

## U.S. labor market performance in international perspective

*From 1960 to 2000, U.S. unemployment rates improved from relatively high to the lowest among the G7 countries; Canada and the United States were leaders in job creation, while Japan and Europe had much weaker employment gains*

Constance Sorrentino and Joyanna Moy

For developed economies, monthly unemployment and employment changes are considered the two most informative labor market indicators, providing knowledge about the current performance of the labor market and the economy as a whole. International analyses often focus on these two key indicators as well, to compare the functioning of labor markets across countries. Researchers have attempted to explain the reasons for international differences and to glean lessons from the more “successful” countries that may be applied toward bringing down unemployment and stimulating job creation in the less successful ones. In fact, the first BLS international comparison of unemployment rates was initiated at the request of a 1961 Presidential Committee that was concerned about the apparently high U.S. unemployment rate compared with rates in Europe and Japan. The BLS program of comparative labor force statistics evolved from that initial study for the Committee,<sup>1</sup> and the data from that program permit a long-term international perspective on labor market outcomes.

Unemployment trends over the past 40 years clearly show divergent paths taken by the United States and Europe. From 1960 to 2000, the United States moved from the position of being a country with relatively high unemployment to a nation that attained the lowest jobless rate among the G7 major industrial countries (the United States, Canada, Japan, France, Germany, Italy, and the United Kingdom).<sup>2</sup> By contrast, European unemployment rates moved in the opposite direction, from low to high, with the crossover occurring in the mid-

1980s. While Europe and the United States were switching positions, Canada and Japan generally maintained their places in the international array: Canada’s jobless rate was frequently the highest, and Japan’s was almost always the lowest, during the 40-year period.

In contrast to unemployment statistics, relative employment trends were more consistent throughout the period. The United States and Canada generated the strongest job creation, while Japan and Europe had much weaker employment increases. The two North American countries’ employment growth greatly surpassed their population growth, while Europe’s and Japan’s employment did not even keep pace with more slowly rising populations. Canada’s job creation success contravened its relatively high unemployment rate over the four decades.<sup>3</sup> The United States had the best of both worlds: lower unemployment rates and high job creation.

This article examines U.S. trends and levels of unemployment, employment, and related statistics from 1960 to 2000, contrasting them with corresponding trends and levels from the other G7 countries. To facilitate comparisons, the European members of the G7 are often treated as a unit and referred to as “Europe (G4)” or simply “Europe.”<sup>4</sup> When numerical growth rates and averages are given for Europe (G4), they are simple arithmetic averages of the respective figures for France, Germany, Italy, and the United Kingdom.

Most of the data presented are from the BLS program of international labor force comparisons,

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### About the data

Most of the data presented in this article are from the BLS program of international labor force comparisons, in which the foreign data are adjusted to U.S. concepts.<sup>1</sup> In addition, comparative data published by the Organization for Economic Cooperation and Development (OECD) are used to supplement the BLS data in order to capture other important differences in labor market performance. The OECD data, however, do not cover the entire 40-year period covered in the article; generally, OECD data are limited to 1983 or 1984 onward. One tabulation in the article draws upon harmonized unemployment rates produced by the Statistical Office of the European Communities (Eurostat). These data are closely comparable to the unemployment rates in the BLS adjusted series.

#### BLS data

Both national data and BLS adjustment methods have changed over the years since 1960. Consequently, there are breaks in the historical continuity of series for most countries. Some breaks are inconsequential, while others represent a more significant discontinuity in the series that would seriously affect estimates of growth rates or averages over periods of time. In order to portray a more consistent long-term comparative picture, the Bureau evaluated the various breaks and decided that adjustments should be made to employment data for Germany and unemployment rates for Italy.

In the BLS comparative database, data for Germany refer to the former West Germany through 1990 and to Germany (unified) thereafter. Thus, there is a significant discontinuity between 1990 and 1991, when German employment increased by almost 10 million and unemployment jumped by about a percentage point with the inclusion of the people of the former East Germany. To estimate the employment trends and employment-to-population ratios in this article, the Bureau has calculated a hypothetical unified Germany employment series back to 1960.<sup>2</sup>

No adjustment is made, however, for the 1991 discontinuity in German unemployment rates. There was no concept of unemployment under the former East Germany's economic system; therefore, there is no basis upon which to link an unemployment series. Consequently, the reader should keep in mind that the upward movement of German and, hence, Europe's unemployment rates in the 1990s is partly due to the absorption of the unemployment that became measurable in the former East Germany after unification.<sup>3</sup>

For Italy, the statistics in the BLS comparative database contain three significant breaks in series for unemployment rates, due to revised questionnaires and definitions that materially affected the continuity of the series. All of these revisions resulted in higher unemployment estimates for Italy. For this article, the Bureau has estimated the effects of the breaks and eliminated them, on the basis of links available for 1986, 1991, and 1992. The result is a substantial increase in estimates

of Italian unemployment rates from 1960 to 1991 over those rates shown as "adjusted to U.S. concepts" in the published BLS database. The changes in the Italian questionnaires and definitions did not substantially affect the employment figures; therefore, the employment series has not been adjusted.

Another adjustment made for this article has to do with data on Japanese men's and women's unemployment rates adjusted to U.S. concepts. The BLS comparative database for Japan's unemployment rates by sex has not been updated for 1994 onward. Updates for 1994–2000 are available from a study by a Japanese economist published in the April *Review*.<sup>4</sup> The data from that article have been used to complete the series for Japanese unemployment rates by sex and will be added to the BLS comparative database in the next update.

#### OECD data

Data compiled by the OECD are used in this article to present information on youth unemployment, the duration of unemployment, employment-to-population ratios by age, and part-time and full-time employment. The OECD data are quite comparable to the corresponding BLS data, although some adjustments for comparability that are made by the Bureau are not made by the OECD. There are some important caveats, however, about the data on full-time and part-time employment, mainly with respect to Japan:

Data collected by the OECD on a standardized basis permit comparisons of trends and levels of full-time and part-time work across countries. The OECD definition of part-time employment covers persons usually working 30 or fewer hours per week in their main job. This criterion is different from the U.S. definition, which covers persons working fewer than 35 hours per week.

The most important caveat regarding data on full-time and part-time work is that the OECD was not able to obtain an adjusted series for Japan. Hence, Japan's data in table 8 are not comparable to those of the other countries, for two reasons: (1) the Japanese data are based on "actual hours worked" rather than "usual hours worked," and (2) part-time employment in Japan is defined as working fewer than 35 hours per week. Thus, the data for Japan are shown only for tracking the broad trend in that country and should not be used to compare levels with other countries.

Another caveat is that the U.S. data are for wage and salary workers only, while the data for the other countries cover all employment. This difference should not materially affect the comparisons, because paid workers account for more than 90 percent of total U.S. employment. Finally, the time-series data could not be adjusted to take account of the unification of Germany; for that reason, the growth rates in table 8 were calculated for the 1983–90 period for the former West Germany and for the 1991–2000 period for unified Germany.

#### Notes to this box

<sup>1</sup> The Bureau issues a semiannual compendium titled "Comparative Civilian Labor Force Statistics, Ten Countries." The latest edition, dated Mar. 25, 2002, can be accessed at the Internet site <http://www.bls.gov/fls/home.htm>. The compendium is also available in printed form upon request from the authors.

<sup>2</sup> The data for Germany were linked on the basis of 1991 ratios of employment in the former West Germany to employment in Germany (unified). Data were available on both bases that year. In 1991, employment in the former West Germany accounted for 77 percent of total employment in Germany (unified).

<sup>3</sup> Even excluding the former East Germany, German unemployment rates would

still show increases in the 1990s, but they would be about a percentage point lower than the figures shown for Germany in this article.

<sup>4</sup> See Toshihiko Yamagami, "Underutilization of labor resources in Japan and the United States," *Monthly Labor Review*, April 2002, pp. 25–43; on the Internet at <http://www.bls.gov/opub/mlr/2002/04/art3full.pdf>. For Japan, the Bureau has long maintained series for men's and women's unemployment rates adjusted for differences with U.S. concepts such that the differences tend to cancel out in the overall unemployment rate. While these further adjustments are not made to the BLS series for the overall Japanese unemployment rate, they do have a significant impact on the jobless rates for Japanese men and women, lowering the men's rate and raising the women's rate.

but several series are from the Organization for Economic Cooperation and Development (OECD), and one is from the Statistical Office of the European Communities (Eurostat). The box on page 16 summarizes additional adjustments made in the BLS database expressly for this article and presents some caveats about comparability of the OECD data on full-time and part-time work.

The analysis begins with an investigation of overall comparative labor market performance, focusing on unemployment and employment trends over the past 40 years. This sets the stage for a deeper investigation of the comparative unemployment experiences of men, women, and youths. Data on the duration of unemployment illustrate a major difference in the nature of joblessness in the United States, compared with other countries. The article then turns to an analysis of employment indicators, including the employment-to-population ratio by age and sex, sectoral employment trends, and trends in full-time and part-time jobs. Some other European countries have diverged from the path set by the G4, and this divergence is captured in a look at selected trends in other European Union countries.

Numerous studies over the years, by both the Bureau and other researchers, have attempted to explain the international labor market differences described herein. A final section summarizes the major findings of some of this literature.

## Historical overview

Overall trends in unemployment and employment are described for 1960–2000, including averages for three subperiods: 1960–73, 1973–90, and 1990–2000. Except for 1960, the first year for which most of the BLS data are available, these periods are broken at or near a business cycle peak for most countries and correspond to those chosen for the analysis of manufacturing productivity in another article in this issue of the *Review*.<sup>5</sup> A U.S. business cycle peak occurred in April 1960, with the corresponding trough in February 1961. In 1973, the first “oil crisis” plunged the industrial economies into recession in 1974–75, when unemployment rose sharply, and 1990 preceded substantial increases in unemployment in six of the seven countries during 1991–92. Japan’s unemployment rate increases came a little later, in 1993 and from then onward. With one exception, employment was increasing and unemployment rates were declining in all of the base years chosen for the analysis. The exception was Japan in 2000, when employment moved downward slightly and the unemployment rate remained stable.

*Unemployment.* Despite the disrupting influence of worldwide cyclical movements and the particular economic ills that plagued individual countries, the relative positions of the seven industrial countries showed little change over the decades of the sixties and seventies. Then the comparative picture began to change.

The first panel of chart 1 depicts the trends in unemployment rates for the United States, Canada, Japan, and Europe (the G4 nations) for 1960 through 2000. At the beginning of the period and throughout the 1960s, unemployment was comparatively high in both the United States and Canada and very low in Japan and Europe.<sup>6</sup>

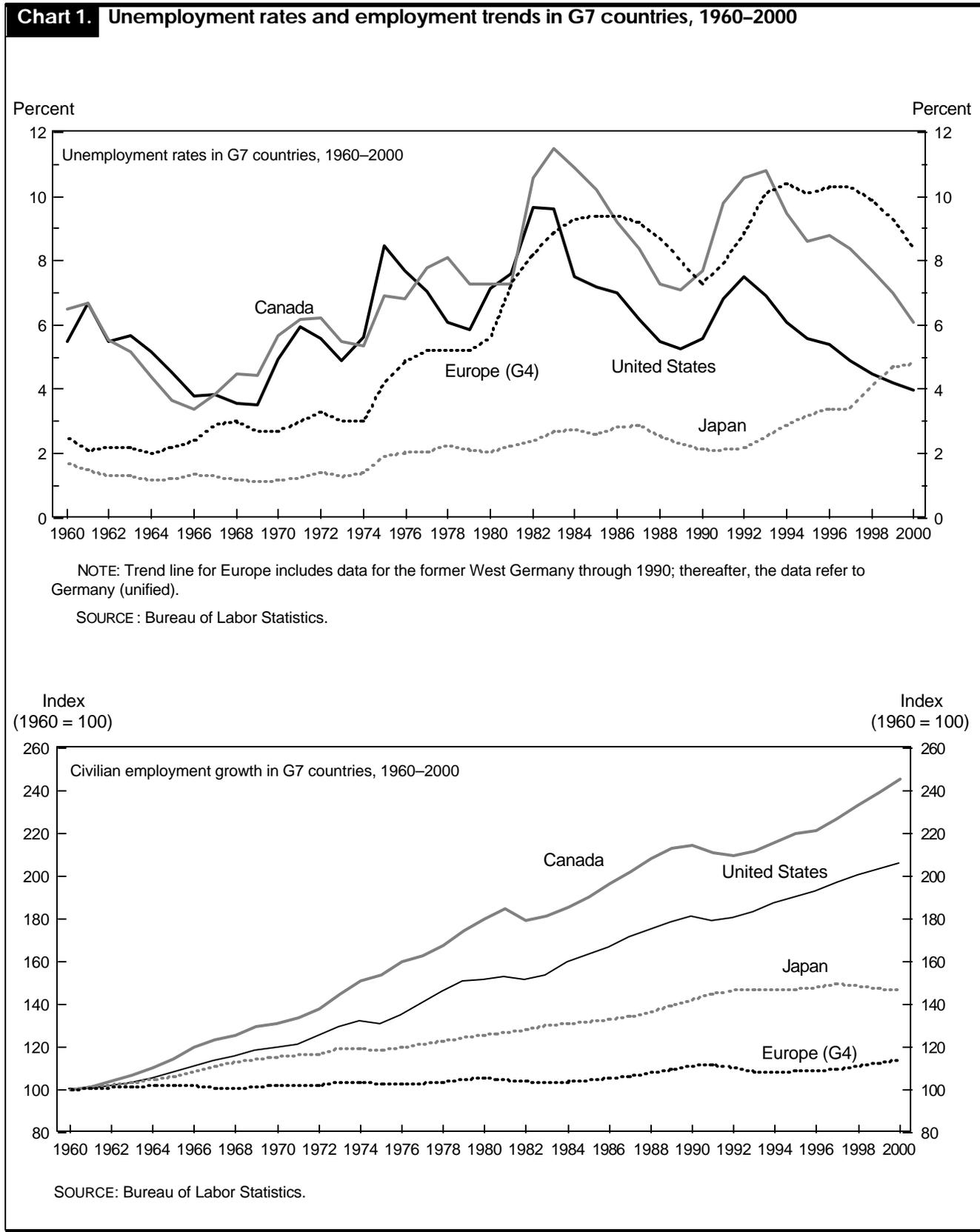
Although, over the 40-year period from 1960 to 2000, the U.S. unemployment rate reached a low of 3.5 percent in 1969, the figure was still significantly higher than that of Europe and, especially, that of Japan the same year. In 1969, Japan’s rate also had attained a 40-year low (1.1 percent), while Germany’s rate (0.6 percent) was indicative of a severe labor shortage. (Still, Germany’s rate had been lower by half earlier in the decade, when that nation had to import millions of *Gastarbeiter*—“guest workers”—to keep the wheels of industry turning.<sup>7</sup>) Italy’s unemployment rate was above the rate for the United States, while the French and British rates, although not as low as Germany’s, were under the record low U.S. rate.

Prior to the first “oil shock” in 1973, unemployment in the United States had already risen in 1971–72 over the 1970 level, while rates remained fairly low in Japan and Europe. In 1975, joblessness surged in all the G7 countries, with the U.S. rate of 8.5 percent the highest in the group. The U.S. rate proceeded to move downward sharply during the rest of the 1970s, while jobless rates generally rose even further in the other G7 countries.

The second “oil shock,” in 1979, and the recession that followed in the early 1980s again resulted in substantial increases in the unemployment rate in all of the countries examined. This time, however, Canada’s rate moved higher than the U.S. rate. As the U.S. rate subsequently moved downward in the 1980s and European rates continued to rise, the U.S. rate fell below the European (G4) average for the first time. Even when European rates moved slowly downward in the latter 1980s, the U.S. rate continued to be below the European rate, a situation that has remained through the latest year studied.

In the early 1990s, recessions resulted in rising unemployment in all of the countries examined, except for Japan. Rates subsequently moved downward in the United States, Canada, and Europe, but the European decline was slower. By 2000, the average unemployment rate for Europe was the highest among the G7 groups, and the U.S. rate was the lowest. Japan’s rate began to rise significantly in 1993, and by the end of the period, it had surpassed the U.S. rate for the first time in the 40-year period studied.

Table 1 shows the average unemployment rate for the entire period for each of the seven countries studied and for the three subperiods. On average, for the entire 1960–2000 period, Japan maintained the lowest jobless rates, 2.2 percent. The U.S. average was nearly 3 times as high. Europe’s (G4) average was



**Table 1. Average unemployment rates in G7 countries, selected periods, 1960–2000**

[In percent]

Country	1960–2000	1960–73	1973–90	1990–2000
United States .....	6.0	4.9	6.9	5.6
Canada .....	7.3	5.1	8.1	8.6
Japan .....	2.2	1.3	2.2	3.2
Europe (G4): .....	6.1	2.6	6.8	9.4
France .....	6.6	2.0	7.4	11.1
Germany <sup>1</sup> .....	4.2	.7	4.6	7.9
Italy <sup>2</sup> .....	7.3	4.7	7.2	10.5
United Kingdom .....	6.4	2.9	7.9	8.0

<sup>1</sup> Former West Germany through 1990; Germany (unified) thereafter.<sup>2</sup> Adjusted for breaks in historical continuity of the series.SOURCE: *Comparative Civilian Labor Force Statistics, Ten Countries, 1959–2001* (Bureau of Labor Statistics, Mar. 25, 2002); on the Internet at <http://www.bls.gov/fls/home.htm>.

slightly above the U.S. figure, while Canada had the highest average unemployment rate over the whole period, 7.3 percent.

The period 1960–73 was the time frame of lowest average unemployment rates for all G7 countries during the 40 years examined. In 1973–90, unemployment rose, on average, in all of the countries, with the highest relative increases occurring in Europe, where the average almost tripled compared with the previous period’s figure. During the 1990–2000 period, the United States had the distinction of being the only G7 country in which the average unemployment rate was lower than it was in 1973–90. The increases in unemployment were greatest in the European countries (with the exception of the United Kingdom, where the rate was virtually unchanged) and moderate in Canada. Japan’s average, although still the lowest of all the countries, was much higher than it was in the 1973–90 period.

*Employment.* The second panel of chart 1 portrays employment trends over the 40-year period studied. Overall, the U.S. job creation rate of 1.8 percent per year was surpassed only by Canada’s, which was half a percentage point greater. By contrast, Japan and Europe had rather flat employment performance. Unlike the trend lines for Japan and Europe, recessionary downturns in employment are clearly evident in the charted lines for the United States and Canada, with the downturns or pauses always followed by a resumption of strong employment growth.

The United States maintained its relatively high employment growth rate during both 1960–73 and 1973–90, while the pace tapered off in Canada and Japan in the latter period. (See table 2.) Europe’s very low rate of employment growth inched upward in 1973–90. By the 1990s, annual rates of change in employment turned downward in all countries except France. Employment growth was virtually nil in Germany, and employment declined slightly in Italy. Employment increases in France and the United Kingdom outpaced the low European (G4) average.

Although lower than the 2-percent growth rate of the previous period, the U.S. annual employment growth rate of 1.3 percent in 1990–2000 was 4 times the growth rate of Europe (G4) and Japan and almost the same as that of the perennial employment growth leader, Canada.

The huge comparative difference between the United States and Europe, a wider gap than in 1973–90, resulted in references to “the great American job machine” and the “U.S. Employment Miracle.”<sup>8</sup> The U.S. performance became the envy of most other industrial countries, far different from the sentiments of the early 1960s, when the United States looked to European countries as exemplars of effective labor markets.

The foregoing broad picture of historical unemployment and employment trends sets the stage for a deeper investigation of (1) unemployment and employment for major demographic groups, (2) the duration of unemployment, and (3) the sectors and types of jobs for which changes were occurring. The investigation begins with unemployment indicators.

### Additional unemployment indicators

Chart 2 reveals differences across countries in the unemployment experience of men compared with women and youths compared with adults. In addition, the chart highlights large contrasts in the duration of unemployment. The BLS database is supplemented by statistics from the OECD on youth and adult unemployment rates and on the duration of unemployment.

*Men and women.* Both North American countries moved toward, and then achieved, equality in unemployment rates for men and women. Japan and Europe appear to be moving in that direction also, but have not yet achieved equality. (See first panel of chart 2.)

In the United States, men had significantly lower unemployment rates than women every year from 1960 to 1981.

But men's rates began increasing relative to those of women in the 1970s and moved higher than women's during the 1980s recession. Subsequently, the rates equalized for some years, and then men's rates again rose higher than women's when recession occurred in the early 1990s. Later in the 1990s, women's and men's jobless rates again equalized. Canada had back-and-forth shifts in the relationship of men's to women's unemployment, with men having higher rates in the early 1960s and again in the 1990s, after some periods of equalization in the intervening years. By contrast, Japanese and European men had substantially lower jobless rates than women had throughout the 40 years studied.

In Europe, the male-female gap in unemployment rates remained remarkably stable over the 40 years, while Japan achieved some narrowing of the sex differential in 1973–90 and a further narrowing in the 1990s. (See table 3.) The United Kingdom had a different profile from the other European (G4) countries: in all periods, British women had notably lower unemployment rates than men, and the differential widened in the 1990s.

*Youths and adults.* In most industrial countries, unemployment rates for young people historically have been higher than those for their elders. Youth unemployment rates are, of course, affected by the overall job situation in each country. Therefore, ratios of youth (those under 25 years) to adult (25 to 54 years) unemployment rates are compared in table 4, with averages for two periods plotted in the second panel of chart 2, based on OECD data for 1984–2000.<sup>9</sup> (OECD data for earlier years were not available for all the G7 countries.) Such ratios may be affected by the general level of unemployment to some extent, but they highlight the relative problems of youths in the labor market.

The ratios shown in the chart are average ratios for the 1984–90 and 1990–2000 periods. There was little change

over the two periods, with the differentials between youths and adults rising slightly in the United States and Canada, declining somewhat in Europe (G4), and holding about steady in Japan. Europe's decline was due mainly to a sharp decrease in the youth-adult ratio in Italy.

In the United States, young persons are 2 to almost 3 times as likely as adults to be unemployed. This differential was about the same as the overall averages for Europe and Japan for 1984–2000. Canada's youths experienced a much lower gap in unemployment rates with adults. Within Europe, there were sharp contrasts: Italian youths were 4 to 5 times as likely to be unemployed as their adult counterparts, while German youths had jobless rates about the same as adults throughout the period. (See table 4.)

*Duration of unemployment.* Almost half of Europe's unemployed remain jobless for a year or longer, while less than 10 percent fall into that category in the United States. (See bottom panel of chart 2, based on OECD data.) In 1983, the United States, Canada, and Japan had about the same proportion of long-duration unemployment, while Europe's was far higher. During the 1980s, the proportion declined somewhat in the United States and Canada, rose in Japan, and remained very high in Europe. All countries except Japan showed a rising trend in the early 1990s. Japan's long-duration unemployment worsened in the last half of the decade, while the other G7 countries showed some small improvement.

The data on duration of unemployment reveal an important difference in the nature of unemployment in the United States compared with Europe. The proportion of long-term unemployment in Europe remains persistently high even during and after recoveries. In the United States, it is relatively low even during downturns in the economy. Thus, the burden of unemployment tends to fall on a smaller proportion of the

**Table 2. Employment growth rates in G7 countries, selected periods, 1960–2000**

[Average annual rate of change]

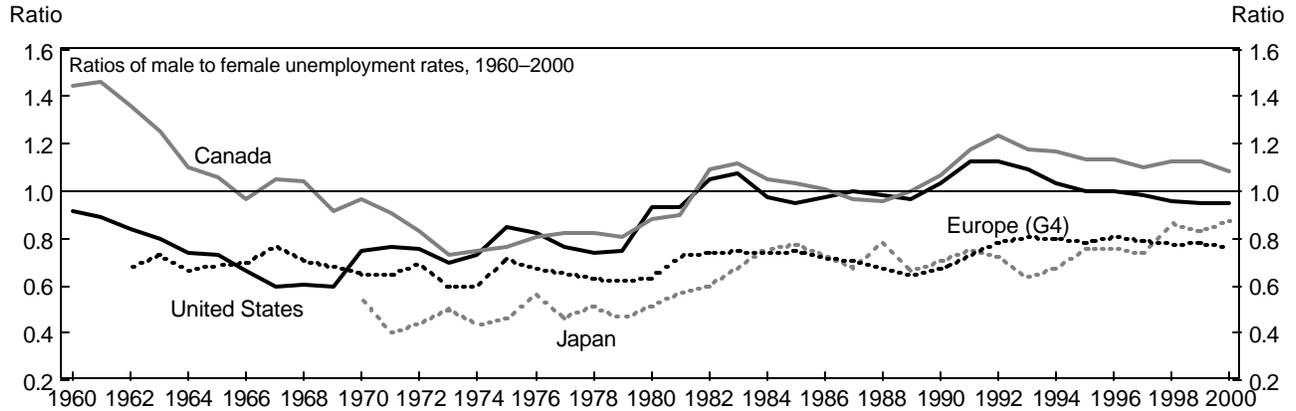
Country	1960–2000	1960–73	1973–90	1990–2000
United States .....	1.8	2.0	2.0	1.3
Canada .....	2.3	2.9	2.3	1.4
Japan .....	1.0	1.4	1.0	.3
Europe (G4): .....	.3	.3	.5	.3
France .....	.6	1.0	.3	.6
Germany <sup>1</sup> .....	.2	.3	.3	.1
Italy .....	.1	-.5	.7	-.1
United Kingdom .....	.4	.3	.5	.4

<sup>1</sup> Employment adjusted to Germany (unified) throughout the period.

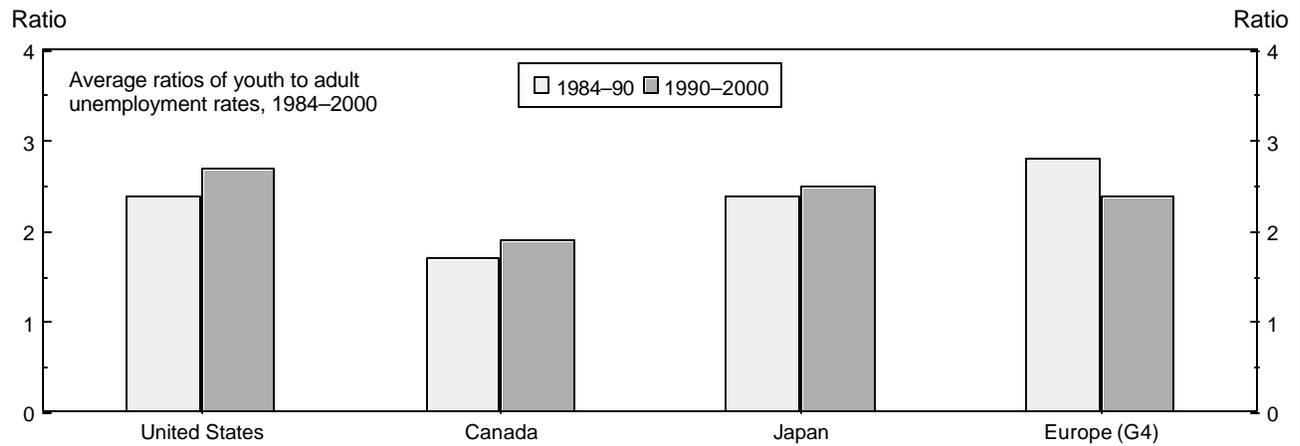
SOURCE: *Comparative Civilian Labor Force Statistics, Ten Countries, 1959–*

2001 (Bureau of Labor Statistics, Mar. 25, 2002); on the Internet at <http://www.bls.gov/fls/home.htm>.

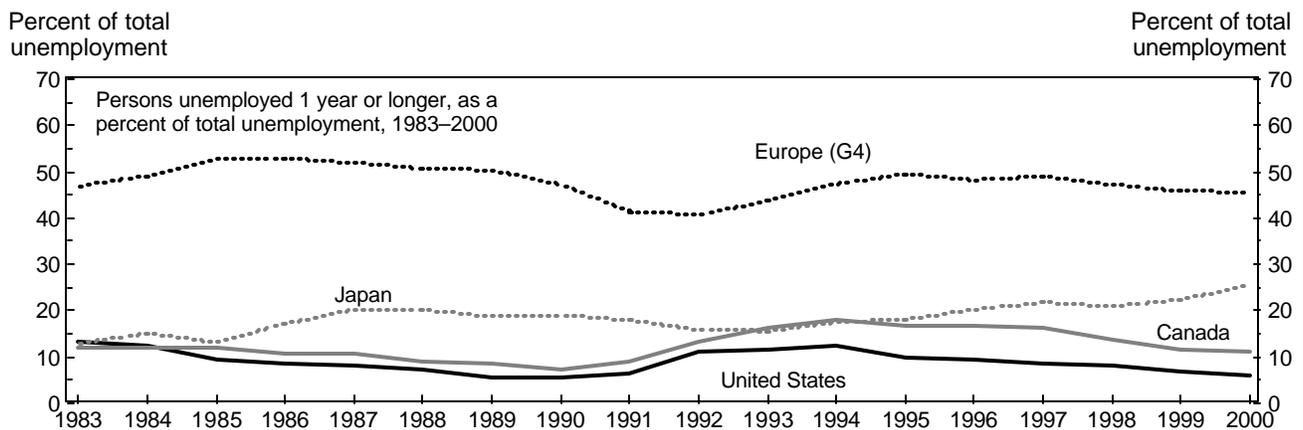
**Chart 2. Unemployment indicators by sex, age, and duration in G7 countries**



NOTE: Data for Japan are from 1970 to 2000; data for Europe (G4) are from 1962 to 2000.



NOTE: Youths are under 25 years; adults are 25 to 54 years.



NOTE: Trend line for Europe (G4) includes data for the former West Germany through 1990; thereafter, the data refer to Germany (unified).

SOURCE: Top panel, Bureau of Labor Statistics; middle and bottom panels, Organization for Economic Cooperation and Development, *Labor Force Statistics, 1980–2000*.

**Table 3.** Annual average ratios of men's to women's unemployment rates in G7 countries, selected periods, 1960–2000

Country	1960–2000	1960–73	1973–90	1990–2000
United States .....	0.9	0.8	0.9	1.0
Canada .....	1.0	1.1	.9	1.1
Japan <sup>1</sup> .....	.6	.5	.6	.8
Europe (G4): .....	.8	.8	.7	.9
France .....	.6	.4	.6	.7
Germany <sup>2</sup> .....	.8	.8	.7	.8
Italy .....	.5	.6	.4	.5
United Kingdom ....	1.2	1.2	1.1	1.4

<sup>1</sup> Data begin with 1970.

<sup>2</sup> Former West Germany through 1990; Germany (unified) thereafter.

SOURCE: *Comparative Civilian Labor Force Statistics, Ten Countries, 1959–2001* (Bureau of Labor Statistics, Mar. 25, 2002); on the Internet at <http://www.bls.gov/fls/home.htm>.

population in Europe, while in the United States and Canada, a greater percentage of the population experiences a spell of unemployment over the course of a year.

### Additional employment indicators

This section takes a more indepth look at employment by examining employment-to-population ratios overall and by sex and age. In addition, investigations of trends in employment in agriculture and in goods-producing and service-producing industries and analyses of trends in part-time and full-time jobs reveal further important contrasts between the United States and other countries.

*Employment ratios.* The employment-to-population ratio (hereinafter, simply the employment ratio) indicates how a country's employment growth compares with the growth in its working-age population. Employment growth surpassed working-age population growth in the United States and Canada, and employment ratios moved upward. (See chart 3.) Meanwhile, employment did not keep up with working-age population growth in Japan and Europe, and those countries' ratios generally moved downward. Cyclical fluctuations were greater in employment ratio trends for the United States and Canada than for Japan and Europe.

At the beginning of the period, employment ratios were lowest in Canada and the United States, but by the end of the period, the United States had the highest ratio, followed by Canada. Japan began the period with the highest employment ratio by far, but it fell below the ratios of the two North American countries by the mid-1980s.

Employment ratios in Europe (G4) declined over the past 40 years and are now far below those of the other G7 countries. Within the G4 nations, the drop was steepest in Italy. (See table

5.) The United Kingdom's employment ratio was much closer to that of the two North American countries than to Europe's average.

Employment ratios were rising for women and falling for men over the long term. (See chart 4 and table 5.) Again, there were greater fluctuations in the U.S. and Canadian ratios and milder ones in the Japanese and European ratios.

The employment ratios for men were highest in Europe and Japan in the 1960s and lowest in Canada and the United States. By 2000, employment ratios for Japanese and U.S. men were about equal, while the rate for European men dropped to the lowest among men in any of the G7 groups. In the United States and Canada, employment ratios for men rose slowly during most of the expansionary years of the 1980s and 1990s, counter to the historical downward trend, but the ratio for Japanese and European men continued downward.

Employment ratios for women increased in every G7 group except Japan, but the European (G4) increase was due mainly to a large gain by British working women. Employment ratios showed little increase in the other G4 members, and in Italy they fell until around the mid-1980s, before rising again to reach their 1960 level by 2000. For Japanese women, the trend was one of decline until the late 1970s and a leveling off thereafter.

In 1960, U.S. women had a much lower employment ratio than Japanese women and a slightly lower ratio than European women. By 2000, U.S. women had the highest employment ratio of women in any of the G7 countries, with Canadian women close behind. Canadian women recorded the strongest increases, experiencing a near doubling in their employment ratio from 1960 to 2000.

Comparative employment ratios are greatly influenced by the varying ratios for certain age groups. In particular, there is little variation across countries in employment ratios for workers in their prime working ages (25 to 54 years), but large variations in employment ratios for youths (under 25 years) and older workers (55 to 64 years). (See chart 5.) The basic similarities and differences among the G7 countries appearing in chart 5 have held since at least the early 1980s. (See table 6.)

The United States had the highest proportion of working youths, a much higher rate than in Japan and Europe and slightly higher than Canada's rate. At the other end of the age spectrum, Japan had the highest employment ratio for older workers, and the United States was next in line. The U.S. ratio was 20 percentage points higher than the older worker ratio for Europe and about 10 percentage points higher than the rate for Canada. Employment ratios for the younger and older U.S. populations grew from 1983 to 2000, while they declined or held steady elsewhere, except for Canadian youths, whose employment rates also moved upward.

In the United States and Canada, persons in the prime working ages had substantial increases in employment ratios from 1983 to 2000, compared with their counterparts in Japan and Europe.

The small increases for prime-age workers, combined with the declines in employment rates for younger or older workers, explain the long-term downward trend in employment ratios depicted in chart 3 for Japan and Europe. By contrast, the United States and Canada saw increasing employment rates in all three of the age groupings, although Canada's older workers had only a slight increase.

*Sectoral employment.* Over the past 40 years, employment trends in the three major economic sectors—agriculture, goods-producing industries and service-producing industries—were quite different both within and across countries. (See chart 6 and table 7.) The superior employment performances of the United States and Canada stemmed mainly from their much larger gains in service-sector employment, lower losses in agriculture, and maintenance of some growth in the goods-producing sector.

Employment in agriculture fell in all of the countries examined, but the losses were smaller in the two North American countries. Japan and Europe (particularly France, Germany, and Italy) experienced large percentage declines in agricultural employment. These countries began the period with substantially larger agricultural sectors than the others, which already had suffered big losses from the agriculture sector earlier in the 20th century.

In the goods-producing industries, employment increases occurred in the United States, Japan, and Canada. In Europe, employment in this sector either declined (in France, Germany, and the United Kingdom) or held steady (in Italy).

The service-producing industries were the engine of job growth throughout the G7 countries. Employment growth in the service-producing sector was stronger than it was in the goods-producing sector in all seven countries, with the strongest showing in the United States and Canada.

In 2000, the service-producing sector accounted for between three-fifths and three-quarters of total employment in the countries studied. Employment in goods-producing industries made up one-fifth to one-third of total employment. In contrast, employment in agriculture accounted for 5 percent or less of total employment in all of the countries studied.<sup>10</sup>

*Full-time and part-time employment.* This section is based upon an OECD standardized series on full-time and part-time employment. (See box on page 16 for information about this series and some caveats about the comparability of the Japanese data in particular.)

Most U.S. employment growth since 1983 has been in full-time jobs. (See table 8.) The United States was the only G7 country with a declining proportion of part-time employment during 1983–2000. In Europe, employment growth has been weak

**Table 4. Ratios of youth to adult unemployment rates in G7 countries, selected years, 1984–2000**

Year	United States	Canada	Japan	Europe (G4)	France	Germany <sup>1</sup>	Italy	United Kingdom
1984 .....	2.3	1.8	2.3	3.2	3.7	1.7	5.4	2.1
1985 .....	2.3	1.8	2.3	3.3	3.4	1.5	6.4	1.9
1986 .....	2.3	1.8	2.4	3.0	3.0	1.3	5.6	1.9
1987 .....	2.4	1.7	2.3	2.7	2.6	1.2	5.2	1.7
1988 .....	2.4	1.7	2.5	2.6	2.6	1.2	4.7	1.7
1989 .....	2.6	1.6	2.5	2.3	2.3	1.0	4.4	1.6
1990 .....	2.4	1.7	2.7	2.4	2.4	1.0	4.3	1.7
1991 .....	2.4	1.7	2.8	2.4	2.5	1.0	4.3	1.9
1992 .....	2.2	1.7	2.6	2.3	2.3	.9	4.3	1.8
1993 .....	2.3	1.7	2.6	2.5	2.5	1.0	4.3	2.0
1994 .....	2.5	1.7	2.3	2.4	2.5	1.0	3.9	2.0
1995 .....	2.7	1.7	2.3	2.4	2.5	1.1	3.8	2.1
1996 .....	2.8	1.8	2.5	2.4	2.4	1.2	3.7	2.1
1997 .....	2.9	2.1	2.4	2.4	2.5	1.2	3.7	2.3
1998 .....	3.0	2.1	2.3	2.4	2.4	1.1	3.5	2.5
1999 .....	3.1	2.2	2.3	2.4	2.5	1.0	3.5	2.5
2000 .....	3.0	2.2	2.2	2.5	2.6	1.1	3.6	2.7
Averages:								
1984–2000 .....	2.6	1.8	2.4	2.5	2.6	1.1	4.4	2.0
1984–90 .....	2.4	1.7	2.4	2.8	2.9	1.3	5.1	1.8
1990–2000 .....	2.7	1.9	2.5	2.4	2.5	1.1	3.9	2.1

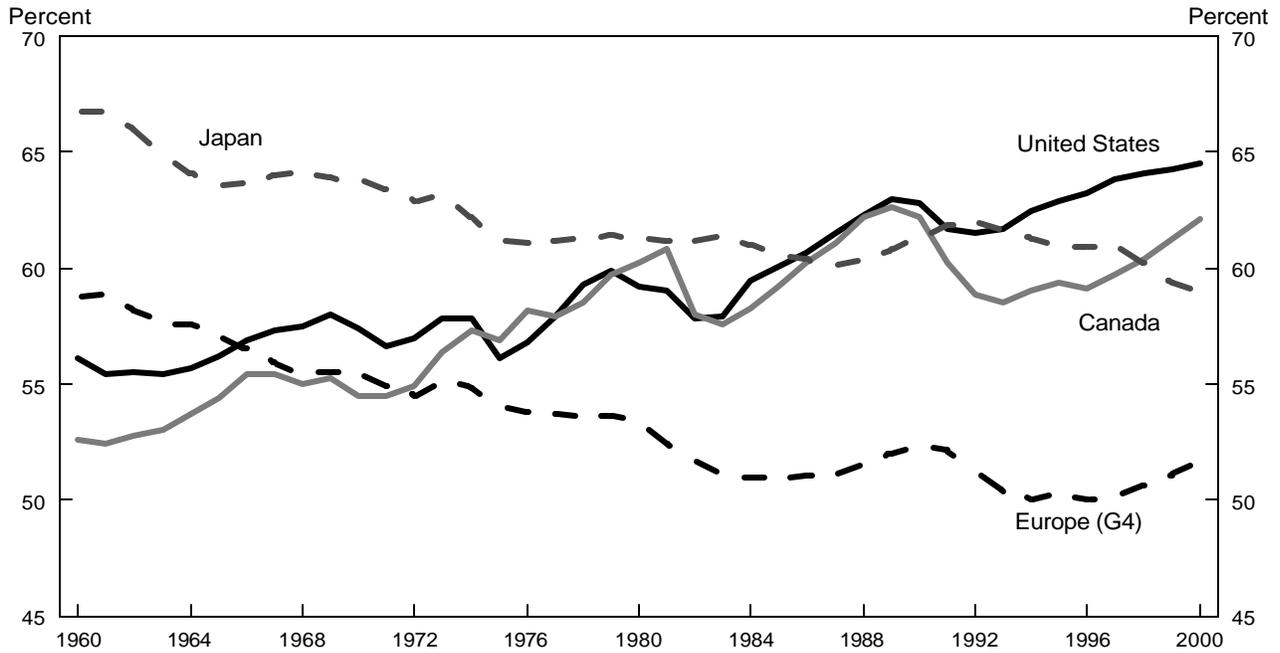
<sup>1</sup> Former West Germany through 1990; Germany (unified) thereafter.

**NOTE:** Youth are defined as persons under 25 years; adults are persons

aged 25 to 54 years.

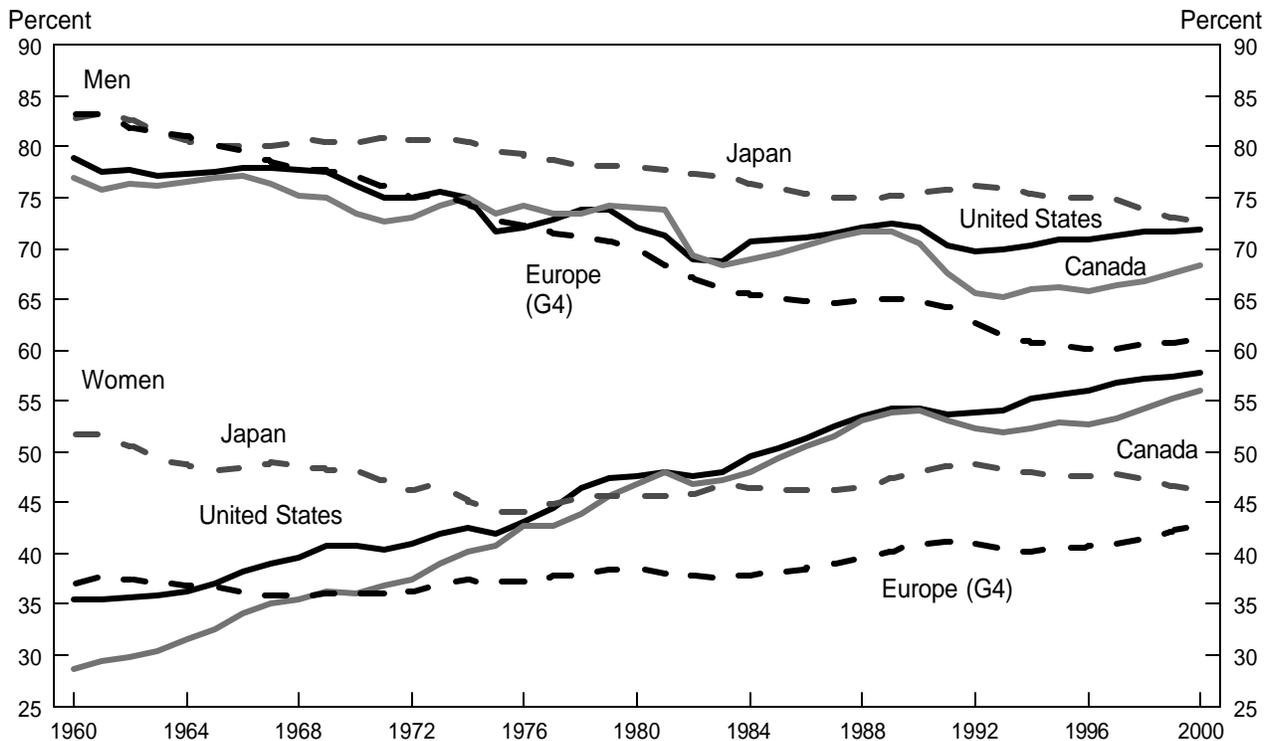
SOURCE: *Labor Force Statistics, 1980–2000, Part III* (Paris, Organization for Economic Cooperation and Development, 2001).

**Chart 3. Employment-to-population ratios in G7 countries, 1960-2000**



SOURCE: Bureau of Labor Statistics.

**Chart 4. Employment-to-population ratios by sex in G7 countries, 1960-2000**



SOURCE: Bureau of Labor Statistics.

**Table 5. Employment-to-population ratios in G7 countries, 1960, 1973, 1990, 2000**

[In percent]

Year and sex	United States	Canada	Japan	Europe (G4)	France	Germany <sup>1</sup>	Italy	United Kingdom
<b>Both sexes:</b>								
1960 .....	56.1	52.6	66.7	58.8	58.6	62.0	54.0	60.6
1973 .....	57.8	56.4	63.2	55.1	55.8	58.5	45.8	60.3
1990 .....	62.8	62.2	61.3	52.4	50.9	55.1	43.9	59.6
2000 .....	64.5	62.1	59.0	51.7	51.1	52.8	42.9	59.8
<b>Men:</b>								
1960 .....	78.9	76.9	82.8	83.2	—	85.1	79.5	85.0
1973 .....	75.5	74.3	80.8	75.2	74.2	78.3	69.3	79.1
1990 .....	72.0	70.6	75.4	65.0	61.3	68.2	60.0	70.3
2000 .....	71.8	68.3	72.5	61.2	59.0	61.7	56.5	67.5
<b>Women:</b>								
1960 .....	35.5	28.6	51.8	37.5	—	42.6	31.0	38.9
1973 .....	42.0	39.1	46.8	37.1	39.2	41.2	24.5	43.4
1990 .....	54.3	54.1	48.0	40.9	41.5	43.1	29.2	49.8
2000 .....	57.7	56.1	46.4	42.9	43.9	44.6	30.5	52.6

<sup>1</sup>Employment ratios are adjusted to Germany (unified) throughout the period.

NOTE: Dash indicates data not available.

SOURCE: *Labor Force Statistics, 1980–2000, Part III* (Paris, Organization for Economic Cooperation and Development, 2001).

in general, but, in addition, the increases that did occur were mainly in part-time employment. This appears also to be the case in Japan.

In 2000, part-time employment constituted 12 percent to 13 percent of total employment in the United States and Italy, but almost twice that proportion in the United Kingdom. Japan's proportion of part-time work appears to have been very high, but the Japanese data are not closely comparable to those for the other countries, being overstated to an unknown degree.

Chart 7 tracks the ratio of full-time to part-time employment from 1983 to 2000. (Note that the jump in the trend line for Europe (G4) in 1991 was due to the absorption of workers from the former East Germany, who were predominantly full-time workers in the Soviet system.) Europe began the period with the highest ratio of full-time to part-time workers, but the trend was sharply downward thereafter. The United States began the period with a ratio considerably below Europe's, but ended with the highest ratio: full-time employment was 7 times as high as part-time employment, while in Europe it was 5 times as high. In Canada, the ratio was somewhat lower. Japan's trend (not shown in the chart) also was sharply downward.

## Europe beyond the G4 countries

Several European countries that are not members of the G4 have had labor market experiences somewhat different from those of France, Germany, Italy, and the United Kingdom. Table 9 shows unemployment rates for other countries in the European Union.<sup>11</sup> The data for all countries except Sweden are from harmonized unemployment rates produced by Eurostat. The data for Sweden

are from the BLS comparisons program. Unemployment rates for the entire period back to 1960 are available only for Sweden; therefore, the table focuses on the more recent trends.

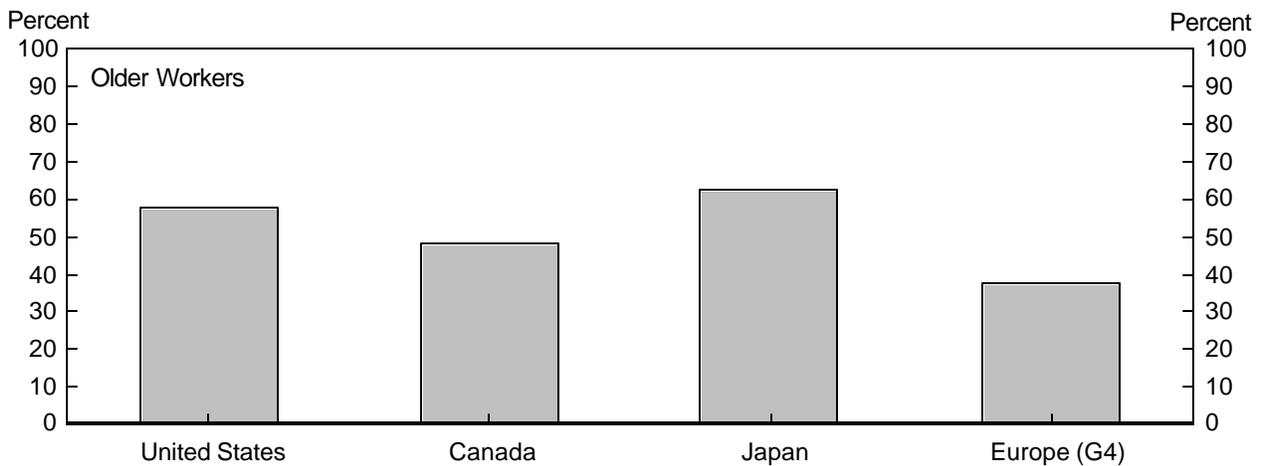
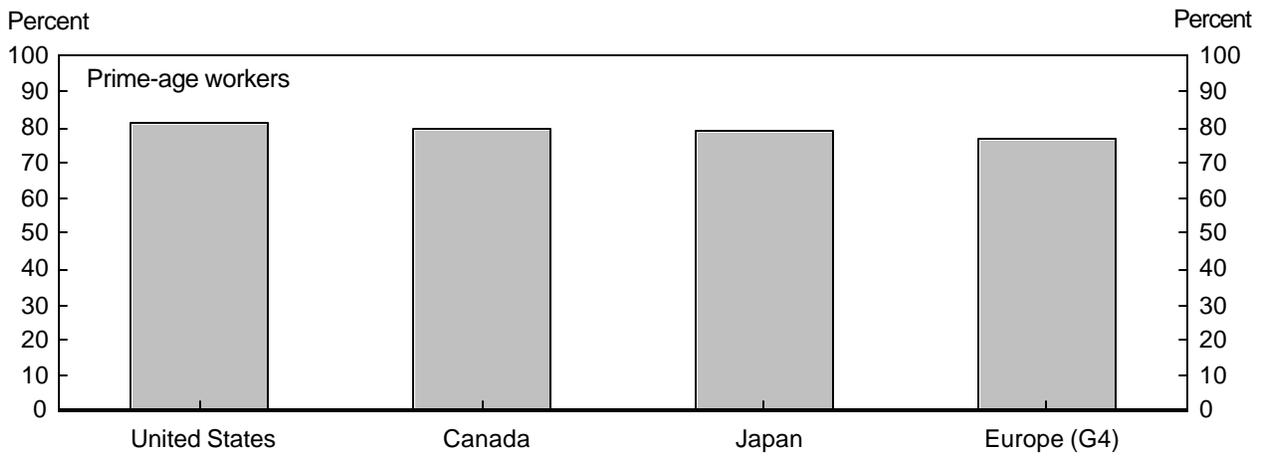
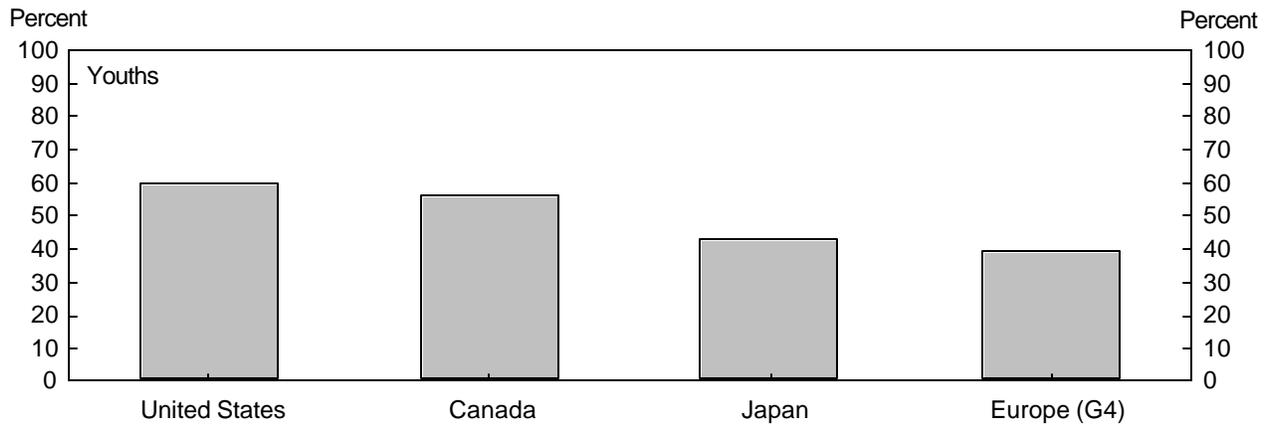
Sweden had an extraordinarily low unemployment rate in 1990, and in the years back to 1960 the rate never rose above 3.5 percent on an annual basis. However, the Swedish jobless rate surged to 9.3 percent in 1993 and then continued to climb to about 10 percent in 1997 before abating. Over the period 1990–2000, Sweden's average unemployment rate of 7.3 percent was about 2 percentage points below the G4 average. Several of the other non-G4 European countries had lower unemployment rates than the G4 average for the 1990s, with Austria and the Netherlands well below even the U.S. average rate of 5.6 percent for the period. By contrast, Spain, with rates above 20 percent in some years of the 1990s, greatly surpassed the European (G4) average.

The Netherlands also provides an exception to the slow employment growth of Europe (G4). Dutch employment grew at about the same pace as that in the United States from 1973 to 2000,<sup>12</sup> but the nature of Dutch job growth was quite different from U.S. job growth: Dutch employment gains were virtually all in part-time positions. In 1983, part-time jobs made up only 7 percent of all employment in the Netherlands; by 2000, the proportion had rocketed to one-third of all Dutch employment, the highest share among the European Union countries.

## Perspectives on differences

The divergent experiences of labor markets in the United States, Canada, Europe, and Japan have spawned a host of

**Chart 5. Employment-to-population ratios by age in G7 countries, 2000**



NOTE: Youths are under 25 years, prime-age workers are 25 to 54 years, and older workers are 55 to 64 years.

SOURCE: *Employment Outlook* (Paris, Organization for Economic Cooperation and Development, June 2001), Statistical Annex, Table C.

**Table 6. Employment-to-population ratios by age and sex in G7 countries, 1983, 1990, and 2000**

[In percent]

Country and age group	Both sexes			Men			Women		
	1983	1990	2000	1983	1990	2000	1983	1990	2000
United States:									
16-24 .....	55.6	59.8	59.8	59.2	63.5	62.0	52.2	56.1	57.6
25-54 .....	73.7	79.7	81.5	86.1	89.1	89.0	62.0	70.6	74.3
55-64 .....	51.4	54.0	57.7	65.2	65.2	65.6	39.4	44.0	50.5
Canada:									
15-24 .....	53.6	61.1	56.3	54.3	62.3	56.7	52.9	59.9	55.8
25-54 .....	71.9	78.0	79.9	84.6	86.4	85.9	59.1	69.7	74.0
55-64 .....	47.9	46.3	48.4	66.4	60.3	57.7	30.9	33.0	39.3
Japan: .....									
15-24 .....	42.2	42.2	42.7	41.9	41.4	42.5	42.5	43.0	43.0
25-54 .....	76.6	79.6	78.6	95.2	96.2	93.5	58.1	62.9	63.6
55-64 .....	61.3	62.9	62.7	95.2	80.4	78.4	45.1	46.5	47.8
Europe (G4):									
15-24 .....	45.9	47.3	39.8	50.8	51.3	43.3	40.9	43.2	36.3
25-54 .....	72.2	74.5	76.7	90.0	89.1	87.1	54.4	59.9	66.1
55-64 .....	39.9	38.4	37.7	56.4	52.1	46.7	25.6	25.7	29.0
France: .....									
15-24 .....	36.7	29.5	23.3	42.8	33.6	26.7	30.5	25.2	20.0
25-54 .....	76.9	77.4	78.3	91.9	89.8	87.0	61.9	65.1	69.6
55-64 .....	39.9	35.6	34.2	50.4	43.0	38.4	30.4	28.8	30.2
Germany: <sup>1</sup>									
15-24 .....	51.6	56.4	48.4	54.6	58.7	52.5	48.4	54.0	44.2
25-54 .....	71.4	73.6	80.2	88.4	86.9	89.4	53.7	59.6	70.8
55-64 .....	38.1	36.8	38.6	57.4	52.0	48.2	24.0	22.4	29.0
Italy: .....									
15-24 .....	34.4	33.3	26.1	40.9	38.8	30.2	28.1	27.8	22.0
25-54 .....	67.0	68.0	67.7	93.2	90.2	84.6	41.8	46.2	50.7
55-64 .....	34.1	32.0	27.3	55.3	50.9	40.3	14.6	14.7	15.2
United Kingdom:									
16-24 .....	60.7	70.1	61.5	64.8	74.2	63.9	56.5	65.9	58.9
25-54 .....	73.3	79.0	80.4	86.4	89.5	87.5	60.2	68.6	73.1
55-64 .....	47.5	49.2	50.5	62.6	62.4	59.8	33.4	36.7	41.4

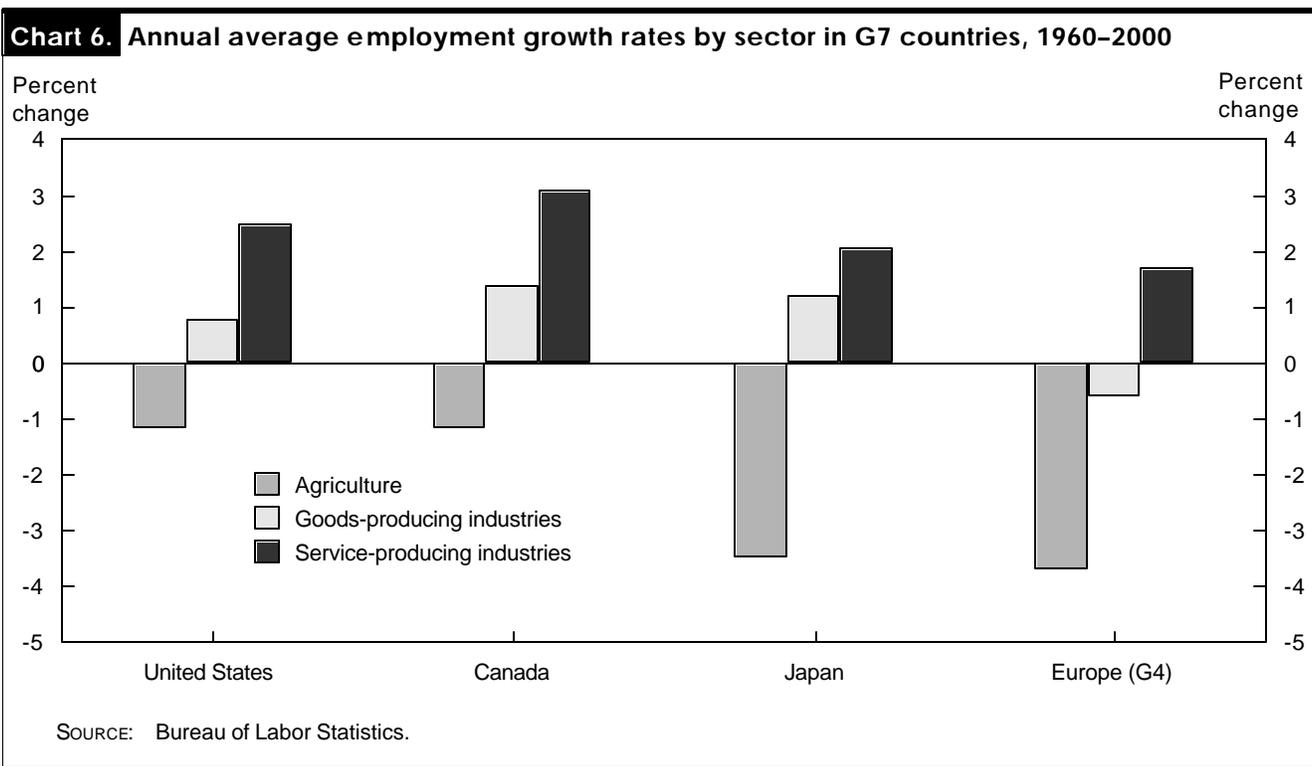
<sup>1</sup> Former West Germany in 1983 and 1990; Germany (unified) in 2000.  
SOURCE: *Employment Outlook* (Paris, Organization for Economic

Cooperation and Development, June 2001 and July 1997), Statistical Annex, Table C.

studies, many of which have tried to determine the underlying causes of these differences. Earlier studies sought to explain the relatively high U.S. unemployment rates, while studies after the mid-1980s attempted to explain the success of the U.S. labor market compared with that in Europe, in terms of both unemployment rates and employment growth. Other research delved into reasons underlying differences in youth unemployment rates, labor force participation rates, and sectoral employment trends. A few studies looked beyond unemployment to international comparisons of broader measures of underutilization, and bilateral (that is, two-country) studies investigated the U.S.-Japan and the U.S.-Canadian unemployment gaps. Research on "labor market flexibility"

examined the impact of various institutions and legislation on comparative employment and unemployment. This section begins with summaries of some BLS studies, almost all of them published in the *Review*, and concludes with a brief discussion of selected research by other individuals and organizations.

*Myers and Chandler.* In 1961, the President's Committee to Appraise Employment and Unemployment Statistics asked the Bureau to prepare a study of definitional and other reasons for the high unemployment rate in the United States, compared with rates in other industrialized countries. In response, Robert J. Myers and John H. Chandler presented one of the first analyses of international unemployment differences to the Committee,



and summaries were published in the August and September 1962 *Monthly Labor Review*.<sup>13</sup> The September report was a followup to their study in the August issue showing that divergence in the statistical methods and definitions used in compiling unemployment statistics was a relatively minor influence in explaining differences in the 1960 unemployment rates in the eight countries studied. In their September article, Myers and Chandler investigated demographic, economic, legal, and social factors that might have affected the comparative levels of unemployment rates. Their study found no one factor to be the “most important” in explaining the high U.S. rate.

Demographic factors and the composition of the workforce did not go very far in providing a satisfactory general explanation of the differences in unemployment rates among the countries covered. Myers and Chandler concluded that the countries with lower unemployment rates than the United States differed from it in two main respects: (1) they experienced a considerably faster rate of economic growth during the 1950s; and (2) as a result of their own individual customs and traditional employment relationships, their workers enjoyed somewhat more assurance of job stability than did U.S. workers.

*BLS Bulletin on unemployment comparisons.* In 1978, Sorrentino updated Myers and Chandler’s analysis in a chapter that was included in a comprehensive bulletin on unemployment

comparisons.<sup>14</sup> The study concluded that the following factors together helped to explain the comparatively high U.S. unemployment rates that prevailed during the 1960–78 period: (1) the relatively rapid increase in the U.S. labor force, compared with much slower growth or declining labor forces in Europe and Japan; (2) a higher and still growing proportion of U.S. youth in the workforce (a result of the U.S. postwar baby boom), which was significant because young persons tended to have much higher unemployment rates than adults; (3) the relatively small proportion of the U.S. labor force engaged in agriculture and the large wage and salary component, together exposing more people to the possibility of unemployment (by contrast, some foreign countries still had relatively large agricultural sectors, and most had a large proportion of small, family-owned businesses, which shielded self-employed and unpaid family workers from the threat of unemployment); (4) cyclical flows of foreign workers, termed “guest workers,” to and from certain European countries, which helped to dampen unemployment increases during recessions; (5) widespread use of short-time work compensation systems abroad, which allowed employers to reduce hours instead of laying off workers; and (6) higher turnover rates and greater worker mobility in the United States, compared with stronger job security in Europe and Japan, causing higher levels of “frictional” unemployment in the United States.

*Sectoral employment trends.* In 1971, Sorrentino analyzed sectoral employment shifts in the major industrial countries over the 1950–70 period, and this work was updated by Godbout in 1993 to cover the 1970–90 period.<sup>15</sup> The articles explain that, generally, with a nation’s economic development and progress in industrialization, the distribution of the employed population shifts from agriculture to industrial activities and, further, from these sectors to service activities. The United States emerged as the world’s first “service economy,” defined as an economy with more than 50 percent of employment in service-producing activities, shortly after World War II. With some lag, the other industrial nations were found to be following that pattern of sectoral development.

*Youth unemployment analysis.* In 1981, Sorrentino prepared an analysis of youth unemployment that was international in scope and that covered the period 1960 to 1979.<sup>16</sup> The study looked at factors that helped to explain the international disparities in youth unemployment. Among the characteristics Sorrentino found to be associated with low youth unemployment in countries such as Germany and Japan were a declining trend in the youth labor force, little labor force activity by students, the widespread use of apprenticeship training, and relatively more emphasis on setting out on one’s career path at an early age. For those countries with relatively high youth unemployment during the period—particularly the United States and Canada—certain common factors also were singled out: rapid increases in the youth labor force, a sizable student labor force, and an emphasis on general education and extended schooling, rather than on the structuring of the early work years

**Table 7.** Annual average rate of change in employment by sector in G7 countries, 1960–2000

Country	Agriculture	Goods-producing industries	Service-producing industries
United States .....	-1.2	0.8	2.5
Canada .....	-1.2	1.4	3.1
Japan .....	-3.5	1.2	2.1
Europe (G4): .....	-3.7	-6	1.7
France .....	-3.8	-6	2.1
Germany <sup>1</sup> .....	-4.2	-7	1.5
Italy .....	-4.3	.0	1.7
United Kingdom .....	-2.4	-1.2	1.4

<sup>1</sup> Employment adjusted to Germany (unified) throughout the period.

NOTE: Agriculture encompasses forestry, hunting, and fishing. Goods-producing industries are mining, manufacturing, and construction. Service-producing industries are transportation, communication, public utilities, trade, finance, public administration, private household services, and miscellaneous services.

SOURCE: *Comparative Civilian Labor Force Statistics, Ten Countries, 1959–2001* (Bureau of Labor Statistics, Mar. 25, 2002); on the Internet at <http://www.bls.gov/fls/home.htm>.

by such devices as apprenticeship. The study noted that the comparative picture for youths was changing by the end of the period analyzed.

*Analysis of participation rates.* Overall trends in labor force participation rates are similar to trends shown by the employment-to-population ratios discussed in this article. After all, the two indicators are quite close in definition: the participation rate is the labor force (employed plus unemployed) as a percentage of the working-age population; the employment

**Table 8.** Indicators of part-time and full-time employment in G7 countries, selected periods, 1983–2000

[in percent]

Country	Part time employment as a percent of total employment			Annual rates of change			
				Full time		Part time	
	1983	1990	2000	1983–90	1991–2000	1983–90	1991–2000
United States .....	15.4	13.8	12.8	2.8	1.9	0.9	0.4
Canada .....	16.8	17.0	18.1	2.4	1.6	2.6	1.6
Japan <sup>1</sup> .....	16.1	19.2	23.1	.7	-.5	3.9	1.6
Europe (G4): .....	12.3	13.6	16.8	.7	-.2	2.5	3.0
France .....	9.7	12.2	14.2	-.9	.5	2.8	2.6
Germany <sup>2</sup> .....	13.4	13.4	17.6	1.6	-1.0	1.7	4.3
Italy .....	7.8	8.8	12.2	.2	-.5	2.0	3.6
United Kingdom .....	18.4	20.1	23.0	1.8	.1	3.4	1.6

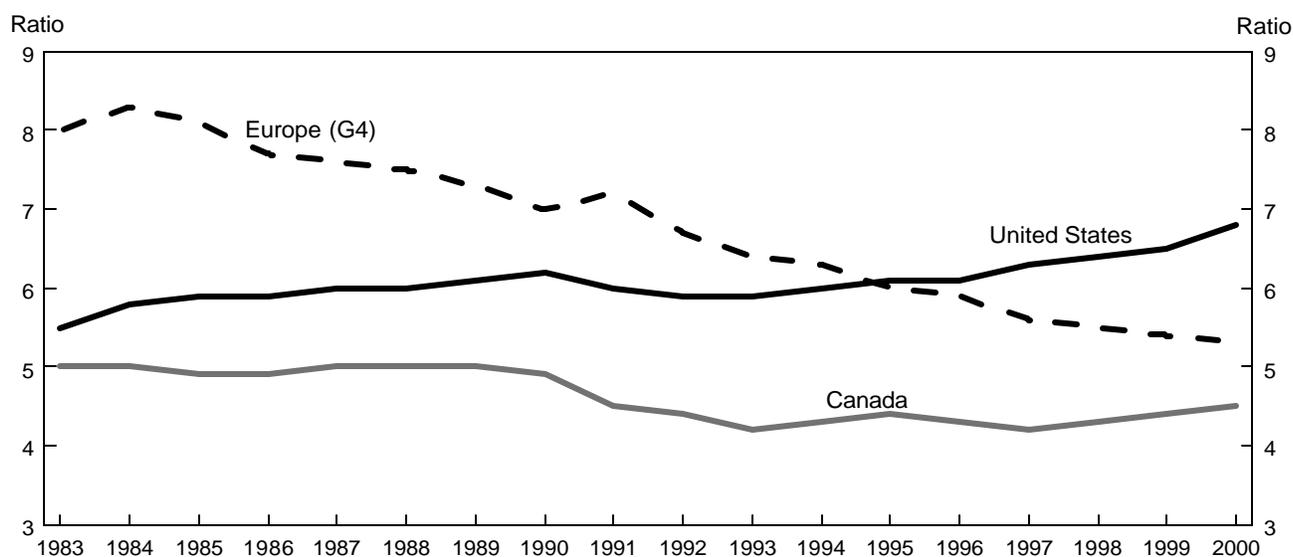
<sup>1</sup> Japan’s data are not comparable to those for the other countries. (See text.)

<sup>2</sup> Former West Germany in 1983 and 1990 and Germany (unified) in 1991 and 2000.

NOTE: Part-time employment is defined as employment of persons usually working 30 or fewer hours per week in their main job. Data are only

for persons declaring usual hours worked. Except for the United States, the data relate to total employment. For the United States, the data relate to wage and salary employment only.

SOURCE: *Labor Force Statistics, 1980–2000* (Paris, Organization for Economic Cooperation and Development, 2001).

**Chart 7. Ratio of full-time to part-time employment in United States, Canada, and Europe (G4), 1983–2000**

NOTE: Trend line for Europe (G4) includes data for the former West Germany through 1990; thereafter, the data refer to Germany (unified).

SOURCE: *Labor Force Statistics, 1980–2000* (Paris, Organization for Economic Cooperation and Development, 2001).

ratio is employment as a percentage of the working-age population.

A 1983 *Review* article by Sorrentino analyzed international trends in labor force participation over the period from 1960 to 1981.<sup>17</sup> During that period, many of the comparative trends and relationships discussed herein, such as the wide differences in levels and trends of youths' and women's employment-to-population ratios, had already been established. The study found that the large international differences in youth activity rates reflected variations in the propensity of youths to continue in school or enter the labor market, or to combine school with work, as in the United States.

The declining trend in men's participation and employment ratios was already evident in Sorrentino's 1983 study and was said to be largely attributable to the extension of years of schooling and earlier retirement. Changes in the age structure of the population also had some effect. These forces influenced women's activity rates as well, but in some countries—particularly the United States—they were outweighed by changing social attitudes toward the role of women, causing many to look outside the home to find market-based work. A greater availability of part-time jobs and the rise of the service sector also were factors. Cross-country differences in women's participation rates were explained partly by differences in the rate of change in the industrial structure of the various economies. The relative size and rate of increase of the service-

producing sector, a larger source of jobs for women than the goods-producing sector, played a role in the international differences.

*Mobility of the workforce.* In another 1983 *Review* article, former BLS Commissioner Janet L. Norwood discussed labor market contrasts between the United States and Europe.<sup>18</sup> Norwood noted that there was one area in particular in which Europe and the United States diverged sharply: the nature of their labor market dynamics. In the United States, most people have relatively short spells of unemployment, interspersed with periods of employment and of (often voluntary) separation from the labor force. By contrast, Europeans have much lower levels of labor market flows. These differences in labor market dynamics show up best in comparative data on the duration of unemployment and on job growth.

Norwood observed that U.S. workers tended to move into and out of employment and unemployment frequently, whereas European joblessness tended to reflect a much larger group of long-term unemployed. She went on to explain the difference in this way:

Certainly, differences in history and cultural attitudes play an important role in mobility patterns. European workers seem much more reluctant to

**Table 9. Unemployment rates in the European Union and selected member countries, civilian labor force basis,<sup>1</sup> 1990–2000**

Year	European Union <sup>2</sup>	Austria	Belgium	Denmark	Finland	Greece <sup>3</sup>	Ireland	Netherlands	Portugal	Spain	Sweden
1990 .....	8.1	—	6.7	7.7	3.2	6.4	13.4	6.2	4.8	16.2	1.8
1991 .....	8.2	—	6.6	8.4	6.6	7.0	14.7	5.8	4.2	16.4	3.1
1992 .....	9.2	—	7.2	9.2	11.7	7.9	15.4	5.6	4.3	18.4	5.6
1993 .....	10.7	3.9	8.8	10.2	16.4	8.6	15.6	6.6	5.7	22.7	9.3
1994 .....	11.1	3.8	10.0	8.2	16.6	8.9	14.3	7.1	6.9	24.1	9.6
1995 .....	10.7	3.9	9.9	7.2	15.4	9.2	12.3	6.9	7.3	22.9	9.1
1996 .....	10.8	4.4	9.7	6.8	14.6	9.6	11.7	6.3	7.3	22.2	9.9
1997 .....	10.6	4.4	9.4	5.6	12.6	9.8	9.9	5.2	6.8	20.8	10.1
1998 .....	9.8	4.5	9.3	4.9	11.4	10.9	7.5	3.8	5.2	18.6	8.4
1999 .....	9.0	4.0	8.6	4.8	10.2	11.6	5.6	3.2	4.5	15.8	7.1
2000 .....	8.1	3.7	6.9	4.4	9.7	11.1	4.2	2.8	4.1	14.0	5.8
Average, 1990–2000 .	9.7	4.1	8.5	7.0	11.7	9.2	11.3	5.4	5.6	19.3	7.3

<sup>1</sup> Excludes conscripts, but includes career military in private households.

<sup>2</sup> Average for 15 countries: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden, and the United Kingdom. For 1990, the figure excludes Austria, Finland, and Sweden; for 1991 and 1992, the figures exclude Austria. These three countries joined the European Union in January 1995. Data for four countries covered in the BLS international comparisons program—France, Germany (former West Germany prior to 1991), Italy, and the United Kingdom—are not shown here. The BLS adjusted rates are about the same as the European Union estimates. The European Union unemployment rates

since 1991 include rates for Germany (unified); the 1990 figure includes the rate for the former West Germany.

<sup>3</sup> Data refer to the spring of each year.

NOTE: Dash indicates data not available.

SOURCE: Statistical Office of the European Communities (Eurostat) and the Bureau of Labor Statistics (for Sweden only), May 3, 2002. This table (excluding data for Sweden) is updated on a monthly basis by the Bureau of Labor Statistics and is made available on the Internet at: <http://www.bls.gov/fls/home.htm>.

change jobs voluntarily than their American counterparts. There is also less of a tendency to change residence in search of jobs. In the United States, mobility is considered desirable, even though the search for a better job may entail some short-term unemployment. Americans are still experiencing sharp shifts in regional economic development and opportunity. In addition, young Americans tend to do more job changing before settling into more permanent careers than European youth.<sup>19</sup>

*Broader measures of underutilization.* In 1993 and 1995, Sorrentino published studies broadening the international analysis of unemployment to cover seven measures of underutilization known then as U-1 through U-7.<sup>20</sup> Both studies found that Japan and Sweden, the countries almost always having the lowest unemployment rates as conventionally measured, experienced by far the largest increases when the definition was expanded to include persons working part time for economic reasons and discouraged workers. In times of recession and recovery alike, the Japanese unemployment rate

consistently tripled when these additional measures were incorporated.<sup>21</sup>

The 1995 study explained that understanding the effect of Sweden's pioneering programs for retraining and employing the unemployed is important in gaining an appreciation of that country's labor market situation. Sweden's very low unemployment rates during 1960–90 were partly explained by a large expansion of those programs during recessions, shielding many persons from unemployment. However, the programs were unable to keep Swedish unemployment from rising to unprecedented levels in the 1990s. If persons in labor market programs were added to the already high number of jobless individuals in 1993, Sweden's conventional unemployment rate of 9.3 percent would have risen to 14 percent.

In addition to the foregoing BLS studies, non-BLS academicians, research institutes, and international organizations have published numerous analyses of international differences in labor markets. The material that follows presents but a small sampling of this literature, beginning with some of the research conducted by two international organizations: the OECD and the International Labor Office (ILO). A few of the major studies in the area of "labor market flexibility" are then discussed, and the

section ends with references to several bilateral studies. Many of the publications or studies described contain citations to the larger body of work in each subject area.

*OECD Employment Outlook.* Since 1983, the OECD has published annual assessments of comparative labor market developments and prospects in its *Employment Outlook* series.<sup>22</sup> Each edition takes up special topics that enrich the reader's understanding of comparative trends and draws on a larger published literature, citations to which can be found within. For instance, chapter 2 of the 1999 edition explored the relationship between employment protection legislation and labor market performance, and chapter 4 of the 1996 edition analyzed youth and the labor market over the 1980s and 1990s.

*Analysis of the smaller European countries.* In 2000, Peter Auer of the ILO presented a report entitled *Employment Revival in Europe*<sup>23</sup> that investigated the labor market success of Austria, Denmark, Ireland, and the Netherlands in the 1990s. The study argues that the relative labor market success of these four countries during that time, compared with the G4 European countries, was attributable to three policy areas: social dialogue, macroeconomic policy, and labor market policy. According to Auer, social dialogue created a climate of confidence among employers, unions, and the Government that led to wage moderation and to reforms in social protection systems. Wage moderation was part of a stabilization-oriented macroeconomic policy that led to low inflation and low interest rates. Labor market policy, and social protection in general, created the necessary environment for labor market adjustment, providing income support, training, job creation, and, sometimes, early retirement for the unemployed.

*Global youth unemployment.* Another ILO study, by Niall O'Higgins, published in 2001, investigated youth unemployment all over the world from a policy perspective.<sup>24</sup> One aspect examined was why some countries (such as Germany) have been notably more successful than others in maintaining low levels of youth unemployment. The role of education and training systems, including apprenticeship, was found to be important in facilitating the transition from school to work.

*Labor market flexibility studies.* A key concept that emerged in the debate over U.S.-European labor market differences over at least the past 20 years is "labor market flexibility." This concept means different things to different analysts. In general, it refers to (1) the greater responsiveness of wages and employment to shifts in demand and supply and (2) the lesser amount of regulation and institutional rigidity. The conventional wisdom was that Europe's high unemployment and lack of job growth were attributable to its inflexible and regulated job markets; by

contrast, the success of the U.S. job market was seen as a product of its flexible nature.<sup>25</sup> The evidence from research studies has not converged to support a general proposition that all inflexibilities matter, but some "rigidities" have been identified as having a negative impact on a country's employment and unemployment performance.

The literature on labor market flexibility has evolved into a rather large body of work. In his 1994 *Review* article, Brodsky traced the historical evolution of the "labor market flexibility" concept in the context of changing economic conditions.<sup>26</sup> Three other studies not only review and evaluate much of the existing literature, but also exemplify different perspectives on the flexibility issue: editor Rebecca M. Blank's work uses the approach of comparing only two or three countries at a time (a bilateral and a trilateral study, respectively) in terms of specific types of social protection mechanisms, Stephen Nickell investigates a wider range of countries and variables, and Robert Bednarzik both covers a wide range of countries and adds variables relating to product and capital markets.

Blank's 1994 volume of mainly bi- and trilateral academic studies provided evaluations of the impact of a broad set of social protection mechanisms—not just labor market policies—on labor market flexibility.<sup>27</sup> In most cases, the studies rejected the existence of a substantial tradeoff between various social protection mechanisms (such as employment protection laws, health insurance, and child care policies) and labor market flexibility.

In a 1997 article, Nickell analyzed the impact of various measures of labor market flexibility on unemployment in 20 OECD countries during two periods: 1983–88 and 1989–94.<sup>28</sup> He found that some "so-called rigidities" were associated with high unemployment, and some were not. Rigidities that were associated with high unemployment included a generous and lengthy duration of unemployment benefits, combined with little or no offsetting pressure on the unemployed to obtain work, and high overall taxes on labor. In contrast, strict employment protection legislation and generous levels of unemployment benefits accompanied by pressure on the unemployed to take jobs (for example, a fixed duration of benefits) were not associated with high unemployment.

In a 2001 study for a Joint U.S.-European Union Seminar, Bednarzik expanded upon Nickell's model by adding variables for the flexibility of product and capital markets during the 1995–99 period in an examination of 24 OECD countries.<sup>29</sup> In Bednarzik's model, capital market flexibility (easier and greater access to capital) emerged as an important factor in explaining divergent unemployment and job growth patterns in different countries.

*Japan-U.S. comparison.* In the April 2002 issue of the *Review*, Japanese economist Toshihiko Yamagami updated and expanded upon U.S.-Japan comparisons, one aspect of the BLS

analysis of U-1 through U-7 described earlier.<sup>30</sup> Using the new BLS indicator framework known as U-1 through U-6, introduced in 1995, Yamagami focused on U-3 through U-6, the expanded indicators. He covered the period from 1994 to 2000 and showed that poor Japanese economic performance, coupled with the strongly positive U.S. performance, served to change the positions of the two countries relative to both unemployment and broader underutilization rates. In a concluding section, Yamagami presented his views on the deterioration of Japan's labor market in the 1990s and the viability of Japan's well-known long-term employment system.

*Canada-U.S. comparisons.* Statistics Canada has noted that prior to 1981 the Canadian unemployment rate was, on average, roughly the same as the U.S. rate. A sustained gap began to open early in the 1980s, and the Canadian rate averaged 2 percentage points higher than the U.S. rate throughout the decade. In the 1990s, the gap widened further, rising to about 4 percentage points. Statistics Canada concluded, "While many explanations have been developed for the unemployment gap, a definitive explanation has yet to emerge."<sup>31</sup>

A set of studies available from the Canadian Centre for the Study of Living Standards<sup>32</sup> investigated Canada's labor market developments in the 1990s, focusing on structural aspects of unemployment. Several of the studies looked for lessons for Canada from the international experience. The major conclusion of one of the international studies was as follows:

[T]here is no magic institutional bullet for unemployment reduction. Different countries have achieved low unemployment using different institutional arrangements. As Stanford points out, both countries with unregulated (the United States) and regulated labor markets (the Netherlands) can achieve low unemployment, although favorable demand conditions are needed. In the United States, job insecurity in a

deregulated labor market has allowed the Federal Reserve Board to pursue expansionary monetary policy without inflation. In the Netherlands, union-employer wage policies permitted expansionary macroeconomic policies without excessive wage increases.<sup>33</sup>

Marilyn E. Manser and Garnett Picot, in a 1999 study published in the *Review*, compared the growth of self-employment in the United States with that in Canada.<sup>34</sup> The study found that self-employment accounted for the majority of net employment growth that took place in Canada in the 1990s, whereas it accounted for effectively none of the net growth in the United States over the same period. (U.S. job growth was concentrated in wage and salary jobs.) During the 1980s, the role of self-employment had been fairly similar in the two countries.<sup>35</sup>

THE STUDIES DISCUSSED IN THIS ARTICLE, written at varying times over the past 40 years, propose numerous explanations for cross-country differences in labor market outcomes. Clearly, the outcomes during any period are influenced by a complex variety of factors, including changing demographic trends, institutional arrangements, and government policies, not only those targeted directly at the labor market, but also fiscal and monetary policies that affect the demand for labor. Other forces outside the labor market, such as those associated with product and capital markets, also affect the labor market. Furthermore, unemployment by itself may not provide a complete picture of cross-country labor underutilization in situations where workers are more likely either to work shorter hours rather than be laid off or to escape the labor market altogether because they become discouraged. A comprehensive explanation that fits all countries and all periods has, so far, eluded researchers. Perhaps the most fruitful approach is one of bilateral comparisons, such as the studies cited comparing the United States and Japan or the United States and Canada. □

## Notes

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<sup>1</sup> For the full BLS report, see *Measuring Employment and Unemployment, Report of the President's Committee to Appraise Employment and Unemployment Statistics* (Washington, DC, U.S. Government Printing Office, September 1962). For articles summarizing the BLS findings, see Robert J. Myers and John H. Chandler, "International Comparisons of Unemployment," *Monthly Labor Review*, August 1962, pp. 857-64; and "Toward Explaining International Unemployment Rates," *Monthly Labor Review*, September 1962, pp. 969-74.

<sup>2</sup> The Group of Seven (G7) was launched in 1975 at a summit of the heads of State of six countries (the United States, France, Germany,

Italy, Japan, and the United Kingdom). Canada was included in 1976. Representatives of the G7 countries meet annually to discuss the principal political and economic issues of the day. Because Russia has taken part in the annual economic discussions since 1997, the group is now often referred to as the G8.

<sup>3</sup> Canada's mixed performance can be explained by the fact that its labor force (the sum of employment and unemployment) growth has been very rapid, outpacing the country's employment growth and leading to proportionally more unemployment than employment. This has kept unemployment rates high, even in the face of relatively strong employment performance.

<sup>4</sup> Then, for convenience, each G7 member—Europe, the United States, Canada, and Japan—is called a group in this article, even though the last three are actually single countries.

<sup>5</sup> Aaron E. Cobet and Gregory A. Wilson, "Comparing 50 years of labor productivity in U.S. and foreign manufacturing," this issue, pp. 51–65. In 1973, cyclical peaks in real gross domestic product (GDP) occurred in the United States, Japan, and the United Kingdom. France, Germany, and Italy attained peaks the following year. Canada was the only G7 country that had rising real GDP throughout the 1970s. Six of the seven countries reached peaks in real output between 1990 and 1992. Japan was the only country covered to have uninterrupted real GDP growth in the 1990s through 1997. The year 2000 saw real-output growth in all seven countries.

<sup>6</sup> For a detailed analysis of comparative unemployment and employment trends in the 1960–77 period, see Constance Sorrentino, *International Comparisons of Unemployment*, Bulletin 1979 (Bureau of Labor Statistics, August 1978), chapter 2.

<sup>7</sup> For a discussion of cyclical flows of "guest workers," see Sorrentino, *International Comparisons of Unemployment*, pp. 51–52.

<sup>8</sup> For example, see Alan B. Krueger and Jorn-Steffan Pishke, "Observations and Conjectures on the U.S. Employment Miracle," Working Paper No. 390 (National Bureau of Economic Research, August 1997).

<sup>9</sup> The BLS database contains a series on unemployment rates by age, but it has not been maintained on a lengthy historical basis. The OECD series used in the table is judged to be comparable across countries and corresponds quite closely to the BLS figures for 1997–2000.

<sup>10</sup> Proportional distributions of employment by economic sector can be found in table 7 of *Comparative Civilian Labor Force Statistics, Ten Countries, 1959–2001* (Bureau of Labor Statistics, Mar. 25, 2002); on the Internet at <http://www.bls.gov/fls/home.htm>.

<sup>11</sup> A table similar to table 9, covering the non-G4 European Union countries, is updated each month by the Bureau. The table is on the Internet at <http://www.bls.gov/fls/home.htm>.

<sup>12</sup> See *Comparative Civilian Labor Force Statistics*, table 2.

<sup>13</sup> See note 1.

<sup>14</sup> Sorrentino, *International Comparisons of Unemployment*, chapter 5.

<sup>15</sup> Constance Sorrentino, "Comparing employment shifts in 10 industrialized countries," *Monthly Labor Review*, October 1971, pp. 3–11; and Todd Godbout, "Employment change and sectoral distribution in 10 countries, 1970–90," *Monthly Labor Review*, October 1993, pp. 3–20.

<sup>16</sup> Constance Sorrentino, *Youth Unemployment: An International Perspective*, Bulletin 2098 (Bureau of Labor Statistics, September 1981). See also Constance Sorrentino, "Youth unemployment: an international perspective," *Monthly Labor Review*, July 1981, pp. 3–15, for a summary of the material in the bulletin.

<sup>17</sup> Constance Sorrentino, "International comparisons of labor force participation, 1960–81," *Monthly Labor Review*, February 1983, pp. 25–36.

<sup>18</sup> Janet L. Norwood, "Labor market contrasts: United States and Europe," *Monthly Labor Review*, August 1983, pp. 3–7.

<sup>19</sup> *Ibid.*, p. 7.

<sup>20</sup> Constance Sorrentino, "International comparisons of unemployment indicators," *Monthly Labor Review*, March 1993, pp. 3–24; and "International unemployment indicators, 1983–93," *Monthly Labor Review*, August 1995, pp. 31–50. The two articles are on the

Internet at <http://www.bls.gov/opub/mlr/1993/03/art1full.pdf> and <http://www.bls.gov/opub/mlr/1995/08/art4full.pdf>, respectively.

<sup>21</sup> For an earlier BLS analysis, see Constance Sorrentino, "Japan's low unemployment: an indepth analysis," *Monthly Labor Review*, March 1984, pp. 18–27.

<sup>22</sup> For further information and an index of each edition of *Employment Outlook*, visit the Internet site <http://www.oecd.org/EN/documents/0,,EN-documents-728-nodirectorate-no-11-no-5,00.html>.

<sup>23</sup> Peter Auer, *Employment Revival in Europe* (Geneva, International Labor Office, 2000).

<sup>24</sup> Niall O'Higgins, *Youth Unemployment and Employment Policy: A Global Perspective* (Geneva, International Labor Office, 2001).

<sup>25</sup> See, for instance, Melvin M. Brodsky, "Labor market flexibility: a changing international perspective," *Monthly Labor Review*, November 1994, pp. 53–60, especially p. 54; and Stephen Nickell, "Unemployment and Labor Market Rigidities: Europe versus North America," *Journal of Economic Perspectives*, summer 1997, pp. 55–74, especially p. 55.

<sup>26</sup> Brodsky, "Labor market flexibility."

<sup>27</sup> Rebecca M. Blank, ed., *Social Protection versus Economic Flexibility: Is There a Tradeoff?* National Bureau of Economic Research Comparative Labor Market Series (Chicago, University of Chicago Press, 1994).

<sup>28</sup> Nickell, "Unemployment and Labor Market Rigidities."

<sup>29</sup> Robert Bednarzik, "The Importance of 'Flexible' Markets in Explaining U.S. and European Job Growth and Unemployment Differentials," in *Labor Market Flexibility: Proceedings of a Joint U.S. and European Union Seminar* (U.S. Department of Labor, Bureau of International Labor Affairs, September 2001). Free copies are available from Robert Bednarzik by calling 202–693–4867 or e-mailing [Bednarzik-Robert@dol.gov](mailto:Bednarzik-Robert@dol.gov) or by writing to the Bureau of International Labor Affairs, Room S–5317, U.S. Department of Labor, 200 Constitution Avenue, N.W., Washington, DC, 20210.

<sup>30</sup> Toshihiko Yamagami, "Underutilization of labor resources in Japan and the United States," *Monthly Labor Review*, April 2002, pp. 25–43; on the Internet at <http://www.bls.gov/opub/mlr/2002/04/art3full.pdf>.

<sup>31</sup> Statistics Canada, "Canada-US Labour Market Comparison," in *Labour Force Update*, Autumn 1998, p. 3.

<sup>32</sup> On the Internet at <http://www.csls.ca>. Click on "Special CPP Issue on Structural Unemployment."

<sup>33</sup> Andrew Sharpe and Timothy C. Sargent, "Structural Aspects of Unemployment in Canada: Introduction and Overview," *Canadian Public Policy*, vol. xxvi, special supplement 1, 2000, p. S4. The study is based on Jim Stanford, "Canadian Labour Market Developments in International Context: Flexibility, Regulation and Demand," *Canadian Public Policy*, vol. xxvi, special supplement 1, 2000, pp. S27–S58. (See preceding note for Internet site at which both studies can be found.)

<sup>34</sup> Marilyn E. Manser and Garnett Picot, "The role of self-employment in U.S. and Canadian job growth," *Monthly Labor Review*, April 1999, pp. 10–25.

<sup>35</sup> The authors cited the following two additional U.S.-Canada comparative studies of net and gross job creation, job security, and job

stability over the past two decades: Marilyn E. Manser and Garnett Picot, "Job Creation in Canada and the United States: What Do We Know and Where Are the Data Gaps?" and Garnett Picot and Marilyn E. Manser,

"Job Stability in Canada and the United States: What We Know and the Data Gaps," both papers presented at the Voorburg Meetings on Service Sector Statistics, Copenhagen, Denmark, September 1997.

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