a job, the greater the likelihood he will be reemployed quickly. In 1957, for example, some 41 percent of the persons who in one month had been jobless for only 4 weeks or less had found a job by the following month. The comparable proportion for those out of work 5 to 14 weeks was 28 percent; for those out 15 weeks or longer, 21 percent. Conversely, the proportions remaining unemployed were 40 percent for the short-termers, 55 percent for the middle termers, and 61 percent for the long-termers (table II-5). The reason for these patterns is not so much that duration of unemployment itself renders the worker less employable, although that may become a factor in cases of very long-term unemployment. Rather, the point seems to be that duration of unemployment itself is related to the personal and economic characteristics of workers discussed above, and that whatever characteristics or situations caused them to be unemployed for varying periods of time in the first place, also determine their chances for reemployment in any given month.

## 36 EXTENT AND NATURE OF FRICTIONAL UNEMPLOYMENT

An employer will hold onto his most highly skilled and productive workers the longest, and will try to hire them back first, within the limitations imposed by seniority and other contractual arrangements covering layoffs and hiring.

TABLE II-5.—*Gross reductions in unemployment, by type, by duration of unemployment in previous month: Annual average, 1957*

[Numbers in thousands]

Age and sex	Total	4 weeks or less	5 to 14 weeks	15 weeks and over
Unemployment.....	2,936	1,485	890	560
Total reductions.....	1,515	893	401	220
Status after change:				
Employment.....	966	601	249	115
Agriculture.....	68	39	19	10
Nonagricultural industries.....	898	562	230	105
Full time.....	543	351	134	57
Part time.....	355	211	96	48
Economic reasons.....	189	106	55	28
Other reasons.....	166	105	41	20
Not in labor force.....	549	292	152	105
School.....	149	88	47	14
Other.....	400	204	105	91
Percent of unemployed who—				
Became reemployed.....	32.9	40.5	28.0	20.5
Dropped out of labor force.....	18.7	19.7	17.1	18.8
Remained unemployed.....	48.4	39.8	54.9	60.7

It is important to note that turnover among the unemployed occurs each month at a fairly high rate. This is true even in years when employment conditions are less favorable, although the extent of turnover may fall as low as 40 to 45 percent as compared with 55 percent in 1957. At the same time, however, observations regarding turnover should be qualified by at least two pieces of related data.

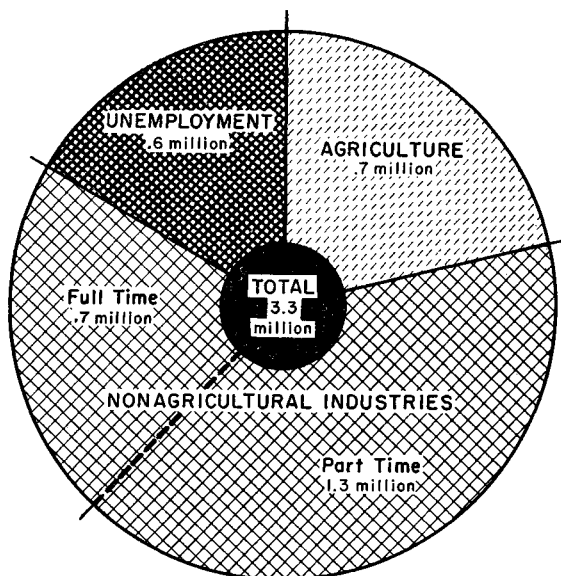
(1) Although the overall turnover rate is 55 percent between one month and the following month, not all of those moving out of unemployment had been looking for work for only 1 month. That is, of the 1.5 million leaving the unemployed between March and April of 1957, for example, about 600,000 had already been unemployed 5 weeks or longer at the time of the April survey. In fact, about 200,000 had already been out of work 15 weeks or longer.

(2) Not all of those leaving the unemployed enter full-time employment. About 550,000 persons withdrew from the labor force in an average month in 1957. There is little direct information about the reasons for those withdrawals, although it has been presumed that most of them were voluntary. Another 350,000 are persons who enter part-time employment, with at least half reporting that their employment at part-time jobs is involuntary, due to economic reasons. Thus, only about 600,000 of the gross reductions in unemployment represent entries into full-time jobs and of this group, only 400,000 could be classified with some assurance as short-term unemployed—that is, they were only classified as unemployed in one previous survey before becoming reemployed.

CHART 3

## EMPLOYMENT STATUS OF ENTRANTS INTO THE LABOR FORCE, 1957

(Average Gross Monthly Additions from Outside of Labor Force, by Employment Status After Entry)

UNITED STATES DEPARTMENT OF LABOR  
BUREAU OF LABOR STATISTICS

## CHAPTER III. UNEMPLOYMENT ASSOCIATED WITH JOB SHIFTS

The relationship between job mobility and unemployment has been a subject of great interest among labor force analysts for many years. There has been some statistical evidence, along with the experience of everyday life, to show that job changing is a significant factor in generating unemployment and that layoffs frequently lead to a job change. Illustrative of these tendencies are the relatively high rates of unemployment among young workers and among construction workers, a high proportion of whom are involved in job shifts during the course of a calendar year. Moreover, survey data on the work experience of the population have shown that workers with only one job are far more likely to be year-round workers than are persons who change jobs. By and large, however, quantitative estimates of the relationship between job mobility and unemployment have been based on untested assumptions rather than on empirical studies.

Now for the first time, a body of data has become available which, although imperfect in many respects, sheds some statistical light on this relationship. These data are based on a retabulation of information collected in 1956 by the Bureau of the Census relating to job mobility, weeks worked, and weeks of unemployment during the calendar year 1955. Two reports were previously issued by the Census Bureau presenting in detail the results of the work experience survey

and, separately, the study of job mobility (Current Population Reports, Series P-50, 68, and 70). The present report differs from those earlier ones in that it specifically relates the information on job shifts to that on the incidence and duration of unemployment during 1955.

Some limitations of the present study should be made clear at the outset. Although it provides statistics on how much unemployment occurred among different kinds of job changers in the aggregate, it cannot provide information as to how many cases of unemployment occurred as a direct result of a job change, or how many cases of job changing were the ultimate result of a layoff. Future surveys might be oriented more specifically toward the answering of such questions. Future research should also refine the information on reasons for job leaving. It would be important to know, for example, whether an instance of job leaving was voluntary or involuntary. In the present study it was impossible to determine whether the termination of a temporary job involved a quit or a separation.

Another major problem with the present data is the absence of any information about the reasons for unemployment among persons who did not change jobs. It would be desirable to know, for example, how many cases were new entrants or reentrants to the labor market, how many were seasonal workers on layoff, how many were laid off for economic reasons, etc. It might then be possible to develop some indexes of proclivity to change jobs as a result of unemployment of different types, among various groups in the labor force.

#### SUMMARY OF RESULTS

Despite their obvious limitations, a number of significant findings have emerged from these data. In the calendar year 1955, of the 10 million different persons who had any unemployment or layoff, some 3.7 million were persons who changed jobs at least once. Persons who had a job change <sup>4</sup> (for any reason) accounted for 11 percent of the entire work force of 75 million, but they represented 37 percent of those with unemployment (table III-1). The rate of unemployment on a calendar year basis (percent of those with work experience who had any unemployment) for job changers of all kinds was five times as large as that for workers who did not change jobs during the year (45 percent versus 9 percent). This rate was even higher for those workers involved in more than one shift during the year (about 60 percent, as compared with 40 percent for those who had only one change).

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<sup>4</sup> Each change in employer, or a change from wage and salary work to self-employment, or vice versa, was classified as a job shift. Persons with more than one job, all held concurrently, were defined as nonchangers.

TABLE III-1.—*Unemployment levels and rates, by job mobility status: Calendar year 1955*

[Numbers in thousands]

Mobility status	Total	Total with unemployment		
		Number	Percent of total	Percent distribution
Total who worked during 1955.....	75,353	9,814	13.0	100.0
Did not change jobs.....	67,113	6,149	9.2	62.7
Did change jobs <sup>1</sup> .....	8,240	3,665	44.5	37.3
Changed jobs only once:				
Economic reasons.....	1,116	719	64.4	7.3
Termination of temporary job.....	545	214	39.3	2.2
Improvement in status.....	2,665	767	28.8	7.8
All other reasons <sup>2</sup> .....	1,182	341	28.8	3.5
Changed jobs 2 or more times, same category of reason for each job leaving:				
Economic reasons.....	187	165	88.2	1.7
Termination of temporary job.....	209	132	63.2	1.3
Improvement in status.....	397	156	39.3	1.6
All other reasons <sup>2</sup> .....	83	45	54.2	.5
Changed jobs 2 or more times, combination of reasons for job leaving:				
Some economic reasons.....	792	564	71.2	5.7
No economic reasons.....	1,064	562	52.8	5.7

<sup>1</sup> The total number of job changers shown here is slightly less than that shown in the original P-50 report because of minor differences in estimating methods.

<sup>2</sup> Includes illness or disability, family and school responsibilities, and all other reasons.

## FRICTIONAL UNEMPLOYMENT DUE TO MOBILITY

The classification of job changers by reasons for change, while by no means without problems, does add to our insight into the relationship between unemployment and mobility and permits us to identify one important group of the frictionally unemployed. In a very rough way, it has been possible to distinguish between persons who left their jobs more or less voluntarily and those who were separated from their jobs. The former group would include: (1) those who left because of a desire to improve their status, and (2) those who became temporarily unavailable for a particular job because of illness or disability, household or school responsibilities, and the like. The group who left to improve their status—to get a better job, make more money, or because of dissatisfaction with the kind of work, conditions of employment, or other aspects of the job—comes closest to our usual concept of frictional unemployment due to job shifting. This group accounted for about 10 percent of all persons with unemployment (on a calendar year basis).

It is possible from these data to develop a crude estimate of how much of the annual average level of unemployment in 1955 (2.9 million), could be ascribed to voluntary job changers, that is, persons who made job shifts due to a desire for improvement in status. Taking into account the available information on their annual duration of unemployment, around 15 percent of annual average unemployment could be ascribed to job shifters. At least a third of these voluntary shifters undoubtedly had unemployment due to other causes. Therefore, only about 10 percent of unemployment can be ascribed to voluntary job mobility itself.

## UNEMPLOYMENT RELATED TO INVOLUNTARY JOB CHANGING

Persons who changed their jobs involuntarily include: (1) Most of those who reported termination of a temporary, usually seasonal, job (although some of these may have quit voluntarily, their characteristics indicate that a majority lost their jobs), and (2) those laid off because of economic reasons—lack of sufficient work, business failure, business movement, and the like.

The highest rate of unemployment (for those who changed jobs only once) was among those whose job change was dictated by economic factors. About two-thirds of these job changers experienced at least one spell of unemployment.

A somewhat lower rate (4 out of every 10) was reported by workers who had one job change but whose job leaving was due to the termination of a temporary job. This group largely includes persons who were separated from, or who left, seasonal jobs or other jobs which were taken with the knowledge that they were temporary. This group is difficult to evaluate because the original reports were apparently not specific enough to distinguish voluntary from involuntary job leaving.

As might be expected, the lowest rates of unemployment among job changers were registered by those who had only one change during the year and who quit their jobs more or less voluntarily. About 3 out of 10 such workers had unemployment, fewer than other job changers but still three times as many as workers who had only one job during the year. There was no difference in the rate of unemployment between the group that quit to take another job in order to improve their status and the group that quit because of such personal considerations as illness, or family and school responsibilities.

Incidentally, the latter group which comprised about 5 to 10 percent of the unemployed, might also be regarded as largely frictional in the sense that much of their unemployment was probably due to reentry into the labor market after a period of absence.

Whatever the reason for job change, persons who changed jobs more than once had considerably higher rates of unemployment than did those with only one change. For those with two or more shifts, the rate of unemployment ranged from 40 percent of those whose reason in each case was to improve their status, to 90 percent of those whose reasons in each case were economic.

## DURATION OF UNEMPLOYMENT

About 41 percent of the single-job workers and 36 percent of the changers who had any unemployment experienced less than 5 jobless weeks (table III-2). Among both groups, about one-fourth of those with any unemployment lost 15 weeks or more of working time.



TABLE III-2.—*Cumulative weeks of unemployment, by job mobility status: Calendar year 1955*

[Numbers in thousands]

Mobility status	Total	Duration of unemployment					Percent of total	
		Less than 5 weeks	5 to 10 weeks	11 to 14 weeks	15 to 26 weeks	27 weeks or longer	Less than 5	15 or longer
Total with unemployment.....	9, 814	3, 827	2, 112	1, 196	1, 614	1, 065	39. 0	27. 3
Did not change jobs.....	6, 149	2, 507	1, 184	747	988	723	40. 8	27. 8
Did change jobs <sup>1</sup> .....	3, 665	1, 320	928	449	626	342	36. 0	26. 4
Changed jobs only once:								
Economic reasons.....	719	256	160	98	126	79	35. 6	28. 5
Termination of temporary job.....	214	45	48	32	45	44	21. 0	41. 6
Improvement in status.....	767	351	185	87	92	52	45. 8	18. 8
All other reasons <sup>2</sup> .....	341	175	77	25	47	17	51. 3	18. 8
Changed jobs 2 or more times, same category of reason for each job leaving:								
Economic reasons.....	165	27	42	33	47	16	16. 4	38. 2
Termination of temporary job.....	132	10	36	22	44	20	7. 6	48. 5
Improvement in status.....	156	73	40	19	19	5	46. 8	15. 4
All other reasons <sup>2</sup> .....	45	30	4	2	3	6	66. 7	20. 0
Changed jobs 2 or more times, combination of reasons:								
Some economic reasons.....	564	185	178	59	100	42	32. 8	25. 2
No economic reasons.....	562	168	158	72	103	61	29. 9	29. 2

<sup>1</sup> The total number of job changes shown here is slightly less than that shown in the original P-50 report because of minor differences in estimating methods.

<sup>2</sup> Includes illness or disability, family and school responsibilities, and all other reasons.

Within the job-changing group there were sizable differences in duration, depending on the reason for change. Voluntary job leavers who went through a period of unemployment were most likely to be among the short-term and least likely to be among the long-term unemployed. About 5 out of 10 were unemployed less than 5 weeks, while only 2 out of 10 were unemployed 15 weeks or longer. The proportions for those who lost their jobs for economic reasons were 36 percent among the short-term, and 29 percent in the long-term group. The highest proportion of long-term unemployed (42 percent) was recorded by persons whose job leaving was due to the termination of temporary jobs.

For voluntary job leavers, duration of unemployment was about the same for those who had only one job change as for those who had more than one. Among the other groups, however, those who had two or more changes had a much smaller proportion of short-term unemployed, and a substantially larger proportion of long-term unemployed.

#### EFFECT OF DIFFERENCES IN MOBILITY ON UNEMPLOYMENT RATES

There is a good deal of variation in the extent of voluntary job leaving among different groups in the labor force. However, this variation has very little effect in causing differential rates of unemployment because the numbers of workers involved are relatively few. Whereas job changing is much more common among young men 18 to 24 years of age than among men over 45, for example, and manual workers are more likely to leave their jobs than are professional, technical, or managerial workers, the occurrence of voluntary job changing is infrequent among all age and occupation groups. The

very highest rate, recorded by young men in their early twenties, was only 10 percent.

Because of the low level of mobility rates, intergroup differences have only a minor effect in creating differences in unemployment rates. In order to quantify this effect, a procedure of standardization was adopted whereby all groups of workers were assumed to have an identical proportion of voluntary job changers (i.e., 4 percent, which was the overall rate for the entire work force). For all groups, the rate of unemployment among job changers is much higher than among nonchangers (roughly 1 out of 4 as compared with 1 out of 10 for the work force as a whole). Therefore, the result of standardization was to raise the unemployment rates for groups with below-average mobility rates and to lower the unemployment rates for groups with above-average mobility rates. (See tables III-3 and III-4.) In nearly all cases, however, the difference between the actual and the standardized rate was less than 1 percentage point. The largest effect was on young men 18 to 24 years of age, where the assumption of a 4-percent mobility rate instead of the actual rate of 10 percent reduced their overall unemployment rates (calendar year basis) from 25 to 23 percent. Even after standardization, their rates remained more than twice as high as those for adult men.

TABLE III-3. *Unemployment associated with voluntary job mobility, by personal characteristics: Calendar year 1955*

(Numbers in thousands)

Personal characteristics	All workers	Voluntary job changers <sup>1</sup>				Percent with any unemployment during the year	
		Number	Percent of all workers	With any unemployment		Actual	Standardized <sup>2</sup>
				Number	Percent of all job changers		
Male.....	47, 624	2, 220	4.7	551	24.8	12.6	12.5
14 to 17 years.....	2, 541	65	2.6	16	24.6	10.9	11.3
18 and 19.....	1, 618	146	9.0	35	24.0	23.9	22.7
20 to 24.....	3, 509	359	10.2	113	31.5	24.7	22.8
25 to 44.....	21, 516	1, 216	5.7	254	20.9	12.0	11.6
45 to 64.....	15, 331	420	2.7	129	30.7	11.0	11.4
65 and over.....	3, 109	14	.5	4	28.6	7.4	8.4
White.....	42, 935	2, 051	4.8	477	23.3	11.6	11.4
Nonwhite.....	4, 689	177	3.8	83	46.9	22.3	22.4
Single.....	9, 480	448	4.7	137	30.6	18.1	17.9
Married, wife present.....	35, 361	1, 670	4.7	377	22.6	10.8	10.6
Other marital status.....	2, 783	106	3.8	44	41.5	17.9	18.0
Female.....	27, 729	842	3.0	249	29.6	9.8	10.1
14 to 17 years.....	1, 663	47	2.8	17	36.2	12.7	13.2
18 to 19.....	1, 508	119	7.9	31	26.1	17.4	16.4
20 to 24.....	3, 367	200	5.9	70	35.0	11.6	11.0
24 to 44.....	11, 800	345	2.8	93	27.0	9.8	10.2
45 to 64.....	8, 199	124	1.5	38	30.6	7.8	8.6
65 and over.....	1, 192	7	.6	-----	-----	4.0	4.0
White.....	24, 035	756	3.1	210	27.8	9.0	9.3
Nonwhite.....	3, 694	83	2.2	36	43.4	14.9	15.8
Single.....	6, 821	279	4.1	95	34.1	11.0	11.0
Married, husband present.....	15, 778	412	2.6	110	26.7	8.5	8.9
Other marital status.....	5, 130	146	2.8	41	28.1	12.2	12.5

<sup>1</sup> Includes persons who made 1 or more job shift during the year in order to improve status only.

<sup>2</sup> Assumes a 4.1-percent rate of voluntary job changing for all groups of workers.

NOTE.—Details will not necessarily add to totals because of rounding. Unlike tables 1 and 2, excludes year-round workers with 1 or 2 weeks of layoff because not available by characteristics.

TABLE III-4.—*Unemployment associated with voluntary job mobility, by occupation and industry of longest job in 1955*

[Numbers in thousands]

Occupation and industry of longest job	All workers	Voluntary job changers <sup>1</sup>				Percent with any unemployment during the year	
		Number	Percent of all workers	With any unemployment		Actual	Stand-ardized <sup>2</sup>
				Number	Percent of all job changers		
Total.....	75,353	3,062	4.1	800	26.1	11.6	11.6
Professional, technical.....	6,765	183	2.7	22	12.0	3.3	3.5
Farmers and farm managers.....	3,959	63	1.6	2	3.2	1.8	1.8
Managers, officials, proprietors.....	6,696	202	3.0	35	17.3	3.6	3.8
Clerical workers.....	10,074	417	4.1	106	25.4	7.8	7.8
Sales workers.....	5,284	311	5.9	60	19.3	7.7	7.4
Craftsmen, foremen.....	9,131	424	4.6	109	25.7	15.6	15.5
Operatives.....	14,666	758	5.2	257	33.9	19.2	18.8
Private household workers.....	2,887	54	1.9	16	29.6	9.6	10.3
Service workers excluding private household.....	6,600	260	3.9	102	39.2	12.9	12.9
Farm laborers.....	5,109	102	2.0	27	26.5	8.9	9.4
Laborers excluding farm and mine.....	4,182	289	6.9	71	24.6	28.1	27.4
Agriculture.....	9,261	210	2.3	61	29.0	6.2	6.7
Nonagricultural wage and salary workers.....	58,839	2,752	4.7	745	27.1	13.4	13.2
Forestry, fisheries, and mining.....	868	48	5.5	15	31.3	23.5	23.0
Construction.....	3,779	218	5.8	64	29.4	32.9	32.4
Manufacturing.....	18,503	812	4.4	201	24.8	14.6	14.5
Durable goods.....	10,495	580	5.5	131	22.6	14.0	13.7
Nondurable goods.....	8,008	232	2.9	70	30.2	15.4	15.8
Transportation.....	4,896	183	3.7	53	29.0	10.3	10.4
Trade.....	12,351	804	6.5	208	25.9	13.1	12.5
Service.....	15,387	594	3.9	180	30.3	9.3	9.4
Public administration.....	3,055	93	3.0	24	25.8	5.0	5.3
Nonagricultural self-employed and unpaid.....	7,253	137	1.9	32	23.4	4.1	4.6

<sup>1</sup> Includes persons who made 1 or more job shift during the year in order to improve status only.<sup>2</sup> Assumes a 4.1-percent rate of voluntary job changing for all groups of workers.

NOTE.—Details will not necessarily add to totals because of rounding. Unlike tables 1 and 2, excludes year-round workers with 1 or 2 weeks of layoff because not available by characteristics.

Among those who did change jobs voluntarily, there was considerable variation in the extent to which different groups of workers experienced any unemployment, although these differences should be interpreted with caution because the base figures are relatively small. In general, workers with the highest rate of unemployment or longest duration overall are also the ones most subject to unemployment in the course of changing jobs. Some illustrations are as follows:

(a) Workers in the central age groups (25 to 44) were less subject to unemployment as a result of a job change than were younger or older workers, especially among men.

(b) White job changers were only half as likely to experience unemployment as were nonwhite changers.

(c) Married men and women were more successful in changing jobs without unemployment than were other workers.

(d) White-collar workers—especially the professional and technical groups—were less likely to be jobless during their transition than were blue-collar or service workers.

## AGE AND SEX

The labor market difficulties of young people in their late teens and early twenties—especially the young men—are brought somewhat more sharply into focus by the data presented in table III-5. More of these young workers are involved in job shifts (about one-fourth) for one reason or another during the course of a calendar year than any other age-sex group in the force labor. At the same time, the rate of unemployment among those involved in job shifts is comparatively high. Perhaps even more significant, however, is the fact that the unemployment rates even for those who had no job change of any kind were still twice as high as the rate for adult men. To a large extent, this difference reflects the fact that initial entry into the labor force on a permanent basis probably occurs most often in the 18 to 24 age group, and the first search for employment is so often preceded by a period of unemployment. To some extent, however, these high rates may also reflect a high layoff rate due to low seniority, inexperience, and lack of training.

TABLE III-5.—*Unemployment and job mobility status, by age and sex: Calendar year 1955*

[Numbers in thousands]

Age and sex	Workers with no job change during the year				Workers with 1 job change or more during the year							
	Total	With unemployment <sup>1</sup>			Total	With unemployment <sup>1</sup>						
		Number	Percent of all workers	Percent distribution		Number	Percent of all workers	Percent distribution	Percent distribution by type of change			
									Economic reasons	Termination of temporary job	Improvement in status	Other voluntary reasons <sup>2</sup>
Total.....	67, 113	5, 358	8. 0	100. 0	8, 240	3, 369	40. 9	100. 0	100. 0	100. 0	100. 0	100. 0
Male.....	41, 769	3, 441	8. 2	64. 2	5, 855	2, 574	44. 0	76. 4	81. 4	78. 7	68. 9	65. 9
14 to 17 years.....	2, 220	170	7. 7	3. 2	321	106	33. 0	3. 1	1. 6	6. 5	2. 0	6. 8
18 and 19.....	1, 178	193	16. 4	3. 6	440	193	43. 9	5. 7	5. 6	6. 8	4. 4	9. 0
20 to 24.....	2, 556	430	16. 8	8. 0	953	438	46. 0	13. 0	14. 2	9. 5	14. 1	16. 7
25 to 44.....	18, 721	1, 437	7. 7	26. 8	2, 795	1, 135	40. 6	33. 7	38. 8	27. 5	31. 8	19. 7
45 years and over.....	17, 094	1, 211	7. 1	22. 6	1, 346	702	52. 2	20. 9	21. 2	28. 4	16. 6	13. 7
Female.....	25, 344	1, 917	7. 6	35. 8	2, 385	795	33. 3	23. 7	18. 3	21. 3	31. 2	33. 9
14 to 17 years.....	1, 487	158	10. 6	2. 9	176	53	30. 1	1. 6	. 5	1. 2	2. 1	1. 4
18 and 19.....	1, 209	170	14. 1	3. 2	299	93	31. 1	2. 8	1. 6	3. 0	3. 9	4. 9
20 to 24.....	2, 867	212	7. 4	4. 0	500	180	36. 0	5. 3	2. 9	6. 2	8. 8	9. 3
25 to 44.....	10, 806	852	7. 9	15. 9	994	309	31. 1	9. 2	7. 8	5. 9	11. 6	15. 3
45 years and over.....	8, 975	525	5. 9	9. 8	416	160	38. 5	4. 8	5. 5	5. 0	4. 8	3. 0

<sup>1</sup> Excludes year-round workers with 1 or 2 weeks of layoff (included on tables III-1 and III-2) because data are not available by characteristics.

<sup>2</sup> Includes illness or disability, family and school responsibilities.

NOTE.—Details do not necessarily add to totals because of rounding.

Some of the problems of older workers are also indicated by these data. The worker over 45 is less likely to be a job changer—either of the voluntary or involuntary type—than is the younger worker among both men and women. Those that do become engaged in a job change, however, are more likely to have some unemployment associated with that change than are workers under 45.

Table III-5 also shows the age-sex distribution of workers with unemployment who had a job change, by reason for change. There is some tendency for women to be relatively more numerous among voluntary job changers than among involuntary job changers (about a third versus a fifth). This reflects their concentration in white-collar jobs and in trade and service activities rather than in heavy industry or in outdoor work subject to wide seasonal fluctuations. Men 20 and over, on the other hand, were most prominent in the group which reported job changes due to economic factors (75 percent) and least likely to appear in the group whose job leaving was related to family and school responsibilities, illness or disability (50 percent).

#### OCCUPATION AND INDUSTRY

As in the case of age, the mobility data also sharpen our previous knowledge about unemployment by occupation and industry. For example, nonfarm laborers—the group historically subject to the highest unemployment rates under any economic conditions—are far more likely to have a job change at some time during the year and are also more likely to have some unemployment associated with that change (table III-6). At the same time, they are more subject to unemployment even if all their work experience was with one employer during the year. At the other extreme, professional, technical, and managerial workers and proprietors are least likely among the nonfarm groups to be involved in a job shift. Those who do so are less frequently subject to unemployment than are other groups of workers. For those who remain at a single job, the rate of unemployment is only one-tenth that of nonfarm laborers and lower than that of any other group. Among the remaining nonfarm occupations, other white-collar workers tend to fare better than service workers among both changers and nonchangers, while service workers make a better showing than the skilled or semiskilled blue-collar workers.

TABLE III-6.—*Unemployment and job mobility status, by major occupation group of longest job in 1955*

[Numbers in thousands]

Major occupation group of longest job	Workers with no job change during the year				Workers with 1 job change or more during the year							
	Total	With unemployment <sup>1</sup>			Total	With unemployment <sup>1</sup>						
		Number	Percent of all workers	Percent distribution		Number	Percent of all workers	Percent distribution	Percent distribution by type of change			
									Economic reasons	Termination of temporary job	Improvement in status	Other voluntary reasons <sup>2</sup>
Total.....	67, 113	5, 358	8. 0	100. 0	8, 240	3, 369	40. 9	100. 0	100. 0	100. 0	100. 0	100. 0
White collar.....	26, 359	975	3. 7	18. 1	2, 460	691	28. 1	20. 4	19. 1	11. 1	27. 5	29. 2
Professional and managerial.....	12, 573	266	2. 1	4. 9	888	204	23. 0	6. 0	6. 7	. 6	7. 0	8. 0
Clerical and sales.....	13, 786	709	5. 1	13. 2	1, 572	487	31. 0	14. 4	12. 4	10. 5	20. 5	21. 2
Blue collar.....	23, 979	3, 387	14. 1	63. 3	4, 000	2, 025	50. 6	60. 0	68. 9	57. 6	54. 1	49. 8
Craftsmen.....	8, 005	891	11. 1	16. 7	1, 126	533	47. 3	15. 8	14. 5	22. 5	13. 5	9. 6
Operatives.....	12, 750	1, 843	14. 5	34. 4	1, 916	968	50. 5	28. 7	34. 0	17. 4	31. 8	29. 5
Laborers.....	3, 224	653	20. 3	12. 2	958	524	54. 7	15. 5	20. 4	17. 7	8. 8	10. 7
Service.....	8, 516	748	8. 8	14. 0	971	378	38. 9	11. 2	7. 9	11. 4	14. 6	14. 3
Farm.....	8, 258	241	2. 9	4. 5	810	282	34. 8	8. 4	4. 2	19. 8	3. 5	6. 6
Farmers.....	3, 782	60	1. 6	1. 1	177	10	5. 6	. 3	. 2	1. 5	. 2	-----
Farm laborers.....	4, 476	181	4. 0	3. 4	633	272	43. 0	8. 1	4. 0	18. 3	3. 3	6. 6

<sup>1</sup> Excludes year-round workers with 1 or 2 weeks of layoff (included on tables III-1 and III-2) because data are not available by characteristics.

<sup>2</sup> Includes illness or disability, family and school responsibilities.

Note.—Details do not necessarily add to totals because of rounding.

Blue-collar workers account for 50 to 70 percent of all the unemployed groups distributed by occupation in table III-6. They are more prominent, however, among those who changed jobs after an economic-type layoff, except for the craftsmen who are more subject to seasonal layoffs. White-collar workers, on the other hand, are relatively more evident in the group of voluntary job shifters.

The patterns shown for the unskilled laborer and the young worker also emerge for the construction workers in general (of course, there is some degree of overlap among these groups). He is also a frequent job shifter—1 of 4 as compared with 1 out of 10 for the work force as a whole. If involved in a job shift, the chances are 6 out of 10 that he will also have had some unemployment. This ratio compares with 4 out of 10 for all workers. But again, one of the most significant results is the unemployment rate for those who do not report any job change—25 percent as compared with 8 percent for all industries (table III-7).



TABLE III-7.—*Unemployment and job mobility status, by major industry group of longest job in 1955*

[Numbers in thousands]

Major industry group of longest job	Workers with no job change during the year				Workers with 1 job change or more during the year							
	Total	With unemployment <sup>1</sup>			Total	With unemployment <sup>1</sup>						
		Number	Percent of all workers	Percent distribution		Number	Percent of all workers	Percent distribution	Percent distribution by type of change			
									Economic reasons	Termination of temporary job	Improvement in status	Other voluntary reasons <sup>2</sup>
Wage and salary workers, total.....	67, 113	5, 358	8.0	100.0	8, 240	3, 369	40.9	100.0	100.0	100.0	100.0	100.0
Agriculture.....	1, 876	150	8.0	2.8	600	293	48.8	8.6	3.8	19.0	7.0	4.2
Mining.....	758	136	17.9	2.6	110	68	61.8	2.0	3.2	.6	1.8	-----
Construction.....	2, 864	701	24.5	13.2	915	541	59.1	15.9	15.5	33.5	7.6	6.4
Manufacturing.....	16, 516	1, 802	10.9	33.9	1, 986	903	45.5	26.5	34.1	10.6	24.0	35.6
Transportation.....	4, 450	320	7.2	6.0	446	182	40.8	5.3	6.0	3.6	6.3	5.9
Trade.....	10, 460	923	8.8	17.4	1, 891	694	36.7	20.4	19.9	13.6	24.8	23.0
Service.....	13, 856	922	6.7	17.3	1, 531	516	33.7	15.1	12.4	12.2	21.5	16.2
Public administration.....	2, 862	87	3.0	1.6	193	66	34.2	1.9	1.1	3.3	2.9	2.5

<sup>1</sup> Excludes year-round workers with 1 or 2 weeks of layoff (included in tables III-1 and III-2) because data are not available by characteristics.

<sup>2</sup> Includes illness or disability, family and school responsibilities.

NOTE.—Details do not necessarily add to totals because of rounding.

Construction and farmworkers predominate in the group whose job leaving was caused by the termination of seasonal or other temporary jobs. Factory workers, on the other hand, are more likely to appear in the economic-layoff group and among those who had unemployment but no job change. Trade and service workers are disproportionately represented in the group whose unemployment was related to voluntary job mobility.

## CONCLUSION

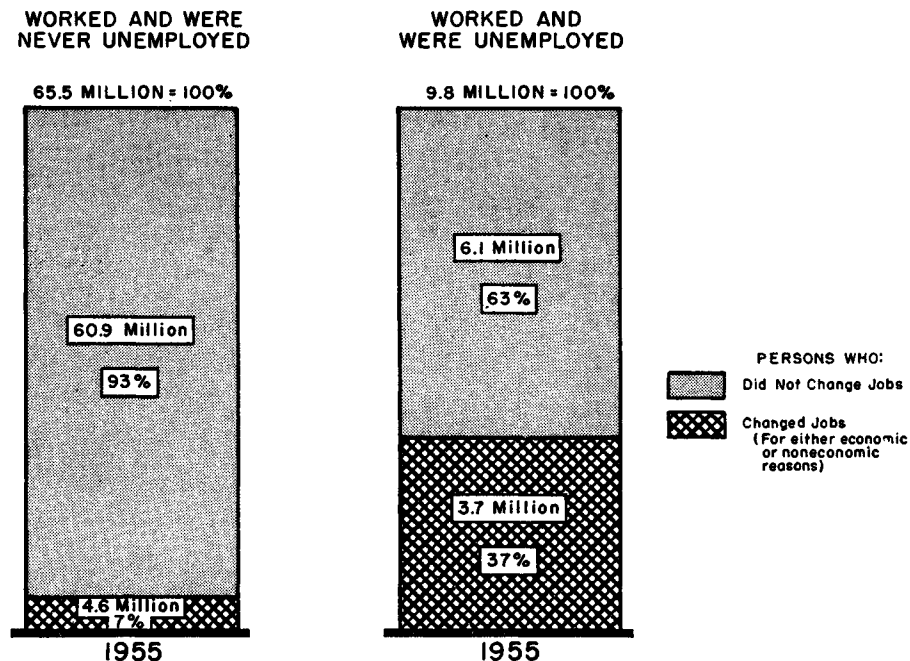
These findings confirm that a high rate of job mobility is associated with a high rate of unemployment. Both are symptomatic of some other more basic problem within the groups subject to them. Unfortunately, there are still many unanswered questions about the specific circumstances connected with the unemployment experience of job changers. Moreover, no information was collected in this study as to the specific reasons for unemployment among those workers not involved in job changes. Nevertheless, enough data have been assembled to show that job changing is largely a secondary aspect of the problem for groups in the labor force subject to high unemployment. High rates of job changing are correlated with, but do not explain high rates of unemployment, since the very same groups (e.g., young persons, unskilled laborers, construction workers) have high unemployment among nonchangers. Except for mobility due to a desire to improve one's status, which has been shown to be a relatively minor factor in unemployment, job changing is more likely to be an effect of unemployment rather than a cause. The largest single group of job changers who had unemployment are the 1.3 million who lost their former jobs because of economic reasons (40 percent of all changers with unemployment). The table below shows the reasons for change among job changers with an unemployment rate of 20 percent or more on a calendar year basis:

TABLE III-8.—*Job changers with unemployment during 1955*

Selected labor force groups	Total		Percent distribution by reason for change				
	Number (thousands)	Percent	Economic	Termination of tempo- job	Improve- ment in status	Other voluntary reasons	Combinations of noneconomic reasons
Males, 18 to 24.....	631	100.0	42.0	8.7	23.5	14.9	10.9
Married men, wife absent.....	105	100.0	46.7	7.6	28.6	8.6	8.6
Nonwhite men.....	393	100.0	45.3	12.0	21.1	3.3	18.3
Operatives.....	968	100.0	47.0	6.0	26.5	11.1	9.4
Nonfarm laborers.....	524	100.0	52.1	11.3	13.5	7.4	15.6
Mineworkers.....	68	100.0	63.2	2.9	22.1	-----	11.8
Construction workers.....	541	100.0	38.4	20.9	11.8	4.3	24.6

Among all these groups, over half reported that their job leaving was due to involuntary factors. For the majority, therefore, unemployment most likely preceded their decision to take another job.

CHART 4  
JOB CHANGING AND UNEMPLOYMENT AMONG PERSONS WHO WORKED IN 1955



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## CHAPTER IV. SEASONAL UNEMPLOYMENT

Seasonal unemployment results both from the periodic entry of job-seekers into the labor force as well as from the periodic layoff of employed workers. It is estimated that a minimum of one-fourth of the total unemployment in 1957 could be termed "seasonal."<sup>5</sup> If the regularly recurrent unemployment of new entrants into the labor force is excluded, the proportion is closer to one-fifth (table IV-1).

TABLE IV-1—*Distribution of seasonal and nonseasonal unemployment by industry of last full-time job, 1957*

[Numbers in thousands]

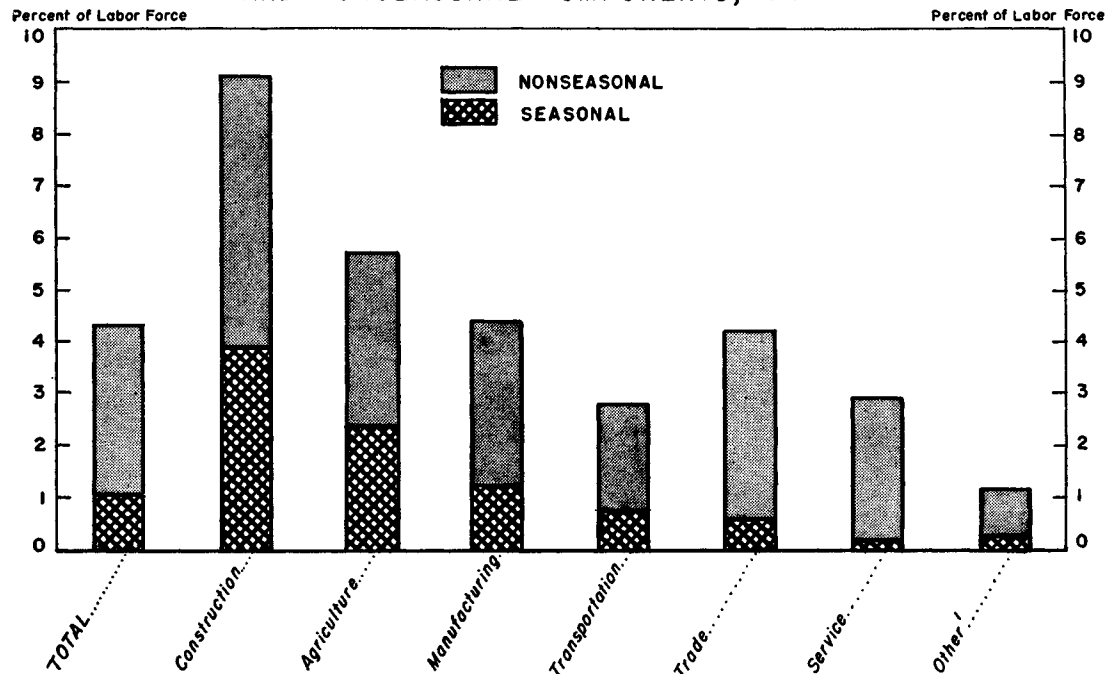
Industry division	Total	Seasonal	Non-seasonal	Seasonal as a percent of total
Total.....	2,936	776	2,160	26
With work experience.....	2,640	674	1,966	26
Wage and salary workers:				
Agriculture.....	104	43	61	41
Construction.....	341	146	195	43
Manufacturing.....	793	236	557	30
Durable goods.....	449	142	307	32
Nondurable goods.....	344	94	250	27
Trade.....	428	60	368	14
Transportation.....	133	36	97	27
Service.....	403	32	371	8
Other <sup>1</sup> .....	178	51	127	29
Temporary layoffs and persons waiting to begin new jobs in 30 days.....	260	71	189	27
No previous work experience.....	296	102	194	34

<sup>1</sup> Includes self-employed and unpaid family workers in all industries as well as wage and salary workers in other industries.

NOTE.—May not add to totals because of rounding.

<sup>5</sup> Estimated from the range of periodic (seasonal) fluctuations in net unemployment from major industry divisions.

CHART 5  
INDUSTRY UNEMPLOYMENT RATES BY SEASONAL  
AND NONSEASONAL COMPONENTS, 1957



UNITED STATES DEPARTMENT OF LABOR  
BUREAU OF LABOR STATISTICS

<sup>1</sup> WAGE AND SALARY WORKERS IN OTHER INDUSTRIES, AND SELF EMPLOYED, AND UNPAID FAMILY WORKERS IN ALL INDUSTRIES.  
NOTE: RATES ARE BASED ON OLD DEFINITION OF UNEMPLOYMENT. ONLY WAGE AND SALARY WORKERS ARE INCLUDED EXCEPT FOR "TOTAL" AND "OTHER".

In a "normal" year unemployment is almost 50 percent higher at its peak in June than at its low point in October.<sup>6</sup> This variation in the number of unemployed is tied to the annual cycle of weather and crop developments and to our social customs and traditional industrial patterns.

Part of the frictional unemployment associated with entry into the labor force is seasonal. The largest regularly recurrent rise in unemployment, which occurs in June, is directly connected with the summer recess in the school year. About 40 percent of the unemployed in June 1957 could be described as seasonally employed; they represented mainly the inevitable proportion of students who experience an interval of joblessness when they enter the labor force at the end of the school term. This is one facet of seasonal unemployment—the unemployment of entrants into the labor force who generally have not held full-time jobs before. This group is discussed in some detail in the section on gross changes in the labor force.

There is another facet which results from the layoff of workers in industries bound to the weather or to the agricultural cycle—in farming, canning and food processing, construction, lumbering, railroad transportation—or from layoff connected with social and commercial customs such as the post-Christmas lull in retail trade or the regular introduction of new automobile or television models at various times in the year.

A declining seasonal demand for workers does not always lead to a proportionate rise in unemployment. Most of the peak needs in agriculture are met by unpaid family workers or by young summer workers who leave the labor force during the slack periods. Some of the employees at Christmastime already hold other jobs; when their seasonal jobs are finished they continue with their regular employment.

#### SEASONAL UNEMPLOYMENT IN 1957

The seasonal unemployment contributed by individual industry divisions is of particular interest because it relates mainly to the unemployment of regular wage earners and because it indicates the source for the periodic increases in total unemployment. In 1957 workers in the construction industry had the highest rates of both seasonal and nonseasonal unemployment.<sup>7</sup> On the average, 10½ percent of the construction industry workforce was unemployed in any month in 1957; about two-fifths of this unemployment could be termed "seasonal."<sup>8</sup>

The next largest group, both in seasonal and nonseasonal unemployment, were hired workers in agriculture. Of their total unemployment rate of 5.8 percent, 2.4 percent was seasonal—also about 40 percent (table IV-2).

<sup>6</sup> This represents the spread in the seasonal adjustment factors. In 1957, June unemployment was actually 33 percent above the October level.

<sup>7</sup> See the appended technical note for an outline of the procedure used in estimating the proportion of seasonal unemployment.

<sup>8</sup> The statistical procedure for measuring average seasonal unemployment is not sufficiently flexible to include all of the seasonal unemployment in a specific period. The effects of unseasonable variations in weather, for example, cannot be taken into full account.

TABLE IV-2.—*Total and seasonal unemployment in 1957*

[In thousands]

	January	February	March	April	May	June	July	August	September	October	November	December	Annual average
Total unemployment.....	3,244	3,121	2,882	2,690	2,715	3,337	3,007	2,609	2,552	2,508	3,188	3,374	2,936
Estimated seasonal.....	1,194	1,160	968	784	793	1,306	978	480	267	88	615	683	776
Percent seasonal to total.....	36.8	37.2	33.6	29.1	29.2	39.1	32.6	18.4	10.5	3.5	19.3	20.2	26.4
Distribution of seasonal unemployment by industry (percent)													
INDUSTRY DIVISION													
Total.....	100	100	100	100	100	100	100	100	100	100	100	100	100
Agriculture.....	10	7	6	4	1	2	3	7	12	13	13	13	6
Construction.....	28	27	27	25	13	6	6	7	5	20	34	19	19
Manufacturing.....	25	30	33	42	43	24	29	33	41	26	28	30	30
Durable goods.....	13	19	20	25	26	15	19	28	25	11	14	18	18
Nondurable goods.....	12	11	13	17	17	9	10	5	16	15	14	12	12
Trade.....	14	15	13	7	5	4	3	3	3	8	4	8	8
Transportation.....	5	6	6	6	4	2	4	7	4	7	3	5	5
Service.....	3	3	3	2	3	7	4	4	11	10	4	4	4
Other.....	9	7	9	8	4	2	6	4	23	7	4	7	7
Temporary layoffs and persons waiting to begin new jobs in 30 days.....	7	3	1	5	11	17	13	20	29	26	7	9	9
No previous work experience.....	1	1	2	2	15	37	33	20	18	23	4	13	13

<sup>1</sup> See table IV-1.

NOTE.—Percents may not add to totals because of rounding.

As has been noted, not all of the seasonal variations in employment are reflected in unemployment, mainly because the labor force expands and contracts to meet seasonal needs for workers. Another factor tending to offset seasonal unemployment, which is particularly applicable to construction and agriculture, is the job mobility of workers.

High worker mobility, as we have noted elsewhere in this report, is usually associated with a high rate of unemployment. However, where mobility lies in the work rather than the worker, i.e., where the locus of the worker's employment shifts, as in crop harvesting, food canning and construction, unemployment tends to be reduced to the extent that the worker can dovetail his employment from an activity of seasonally declining demand into an activity of seasonally rising demand.

In a survey of job mobility for the year 1955, approximately 24 percent of the wage and salary workers in both construction and agriculture held more than one job during the year. By comparison, only 11 percent of workers in all industries held more than one job.<sup>9</sup> Job mobility in these two industries is a natural consequence of the periodicity of the work and the multiplicity of employer units; separate projects at different locations under different employers result, of necessity, in a lack of job continuity.

Workers in manufacturing had substantially lower rates of seasonal unemployment (1.3 percent seasonal out of 4.5 percent total) than in construction and agriculture but, because of its large employment, manufacturing accounted for the largest proportion of total seasonal unemployment (30 percent).

Workers in durable and nondurable goods were on the average about equally affected by seasonal unemployment. An analysis of employment data indicates that the manufacturing industries with the widest seasonal fluctuations included canning and several other food processing industries, tobacco, automobiles, lumber and the apparel industries.

Relatively low seasonal unemployment was characteristic of the service and trade industries; this could probably be attributed as much to flexibility in the work force in these industries as to steadiness in employment. Total unemployment rates in these industries were about as high as in manufacturing.

Next to manufacturing, the largest numbers of seasonally unemployed workers came from the construction industry (19 percent of the total). Other industries contributed substantially less to the total number of seasonally unemployed workers. However, a large proportion of seasonal unemployment (13 percent) was among new workers—without previous work experience. The seasonal unemployment of new workers is concentrated in the late spring, summer and early fall, with the peak months in June and July. (See table IV-2.) In the spring months and in September, manufacturing accounts for the largest part of seasonal unemployment; in the winter months, construction is the source of the largest seasonal unemployment.

The month with the least seasonal unemployment is October. The unemployment of workers from manufacturing, construction, trade,

<sup>9</sup> Percentages refer to consecutive jobholding, not concurrent.



and transportation is then normally at a minimum. Unemployment from all other industries is only fractionally higher in October than in some other month (May is the low point in agriculture, August in services); the seasonal unemployment contributed by these industries amounts to about 5 percent of total unemployment in October.

June is, as has been previously noted, the month of highest seasonal unemployment, but there are also large numbers of workers seasonally unemployed in January, February, and March. (See table IV-3.) Seasonal unemployment in these winter months generally reflects slack-season layoffs of workers who previously held full-time jobs. On the other hand, the heavy seasonal unemployment in June and July is accounted for by new workers.

TABLE IV-3.—*Comparative seasonal unemployment by sex and major age group between months of peak and low point*<sup>1</sup>

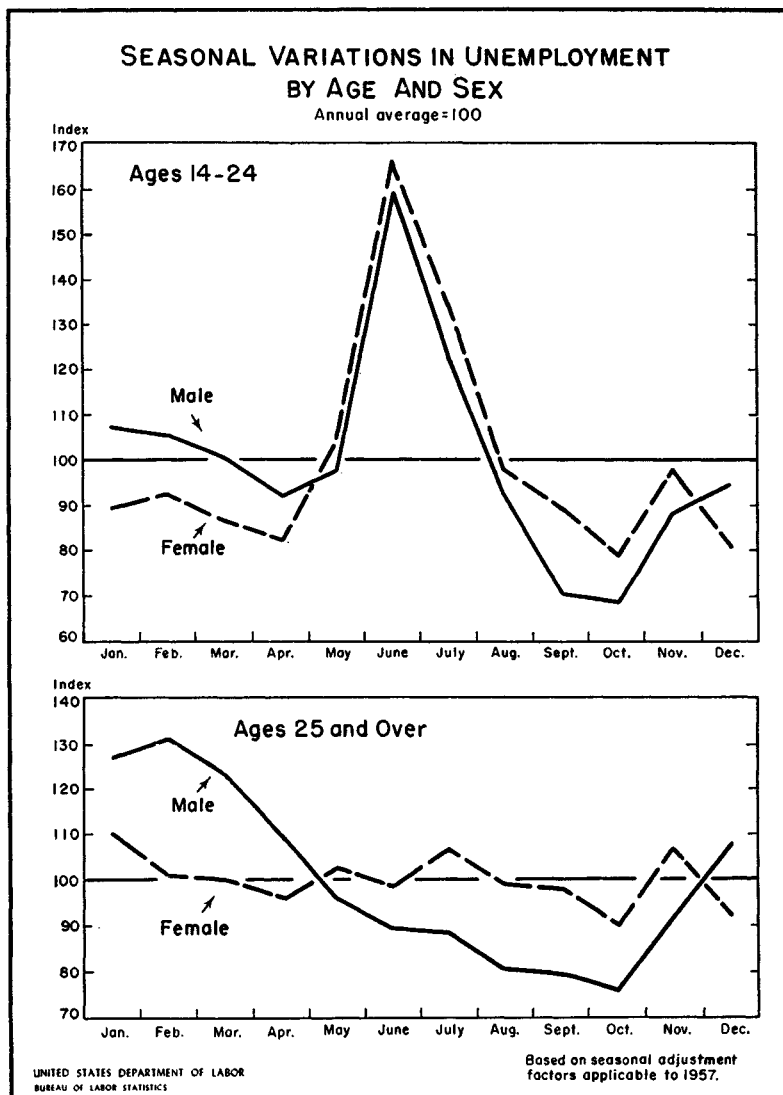
Age and sex	Lowest unemployment		Highest unemployment		Percent change
	Month	Percent of annual average	Month	Percent of annual average	
Under 25:					
Male.....	October.....	68.9	June.....	159.6	132
Female.....	.....do.....	79.2	.....do.....	166.3	110
25 and over:					
Male.....	.....do.....	75.9	February...	131.0	73
Female.....	.....do.....	90.1	January.....	110.1	22

<sup>1</sup> Based on seasonal adjustment factors derived from recent years' experience.

October is the month of least seasonal unemployment for both men and women, as well as for young persons (under 25) and adults (over 25). The peak periods differ. June is the peak for youngsters of both sexes, with their seasonal unemployment in this month more than double the October level. February, the peak month of seasonal unemployment for men 25 and over, is higher by two-thirds than October. January is the peak for women over 25, but the range between peak and low point is relatively narrow—one-fifth higher in January than in October.

Although seasonal unemployment can usually (by definition) be anticipated, and although it is usually (but not invariably) of short duration, it may nevertheless work hardship on individuals. Also, to the extent that seasonal unemployment results from industry practices which may be changed rather than from unavoidable variations in weather, it may represent one of the most promising areas for reduction of frictional unemployment.

CHART 6



## APPENDIX TO CHAPTER IV

## TECHNICAL NOTE ON SEASONAL UNEMPLOYMENT

The measurement of seasonal unemployment in 1957 was made primarily from the individual seasonally adjusted series on unemployment by industry source, related to the month of minimum seasonal unemployment indicated by the seasonal adjustment factors.

The following procedure was used:

1. Differences between the original and seasonally adjusted series were computed for each month. This gave a measure of seasonal unemployment for each month in relation to the annual average.
2. The month of minimum seasonal unemployment for each industry division was identified from the seasonal adjustment factors. For this month the amount of seasonal unemployment was considered as zero.
3. The amount of seasonal unemployment for each of the other months was the sum, without regard to sign, of the differences between adjusted and original figures for the minimum month and each of the other months. This is illustrated in the following example for total unemployment.

	Minimum month (October 1957)	Other than minimum month (March 1957)
Unemployment:		
Original.....	2,508,000	2,882,000
Seasonally adjusted.....	3,195,000	2,661,000
Seasonal unemployment related to annual average.....	-687,000	221,000
Seasonal unemployment related to minimum month.....	0	908,000

When calculated for aggregate unemployment, the average proportion attributable to seasonality amounted to 24 percent; when the calculation was applied to major industry divisions (and included new entrants to the labor force) the estimate was increased to 26.5 percent. Had it been possible to do the computations for more detailed groups, the estimates would undoubtedly have been somewhat higher.

This last point illustrates one difficulty in attaining a precise measure of seasonal unemployment. Any of the aggregate groups represents a balance of offsetting movements. Even at levels considered minimum for any group some individuals would be unemployed for seasonal reasons. However, it was not practical to measure seasonal unemployment in groupings more detailed than the major industry division because the small size of the more detailed unemployment groups would not have permitted statistically adequate seasonal adjustment. Even though the amount of revealed seasonality would have been greater, it is questionable whether further quantification of seasonal unemployment at minimal levels for smaller groupings would have materially altered the patterns described in this report.

There are other limitations which must be recognized in using the information on seasonal unemployment. Just as the original data on unemployment are subject to sampling variability and response errors and biases, so are the seasonal adjustments merely approximations of an average pattern which has been discerned within an historical mass of other regular and irregular movements, without certainty that the pattern is precisely applicable to the current period of study.

The seasonal adjustment factors express the characteristic recurrent pattern of monthly change isolated through a highly detailed technical examination of unemployment over a period of years, with due weight being given to changes in the pattern indicated in more recent years. These factors were developed in the Census Bureau by the application of a ratio-to-moving-average procedure to the original data, with the computations carried out on high-speed electronic computing equipment.

For a description of the basic ratio-to-moving-average procedure, see "Adjustment for Seasonal Variation," by H. C. Barton, Jr. in the Federal Reserve Bulletin, June 1941. For its utilization in electronic computers, see "Seasonal Computations on UNIVAC," by Julius Shiskin, in the American Statistician, February 1955.

## CHAPTER V. SOME POSTWAR TRENDS IN UNEMPLOYMENT

Of the various forms of noncyclical unemployment that have been discussed, structural unemployment in many ways presents the most serious problems from the point of view of the national welfare. It is most usually considered to result from changes in basic economic conditions attending economic growth. These may embrace shifts in consumer tastes, the relocation of industry, the evolution of technological innovations, as well as new labor force patterns stemming from trends in population growth or work habits. The effects of structural unemployment may be confined to particular areas only, or affect relatively small segments of the overall work force. But this form of labor surplus is particularly likely to be long term in nature.

A forthcoming study for the Joint Economic Committee will investigate, so far as the available data permit, the impact of structural unemployment upon geographical areas most affected. The attention of this section is directed to the overall dimensions of the problem, in particular its important historical aspects; the kinds of basic changes likely to result in structural unemployment and their effect on total unemployment; and the trend in the extent of noncyclical unemployment. This examination of changes over time differentiates the treatment here from preceding parts of this study which have focused on the characteristics of the unemployed in a particular postwar period most suitable (from some technical or conceptual point of view) for the problem at hand.

Unfortunately, data limitations severely restrict the period that can be observed in any detail to but a few years. In particular, the years 1948 and 1956 have been selected for comparison because of all the period for which household survey estimates are available (1940 to present) these years were probably the least affected by the major dislocations of World War II and the postwar periods.<sup>10</sup> The composition of the unemployed in both these years is compared to see what changes, if any, took place in this group over an 8-year period and to what extent they can be related to major changes in the economic structure.

## THE TREND IN TOTAL UNEMPLOYMENT

From what little is known of the history of unemployment in the United States, there is no very strong evidence of a distinct trend toward higher or lower rates of unemployment. When the years of the great depression and World War I are omitted, estimates for the period 1900 to 1940, painstakingly pieced together from a variety of sources, show a median (and modal) unemployment rate of slightly under 5 percent.<sup>11</sup> While the fluctuations about this rate were more considerable in the earlier period (perhaps because of estimation problems), the typical postwar rate of unemployment, excluding the

<sup>10</sup> There is no special advantage here, as earlier, in using the 1957 estimates of unemployment by detailed characteristics, since there are no comparable data for 1948. In addition, any comparison between 1948 and 1957, would be affected by the early effects of the 1958 business recession.

<sup>11</sup> See Stanley Lebergott: "Annual Estimates of Unemployment in the United States, 1900-1954" in "The Measurement and Behavior of Unemployment," National Bureau of Economic Research Special Conference Series, No. 8, Princeton University Press, 1957. The median rate quoted here has been converted roughly so that it is more comparable with the definitions of unemployment adopted by the Census Bureau in 1957.

Korean years, was not materially different. In 1948, the overall rate of unemployment was 3.8 percent; in 1956 it was 4.2 percent.

When yearly estimates of unemployment are based on averages of regular monthly surveys, as has been the case since 1940, two sometimes independent developments affect the average. One of these is the number of different persons becoming unemployed, affecting the total count through the number of new spells of unemployment reported each month; the other is the average duration of unemployment, determining how many months in all, persons are counted during each spell of unemployment.<sup>12</sup> Each of these factors may reflect different economic causes and their interrelationships are important for evaluating the trend of total unemployment.

#### NEW VERSUS CONTINUING UNEMPLOYMENT

A comparison of the trend in the rates of new and continuing unemployment between 1948 and 1956 (table V-1) shows some evidence of a lengthening of the duration of unemployment, whereas the proportion of different persons looking for work each year remained about the same. New unemployment is measured by the persons reporting 1 to 4 weeks of unemployment at the time of the survey while continuing unemployment is measured by the number who reported looking for work longer than 4 weeks.<sup>13</sup> The swings in total unemployment over the period pretty much mirror fluctuations in the number unemployed over 4 weeks. By comparison, the rate expressing the total number of persons unemployed each year was relatively much more stable. At the beginning and end of the period, the rate of new unemployment was about the same, whereas the rate of continuing unemployment rose by about 25 percent. All of the moderate increase in the rate of total unemployment was accounted for by the proportionately much greater rise in the continuing unemployed.

TABLE V-1.—*New, continuing, and total unemployment,<sup>1</sup> 1948–56*

Year	As a percent of civilian labor force			Number in thousands		
	Total	New	Continuing	Total	New	Continuing
1948.....	3.4	1.8	1.6	2,064	1,087	977
1949.....	5.5	2.4	3.1	3,395	1,517	1,878
1950.....	5.0	2.1	2.9	3,142	1,307	1,835
1951.....	3.0	1.6	1.4	1,879	1,003	876
1952.....	2.7	1.5	1.2	1,673	925	748
1953.....	2.5	1.4	1.1	1,602	910	692
1954.....	5.0	2.0	3.0	3,230	1,303	1,927
1955.....	4.0	1.7	2.3	2,654	1,138	1,516
1956.....	3.8	1.8	2.0	2,551	1,214	1,337

<sup>1</sup> New unemployment is expressed as the number of persons reporting a spell of 1 to 4 weeks of unemployment at the time of the survey; continuing, as the number reporting a spell of more than 4 weeks.

NOTE.—Figures are based on old definition of unemployment.

<sup>12</sup> The number of new spells reported each month is not an exact index of the number of different persons becoming unemployed during the year, because of the fairly high proportion of persons experiencing two or more spells. Studies since 1955 in the annual work experience surveys indicate, however, that this group has remained a fairly constant proportion of the total of unemployed persons throughout.

<sup>13</sup> Technically, this does not cover the occasional case when there are 5 weeks between surveys. The estimates could be adjusted to take account of these cases, but it is not very likely that the effect on the annual averages would be of any consequence. In table V-1, all estimates are expressed in terms of the original definitions used before January 1957. The two groups excluded from the unemployed on this basis, persons on temporary layoff with instructions to return to work within 30 days and persons not in school with new jobs to begin also within 30 days—increase the rate of new unemployment without changing the trend. The groups excluded would be included among the continuing unemployed only insofar as they had misunderstood or misreported their original status.

Other indexes of the duration of unemployment throw added light on this trend. Despite the still tight labor markets of the Korean period, the average duration of unemployment was at essentially the 1948 level during 1952 (table V-2). Between 1948 and 1956 this average became almost 3 weeks longer. The increasing extent of prolonged unemployment lasting 15 weeks or longer, and even more so, 27 weeks or longer, appears to have been one of the most important factors in this development. Fairly similar increases in duration occurred among both men and women.

It is difficult to determine why an increase in unemployment between these 2 years of relatively full employment should have taken this form, since many of the statistics on detailed characteristics of the long-term unemployed were not tabulated until around 1954. However, certain possible causes may be eliminated and the probability of others evaluated to a certain extent.

TABLE V-2.—*Selected measures of the duration of unemployment, 1948, 1952, and 1956*

Duration measure	1948	1952	1956
Annual average duration of unemployment (weeks).....	8.6	8.3	11.3
Male.....	9.2	(1)	12.0
Female.....	7.1	(1)	10.0
Percent of total unemployment reporting:			
15 weeks or more unemployment.....	15.0	13.9	20.9
27 weeks or more unemployment.....	5.6	5.0	9.1

<sup>1</sup> Not available.

NOTE.—Figures are based on old definition of unemployment.

#### CHANGES IN LABOR FORCE PATTERNS AND THE RATE OF UNEMPLOYMENT

It is possible for the unemployment rate for each of the major labor force groups to remain unchanged, yet the overall rate change because of shifts in the relative importance of the groups. These shifts may occur because of population changes, new work habits, or other characteristics of a growing economy, without any fundamental disturbance in the usual rate of unemployment for the groups mainly concerned, but with implications for the rate of total unemployment if the groups becoming more important tend to have unemployment rates significantly different from the average.

Two most important labor force trends in this period with potential effect for the overall rate have been the continuing movement of agricultural workers into nonfarm jobs and the sharply increasing rate of labor force participation among women. Everything else being equal, a labor force with a higher proportion of women would probably have a higher overall rate of unemployment, since women usually work in more marginal occupations than married men, who make up the bulk of the male labor force. Similarly, since most of the migration from the farm work force has been among self-employed farmers or unpaid family workers, who in their original occupations had an almost nonexistent degree of unemployment in the usual survey sense, the movement of these persons into nonfarm jobs where unemployment is more common could also be expected to raise the

overall rate of unemployment, even if the shift occurred without disruption of the nonfarm job market.

The possible impact of these shifts on unemployment in 1956 is considered in tables V-3 and V-4. The change in the proportion of agricultural and nonagricultural workers between 1948 and 1956 implied a shift of some 2 million farmworkers into nonfarm lines. Given a constant rate of nonagricultural unemployment (the 1956 rate), the net addition to the total unemployed resulting from the movement between farm and nonfarm industries totaled only a comparatively small 80,000. On the same basis, the impact of the new working women was only slightly larger—amounting to a little over 100,000 additional unemployed. However, the effect of this addition was more than offset by the consequences of the lower birth rates in the 1930's for the 1956 labor force. Young adults 20 to 24 years old of both sexes have even higher rates of unemployment. Therefore, the net effect of the age-sex changes in the character of the labor force between 1948 and 1956 tended toward a slightly lower overall level of unemployment because of the decreased numbers of 20- to 24-year-olds.<sup>14</sup>

The average duration of unemployment increased only by an estimated day and a half as a result of these labor force changes, assuming that the average for the groups themselves were not affected by the shifts.

TABLE V-3.—*Changes in experienced labor force and unemployed, 1948-56, by type of activity and class of worker*

Type of activity and class of worker	Change in percent of experienced labor force	Implied change in <sup>1</sup> —	
		Experienced labor force	Experienced unemployed
		<i>Thousands</i>	<i>Thousands</i>
<b>Experienced labor force.....</b>			<b>+80</b>
<b>Agriculture.....</b>	<b>-3.2</b>	<b>-2,158</b>	<b>-21</b>
Self-employed workers.....	-3.4	-1,595	-6
Wage and salary workers.....	-.3	-208	-14
Unpaid family workers.....	-.5	-354	-1
<b>Nonagricultural industries.....</b>	<b>+3.2</b>	<b>+2,158</b>	<b>+101</b>
Self-employed workers.....	-1.2	-797	-8
Wage and salary workers.....	+4.2	+2,842	+108
Unpaid family workers.....	+-.2	+113	+1

<sup>1</sup> Obtained for labor force by standardizing 1956 on the 1948 activity-class of worker distribution and taking the difference between 1956 and 1956 standardized. Unemployment changes were derived by applying the appropriate 1956 unemployment rates to the implied labor force changes.

NOTE.—Figures are based on old definition of unemployment.

<sup>14</sup> The method for making these estimates is outlined in the footnotes to tables V-3 and V-4. The basic assumption in the use of a hypothetical standardized distribution is that the change being measured occurred while all other factors remained constant. The two shifts discussed were treated separately and no account was taken of their possible interactions with each other or other events.

## 64 EXTENT AND NATURE OF FRICTIONAL UNEMPLOYMENT

TABLE V-4.—*Changes in civilian labor force and unemployed, 1948-56, by age and sex*

Age and sex	Change in percent of civilian labor force	Implied change in <sup>1</sup> —	
		Civilian labor force	Total <sup>2</sup> unemployed
		Thousands	Thousands
Both sexes, total.....			-89
Male, total.....	-3.5	-2,393	-155
14 to 17.....	(?)	-16	-2
18 to 24.....	-2.9	-1,977	-142
25 and over.....	-.6	-400	-11
Female, total.....	+3.5	+2,393	+66
14 to 17.....	+1.1	+36	+4
18 to 24.....	-1.0	-672	-44
25 and over.....	+4.4	+3,029	+106

<sup>1</sup> Obtained for labor force by standardizing 1956 on the 1948 age-sex distribution and taking the difference between 1956 and 1956 standardized. Unemployment changes were derived by applying the appropriate 1956 unemployment rates to the implied labor force changes.

<sup>2</sup> Less than 0.05 percent.

NOTE.—Figures are based on old definition of unemployment.

Two other relevant demographic changes should be considered: the increasing population of both older and younger persons. The effect of the first on the structure of the labor force was tempered during this period by a persistent decline in the rate of labor force participation among men past 65. The bulge in the youthful population resulting from the wartime and postwar "baby boom," on the other hand, had not yet pushed much past the age of 14 by 1956. The ordinarily high rate of unemployment among youngsters and the typical difficulties of the older worker in finding work, once losing a job, mean that these two groups present special unemployment problems. Larger numbers of workers in these ages in future years may change the scope of the unemployment problem somewhat. Given usual postwar unemployment rates for these ages and the labor force composition projected from known trends, the overall rate of unemployment may be expected to increase by at least 0.5 of a percent by 1975 as a result of these factors alone, in the absence of any counteracting tendencies.

## OTHER INDUSTRY-OCCUPATION CHANGES AND THE RATE OF UNEMPLOYMENT

Unlike the labor force patterns so far discussed, other industry-occupation trends between 1948 and 1956 would have led to a somewhat lower overall rate of unemployment, everything else considered unchanged. The considerably greater increases in service-rendering activities and related occupations as compared with the goods-producing industries placed a greater proportion of the labor force in lines with customarily lower rates of unemployment. However, there is some evidence that these changes did not occur without some disequilibrium in labor resource allocation, possibly figuring prominently in the trend in total unemployment observed between these years.

The changing industry distribution of the unemployed between 1948 and 1956 is examined in table V-5 by breaking the change for each



industry into two components: unemployment resulting from merely an increase or decrease in the size of the industry labor force, and the structural unemployment attributable solely to a change in the industry unemployment rate. The various industry changes worked themselves out over the period so that, on balance, most of the net difference in the total between 1948 and 1956 could be ascribed to changes in labor force size, especially in the service sector. The effect of changes in the rate of unemployment was offsetting between the two major sectors, but workers in goods-producing industries experienced a relatively large increase in structural unemployment as compared to a reduction for the faster growing service industries.

TABLE V-5.—*Changes in unemployment between 1948 and 1956, by major industry group for wage and salary workers*

Industry division	Unemployment rate		Change in unemployment due to 1—		
	1948	1956	Total	Struc-tural changes	Labor force changes
Wage and salary labor force.....			+379	+113	+266
Goods-producing industries.....	4.1	5.0	+298	+215	+83
Agriculture.....	4.7	6.5	+30	+32	-2
Mining.....	2.3	6.4	+26	+30	-4
Construction.....	7.4	8.3	+80	+33	+47
Manufacturing.....	3.5	4.1	+162	+120	+42
Service-rendering industries.....	3.4	3.1	+81	-102	+183
Transportation.....	3.0	2.4	-27	-29	+2
Trade.....	4.3	4.1	+35	-21	+56
Service, including private household.....	3.2	2.9	+81	-37	+118
Forestry and fisheries.....	10.8	7.0	-1	-3	+2
Public administration.....	2.0	1.6	-7	-12	+5

<sup>1</sup> The structural change in unemployment is obtained by applying the change in the rate of unemployment between 1948 and 1956 to the appropriate 1956 labor force component. The labor force change is the product of the appropriate 1948 rate of unemployment and the 1948-56 change in the associated labor force component.

NOTE.—Figures are based on old definition of unemployment.

“Structural” unemployment is defined here in a very limited sense, referring only to changes in specific unemployment rates over a fairly brief period. In effect, the classification serves as a rough index of whether the employment position of a particular segment of the labor force was improving, without commitment as to how “good” or “bad” the situation may have been to begin with. Also, an improvement in the job position for a particular group is not an unconditionally favorable development if it comes about at another’s expense or is a symptom of labor scarcities in the economy. Subject to qualifications of this nature, significant changes in the rate of unemployment as between two periods of relatively full employment may be taken as indications of structural dislocations.

This same sort of analysis of the data is presented in table V-6 in terms of occupational changes. Here again, unemployment resulting from labor force change occurs mainly among white-collar or service workers with structural unemployment as an offset. Manual workers, comprising the bulk of goods-producing industries’ employees, again

show a comparatively sizable increase in structural unemployment. It will be noted that the relative importance of the total structural change is larger when obtained from the yearly occupation averages based on only 4 months. The sampling variability is larger here so that the 12-month industry averages must be taken as more reliable. The relative character of the changes in goods-producing and service-rendering activities is the same for both sets of averages.

TABLE V-6.—*Changes in unemployment between 1948 and 1956, by major occupation group*

Major occupation group	Unemployment rate		Change in unemployment due to 1—		
	1948	1956	Total	Structural changes	Labor force changes
Experienced labor force.....	3.0	3.4	+425	+210	+215
White-collar and service workers.....	2.5	2.4	+99	-64	+163
Professional, technical, and kindred.....	1.7	1.0	-9	-45	+36
Managers, officials, and proprietors.....	1.0	.8	-15	-17	+2
Clerical and kindred workers.....	2.3	2.4	+43	+9	+34
Sales workers.....	3.4	2.7	-14	-30	+16
Private household workers.....	3.2	4.2	+34	+21	+13
Service workers.....	4.8	4.8	+60	-2	+62
Manual workers.....	3.5	4.4	+326	+274	+52
Farmers and farm managers.....	.2	.4	+6	+8	-2
Craftsmen, foremen, and kindred workers.....	2.9	3.2	+44	+26	+18
Operatives and kindred workers.....	4.1	5.4	+198	+173	+25
Farm laborers.....	2.3	3.7	+35	+42	-7
Laborers, except farm and mine.....	7.5	8.2	+43	+25	+18

<sup>1</sup> The Structural change in unemployment is obtained by applying the change in the rate of unemployment between 1948 and 1956 to the appropriate 1956 labor force component. The labor force change is the product of the appropriate 1948 rate of unemployment and the 1948-56 change in the associated labor force component.

NOTE.—Figures are based on old definition of unemployment.

Workers in goods-producing industries represent a disproportionate number of the unemployed, even in relatively goods years, and their average duration of unemployment is typically longer (table V-7). The stability in the rate of new spells of unemployment, noted previously, indicates that the structural component of the 1948 to 1956 changes reflects mainly changes in duration. Considering their faster growing employment opportunities and declining rate of unemployment, it is likely that the average duration of unemployment was reduced for workers in the service sectors. Consequently, it also is likely that the increases for goods-producing workers were longer than observed for the aggregate of all the unemployed. The evidence that this development was probably most important for the especially long-term groups—who make up one of the least mobile segments of the working population—highlights its fundamentally structural character.

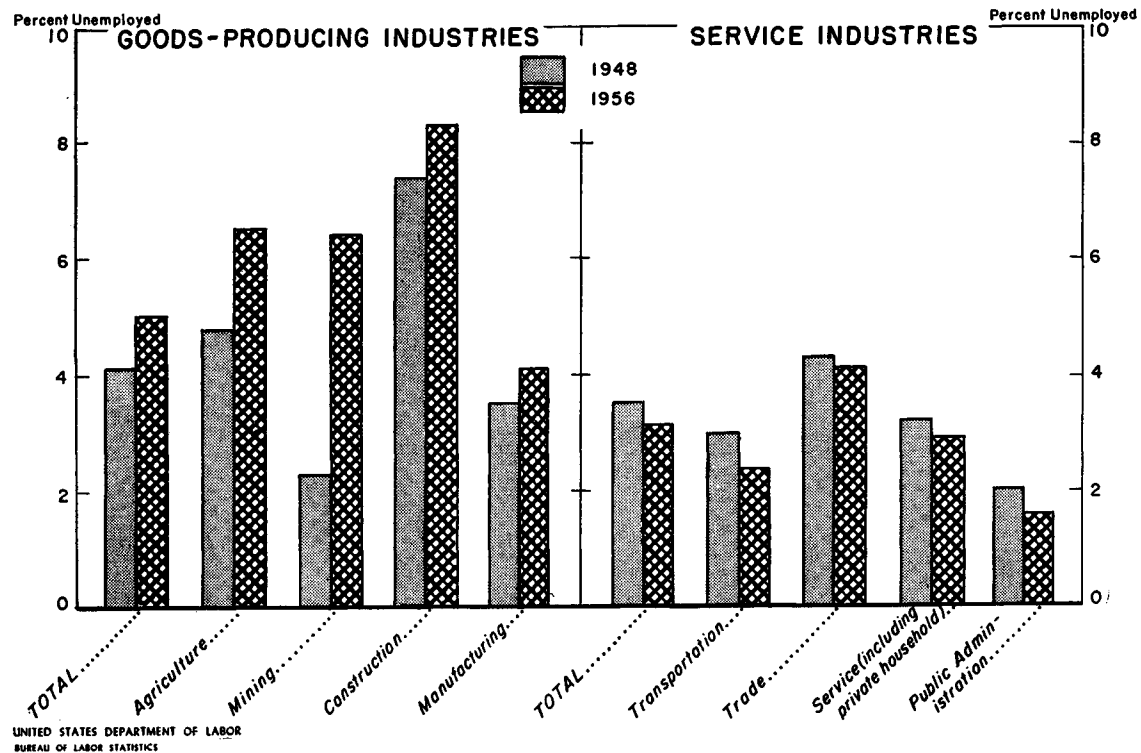
TABLE V-7.—*Experienced labor force, unemployment, and long-term unemployment in goods-producing and service-rendering industries wage and salary workers, 1956*

Industry divisions	Percent distribution		
	Experienced labor force	Unemployed	Unemployed 15 weeks or longer
Total wage and salary workers.....	100.0	100.0	100.0
Goods, producing industries.....	43.1	55.0	58.4
Agriculture.....	3.2	5.3	2.5
Mining.....	1.3	2.1	3.4
Construction.....	6.5	13.8	12.5
Manufacturing.....	32.0	33.8	40.0
Service-rendering industries.....	56.9	45.0	41.6
Transportation.....	8.5	5.2	5.5
Trade.....	18.6	19.4	17.8
Service, including private household.....	24.3	17.9	16.1
Forestry and fisheries.....	2	3	(1)
Public administration.....	5.3	2.2	2.1

<sup>1</sup> Less than 0.05 percent.

NOTE.—Figures are based on old definition of unemployment.

CHART 7  
TRENDS IN UNEMPLOYMENT RATES, 1948 AND 1956



A faster rising outlay on services as compared to commodities has had continuing and far-reaching effects on the general character of labor force growth. Even in the short space of the 8 years between 1948 and 1956, the proportion of the experienced labor force employed in goods-producing industries fell from around 45 to 41.5 percent. Though migration from the farm was a major factor, the expansion among other nonfarm goods-producers, particularly in manufacturing, has not compared with the growth in services generally. Among other things, the expanding service activities have also generated a greater need for women workers and so contributed to the changing complexion of the labor force.

For a number of reasons, a fundamental transformation such as is involved in the goods-to-services shifts poses many obstacles to smooth adjustments. Differences in skills, rates of pay, and hiring systems as between workers in goods-producing industries and the service-rendering activities reduce the mobility of displaced workers and impede their desire and ability to find equivalent places for themselves in faster expanding alternatives.

It must be stressed, however, that the total effect observed over this period was, on the whole, rather small without involving any very extensive group of workers.

#### NEW WORKERS

Normally labor force growth is more vigorous in prosperous years, but the 1½ million increase for 1956 was unusually large even for a prosperous year. One factor also important, therefore, in explaining differences from 1948 among the unemployed is the relatively larger numbers of inexperienced persons looking for work in 1956 than earlier. In 1948, those who had never held a full-time job made up about 8.5 percent of the total unemployed; in 1956, around 11 percent. Whether because of rapid absorption into expanding employment opportunities or because of discouragement if jobs are not easy to find, inexperienced workers make up an almost negligible proportion of the long-term unemployed, so that their larger numbers in 1956 might have led one to have expected a somewhat different trend in duration than actually observed.



