

ILO-Comparable annual employment and unemployment estimates

The ILO-Comparable framework

1. Coherence with ILO statistical guidelines as embodied in the ILO international definitions for measurement of employment and unemployment, except where adjustments are negligible, therefore disregarded.
2. Consistency with the programme of Standardised Unemployment Rates of the Organisation for Economic Co-operation and Development and other international comparative programmes using the ILO guidelines.
3. Expression of all estimates in terms of annual averages.
4. Basis for estimates being a regular household labour force survey conducted at least once a year and capable of yielding consistent time series for the whole country.

The ILO-Comparable programme

The programme presents a set of 11 basic indicators in relation to employment and unemployment from national labour force surveys that have been adjusted to make the estimates conceptually consistent with the strictest application possible of the ILO international statistical guidelines on labour statistics. In this published edition, time series of ten years are presented, from 1994 to 2003. Specifically statistics of the working-age population, total and civilian labour force, total employment by industry and by age group, civilian employment, and unemployment by age group as well as labour force participation rates and unemployment rates computed from the relevant series of absolute figures are available.

As one of the most important contributors to data comparability is the nature of the data source, the basis for the production of the ILO-Comparable estimates are specialised, nation-wide surveys of households or individuals referred to as labour force surveys. The programme seeks to eliminate many of the variations in national data that are due to differences in survey concepts, coverage and differences due to the reference date to which the data refer. Labour force surveys are the most comprehensive data source for measuring the economically active population (labour force) and its components using one coherent framework. The national surveys included in this programme are carried out by the statistical offices of the respective countries. Many other countries carry out labour force surveys and the ILO's Bureau of Statistics is looking to include them into this programme. Once we have agreed on this in general, national methods and definitions are checked for compatibility with

the ILO-comparable framework so that adjustments can be made if necessary and data can appear in a future round. Countries included here cover in principle the whole national territory and basically all of the countries' non-institutional population (based on the civilian or total labour force) engaged in all branches of economic activity and all sectors of the economy. Although the scope of such surveys comprises all categories of workers including the self-employed, the main differences between national definitions of the labour force concept relate to the statistical treatment of contributing (unpaid) family workers, categories of unemployed non-seekers, lay-offs, and inclusion or not of conscript and career members of the armed forces.

Other factors that affect substantially the comparability of national data are the geographical coverage of surveys, (rural areas may often be excluded) and the age limits used for measuring the economically active population. The ILO-Comparable estimates are based on full coverage surveys, and present the employment and unemployment estimates in standard age groups for the core active ages, to minimise non-comparability related to differences in minimum or maximum age limits.

To avoid inconsistencies associated with the use of different reference periods, the ILO-Comparable statistics are adjusted and expressed in terms of annual averages (for some countries the statistical authorities may consider a specific period representative of the year). Although the resulting estimates could contain possible, minor discrepancies, adjusted estimates that are based on official national labour force survey data should provide the best current basis available for reasonable international comparisons.

We thank the statistical offices of all participating countries for providing detailed information on the composite elements of their labour force in order for the definitional harmonization of the resulting comparable estimates to take place. We would also like to encourage other countries, especially those who are not members of OECD, to join this programme and we are, therefore strengthening our efforts to get in touch with them.

The ILO-Comparable tables

Table 1: ILO-Comparable labour force participation rates and ILO-Comparable unemployment rates by country and sex.

Table 1 provides the reader with a rapid comparison of the relative labour market situation in all countries in the programme, illustrated by the labour force participation and unemployment rates presented by sex and for all available years. These two ILO-Comparable rates are computed from the relevant series of absolute figures presented, for each country separately, in Table 2. Both series of rates are calculated on the basis of the total labour force including all members of the armed forces, as stipulated in the international guidelines with the exception of the rates computed for (five) countries/territory that are only able to provide civilian-based labour force estimates. The effects of this difference are documented in the ILO-Comparable methodologies for the individual country under Table 2.

The comparable **labour force participation rate** presented for each country is an analytical concept that relates the harmonised economically active population (labour force) to the working-age population. These comparable rates provide a coherent indication between countries of the relative size of the labour supply available to each economy for the production of goods and services. They also indicate overall levels of labour market activity and are useful in developing policies to facilitate decent work, identify training needs, etc. The distribution of the economically active population in all countries can be observed from X

the rates presented for men and for women together with labour force participation rates that can be computed for the different age groups given in the country tables.

The labour force participation rate is computed as an expression of the number of persons in the labour force as a percentage of the working age population. The labour force is the sum of the number of persons employed and of persons unemployed. The working age population is all persons above the age (usually 15 or 16 years) set by countries for the measurement of economic characteristics.

The comparable **unemployment rate** presented for each country is also an analytical concept that relates the harmonised unemployed population to the total labour force. It provides an indication of the proportion of people in countries' labour force, that do not have a job but are available and actively looking for work. The unemployment rate is calculated by expressing the number of unemployed persons as a percentage of the total labour force, including all career and conscript members of the armed forces. Specific unemployment rates by sex or for different age-groups from the country tables in Table 2 can also be calculated by expressing the number of unemployed persons in the relevant group as a percentage of the corresponding labour force group.

The unemployment rate measures the unutilized labour supply and provides a broad indicator of the labour market situation and of the general performance of the economy as a whole. It is perhaps the most well-known labour market measure, although not the only significant one.

Table 2: ILO-Comparable country tables

Each page of Table 2 presents the statistics for one country in the form of annual average estimates with the percentage share of women for the following time series: working age population, total and civilian labour force, total and civilian employment, employment and unemployment by age group and employment by four main sectors of economic activity. The ILO-Comparable methodological summary that precedes each statistical table serves to identify the country's labour force survey and the harmonization process. It describes the differences regarding specific components, between the national application of the main concepts of employment and unemployment, the adjustments needed to transform these national survey estimates into ILO-comparable estimates using the ILO international guidelines as reference point, and the averaging process used to obtain annual estimates.

Presentation of the ILO-Comparable Methodology is organized under the following headings:

Source:	The title of the labour force survey that furnishes the employment and unemployment statistics, its frequency, and any other incorporated data source used as the basis for the ILO-Comparable estimates.
Population covered:	The scope and coverage of population included in the selected source.
National data:	The type and time reference of data published for national purposes by the country: description of point-in-time or survey periods.
Concept Differences:	Differences between the national concepts and definitions used for employment and unemployment and the ILO international guidelines, where "total employment" refers to the civilian labour force employed plus career and conscript members of the armed forces and "total labour force" represents "total employment" plus "unemployment".

To facilitate quick reference, the following terminology has been adopted:

Excluded:

means excluded from the national concepts and definitions but should be included according to the ILO guidelines and is referred to under “Adjustments”(below) made within the ILO-Comparable framework.

Included:

means included in the national concepts and definitions but should be excluded according to the ILO guidelines and is referred to under “Adjustments” (below) made within the ILO-Comparable framework.

Adjustments: The specific adjustments made to harmonize the national figures with the ILO guidelines, and/or explanations of cases where no adjustments are considered necessary due to the insignificance of the numbers or another reason, which is given.

Averaging: The method used to annualize the estimates, where national data refer to point-in-time estimates that are not considered representative of the yearly trend.

Indications used in the tables

Thousands (000s) are separated by a comma.

Decimal figures are separated by a point.

Percentages (%) are shown in italics in Table 2.

Numbers highlighted in **bold** indicate a break in series - data are not strictly comparable with earlier years. Relevant explanations are given in the country methodology.

Table 1:

• Not applicable

... Not available

Table 2:

♀ Percentage share of women

• Not available

Methods used to calculate adjusted annual averages

ILO-1

Method for calculating annual averages based on quarterly observations

1. Assuming that the quarterly observations are for March, June, September and December in year "t", they may be designated $X_{t,3}, X_{t,6}, X_{t,9}$ and $X_{t,12}$, respectively:

(a) estimates for January and February in year "t" will be:

$$X_{t,1} = \frac{1}{3}(X_{t,3} - X_{t-1,12}) + X_{t-1,12}$$

$$X_{t,2} = \frac{2}{3}(X_{t,3} - X_{t-1,12}) + X_{t-1,12}$$

(b) estimates for April and May in year "t" will be:

$$X_{t,4} = \frac{1}{3}(X_{t,6} - X_{t,3}) + X_{t,3}$$

$$X_{t,5} = \frac{2}{3}(X_{t,6} - X_{t,3}) + X_{t,3}$$

(c) estimates for July and August in year "t" will be:

$$X_{t,7} = \frac{1}{3}(X_{t,9} - X_{t,6}) + X_{t,6}$$

$$X_{t,8} = \frac{2}{3}(X_{t,9} - X_{t,6}) + X_{t,6}$$

(d) estimates for October and November in year "t" will be:

$$X_{t,10} = \frac{1}{3}(X_{t,12} - X_{t,9}) + X_{t,9}$$

$$X_{t,11} = \frac{2}{3}(X_{t,12} - X_{t,9}) + X_{t,9}$$

2. The annual average for year "t" is:

$$\bar{X}_t = \frac{1}{12}(X_{t,1} + X_{t,2} + \dots + X_{t,12}).$$

ILO-2

Method for calculating annual average estimates for annual employment from occasional, but regular observations.

Let us use X_t to indicate annual employment estimates obtained from an occasional observation in year "t", X_{t+1} for annual employment estimates obtained from the same source in year "t+1" and \bar{X} for the annual average of the two consecutive years. The annual average for year "t" is thus:

$$\bar{X}_t = \frac{Y_t + X_{t+1}}{2}.$$

OECD-1

Method for interpolating between survey benchmarks²

Given survey benchmarks X_0 and X_{12} , 12 months apart, and corresponding registration (administrative) data $Y_0, Y_1 \dots Y_{12}$, where Y_0 and Y_{12} are for corresponding periods as X_0 and X_{12} respectively:

- calculate A_t , the ratio between the change in the survey benchmarks and the registration data over the year where t =the month:

$$A_t = [(X_{12}/X_0)/(Y_{12}/Y_0)] \times t/12 \quad (t=1,2,3,\dots,12)$$

- and correct the simple interpolation results by applying the factor A_t cumulatively.

This gives the monthly series:

$$X_0 = X_0$$

$$X_1 = X_0(Y_1/Y_0)A_1$$

$$X_2 = X_0(Y_2/Y_0)A_2$$

$$X_3 = X_0(Y_3/Y_0)A_3$$

$$X_4 = X_0(Y_4/Y_0)A_4$$

$$X_5 = X_0(Y_5/Y_0)A_5$$

$$X_6 = X_0(Y_6/Y_0)A_6$$

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$$X_{12} = X_0(Y_{12}/Y_0)A_{12} = X_{12}$$

The use of the adjustment factor (A) ensures that the interpolated monthly series coincides exactly with the benchmark estimates.

The ILO statistical guidelines as reference point (extracts)

Economically active population and the labour force framework

According to the ILO *Resolution concerning statistics of the economically active population, employment, unemployment and underemployment*, adopted by the Thirteenth International Conference of Labour Statisticians, (October 1982), the economically active population "comprises all persons of either sex who furnish the supply of labour for the production of economic goods and services as defined by the United Nations systems of national accounts and balances, during a specified time-reference period.(...) The currently active population or equivalently the labour force measured in relation to a short reference period such as one week or one day.(...) The labour force comprises all persons who fulfil the requirements for inclusion among the employed or the unemployed."

² Adapted from a Note by the Secretariat: "Standardised Unemployment Rates: the Current Situation", OECD, 1989. Still cited in view of its continued use in this programme.

An approach to the measurement of the labour force denoted in the ILO international recommendations may be referred to as the labour force framework, based on the activity principle and a set of priority rules. When dividing the population into the three basic categories "employed", "unemployed" and "not in the labour force" based on persons' activities during a short reference period, according to the priority rules precedence is given to employment over unemployment; and to unemployment over economic inactivity. A person both working and seeking work is, therefore, classified as employed. A student attending school and also seeking work is classified as unemployed.

Extracts of the ILO international guidelines follow. Editorial comments are indented and are preceded with a -:

Employment

- The ILO international definition of employment provides separate criteria for persons in paid employment and persons in self-employment in order to accommodate the idea that employment covers any work, be it for wage or salary, profit or family gain, including the production of goods for own consumption:

The "employed" comprise all persons above a specific age who during a specified brief period, either one week or one day, were in the following categories:

(a) "paid employment":

- (i) "at work": persons who during the reference period performed some work for wage or salary, in cash or in kind;
- (ii) "with a job but not at work": persons who, having already worked in their present job, were temporarily not at work during the reference period and had a formal attachment to their job.

(b) "self-employment":

- (i) "at work": persons who during the reference period performed some work for profit or family gain, in cash or in kind;
- (ii) "with an enterprise but not at work": persons with an enterprise, which may be a business enterprise, a farm or a service undertaking, who were temporarily not at work during the reference period for any specific reason."

For operational purposes, the notion "some work" may be interpreted as work for at least one hour.

Unpaid family workers at work should be considered as in self-employment irrespective of the number of hours worked during the reference period. Apprentices who received pay in cash or in kind should be considered in paid employment and classified as "at work" or "not at work" on the same basis as other persons in paid employment.

Members of the armed forces should be included among persons in paid employment. They should include both the regular and temporary members.

Unemployment

- The ILO international standard definition of unemployment is based on the following three criteria which should be satisfied simultaneously: "without work", "currently available for work" and "seeking work". Accordingly:

The "unemployed" comprise all persons above a specific age who during the reference period were:

- (a) "without work", i.e. were not in paid employment or self-employed;
- (b) "currently available for work", i.e. were available for paid employment or self-employment during the reference period, and
- (c) "seeking work", i.e. had taken specific steps in a specified reference period to seek paid employment or self-employment."

Notwithstanding the criterion of seeking work, persons without work and currently available for work who had made arrangements to take up paid employment or undertake a self-employed activity at a date subsequent to the reference period (future engagements) should be considered as unemployed.

Persons temporarily absent from their jobs with no formal job attachment (lay-offs) who were currently available for work and seeking work should be regarded as unemployed.

- Under this context, availability for work is interpreted as ability and readiness to work, provided the person is given a work opportunity. One purpose of the availability criterion is to exclude both persons who are seeking work to begin at a later date (a test of the current readiness to start work) and those who cannot start work for certain reasons (family responsibilities, studies, etc.). The validity of the "current availability" criterion in terms of time need not be limited to the reference week or day but rather extended to one week or two weeks beyond the basic survey reference period.

The "seeking work" criterion can be interpreted as activity or efforts undertaken during the specified reference period or prior to it in order to find a job. Such efforts may include:

- (i) "... registration at a public or private employment agency;
- (ii) application to employers, checking at work sites;
- (iii) placing or answering newspaper advertisements;
- (iv) seeking assistance from friends or relatives;
- (v) arranging for land, machinery or resources;
- (vi) applying for permits, etc."

- The job search period is not limited to the specified reference period (one week or one day) but may be longer - one month or the past four weeks including the survey reference period.

Estimaciones anuales comparables de l'emploi et du chômage effectuées par le BIT

Résultats actualisés et méthodologie

Résumé

Pour la mise à jour des statistiques de l'année 2003, les estimations annuelles comparables de l'emploi et du chômage sont présentées dans ce *Bulletin des statistiques du travail*. Le cadre utilisé pour le développement du programme, fondé sur quatre principes, y est décrit. Un résumé des directives statistiques internationales du BIT utilisées comme point de référence est donné. Le tableau 1 présente côte à côte les taux de participation et les taux de chômage harmonisés pour l'ensemble des pays couverts et les dix dernières années. Le tableau 2 consiste en un tableau par pays/territoire qui présente toutes les séries d'estimations comparables disponibles pour le pays et la description méthodologique sommaire qui reflète l'analyse de la méthodologie nationale, et les procédures de conciliation des estimations nationales avec les directives internationales de référence, qui a permis la production des estimations comparables du BIT.

Estimaciones anuales comparables de empleo y desempleo efectuadas por la OIT

Resultados actualizados y metodología

Resumen

Para actualizar las estadísticas del año 2003, se presentan las estimaciones anuales comparables de empleo y desempleo en este *Boletín de Estadísticas del Trabajo*. El cuadro que se utilizó para desarrollar el programa y que se base en cuatro principios está descrito. Se presente un resumen de las directivas estadísticas internacionales de la OIT utilizadas como punto de referencia. En el Cuadro 1 se presentan las tasas de participación comparables al lado de las tasas de desempleo comparables para el conjunto de los países abarcados y los diez últimos años. En el Cuadro 2 se presentan cuadros individuales por cada país/territorio con todas las estimaciones comparables disponibles para el país y un resumen de la descripción metodológica que refleja el análisis de la metodología nacional y los procedimientos de ajuste para reconciliar las estimaciones nacionales con las directivas internacionales de referencia y que han permitido la producción de estas estimaciones comparables.