Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Target 8.5: By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value Indicator 8.5.2: Unemployment rate, by sex, age and persons with disabilities

### Institutional information

#### Organization(s):

International Labour Organization (ILO)

## Concepts and definitions

#### **Definition:**

The unemployment rate conveys the percentage of persons in the labour force who are unemployed.

#### Rationale:

The unemployment rate is a useful measure of the underutilization of the labour supply. It reflects the inability of an economy to generate employment for those persons who want to work but are not doing so, even though they are available for employment and actively seeking work. It is thus seen as an indicator of the efficiency and effectiveness of an economy to absorb its labour force and of the performance of the labour market. Short-term time series of the unemployment rate can

be used to signal changes in the business cycle; upward movements in the indicator often coincide with recessionary periods or in some cases with the beginning of an expansionary period as persons previously not in the labour market begin to test conditions through an active job search.

#### **Concepts:**

Persons in unemployment are defined as all those of working age (usually persons aged 15 and above) who were not in employment, carried out activities to seek employment during a specified recent period and were currently available to take up employment given a job opportunity, where: (a) "not in employment" is assessed with respect to the short reference period for the measurement of employment; (b) to "seek employment" refers to any activity when carried out, during a specified recent period comprising the last four weeks or one month, for the purpose of finding a job or setting up a business or agricultural

undertaking; (c) the point when the enterprise starts to exist should be used to distinguish between search activities aimed at setting up a business and the work activity itself, as evidenced by the enterprise's registration to operate or by when financial resources become available, the necessary infrastructure or materials are in place or the first client or order is received, depending on the context; (d) "currently available" serves as a test of readiness to start a job in the present, assessed with respect to a short reference period comprising that used to measure employment (depending on national circumstances, the reference period may be extended to include a short subsequent period not exceeding two weeks in total, so as to ensure adequate coverage of unemployment situations among different population groups).

Persons in employment are defined as all those of working age (usually persons aged 15 and above) who, during a short reference period, were engaged in any activity to produce goods or provide services for pay or profit. They comprise: (a) employed persons "at work", i.e. who worked in a job for at least one hour; (b) employed persons "not at work" due to temporary absence from a job, or to working-time arrangements (such as shift work, flexitime and compensatory leave for overtime)

The labour force corresponds to the sum of persons in employment and in unemployment.

#### Comments and limitations:

Even though in most developed countries the unemployment rate continues to prove its usefulness as an important indicator of labour market performance, and specifically, as a key measure of labour underutilisation, in many developing countries, however, the significance and meaning of the unemployment rate could be questioned. In the absence of unemployment insurance systems or social safety nets, persons of working age must avoid unemployment, resorting to engaging in some form of economic activity, however insignificant or inadequate. Thus, in this context, other measures should supplement the unemployment rate to comprehensively assess labour underutilization.

# Methodology

#### **Computation Method:**

Unemployment rate = Unemployed persons / Persons in the labour force \*100

#### Disaggregation:

This indicator should, ideally, be disaggregated by sex, age group and disability status.

#### **Treatment of missing values:**

#### At country level

Multivariate regression techniques are used to impute missing values at the country level. For a more detailed methodological description, please refer to Trends Econometric Models: A Review of Methodology (ILO, Geneva, 2010), available at <a href="http://www.ilo.org/wcmsp5/groups/public/---ed\_emp/---emp\_elm/---trends/documents/publication/wcms">http://www.ilo.org/wcmsp5/groups/public/---ed\_emp/---emp\_elm/---trends/documents/publication/wcms</a> 120382.pdf.

• At regional and global levels

NA

#### Regional aggregates:

To address the problem of missing data, the former ILO Employment Trends Team designed several econometric models which are actively maintained and used to produce estimates of labour market indicators in the countries and years for which real data are not available. The Global Employment Trends Model (GET Model) is used to produce estimates, in particular, on unemployment (among others). It uses multivariate regression techniques to impute missing values at the country level. The first step is to assemble every known piece of real information (i.e. every real data point), and keep only data that are national in coverage and comparable across countries and over time. This is an important selection criterion when GET Models are run, because they are designed to use the relationship between the various labour market indicators and their macroeconomic correlates – such as per capita GDP, GDP growth rates, demographic trends, country membership in the Heavily Indebted Poor Countries initiative (HIPC), geographical indicators, and country and time dummy variables – in order to produce estimates of the labour market indicators where no data exist. Thus, the comparability of the labour market data that are used as inputs in the imputation models is essential to ensure that the models accurately capture the relationship between the labour market indicators and the macroeconomic variables. The last step of the estimation procedure occurs once the datasets containing both real and imputed labour market data have been assembled. In this step, the data are aggregated across countries to produce the final world and regional estimates. For further information on the GET Models, please refer to the technical background papers available at the following website: http://www.ilo.org/empelm/projects/WCMS 114246/lang--en/index.htm.

#### Methods and guidance available to countries for the compilation of the data at the national level:

In order to calculate this indicator (according to the ILO definitions of unemployment and unemployment rate), data is needed on both the labour force and the unemployed, by sex and age (and eventually disability status). This data is collected at the national level mainly through labour force surveys (or other types of household surveys with an employment module). For the methodology of each national household survey,

one must refer to the most comprehensive survey report or to the methodological publications of the national statistical office in question.

- ILO Manual Decent Work Indicators, Concepts and Definitions Chapter 2, Employment opportunities <a href="http://www.ilo.org/integration/resources/pubs/WCMS\_229374/lang--en/index.htm">http://www.ilo.org/integration/resources/pubs/WCMS\_229374/lang--en/index.htm</a> (first version, pages 49 and 57)
- Resolution concerning statistics of work, employment and labour underutilization
   http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS 230304/lang--en/index.htm

#### **Quality assurance:**

Data consistency and quality checks regularly conducted for validation of the data before dissemination in the ILOSTAT database.

In many cases, data reported to the ILO Department of Statistics through its annual questionnaire on labour statistics, by national statistical offices or other relevant national agencies. Data also received in other cases through agreements between the ILO Department of Statistics and regional or national statistical agencies.

### **Data Sources**

The preferred official national data source for this indicator is a household-based labour force survey. The population census and/or other household surveys with an appropriate employment module may also be used to obtain the required data. Unemployment registers can serve as instruments to collect data on unemployment levels, and used to supplement the information obtained in household surveys.

## **Data Availability**

The indicator is widely available both from actual data provided by countries and also by estimates carried out by the ILO yearly. However, the disaggregation by disability is not widely available. It is increasingly reported but coverage is still very low.

## Calendar

NA

## Data providers

Mainly National Statistical Offices, and in some cases Labour Ministries or other related agencies.

# Data compilers

ILO

### References

**URL**:

www.ilo.org/ilostat

#### **References:**

Decent Work Indicators Manual: <a href="http://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/publication/wcms">http://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/publication/wcms</a> 223121.pdf

Resolution concerning statistics of work, employment and labour underutilization, adopted by the 19th ICLS in 2013: <a href="http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS">http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS</a> 230304/lang--en/index.htm

Trends Econometric Models: A Review of Methodology: <a href="http://www.ilo.org/wcmsp5/groups/public/---">http://www.ilo.org/wcmsp5/groups/public/---</a>
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Key Indicators of the Labour Market, 9th edition, Tables KILM 9 and R5: www.ilo.org/ilostat/kilm