Goal: Achieve gender equality and empower all women and girls

Target: Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life

Indicator: 5.5.2: Proportion of women in managerial positions

Institutional information

Organization(s):

ILO

Concepts and definitions

Definition:

This indicator refers to the proportion of females in the total number of persons employed in managerial positions. It is recommended to use two different measures jointly for this indicator: the share of females in (total) management and the share of females in senior and middle management (thus excluding junior management). The joint calculation of these two measures provides information on whether women are more represented in junior management than in senior and middle management, thus pointing to an eventual ceiling for women to access higher-level management positions. In these cases, calculating only the share of women in (total) management would be misleading, in that it would suggest that women hold positions with more decision-making power and responsibilities than they actually do.

Concepts:

- Employment comprises all persons of working age who, during a short reference period (one week), were engaged in any activity to produce goods or provide services for pay or profit.
- Employment in management is determined according to the categories of the latest version of the International Standard Classification of Occupations (ISCO-08), which organizes jobs into a clearly defined set of groups based on the tasks and duties undertaken in the job. For the purposes of this indicator, it is preferable to refer separately to senior and middle management only on one hand, and to total management (including junior management) on the other. The share of women tends to be higher in junior management than in senior and middle management, so limiting the indicator to a measure including junior management may introduce a bias. Senior and middle management correspond to sub-major groups 11, 12 and 13 in ISCO-08 and sub-major groups 11 and 12 in ISCO-88. If statistics are not available disaggregated at the sub-major group level (two-digit level of ISCO), then major group 1 of ISCO-88 and ISCO-08 can be used as a proxy and the indicator would then refer only to total management (including junior management).

Rationale:

The indicator provides information on the proportion of women who are employed in decision-making and management roles in government, large enterprises and institutions, thus providing some insight into women's power in decision making and in the economy (especially compared to men's power in those areas).

Comments and limitations:

This indicator's main limitation is that it does not reflect differences in the levels of responsibility of women in these high- and middle-level positions or the importance of the enterprises and organizations in which they are employed. Its quality is also heavily dependent on the reliability of the employment statistics by occupation at the two-digit level of the ISCO.

Methodology

Computation method:

- ***Using ISCO-08:***

$$\text{Proportion of women in senior and middle management} = \frac{(\text{Women employed in ISCO 08 category 1} - \text{Women employed in ISCO 08 category 14})}{(\text{Persons employed in ISCO 08 category 1} - \text{Persons employed in ISCO 08 category 14})} \times 100$$

Which can be also expressed as:

$$\text{Proportion of women in senior and middle management} = \frac{(\text{Women employed in ISCO 08 categories } 11 + 12 + 13)}{(\text{Persons employed in ISCO 08 categories } 11 + 12 + 13)} \times 100$$

And

$$\text{Proportion of women in management} = \frac{\text{Women employed in ISCO 08 category 1}}{\text{Persons employed in ISCO 08 category 1}} \times 100$$

- ***Using ISCO-88:***

$$\text{Proportion of women in senior and middle management:} = \frac{(\text{Women employed in ISCO 88 category 1} - \text{Women employed in ISCO 88 category 13})}{(\text{Persons employed in ISCO 88 category 1} - \text{Persons employed in ISCO 88 category 13})} \times 100$$

Which can also be expressed as:

$$\text{Proportion of women in senior and middle management:} = \frac{(\text{Women employed in ISCO 88 categories } 11 + 12)}{(\text{Persons employed in ISCO 88 categories } 11 + 12)} \times 100$$

And

$$\text{Proportion of women in managerial positions:} = \frac{\text{Women employed in ISCO 88 category 1}}{\text{Persons employed in ISCO 88 category 1}} \times 100$$

Treatment of missing values:

- ***At country level:***

Multivariate regression and cross-validation techniques are used to impute missing values at the country level. The additional variables used for the imputation include a range of indicators, including labour market and economic data. However, the imputed missing country values are only used to calculate the global and regional estimates; they are not used for international reporting on the SDG indicators by the ILO.

For a more detailed methodological description, please refer to Trends Econometric Models: A Review of Methodology (ILO, Geneva, 2010), available at http://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_elm/---trends/documents/publication/wcms_120382.pdf .

- ***At regional and global levels:***

Regional aggregates:

The aggregates are derived from the Trends Econometric Models (TEM) that are used to produce global and regional estimates of, amongst others, employment by occupation and gender. These models use multivariate regression and cross-validation techniques to impute missing values at the country level, which are then aggregated to produce regional and global estimates. The regional and global proportions of women in managerial positions are obtained by first adding up, across countries, the numerator and denominator of the formula that defines the proportion of women in managerial positions - outlined above. Once both magnitudes are produced at the desired level of aggregation, the ratio between the two is used to compute the rate for each regional grouping and the global level. Notice that this direct aggregation method can be used due to the imputation of missing observations. For further information on the TEM, please refer to the technical background papers available at: 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, data on employment by sex and occupation is needed, using at least the 2-digit level of the International Standard Classification of Occupations. 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 Guidebook - Decent Work and the Sustainable Development Goals: A Guidebook on SDG Labour Market Indicators (https://www.ilo.org/stat/Publications/WCMS_647109/lang--en/index.htm)
- ILO Manual – Decent Work Indicators, Concepts and Definitions – Chapter 8, Equal opportunity and treatment in employment http://www.ilo.org/integration/resources/pubs/WCMS_229374/lang--en/index.htm (second version, page 146)

- Resolution concerning statistics of work, employment and labour underutilization http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutionsadopted-by-international-conferences-of-labour-statisticians/WCMS_230304/lang--en/index.htm
- International Standard Classification of Occupations 2008 (ISCO-08) http://www.ilo.org/public/english/bureau/stat/isco/isco08/
- ILOSTAT Database (www.ilo.org/ilostat)
- ILOSTAT Database – Metadata – Indicator Descriptions (Employment by occupation, at: http://www.ilo.org/ilostat-files/Documents/description_OCU_EN.pdf).

Quality assurance:

Data consistency and quality checks regularly conducted for validation of the data before dissemination in the ILOSTAT database. In many cases, data are reported to the ILO Department of Statistics through its annual questionnaire on labour statistics, by national statistical offices or other relevant national agencies. Data are also received in other cases through agreements between the ILO Department of Statistics and regional or national statistical agencies, or obtained through ILO processing of microdata sets of national household surveys. The primary source of the data as well as the repository where applicable are indicated in the relevant metadata and/or footnotes in ILOSTAT and in the SDG Indicators Global Database.

Data sources

Description:

The recommended source for this indicator is a labour force survey or, if not available, other similar types of household surveys, including a module on employment. In the absence of any labour-related household survey, establishment surveys or administrative records may be used to gather information on the female share of employment by the required ISCO groups. In cases where establishment surveys or administrative records are used, the coverage is likely to be limited to formal enterprises or enterprises of a certain size. Information on the enterprises covered should be provided with the figures. When comparing figures across years, any changes in the versions of ISCO that are used should be taken into account.

Collection process:

The ILO Department of Statistics sends out its annual questionnaire on labour statistics every year to all relevant agencies within each country (national statistical office, labour ministry, etc.) requesting for the latest annual data available and any revisions on numerous labour market topics and indicators, including many SDG indicators. Indicator 5.5.2 is calculated from statistics submitted to the ILO Department of

Statistics via this questionnaire as well as through special agreements with regional and national statistical offices or through the processing of microdata sets of national household surveys.

Data availability

Time series:

Data for this indicator is available as of 2000 in the SDG Indicators Global Database, but time series going back several decades are available in ILOSTAT.

Disaggregation:

This indicator requires no disaggregation per se, although employment statistics by both sex and occupation are needed to calculate it.

If statistics are available and the sample size permits, it may be of interest to cross-tabulate this indicator by economic activity (ISIC) or disaggregate further to observe the share of women across more detailed occupational groups.

Calendar

Data collection:

The ILO Department of Statistics sends out its annual questionnaire on labour statistics every year, usually in the 2nd quarter, with a view to receiving the requested statistics by the 3rd quarter or the end of the year at the latest. Data received in batch from regional and national statistical offices and data obtained through the processing of microdata sets of national household surveys by the ILO Department of Statistics are continuously updated in ILOSTAT (as they become available to the ILO Department of Statistics).

Data release:

The ILO Department of Statistics' online database ILOSTAT is continuously updated to reflect statistics compiled and processed every week. In general, statistics for EUROSTAT and OECD countries are available around the 2nd or 3rd quarter of the year following the year of reference, whereas they are usually available around the 3rd or 4th quarter of the year following the year of reference for the other countries.

Data providers

National Statistical Offices

Data compilers

ILO

References

ILOSTAT database: www.ilo.org/ilostat

Decent Work and the Sustainable Development Goals: A Guidebook on SDG Labour Market Indicators: https://www.ilo.org/stat/Publications/WCMS_647109/lang--en/index.htm

Decent work indicators - ILO Manual: http://www.ilo.org/wcmsp5/groups/public/---dgreports/---integration/documents/publication/wcms_229374.pdf

ISCO-08: http://www.ilo.org/public/english/bureau/stat/isco/isco08/

Resolution concerning statistics of work, employment and labour underutilization, adopted by the 19th ICLS: http://ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-byinternational-conferences-of-labour-statisticians/WCMS_230304/lang--en/index.htm

Related indicators

8.5.1 Average hourly earnings of female and male employees, by occupation, age and persons with disabilities