

Unemployment, labor force trends, and layoff practices in 10 countries

Unemployment rates reached record highs in Great Britain, France, and the Netherlands and were the lowest in Japan and Sweden; statistical treatment of laid-off workers is evaluated

JOYANNA MOY AND CONSTANCE SORRENTINO

After declining in 1979, unemployment rates resumed their upward trend in 1980 in most major industrial countries. In the first half of 1981, unemployment rates leveled off in North America and Japan, but continued rising in Western Europe. By May 1981, the British rate was 11 percent—the highest in Britain's post-World War II history, and the highest rate recorded by any country in the Bureau of Labor Statistics' series of comparative unemployment rates. Unemployment also reached record highs in France and the Netherlands. In contrast, jobless rates of only 2 percent were recorded in the two nations where unemployment has been the lowest and most stable, Japan and Sweden. (See table 1.)

This article examines unemployment and labor force trends in the United States and nine other nations through the first half of 1981, based on data approximating U.S. concepts. For the first time, adjusted labor force statistics are presented for the Netherlands. The Dutch data are shown on an annual average basis only. Some revisions to previously published estimates for other countries are also presented. The revisions generally arise from the inclusion of more recent survey results. (See appendix for an explanation of the Dutch statistics and of the revisions.)

In addition, persons on temporary layoff are excluded from the unemployed in France and Great Britain, and this has had a slight impact on the comparative rates. In the past, persons on layoff had been included in the unemployed for comparability with U.S. concepts. However, layoff practices are so fundamentally different abroad, compared with U.S. practices, that BLS has decided to make no adjustments on this point. The question of layoffs in international unemployment comparisons is discussed in detail.

Unemployment

In the 1960's and first half of the 1970's, unemployment rates in the United States and Canada were much higher than in Western Europe, Japan, and Australia. However, this situation has been changing in recent years. (See table 2.) In 1979, the U.S. rate of 5.8 percent was surpassed in Australia, France, and Canada; and unemployment in Great Britain and the Netherlands was close to the U.S. rate. In 1980, the U.S. rate rose to 7.1 percent. Only Canada and Great Britain had jobless rates above that level, but Australia, France, and the Netherlands all had rates of more than 6 percent. As of mid-1981, unemployment rates in the United States, Canada, and France were more than 7 percent and the British rate had soared to 11 percent. Unemployment began to recede in Australia, but the German jobless rate, which had averaged 3 percent in 1979 and 1980, reached 4 percent—the highest recorded in the past

Joyanna Moy and Constance Sorrentino are economists in the Division of Foreign Labor Statistics and Trade, Bureau of Labor Statistics.

Table 1. Quarterly unemployment rates approximating U.S. concepts, seasonally adjusted, 1978-81

Period	United States	Canada	Australia ¹	Japan	France ²	Germany ²	Great Britain ³	Italy ⁴	Sweden
1978	6.0	8.4	6.3	2.3	5.4	3.4	6.3	3.7	2.2
I	6.3	8.4	6.7	2.2	4.8	3.5	6.5	3.6	2.2
II	6.0	8.5	6.3	2.3	5.3	3.5	6.4	3.6	2.3
III	5.9	8.4	6.4	2.3	5.7	3.4	6.2	3.6	2.4
IV	5.9	8.2	6.3	2.3	5.6	3.3	6.1	3.9	2.1
1979	5.8	7.5	6.2	2.1	6.1	3.0	5.7	3.9	2.1
I	5.8	7.9	6.3	2.1	5.8	3.2	5.9	3.8	2.2
II	5.7	7.6	6.2	2.1	6.2	3.0	5.6	3.9	2.2
III	5.7	7.1	6.0	2.1	6.3	2.9	5.5	3.9	2.0
IV	5.9	7.3	6.0	2.1	6.2	2.8	5.6	3.9	1.9
1980	7.1	7.5	6.1	2.0	6.5	3.0	7.4	3.9	2.0
I	6.2	7.5	6.0	1.9	6.2	2.8	6.1	4.0	1.8
II	7.3	7.7	6.2	2.0	6.4	2.9	6.7	4.0	1.9
III	7.5	7.5	6.1	2.1	6.5	3.1	7.5	3.9	1.9
IV	7.6	7.4	5.9	2.2	6.6	3.3	8.9	3.8	2.2
1981	7.4	7.2	5.6	2.2	7.2	3.6	10.1	3.9	2.2
I	7.4	7.2	5.6	2.4	8.0	4.0	10.8	4.6	2.2
II	7.2	7.5	5.8	(⁵)	8.2	4.6	11.2	4.5	2.5

¹ Quarterly data are for February, May, August, and November.
² Preliminary data from 1979 forward.
³ Preliminary data from 1980 forward.
⁴ Quarterly data are for January, April, July, and October.
⁵ Not available.

NOTE: Quarterly figures for France, Germany, Italy, and Great Britain are calculated by applying annual adjustment factors to current published data, and therefore should be viewed as only approximate indicators of unemployment under U.S. concepts. Published data for Australia, Canada, Japan, and Sweden require little or no adjustment.

two decades. Swedish and Japanese unemployment, which averaged only about 2 percent in 1979 and 1980, showed a slight upward trend in 1980 which continued into 1981. In April, the Japanese rate, 2.4 percent, was its highest monthly rate since late 1978.

Italian unemployment statistics are difficult to interpret. The BLS tentative adjustment of the Italian statistics to approximate U.S. concepts indicates an unemployment rate of about 4 percent in 1979 and 1980, rising to 4.6 percent in the second quarter of 1981. According to the Italian labor force survey, an additional 4 percent of the labor force are looking for work, but have not taken any active steps to find work in the past month. BLS has excluded such persons from the Italian unemployed because U.S. concepts require that a person actively seek work in the past 4 weeks to be counted as unemployed (unless on temporary layoff or waiting to begin a new job).¹ By classifying such persons as out of the labor force rather than as unemployed, the Italian unemployment rate looks quite favorable. However, it implies a very large number of discouraged workers, that is, persons who want jobs but who have stopped actively looking for work because they believe no jobs are available.²

The Italian labor market situation is also complicated by a large amount of unrecorded employment, known as "black labor" in Italy.³ The other countries covered here also have unrecorded employment, but not to the same extent as in Italy. Some persons classified in the

Italian survey as not working and looking for work may well have done some work during the survey period which they do not declare when replying to the survey.

Other labor market indicators

Differences in unemployment rates—after adjustment to a common statistical base—reflect the significant differences in the institutions and social programs as well as in the level of economic activity among the 10 countries studied here. Differences in growth and sectoral composition of the labor force also affect unemployment rates. Because unemployment rates alone do not indicate the full extent of labor force underutilization, other labor market indicators, such as employment, employment-population ratios, participation rates, and migration are also examined in this article.

Employment. In 1980, civilian employment in the United States was about 13 percent greater than in 1974, the year before the full effects of the 1974-75 recession were felt. Only Canada had a sharper employment increase. In Australia, Japan, Italy, the Netherlands, and Sweden, employment was up 3 to 7 percent; in France, only 1 percent; and in Germany and Great Britain, employment was 2 percent below 1974 levels. These rates of change in employment are, of course, related to differential rates of growth in the population of working age and to changes in the level of unemployment—all countries except Sweden had higher unemployment rates in 1980 than in 1974. The rates also reflect labor force participation; as will be shown later, only the United States, Canada, and Sweden had significantly higher labor force participation rates in 1980 than in 1974.

While U.S. employment has risen substantially since 1974, the rate of increase slowed in 1979 and employment rose only 0.3 percent in 1980. In Britain, a large drop in the number of persons with jobs in 1980 more than offset small increases recorded the previous 3 years. Employment could have dropped even further were it not for the existence of special employment and training measures. In March 1981, 1.2 million Britons were covered under special employment programs, the most extensive of which subsidizes employers who cut working hours rather than lay off workers. According to the British Department of Employment, these programs kept approximately 345,000 persons from becoming unemployed in March.⁴ The Netherlands was the only other country with a 1980 decline in employment, but the fall was not nearly as severe as in Great Britain.

In France, Germany, Italy, and Sweden, employment was bolstered by extensive programs which assisted workers during periods of reduced working hours. In France, the number of workers collecting partial unem-

ployment benefits declined sharply in 1979, but rose by 60 percent in 1980 to 179,000, approximately 1 percent of the labor force. The number of working days compensated doubled to more than 10 million in 1980. In

Germany, workers on shorter hours dropped to 88,000 in 1979, the lowest since 1973. In late 1979, however, partial unemployment was again rising and in the fourth quarter of 1980, 270,000 persons, 1 percent of

Table 2. Civilian labor force, employment, and unemployment approximating U.S. concepts, 10 countries, 1974-80

[Numbers in thousands]

Year	United States	Canada	Australia	Japan	France	Germany	Great Britain	Italy	Netherlands	Sweden
Labor force:										
1974	91,011	9,639	6,053	52,440	21,590	26,040	24,850	20,060	4,760	4,037
1975	92,613	9,974	6,169	52,530	21,620	25,630	25,100	20,270	4,830	4,123
1976	94,773	10,206	6,244	53,100	21,800	25,400	25,330	20,490	4,890	4,149
1977	97,401	10,498	6,358	53,820	22,130	25,360	25,520	20,530	4,950	4,168
1978	100,420	10,882	6,399	54,600	22,300	25,520	25,650	20,630	¹ 4,970	4,203
1979	102,908	11,207	6,480	55,210	¹ 22,500	¹ 25,780	25,580	20,910	¹ 5,040	4,262
1980	104,719	11,522	6,655	55,740	¹ 22,670	¹ 25,990	¹ 25,440	21,210	¹ 5,060	4,314
Labor force participation rate²:										
1974	61.2	60.5	63.0	63.0	57.2	54.4	62.6	47.9	48.2	64.9
1975	61.2	61.1	63.2	62.4	56.7	53.4	63.0	47.9	49.3	65.9
1976	61.6	61.1	62.7	62.3	56.7	52.8	63.3	48.1	49.1	66.0
1977	62.3	61.5	62.7	62.5	57.1	52.4	63.5	48.0	49.0	65.9
1978	63.2	62.6	62.0	62.8	57.1	52.8	63.4	47.7	¹ 48.5	66.1
1979	63.7	63.3	61.7	62.7	¹ 57.3	¹ 52.6	62.8	47.8	¹ 48.7	66.8
1980	63.8	64.0	62.2	62.6	¹ 57.4	¹ 53.0	¹ 62.1	48.0	¹ 48.4	¹ 67.2
Employment:										
1974	85,936	9,125	5,891	51,710	20,960	25,620	24,080	19,500	4,580	3,957
1975	84,783	9,284	5,866	51,530	20,710	24,740	23,950	19,620	4,580	4,056
1976	87,485	9,479	5,946	52,020	20,800	24,510	23,820	19,760	4,630	4,083
1977	90,546	9,648	6,000	52,720	21,040	24,460	23,900	19,790	4,700	4,093
1978	94,373	9,972	5,997	53,360	21,100	24,650	24,040	19,870	¹ 4,710	4,109
1979	96,945	10,369	6,075	54,040	¹ 21,130	¹ 25,000	24,130	20,100	¹ 4,770	4,174
1980	97,270	10,655	6,250	54,600	¹ 21,200	¹ 25,210	¹ 23,560	20,380	¹ 4,740	4,228
Employment-population rate³:										
1974	57.8	57.3	61.3	62.2	55.5	53.5	60.7	46.6	46.3	63.6
1975	56.0	56.9	60.7	61.2	54.3	51.5	60.2	46.4	46.7	64.8
1976	56.8	56.7	59.7	61.1	54.1	50.9	59.6	46.3	46.5	64.9
1977	57.9	56.6	59.2	61.2	54.3	50.5	59.4	46.2	46.5	64.8
1978	59.4	57.4	58.1	61.3	53.8	51.0	59.4	45.9	¹ 45.9	64.6
1979	60.0	58.6	57.9	61.4	¹ 53.8	¹ 51.0	59.3	46.0	¹ 46.1	65.4
1980	59.3	59.2	58.4	61.3	¹ 53.6	¹ 51.4	¹ 57.5	46.1	¹ 45.3	¹ 65.9
Unemployment:										
1974	5,076	514	162	730	630	420	770	560	180	80
1975	7,830	690	302	1,000	910	890	1,150	650	250	67
1976	7,288	727	298	1,080	1,000	890	1,510	730	260	66
1977	6,855	850	358	1,100	1,090	900	1,620	740	250	75
1978	6,047	911	402	1,240	1,200	870	1,610	760	¹ 260	94
1979	5,963	838	405	1,170	¹ 1,370	¹ 780	1,450	810	¹ 270	88
1980	7,448	867	405	1,140	¹ 1,470	¹ 780	¹ 1,880	830	¹ 320	86
Unemployment rate:										
1974	5.6	5.3	2.7	1.4	2.9	1.6	3.1	2.8	3.8	2.0
1975	8.5	6.9	4.9	1.9	4.2	3.5	4.6	3.2	5.2	1.6
1976	7.7	7.1	4.8	2.0	4.6	3.5	6.0	3.6	5.4	1.6
1977	7.0	8.1	5.6	2.0	5.0	3.5	6.3	3.6	5.1	1.8
1978	6.0	8.4	6.3	2.3	5.4	¹ 3.4	6.3	3.7	¹ 5.2	2.2
1979	5.8	7.5	6.2	2.1	¹ 6.1	¹ 3.0	5.7	3.9	¹ 5.4	2.1
1980	7.1	7.5	6.1	2.0	¹ 6.5	¹ 3.0	¹ 7.4	3.9	¹ 6.3	2.0
Unemployment rate (as published by each country)⁴:										
1974	5.6	5.3	2.7	1.4	2.8	2.6	2.6	⁵ 5.4	3.5	2.0
1975	8.5	6.9	4.9	1.9	4.2	4.7	4.1	⁵ 5.9	5.0	1.6
1976	7.7	7.1	4.8	2.0	4.6	4.6	5.6	⁵ 6.7	5.3	1.6
1977	7.0	8.1	5.6	2.0	4.9	4.5	6.1	7.2	5.1	1.8
1978	6.0	8.4	6.3	2.2	5.3	4.3	6.0	7.2	5.0	2.2
1979	5.8	7.5	6.2	2.1	6.1	3.8	5.6	7.7	5.0	2.1
1980	7.1	7.5	6.1	2.0	6.4	3.8	7.4	7.6	5.8	2.0

¹ Preliminary estimate based on incomplete data.

² Civilian labor force as a percent of civilian working-age population.

³ Civilian employment as a percent of civilian working-age population.

⁴ Published and adjusted data for the United States, Canada, and Australia are identical. For France, unemployment as a percent of the civilian labor force; for Japan, Italy, and Sweden, unemployment as a percent of the civilian labor force plus career military personnel; for Germany, Great Britain, and the Netherlands, registered unemployed as a percent of employed wage and salary workers plus the unemployed. Except for France, which does not publish an unemployment rate, these are the usually published unemployment rates for each country.

⁵ Italian Central Institute of Statistics estimate made for comparability with the revised labor force survey, introduced in 1977.

Note: Data for the United States relate to the population 16 years and over. Published data for France, Germany, Italy, and the Netherlands relate to the population 14 years and over; for Sweden, to the population age 16 to 74; and for Canada, Australia, and Japan, to the population 15 years and over. For Great Britain, the lower age limit was raised from 15 to 16 in 1973. The statistics have been adapted, insofar as possible, to the age at which compulsory schooling ends in each country. Therefore, the statistics for France relate to the population 16 and over and for Germany and the Netherlands, to the population 15 years and over. The age limits of the statistics for Canada, Australia, Japan, Great Britain, and Italy coincide with the age limits of the published statistics. Statistics for Sweden remain at the lower age limit of 16, but have been adjusted to include persons 75 years of age and over.

the labor force, collected short-time benefits. In Italy, the number of hours subsidized rose from 287 million in 1979 to 296 million, approximately 37 million days, in 1980. In Sweden, programs such as training and public works assist the unemployed and disabled. The number of persons enrolled in these programs has exceeded the number of jobless since 1973. In 1977, enrollment was more than double the number of unemployed. Since 1978, when the average number of persons in training and public works programs reached 170,000, enrollment has declined slowly. Persons in training for labor market reasons made up 40 percent of total enrollments in the early 1970's; by 1977, this figure had risen to 55 percent. In 1979, enrollment in training programs returned to the proportions recorded in the early 1970's, as enrollment in public works projects expanded from 18 percent of the total in 1977 to 31 percent in 1979.

The relative movement of workers out of the goods-producing sector and into the service sector continued its long-term trend in all countries. Employment in industry—mining, manufacturing, and construction—which at one time absorbed many surplus agricultural workers, now appears to be declining as a proportion of total civilian employment in all of the countries.

As of 1979–80, the agricultural sector (including forestry and fishing) accounted for about 15 percent of civilian employment in Italy, 10 percent in Japan, 9 percent in France, and under 7 percent in the other countries. Twenty years earlier, agriculture accounted for about 30 percent of employment in Japan and Italy, more than 20 percent in France, and more than 10 percent in all of the other countries except the United States and the United Kingdom.

Employment in services—which includes employment in transportation, communications, and public utilities, wholesale and retail trade, finance, insurance, and real estate, public administration, and personal, business, and miscellaneous services—has been growing both absolutely and as a proportion of total employment in all countries. In 1980, service employment reached 50 percent of the total in Germany, leaving Italy as the only country with more workers engaged in the production of agricultural and industrial goods than of services. In 1960, service employment accounted for more than half of the total only in the United States and Canada; two-thirds of U.S. and Canadian employment is now in the service sector.

Employment in industry has been declining as a proportion of total employment in most of the countries since at least the mid-1960's. The exceptions are Japan and Italy, where industrial employment continued to rise relative to total employment until 1974. However, Germany, where industrial employment has been moving slowly downward, still has the highest proportion of industrial workers—44 percent. Industrial employment

in the other countries ranges from under 30 percent in the United States, Canada, and Australia to about 38 percent in Italy and the United Kingdom.

Employment-population ratios. In 1980, civilian employment as a percent of the population of working age—the employment-population ratio—declined in Great Britain, the Netherlands, the United States, and France. This occurred because employment declined in Great Britain and the Netherlands and employment growth in the United States and France did not match the increases in their working-age population. For the United States, this was the first decline in the employment-population ratio since the recession of 1975; between 1975 and 1979, the ratio had increased by an average of 1 percentage point a year.

The employment ratio is the highest in Sweden, where it rose to 65.9 percent in 1980. The Japanese employment-population ratio fell to 61.2 percent in 1975 and has remained at about that level since. In the United States, Canada, Australia, and Great Britain, the ratios have ranged between 57 and 60 percent in recent years, while the ratios for France and Germany are somewhat lower. Italy and the Netherlands are the only countries studied where fewer than one-half of the civilian working-age population is employed.⁵ This reflects low female labor force participation rates in these two countries, although the Italian figures would be understated to the extent that persons engaged in “black labor”—and not otherwise employed—are not counted in the Italian survey. Black labor, or unreported employment, exists to some extent in all countries, but it is of greatest concern in Italy.

Participation rates. The U.S. labor force participation rate—the ratio of the civilian labor force to the civilian working-age population—was 63.8 percent in 1980, little changed from 1979, but substantially higher than the 1974–75 level of 61.2 percent. Only Canada had a sharper rise over this period. But, Sweden continued to have the highest labor force participation rate—67.2 percent in 1980. In all three countries, male participation rates have been falling, but they have been more than offset by rising female participation. (See table 3.) In the other countries, 1980 participation rates were about the same or lower than in 1974, as slowly rising female rates only matched or failed to match declining male rates. Australia, Japan, and Great Britain at one time had higher labor force participation rates than the United States, but in 1978, the U.S. rate surpassed those in Australia and Japan and in 1979, the British rate fell below the U.S. rate and continued downward in 1980.

The lowest labor force participation rates are in Italy and the Netherlands, where less than half of the work-

Table 3. Labor force participation rates approximating U.S. concepts, by sex, 1974-80

Year	United States	Canada	Australia	Japan	France ¹	Germany	Great Britain	Italy	Netherlands ²	Sweden
Men:										
1974	78.7	78.7	82.7	81.5	73.0	73.5	80.9	71.3	(³)	76.9
1975	77.9	78.4	82.2	81.0	73.2	72.0	81.2	71.0	74.7	77.0
1976	77.5	77.6	81.5	80.9	72.6	71.0	81.4	70.5	(³)	76.5
1977	77.7	77.6	81.0	80.3	71.6	70.2	81.1	69.1	73.4	75.6
1978	77.9	77.9	79.8	80.1	71.4	70.6	80.4	68.6	(³)	75.1
1979	77.9	78.4	79.5	79.9	71.6	⁴ 70.1	79.2	68.2	(³)	75.2
1980	77.4	78.3	79.2	79.6	(³)	⁴ 70.2	⁴ 78.0	67.8	(³)	75.0
Women:										
1974	45.6	43.0	43.5	45.7	41.6	37.9	46.1	26.6	(³)	53.3
1975	46.3	44.4	44.5	44.8	42.5	37.4	46.6	26.9	28.0	55.2
1976	47.3	45.2	44.3	44.8	42.9	37.2	47.1	27.6	(³)	55.8
1977	48.4	46.0	44.8	45.7	44.2	37.1	47.5	28.6	28.8	56.7
1978	50.0	47.8	44.5	46.4	43.3	37.5	48.1	28.6	(³)	57.5
1979	51.0	48.9	44.3	46.6	44.3	⁴ 37.9	48.0	29.2	(³)	58.7
1980	51.6	50.3	45.5	46.6	(³)	⁴ 38.2	⁴ 47.6	29.9	(³)	59.7

¹ Data are for March.

² Data are for March-May.

³ Not available.

⁴ Preliminary estimate.

Note: Data relate to the civilian labor force approximating U.S. concepts as a percent of

the civilian working-age population. Working age is defined as 16-year-old and over in the United States, France, and Sweden; 15-year-old and over in Australia, Canada, Germany, and Japan; and 14-year-old and over in Italy. For Great Britain, the lower age limit was raised from 15 to 16 in 1973. The institutionalized working-age population is included in Japan and Germany.

ing-age population is employed or looking for work. For the Netherlands, the low rates may be explained, in part, by provisions of the social security system, as disability payments are usually more generous than early retirement pensions or unemployment benefits. Therefore, according to the Organization for Economic Cooperation and Development, "the more favorable benefits and the weak demand for labor may have encouraged continuing shifts from the active population into inactivity."⁶ In 1979, the number of disability recipients was 12 percent of the labor force, twice the proportion in 1973.

Male-female differences in labor force participation rates were widest in Italy and in the Netherlands and narrowest in Sweden. In 1980, the participation rate for Italian women was still substantially less than half the rate of their male counterparts. In Sweden, the rate for women was 80 percent of that for men, reflecting in part, extensive government-financed day care facilities, separate taxation for married women, parenthood insurance, and greater flexibility in working hours.

Migrant workers. In 1973-74, several European Community nations banned the recruitment of foreign workers from outside the Community. Consequently, many unemployed foreign workers remained in the host countries because re-entry was uncertain and social benefits such as unemployment insurance were more generous than in the home countries. This trend of jobless alien workers remaining in the host nations contributed to the sharp rise in overall unemployment recorded in Western Europe during the 1974-75 recession.

Since 1974, the jobless rates of foreign workers have been significantly higher than the overall unemployment rates. This contrasts with the situation of the 1960's and early 1970's when unemployment rates of migrant

workers were much lower than the overall rates. The higher foreign worker jobless rates reflect their concentration in sectors vulnerable to economic downturns, such as in manufacturing, construction, hotels, and restaurants. In addition, migrant workers tend to be young or unskilled or both, two groups with high incidences of joblessness.

In France, the overall jobless rate, as recorded in the March 1973 labor force survey, was 3.4 percent and the foreign worker rate was 2.7 percent (not adjusted to U.S. concepts). By March 1976, the foreign worker unemployment rate had risen to 6.5 percent, compared to the overall rate of 6 percent. In March 1979, the foreigners' jobless rate, 9.2 percent, was significantly higher than the overall rate of 7 percent. In Germany, the overall 1973 unemployment rate (based on registration statistics and not adjusted to U.S. concepts) was 1.2 percent, compared with the foreign worker jobless rate of 0.8 percent. By 1975, the overall rate, 4.7 percent, was lower than the migrant worker rate of 6.8 percent. In 1980, the alien workers' jobless rate was 5.2 percent, compared with the overall rate of 3.8 percent.

In Sweden, migrant workers' unemployment rates have been double the overall rate since 1977 when the data were first collected in the labor force survey. Data on registered foreign workers available from the second half of 1974 are also indicative of their rising unemployment. Foreign workers accounted for 4.3 percent of all registrations in the second half 1974, 8.6 percent in 1978, and 6.9 percent in 1980.

Employment of foreign nationals in Germany declined sharply during the 1974-75 recession and did not begin to rise until 1978. In March 1981, alien worker employment reached 2 million for the first time since 1975. In Sweden, foreign worker employment has risen slowly since 1977 to 225,000 in 1980. In contrast, the

number of foreign nationals with a job in France has declined since 1977. However, foreign worker employment in March 1979, 1.4 million, was still higher than in 1974.

The demographic pattern of migrants in Western Europe has changed in the past decade. In the 1960's and early 1970's, the foreign population consisted primarily of economically active men whose families remained in the home countries. Beginning in the mid-1970's, when new migration from non-European Community member states was banned, the number of dependent family members in Western Europe increased rapidly as host countries liberalized integration programs and promoted family unification. In 1972, 65.6 percent of Germany's foreign population were in the labor force, compared with 48.7 percent in 1979. This proportion is expected to rise again as dependents of "settled" migrant workers are now eligible to obtain work permits.

Treatment of layoffs

In the U.S. labor force survey, persons on layoff who are awaiting recall to their jobs are classified as unemployed. In European countries and Japan, however, many such persons are classified as employed. In the past, BLS made adjustments to include such persons in the unemployed count in two of the European countries—France and Great Britain. Japanese, Italian, and German unemployment data also would have been adjusted if reliable data on layoffs had been available. In recent years, when reliable layoff data became available, adjustments were developed for those countries. However, BLS reconsidered its strict application of the U.S. definition after labor statisticians in these other countries questioned the procedure. The statisticians pointed out that European and Japanese layoff practices are quite different from those in North America, and therefore, strict application of the U.S. definition was unwarranted.

International differences in the classification of laid-off workers stem mainly from the degree of job attachment. North American and Australian workers on layoff have relatively little attachment to their former jobs, while European and Japanese workers on layoff have a very strong job attachment, even during lengthy layoffs, because they are employed under work contracts. They regard themselves as employed, and unlike the North American workers, they are virtually certain to be recalled to their jobs. Because of these differences, BLS now does not adjust the unemployment figures for European countries and Japan to include persons on layoff who are waiting to be recalled. Persons on layoff continue to be included in the unemployed count in the United States, Canada, and Australia.

It should be noted that persons on layoff represent a form of labor underutilization in all countries, whether

they are classified as employed or unemployed. To enhance international comparisons of how labor markets are functioning, it would be desirable to measure and compare total labor slack—that is, unemployment, workers on layoff, workers on part time for economic reasons, and discouragement. However, sufficient comparable data for all countries have not yet been developed. The following discussion points out the differences among the statistical treatments of layoffs and the layoff practices of the major industrial countries, and the impact of the change in BLS procedures on the comparative unemployment rates.

U.S. definitions. Persons on layoff who are awaiting recall to their jobs are counted as unemployed in U.S. unemployment statistics. The only requirement is that they must be currently available for work. Unlike other unemployed persons, they are not required to have been actively seeking work in the prior 4 weeks. Even so, a special BLS survey in May 1976 indicated that most people on layoff do indeed look for work. About 80 percent of those on layoff in May 1976 looked for work during their current spell of unemployment (not necessarily the past 4 weeks.)⁷

ILO definitions. The Eighth International Conference of Labour Statisticians, under the auspices of the International Labour Office (ILO), established standard definitions of labor force and unemployment in 1954. These ILO definitions specify that persons on layoff without pay are to be included in the unemployed. At the time these definitions were established, very few laid-off workers received remuneration from their firms. Now, however, most laid-off workers in Europe and Japan receive payments directly from their firm or from the firm and government combined. The ILO plans to convene a Conference of Labour Statisticians in October 1982 to discuss updating these concepts.

The Working Party on Employment and Unemployment Statistics of the Organization for Economic Cooperation and Development (OECD) recently commissioned a study of the statistical treatment of layoffs and partial unemployment.⁸ Its findings were discussed at the June 1981 meeting of the Working Party, a gathering of delegates from the statistical offices of most member countries. The Working Party argued that the ILO definition of layoffs has a number of shortcomings and should be revised. A new definition was proposed as an international standard: to be counted as unemployed, a person on layoff would have to have weak job attachment and to be looking for work. Strength of job attachment would be measured by circumstances such as (1) existence of a specific recall date or a specific circumstance (noneconomic) that would result in immediate recall; (2) elapsed length of layoff; and (3)

maintenance of the wage or salary payment to the employee. The proposed definition would make it possible to distinguish between situations where a very strong link remains between the person laid off and the employer and those where this link becomes tenuous or broken. In the latter case, the laid-off worker becomes closely comparable to the dismissed worker.

Data on recall dates and job search of laid-off persons are not regularly collected in most labor force surveys. Plans are underway to introduce questions on these points in the U.S. survey in 1983. Canada and Australia currently collect data on job search by laid-off workers but not on recall dates; none of the remaining countries collects any of this information. If the 1982 ILO Conference of Labour Statisticians adopts an international standard along the lines recommended by the OECD, more detailed data on layoffs would be available.

Definitions in other countries. In Canada, Australia, and Sweden, persons on layoff who are awaiting recall to their jobs are classified as unemployed. However, there are specifications in each country which make the treatment of such persons different from the practice in the United States. In all three countries, persons on layoff do not have to be seeking work to be classified as unemployed, except that after a specified period in Canada (26 weeks) and Australia (4 weeks), they do have to be taking active steps to find work. The U.S. survey does not impose a time limit beyond which laid-off persons must seek work. The Australian and Swedish surveys follow the ILO definition in that it specifies that layoffs should be "without pay" for classification as unemployed. No such specification is made in the U.S. or Canadian surveys, but in both countries, layoffs are generally unpaid. There are a small number of persons on paid layoff in North America, Australia, and Sweden, and such persons generally report themselves as employed.

Because of the lengthy period allowed in Canada before jobseeking is required (26 weeks), it does not appear that this cutoff has much effect on the comparative statistics. Most persons laid off for that length of time would be looking for work and, therefore, would be included in the unemployment data.

Unpublished data for Australia, supplied by the Australian Bureau of Statistics, indicate that there are, on average, only about 2,000 persons laid off without pay for 4 weeks or longer who are not actively looking for work. Such persons would be classified as unemployed in the United States, but are regarded as "not in the labor force" in Australia. They are equivalent to less than 0.5 percent of total Australian unemployment, and, if included, would make no difference in the comparative Australian jobless rate.

The Swedish Central Bureau of Statistics indicated that there were about 1,500 persons on unpaid layoff in 1979 and 1980. These persons are included in the Swedish unemployment figures, but they represent only about 1.7 percent of the total. Data are not available on the extent of their job search activity.

In Japan and Western Europe, persons on layoff who are awaiting recall to their jobs are generally classified as employed. They are regarded as "with a job, but not at work" (except for unpaid layoffs in Sweden). The reason for this classification is that such persons regard themselves as having a job rather than as "jobless." They rarely seek other employment, and they continue on the payroll of their firms.

Differences in layoff practices. Initially, during economic declines, hours are cut back in all countries. As output declines worsen, North American and Australian employers usually rely on temporary or indefinite layoffs. In Western Europe and Japan, however, employers try to maintain their work forces by making further use of "short-time schedules," where hours at work are reduced in order to spread available jobs among a larger number of persons. Legal restraints on layoffs in Europe and Japan make worksharing a more attractive option than it is in the United States. The fact that special payments are available for workers placed on shortened workweeks also encourages worksharing.⁹ In the United States, Canada, and Australia, unemployment insurance systems may actually cause workers and their unions to prefer layoffs rather than reduced hours. American workers whose hours are cut receive no compensation from the State (except in California¹⁰), unless their earnings fall below the level of benefits to which they would be entitled in a layoff. Even then, benefits are limited roughly to the differences between full weekly benefits and the income earned during the week in question. The Canadian and Australian systems are similar.¹¹ Furthermore, it may be in the U.S. employer's interest to resort to layoffs rather than to a reduction in hours because fringe benefits cost more under a worksharing system. There are few, if any, such costs associated with workers on layoff. On the other hand, the cost to employers of losing skilled workers and having to hire and train new workers when business improves must also be weighed.

Layoffs in Europe and Japan normally take the form of reduced hours or fewer days worked during the week, rather than entire weeks without work. Occasionally, there may be a temporary plant shutdown or a practice of working alternate weeks, so that some laid-off workers in these countries may be out of work entirely during some weeks.

During the layoff or short-time period in Europe and Japan, a strong employment relationship is maintained

between workers and firms. This relationship is much stronger than in the United States because of the existence of work contracts abroad. In most cases, European and Japanese workers remain on the payroll and receive payments from the firm (subsidized by the government) for the time not worked. Furthermore, they retain seniority and other employment-related benefits (for example, health and old-age benefits insurance). In short, the workers are treated as if they had maintained their employment relationship. They usually do not engage in jobseeking activities because they regard themselves as employed and they are virtually certain to return to their jobs at the end of the layoff period.

In North America and Australia, workers usually do not work under employment contracts. Laid-off workers do not remain on the payroll and generally do not receive payments from their firms. A few U.S. industries (auto and steel, for instance) are exceptions to the extent that supplemental unemployment benefits (SUB) are paid by the firm to laid-off workers. These benefits are combined with regular unemployment benefits to provide a higher level of wage replacement. The U.S. labor force survey does not collect information on whether laid-off workers are receiving SUB payments, because no distinction is made in the U.S. definition concerning paid versus unpaid layoffs.

A 1974 analysis of 52,000 U.S. private industry health care plans, covering 28 million workers, indicated that 45 percent of the workers participated in plans that explicitly did not extend protection to workers who had been laid off.¹² An additional 15 percent were in plans that provided no information on health benefits after layoff; presumably, most also did not have layoff benefit protection. The remaining 11 million workers, or 40 percent, were in plans reporting definite provisions to continue health benefits for at least 1 month after layoff. The degree of protection for those with layoff health benefits varied considerably. A little more than half were covered for 3 months or longer; about one-fifth had less than 3 months of coverage; and slightly more than one-fifth had plans in which layoff benefits varied by length of employment. Data were not available for the remainder.

An analysis of major U.S. collective bargaining agreements shows that seniority rights (and recall rights) are generally limited to a specified time period.¹³ The worker who has not been recalled by the expiration of this period almost always loses his seniority. Nonunionized workers generally lose all seniority when laid off.

Prevalence of layoffs. Persons on layoff accounted for almost 20 percent of total U.S. unemployment in 1980, up from 14 percent in 1979 and around 12 percent in earlier years. Persons on layoff were 1.4 percent of the U.S. labor force in 1980, and less than 1 percent in ear-

lier years. About 44 percent of those on layoff in 1980 were unemployed less than 5 weeks; 9 percent were laid off 27 weeks or longer.

Layoffs compose a smaller proportion of unemployment in Canada and Australia. Canadians on layoff have accounted for 7 to 8 percent of total unemployment and 0.6 percent of the labor force in recent years. Data on layoffs are not published in the Australian labor force survey reports. However, the Australian Bureau of Statistics indicates that, on average, some 10,000 to 12,000 persons claim to have a job from which they have been laid off. Of these, about 1,000 are being paid and are classified as employed. About 2,000 are on unpaid layoff for 4 weeks or more and are not looking for work—they are classified as not in the labor force. About 1,000 are laid off without pay for 4 weeks or more and are actively looking for work—they are classified as unemployed. The remaining 6,000 to 8,000 persons are laid off without pay for less than 4 weeks and are classified as unemployed, unless they are laid off because of bad weather or plant breakdown, in which case they are classified as employed. Therefore, the number of layoffs in the unemployed count totals only 7,000 to 9,000, or about 2 percent of total unemployment and 0.1 percent of the labor force.

Unpublished labor force survey tabulations for Germany indicate that the number of persons on short-time schedules for economic reasons who worked zero hours during the reference week is very small—at the most, 25,000 workers in the deep recession year of 1975 (about 0.1 percent of the labor force) and much smaller numbers in other years. Inclusion of the 25,000 would raise the adjusted rate for 1975 from 3.1 to 3.2 percent. In other years, there would be no impact on the comparative rate. Although there have been a substantial number of workers on short-time schedules in Germany, most work shorter hours each day rather than being laid off for weeks at a time. Such workers on reduced hours are regarded as employed under both U.S. and German definitions.

The revised Italian labor force survey, instituted in 1977, generates unpublished data on the number of “underemployed” persons who worked no hours in the reference week. According to the Italian Central Bureau of Statistics, there are a substantial number of such persons—102,000 in 1977 and 110,000 in 1978, or about 0.5 percent of the labor force. If added to current unemployment figures, these persons would raise the 1977 comparative rate from 3.6 to 4.1 percent and the 1978 rate from 3.7 to 4.2 percent.

For Japan, special surveys conducted each March have produced data on the number of persons on layoff who worked zero hours in the reference week. Virtually all of these persons are on paid layoffs. There were 100,000 such persons in 1977 and 140,000 in 1978; or

about 0.2 percent of the labor force. Adjusting the unemployed to include them would raise the 1977 comparative rate from 2.0 to 2.2 percent, and the 1978 rate from 2.3 to 2.6 percent.

For France, the number on layoff an entire week has averaged about 20,000 since 1971. In Great Britain, the number of persons on layoff for an entire week averaged about 13,000. For both countries, this was less than 0.1 percent of the labor force in most years. In the past, the BLS has adjusted French and British unemployment data to include persons on layoff an entire week who were waiting to return to their jobs. Table 4 shows unemployment rates for both countries, including and excluding the layoff adjustments. Whether persons on layoff are included makes very little difference in the unemployment rates in France and Great Britain.

Conclusion. Layoffs in Europe and Japan typically are in the form of short-time work schedules. Classification of short-time workers who work 1 or more hours a week is clear: they are considered employed under United States, ILO, and all other countries' concepts. Classification of workers doing no work during the reference week (because of economic reasons) is less clear: this group can be characterized according to their "zero hours" worked. On one hand, it could be argued that, as with American workers on layoff, foreign workers on zero hours for economic reasons should also be classified as unemployed. This would be a very strict application of U.S. definitions.

On the other hand, it could be argued that layoffs in Europe and Japan are fundamentally different from North American layoffs. The overriding difference is the degree of job attachment. Persons on layoff are appropriately counted as unemployed in the United States because they are "jobless." In Europe and Japan, however, such persons have work contracts and, therefore, have a job. Workers on layoff in these countries feel a strong attachment to their jobs and usually continue to receive payments directly from their firm. They do not regard themselves as unemployed, do not seek

Table 4. Unemployment rates for France and Great Britain, adjusted for layoffs and approximating U.S. concepts, 1971-80

Year	France		Great Britain	
	With layoff adjustment	Without layoff adjustment	With layoff adjustment	Without layoff adjustment
1971	2.8	2.7	3.9	3.9
1972	2.9	2.8	4.3	4.2
1973	2.8	2.7	3.2	3.2
1974	3.0	2.9	3.1	3.1
1975	4.3	4.2	4.7	4.6
1976	4.7	4.6	6.0	6.0
1977	5.0	5.0	6.4	6.3
1978	5.4	5.4	6.3	6.3
1979	6.1	6.1	5.8	5.7
1980	6.6	6.5	7.5	7.4

work, and answer surveys to the effect that they have a job. Under the North American systems, workers on layoff have much weaker job attachments. They are often not recalled to their jobs, and they frequently engage in job search while on layoff.

European workers on layoff for a full reference week still have the same degree of job attachment as workers on reduced weekly hours. In the first case, workers may simply be working alternate weeks as their firm's most convenient form of worksharing. Thus, to consider the "zero hours" workers as unemployed and the "short-time" workers as employed would not be consistent. It would be applying different labor force classifications to essentially the same situation.

European and Japanese layoffs, even at the level of zero weekly hours, are not directly comparable with U.S. layoffs. U.S. definitions should not be forced onto the data for other countries where practices are so different from our own. Therefore, for international comparisons, BLS will consider European (except for the small number of persons on unpaid layoff in Sweden) and Japanese workers on layoff as employed, even if they work no hours in the reference week. Adjustments for layoffs previously made to French and British data have been eliminated in the data shown in this article. The impact of this change on the adjusted unemployment rates is very small. □

— FOOTNOTES —

¹ There could be a number of persons registered as unemployed who do not consider registration to be an active job search step, believing that the government is looking for work for them. Registration is valid for 30 days from the end of the month registered (or from 59 to 31 days); for the youth employment exchanges, it is valid for 3 years. Registration is an effective job search method for persons seeking manual work and for youths seeking special public administration jobs. Other jobseekers may not feel preparation for job entry examinations in an active job search method. In addition, it is not the usual practice in Italy to make frequent inquiries regarding the status of one's employment application.

² However, prior to 1967, the United States classified very few discouraged workers as unemployed. There was no specific question on discouraged workers in the U.S. survey prior to 1967. Respondents

volunteered that they were discouraged, and only a limited number of discouraged workers were enumerated as unemployed. In 1967, however, a new questionnaire was introduced that broadened the search period for unemployment from an implied 1 week to 4 weeks and also eliminated the practice of reliance on volunteered information. The questionnaire includes specific questions that attempt to measure labor force discouragement.

³ "Black labor" is unrecorded employment; the worker may moonlight or it may be the primary job. Taxes, social security, and other contributions are not withheld. For an analysis of "black labor" in Italy, see CENSIS, "L'Occupazione Occulta," CENSIS Ricerca No. 2 (Rome, CENSIS, 1976).

⁴ Department of Employment, "Special Employment and Training Measures," Press Notice, Mar. 24, 1981, p. 1.

⁴ For further information, see *International Comparisons of Unemployment*, Bulletin 1979 (Bureau of Labor Statistics, 1978), pp. 23–26.

⁵ Organization for Economic Cooperation and Development, "Economic Survey, Netherlands" (Paris, OECD, 1981), p. 35.

⁶ *Job Search of the Unemployed, May 1976*, Special Labor Force Report 210 (Bureau of Labor Statistics).

⁷ Bernard Grais, "Layoffs and Partial Unemployment," paper prepared for the fifth meeting of the OECD Working Party on Employment and Unemployment Statistics, June 9–11, 1981 (Paris, OECD, May 1981).

⁸ For further information, see *International Comparisons of Unemployment*, p. 59.

⁹ The California program, begun in 1978, allows unemployment insurance benefits to be paid to workers whose wages and hours are

reduced as a temporary alternative to layoffs. Employers' participation in the program is voluntary. See Fred Best and James Mattesich, "Short-time compensation systems in California and Europe," *Monthly Labor Review*, July 1980, pp. 13–22. In addition, Arizona recently passed a worksharing compensation law.

¹⁰ Canada has also experimented with the short-time compensation concept. See "Work Sharing in Canada," Department of Employment and Immigration, Ottawa, Canada, April 1978.

¹¹ "Health Benefits for Laidoff Workers," *Social Security Bulletin*, February 1976.

¹² *Major Collective Bargaining Agreements: Layoff, Recall, and Worksharing Procedures*, Bulletin 1425–13 (Bureau of Labor Statistics, 1972), p. 49.

APPENDIX: Adjustment to U.S. concepts

This article contains revisions of the Bureau's previously published unemployment estimates for France, Germany, and Great Britain. The revisions for France arise from the omission of the previous adjustment to exclude persons on layoff from the unemployed. Also, data from the October 1978, 1979, and 1980 and March 1979 and 1980 surveys have been incorporated in the revised estimates.

For Germany, the revisions in this article relate to a new adjustment made to the unemployment data to exclude persons not currently available to begin work and the inclusion of 1979 labor force survey results. The adjustment is the outcome of the recommendations made by Carol L. Jusenius and Burkhard von Rabenau in their review of BLS adjustment methods for Germany prepared for the National Commission on Employment and Unemployment Statistics. (See "Unemployment Statistics in the United States and the Federal Republic of Germany: Problems of International Comparisons," paper prepared for the National Commission on Employment and Unemployment Statistics, December 1978.) The BLS is now using unpublished 1977 Microcensus (German household survey) tabulations on current availability for work in making the new adjustment. The survey indicated that there were a significant number of students enumerated as unemployed who were not currently available to begin work because they were still in school (the German survey is taken in April and the school year ends in July).

Data on the number of unemployed students are reported each year in the survey results and these figures have been used to make estimates for years other than 1977. (The adjustment to exclude students not currently available for work should be regarded as a partial adjustment. There may be some other persons who should be excluded because they were not available for work and BLS is now pursuing this point with the German Federal Statistical Office.) This revision lowers previous estimates for 1975 forward by about 0.3 percentage point. For earlier years, there is very little change.

The British data were also modified to exclude the layoff adjustment and to incorporate data from the 1977 through 1979 General Household Surveys. In ad-

dition, a new method of determining the number of unregistered unemployed persons has been used. Previously, estimates of total comparable unemployment were derived by inflating the British General Household Survey data to universe levels. However, the General Household Survey has a very small sample size which makes it difficult to measure accurately year-to-year changes in the unemployment rate. Therefore, a better method would be to start with the count of registered unemployed persons, as it is a total universe count, and to modify that count in several ways to arrive at unemployment approximating U.S. concepts. The estimated number of registered persons who did some work during the reference week is subtracted, as are "inactive" registered men. The latter group consists mainly of older workers who report themselves as economically inactive in the General Household Survey, but who register as unemployed to obtain credits toward their pensions. Added to the registered unemployed are: (1) adult students (age 18 and over) who registered as unemployed but who are not included in the official British registration figures; and (2) the unregistered unemployed. The latter estimate was derived from the General Household Survey results.

The following tabulation shows the previously published and revised British unemployment rates for 1970 to date (asterisks indicate that General Household Survey data were not incorporated in the estimates):

	Year	Previous	Revised
1970	3.1	3.0
1971	3.7	3.9
1972	4.1	4.2
1973	2.9	3.2
1974	2.9	3.1
1975	4.1	4.6
1976	5.5	6.0
1977	*6.2	6.3
1978	*6.1	6.3
1979	*5.8	5.7
1980	*7.5	*7.4

BLS is now investigating a further adjustment for Great Britain to exclude persons not currently available for work from the unemployed count. Such data were col-

lected in the recent General Household Surveys which the United Kingdom conducted under the auspices of the Statistical Office of the European Communities. However, there are some problems in interpreting these data, and they are not used in this article.

In the United States, labor force participation rates and employment-population ratios are calculated using the civilian noninstitutional working-age population. The ratios previously shown for Canada and Italy also excluded the institutional population, but the ratios for the other countries did not. With this article, the ratios for Australia, France, Great Britain, and Sweden have been revised to conform with the U.S. definition; the figures for the Netherlands also exclude the institutional population. Participation rates and employment ratios for Japan and Germany, however, are still based on data including the institutionalized population, because data on the size and age-sex distribution of this population group are not available.

The impact of the exclusion of the institutional population was to raise both the labor force participation rate and employment-population ratio by about 1 percentage point, except for the French participation rates. The French rates were raised by only .2 of a percentage point, because a majority of the institutionalized population is excluded from the scope of the labor force survey. There is no significant difference in the impact on participation rates by sex. In all of the countries, the number of men and women residing in the various institutions is roughly equal.

The Netherlands

This article introduces Dutch labor force and unemployment statistics adjusted to approximate comparability with U.S. definitions from 1973 forward. Results from the biennial Dutch labor force survey—the AKT—were used to estimate the adjusted Dutch labor force statistics. Because of the infrequency of earlier surveys and limited data, attempts to adjust Dutch data prior to 1973 would be less reliable. (According to the Netherlands Central Bureau of Statistics, even the results of the 1973 survey are not reliably comparable with later survey results because of changes in sampling methods and some changes in the survey questionnaire; however, the 1973 survey results appear to be sufficiently comparable with the later surveys and are used in the BLS analysis.) In addition, limited data currently preclude the calculation of quarterly and monthly jobless rates approximating U.S. concepts.

BLS analysis found that the AKT overstates the number unemployed under U.S. concepts while employment office registrations understate unemployment on a U.S. basis. For example, in March–May 1977, adjusted unemployment was estimated at 233,300, compared with the Dutch survey figure of 299,800 and the registered unemployed figure of 191,700.

The “official” Dutch data on joblessness relate to persons age 15 to 65 who do not have a job and are

registered at an employment office for full-time work (25 hours or more a week since 1977 and 30 hours or more prior to 1977). Persons on temporary layoff are allowed to register, but only if they have been out of work for at least 1 week. Registration must be renewed monthly in order to remain on the register and is compulsory for recipients of unemployment insurance benefits. The count is taken on the day preceding the last full working day of the month. Unemployment rates are calculated by dividing the registered unemployed by an annual estimate of the wage and salary labor force.

The Dutch labor force survey collects data in such a manner that the population can be classified according to two definitions of economic activity—in the “strict sense” and in the “broad sense”. The labor force in the “strict sense” is comprised of persons who initially classify themselves as employed or unemployed. The labor force in the “broad sense” is the sum of the labor force in the “strict sense” and the “marginal” labor force. The “marginal” labor force consists of persons who do not initially classify themselves as economically active—for example, housewives, students, pensioners—but who upon further probing reveal that they worked or looked for work. The labor force in the “broad sense” more closely corresponds to U.S. concepts and is used to estimate the adjusted data.

The number of AKT unemployed was adjusted to exclude: (1) persons not currently available for work except for temporary illness, (2) persons who had not yet commenced seeking work, and (3) persons younger than the legal school-leaving age. Adjustments could not be made for a few other differences from U.S. concepts, but the number involved are probably very small. AKT employment data were adjusted to exclude: (1) the Armed Forces, (2) unpaid family workers working less than 15 hours a week, and (3) persons younger than the legal school-leaving age.

Adjustment ratios for unemployment and employment were calculated by comparing adjusted AKT data to published data. Separate ratios by sex were compiled for the unemployed because of the wide sex differential in the propensity to register. Monthly registered unemployment data were weighted according to the distribution of the survey interviews to more closely correspond to the AKT survey period of March–May. Because of the lack of reliable data, no adjustments were done to make the published employment estimates more closely match the survey period. The adjustment factors were then applied to annual average published statistics under the assumption that the ratios for the survey period are representative of the entire year. Adjustment factors for years between survey years were interpolated, and factors from the last survey are maintained until the results of later surveys become available. For most years, the resultant unemployment rates approximating U.S. concepts are slightly higher than the official rates. A more detailed description of the adjustment method is available from the authors.