

Technical Notes

International Comparisons of Annual Labor Force Statistics, 1970-2012



International Labor Comparisons

INTRODUCTION

This file contains the technical notes for data products associated with “International Comparisons of Annual Labor Force Statistics, 1970-2012”, at www.bls.gov/fls/flscomparelf.htm. Data in associated reports and tables present selected labor force statistics adjusted to U.S. concepts for 1970 onward for the United States and fifteen foreign countries: Australia, Canada, France, Germany, Italy, Japan, the Republic of Korea, Mexico, the Netherlands, New Zealand, South Africa, Spain, Sweden, Turkey, and the United Kingdom.

Data in the report refer to the civilian working-age population and are based on figures mainly from national statistical agencies, but also from the Organization for Economic Cooperation and Development (OECD) and the Statistical Office of the European Communities (EUROSTAT). The U.S. data are from a labor force survey (also referred to as a household survey) called the Current Population Survey (CPS). Foreign-country data are based mainly on labor force surveys. All data come from secondary sources; that is, BLS does not conduct any surveys to collect data for foreign countries.

To the extent possible, foreign-country data are adjusted to concepts used by the U.S. Current Population Survey (CPS). This document provides an introduction to the U.S. concepts, but further details are available in the BLS Handbook of Methods, Chapter 1, “Labor force data derived from the Current Population Survey,” at www.bls.gov/opub/hom.

Why are adjustments necessary?

Persons counted as employed, unemployed, or not in the labor force may differ across countries. Some types of workers that are categorized differently include new entrants to the workforce, persons on layoff or working part-time, students, and unpaid family workers. For example, whereas most foreign countries count all unpaid family workers as employed, the U.S. only includes them if they worked at least 15 hours per week. Also, foreign countries sometimes include the career military or national defense force in the labor force, whereas U.S. data are based on the civilian labor force. Another difference between U.S. and foreign-country definitions is with regards to age limits. The lower age limit of the working-age population according to U.S. concepts is 16 while most foreign countries collect data on the working-age population ages 15 and older. In addition, some countries may have an upper age limit.

To compare across countries, these definitional differences must be taken into account. Thus, the foreign-country data presented in the report are adjusted to a common framework: concepts used by the U.S. Current Population Survey. Adjustments made for each country are discussed in the [country notes](#).

BLS does not adjust to U.S. concepts in the following cases:

- **Lower age limits of the working age population.** Lower age limits are adjusted to the age at which compulsory schooling ends rather than the U.S. lower age limit of 16 (for exceptions, see the [working-age population](#) section).
- **Persons on layoff classified as employed.** In the United States, persons on layoff are classified as unemployed because of weak job attachment; however, in some countries, persons on layoff are classified as employed because of strong job attachment. Strong job attachment is determined by

national circumstances and is evidenced by, for example, payment of salary or the existence of a recall date.

- **Unpaid family workers or persons waiting to start a new job classified as employed.** For some countries, no adjustment is made for deviations from U.S. concepts in the treatment of unpaid family workers and persons waiting to start a new job.
- **Passive jobseekers classified as unemployed.** While Australia, Japan, New Zealand, and South Africa exclude passive jobseekers from the unemployed, in accordance with the U.S. concept, the other countries do not. An adjustment is made to exclude them in Canada only.
- **Upper age limits of the working age population.** In the United States, there is no upper age limit for inclusion in the working age population. Data for the Netherlands and South Africa have upper age limits. Unemployment for the Netherlands has an upper age limit of 75. All data for South Africa have an upper age limit of 64.

For further information on comparability issues, see Constance Sorrentino, "International unemployment rates: how comparable are they?" *Monthly Labor Review*, June 2000, pp. 3-20, at www.bls.gov/opub/mlr/2000/06/art1full.pdf.

DEFINITIONS AND BACKGROUND

UNEMPLOYMENT

In the United States, unemployment includes all persons who, during the reference week:

1. Had no employment,
2. Were available for work, except for temporary illness, and
3. Had actively sought work during the 4-week period ending with the reference week.

Active job search methods are those that have the potential to result in a job offer without further action on the part of the jobseeker. For example, sending a resume to an employer would be considered active, whereas simply reading newspaper advertisements would not.

Persons who were waiting to start a new job must have fulfilled these criteria to be considered unemployed. However, persons who were waiting to be recalled to a job from which they had been laid off need not have been looking for work.

The unemployment rate represents the percentage of persons in the [labor force](#) who are unemployed.

HOW IS UNEMPLOYMENT MEASURED?

Because unemployment insurance records, which many people think are the source of total unemployment data, relate only to persons who have applied for such benefits, and since it is impractical to actually count every unemployed person each month, the United States Government conducts a monthly sample survey to measure the extent of unemployment in the country.

Use of a labor force survey to count the unemployed, a longstanding practice in the United States, is also common in most foreign industrialized countries. Countries in the European Union are now required to use a labor force survey to count the unemployed, although some had previously depended on administrative sources, such as employment office registrations or unemployment insurance records, to

measure unemployment. Countries also may continue to produce unemployment statistics from administrative sources. Administrative statistics from employment office registrations or unemployment insurance records relate only to persons who have registered or applied for benefits and are not an accurate measure of total unemployment because only a subset of workers is covered. Labor force surveys, on the other hand, provide a more complete measure of unemployment because the data are based on a representative sample of the population. However, concepts and definitions of unemployment in labor force surveys may differ from country to country, and thus BLS makes adjustments to provide foreign-country data that are more comparable with U.S. concepts and definitions.

Annual averages of unemployment figures and other labor force statistics adjusted to U.S. concepts are presented in the annual report, at <http://www.bls.gov/fls/flscomparelf.htm>. BLS also publishes a monthly report with seasonally adjusted monthly and quarterly unemployment rates and employment indexes, at www.bls.gov/ilc/intl_unemployment_rates_monthly.htm.

ALTERNATIVE MEASURES OF UNEMPLOYMENT

Although there is only one official unemployment rate in the United States, several other rates with alternative definitions of unemployment are also published by BLS. These rates are known as U1 through U6 and have the following definitions:

- U-1: Persons unemployed 15 weeks or longer, as a percent of the civilian labor force
- U-2: Job losers and persons who completed temporary jobs, as a percent of the civilian labor force
- U-3: Total unemployed, as a percent of the civilian labor force (official unemployment rate)
- U-4: Total unemployed plus discouraged workers, as a percent of the civilian labor force plus discouraged workers
- U-5: Total unemployed, plus discouraged workers, plus all other marginally attached workers, as a percent of the civilian labor force plus all marginally attached workers
- U-6: Total unemployed, plus all marginally attached workers, plus total employed part time for economic reasons, as a percent of the civilian labor force plus all marginally attached workers

(A brief discussion of discouraged and marginally attached workers is provided in the [labor force](#) section.)

U-3, the official unemployment rate, is the most widely reported by the media and, most importantly, it is the basis of the international comparisons presented in the report.

Although BLS does not prepare regular international comparisons of alternative measures of unemployment as described in this section, several articles have been published on the topic, including:

- Constance Sorrentino, "International unemployment indicators, 1983-1993," *Monthly Labor Review*, August 1995, at www.bls.gov/opub/mlr/1995/08/art4full.pdf;
- Constance Sorrentino, "International comparisons of unemployment indicators," *Monthly Labor Review*, March 1993, at www.bls.gov/opub/mlr/1993/03/art1full.pdf;
- Gary Martin, "Employment and unemployment in Mexico in the 1990s," *Monthly Labor Review*, November 2000, at www.bls.gov/opub/mlr/2000/11/art1full.pdf; and
- Toshihiko Yamagami, "Utilization of labor resources in Japan and the United States," *Monthly Labor Review*, April 2002, at www.bls.gov/opub/mlr/2002/04/art3full.pdf.

EMPLOYMENT

According to U.S. definitions, employment includes all persons who, during the reference week:

1. Worked at least 1 hour as paid employees, worked in their own business, profession, or on their own farm, or worked at least 15 hours as unpaid workers in a family-operated enterprise, and
2. All those who did not work but had jobs or businesses from which they were temporarily absent due to vacation, illness, bad weather, childcare problems, maternity or paternity leave, labor-management dispute, job training, or other family or personal reasons, regardless of whether they were paid for the time off or were seeking other jobs.

Each employed person is counted only once, even if he or she holds more than one job. For purposes of industry classification, multiple jobholders are counted in the job at which they worked the greatest number of hours during the reference week.

Persons whose only activity consisted of work around their own house (painting, repairing, or own home housework) or volunteer work for religious, charitable, and other organizations are excluded.

The employment-population ratio represents the proportion of the [working-age population](#) that is employed.

CAN I MEASURE JOB GROWTH WITH YOUR EMPLOYMENT DATA?

No, the BLS comparative employment data in the report cover employment rather than jobs. Employment and jobs are different concepts. In a tally of employment (based on a labor force survey), persons who hold more than one job are counted only once. In a tally of jobs (based on an establishment survey), persons who work in more than one establishment are counted each time their names appear on payrolls. There are additional differences between the U.S. labor force (household) and establishment (payroll) surveys, as described in “Employment from the BLS household and payroll surveys: summary of recent trends”, at www.bls.gov/web/ces_cps_trends.pdf.

Note that across countries, labor force surveys provide greater comparability of labor force statistics than do establishment surveys. However, using employment data from a labor force survey to measure change over time would represent employment growth rather than job growth.

EMPLOYMENT BY SECTOR

Employment levels and distributions are shown for four broad economic sectors: agriculture, industry, manufacturing (a sub-sector of industry), and services.

Sectoral employment data are based on the North American Industry Classification System (NAICS) for the United States for 2000 onward, Canada for 1976 onward, and Mexico for 2005 onward. Data for Japan are based on the Japanese Standard Industrial Classification System (JSIC). For all other countries covered, sectoral employment data are based on the International Standard Industrial Classification (ISIC). Effects of the change in classification system are discussed in the [country notes](#).

LABOR FORCE

The labor force is comprised of persons who are in [employment](#) and [unemployment](#). All members of the [working-age population](#) are eligible for inclusion in the labor force, and those 16 and over (in the United

States; age limits vary by country) who have a job or are actively looking for one are so classified. All others—those who have no job and are not looking for one—are counted as "not in the labor force."

The labor force participation rate represents the proportion of the [working-age population](#) that is in the labor force. Conversely, the inactivity rate represents the proportion of the [working-age population](#) that is *not* in the labor force.

WHO IS NOT IN THE LABOR FORCE?

All persons in the civilian non-institutional working-age population who are neither employed nor unemployed are considered not in the labor force. Many who do not participate in the labor force are going to school or are retired. Family responsibilities keep others out of the labor force. Still others have a physical or mental disability which prevents them from participating in labor force activities.

In the United States, persons not in the labor force who want and are available for a job and who have looked for work sometime in the past 12 months (or since the end of their last job if they held one within the past 12 months), but who are not currently looking, are designated as "marginally attached to the labor force." The marginally attached are divided into those not currently looking because they believe their search would be futile—so-called "discouraged workers"—and those not currently looking for other reasons such as family responsibilities, ill health, or lack of transportation.

For discouraged workers, the reasons for not currently looking for work are that the individual believes that:

- No work is available in his or her line of work or area;
- He or she could not find any work;
- He or she lacks necessary schooling, training, skills, or experience;
- Employers would think he or she is too young or too old; or
- He or she would encounter hiring discrimination.

The report does not provide international comparisons for discouraged workers but several relevant articles are cited in the [unemployment](#) section.

WORKING-AGE POPULATION

The labor market statistics provided in the report describe the working-age population. In the United States, the working-age population is more specifically known as the civilian non-institutional working-age population:

- "Civilian" refers to persons who are not on active duty in the military;
- "Non-institutional" refers to persons who are not in institutions, such as prison inmates or those in a mental institution; and
- "Working-age" refers to persons 16 years of age and older.

Data also refer to the civilian non-institutional working-age population for the foreign-country data except for Japan and Germany, where the institutional population is included. The lower age limit is 16 for the United States; the lower age limits for the foreign countries are shown in Figure 1 on this page.

Data are, in fact, adjusted to the age at which compulsory schooling ends for each country except for Canada and the Netherlands. For Canada, adjusted data cover persons ages 16 and over for 1976 onward, whereas the age at which compulsory schooling ends remains at 15. For the Netherlands, adjusted data cover persons ages 15 and over for 1975 onward, although the age at which compulsory schooling ends is now 16.

For some countries, the data reported by the national statistical agency have an upper age limit. For these countries, except South Africa, BLS adjusts for this divergence from the U.S. concept; therefore, the adjusted series for most countries have no upper age limit. Working-age population for South Africa has an upper age limit of 64.

FIGURE 1 LOWER AGE LIMITS

Country	Unadjusted	Adjusted	Country	Unadjusted	Adjusted
United States	16	NA	Mexico	14	NA
Australia	15	NA	Netherlands		
Canada			1973-74	13	14
1970-75	15	NA	1975-87	14	15
1976-present	15	16	1988-present	15	NA
France	15	16	New Zealand	15	NA
Germany			South Africa	15	NA
1970-74	14	15	Spain	16	NA
1975-83	14/15	15	Sweden		
1984-present	15	NA	1970-2004	16	NA
Italy			2005-present	15	16
1970-92	14	NA	Turkey	15	NA
1993-present	15	NA	United Kingdom		
Japan	15	NA	1970-72	15	NA
Republic of Korea	15	NA	1973-present	16	NA