

# **DECENT WORK INDICATORS**

## **GUIDELINES FOR PRODUCERS AND USERS OF STATISTICAL AND LEGAL FRAMEWORK INDICATORS**

### **ILO MANUAL**

*Second version*

**December 2013**

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For Statistical Information: <http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/lang-en/index.htm>

For Legal Information: [www.ilo.org/normes](http://www.ilo.org/normes). Summaries in this manual draw on the summaries available on NORMES website:

<http://www.ilo.org/global/standards/subjects-covered-by-international-labour-standards/lang-en/index.htm>

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## Abbreviations

CBA	Collective bargaining coverage rate
CCAS	Conference Committee on the Application of Conventions and Recommendations
CEACR	Committee of Experts on the Application of Conventions and Recommendations
CFA	Committee on Freedom of Association
CFW	Contributing family workers
CPI	Consumer price index
DWI	Decent Work Indicator
EPLeX	Employment protection legislation database
EPR	Employment-to-population ratio
GDP	Gross domestic product
GER	Gross enrolment ratio
GESS	Global Extension of Social Security
ICLS	International Conference of Labour Statisticians
ICSE	International Classification of Status in Employment
ILS	International labour standards
IPEC	International Programme for the Elimination of Child Labour
ISCED	International Standard Classification of Education
ISIC	International Standard Industrial Classification of All Economic Activities
ISSA	International Social Security Association
LFPR	Labour force participation rate
LFS	Labour force survey
LPR	Low pay rate
MDG	Millennium Development Goal
NPISH	Non-profit institutions serving households
OHCHR	Office of the High Commissioner for Human Rights
OOPS	Out-of-pocket spending by private households
OECD	Organization for Economic Cooperation and Development
OSH	Occupational safety and health
SNA	System of National Accounts
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNSD	United Nations Statistics Division
WHO	World Health Organization
WPR	Working poverty rate



## Preface

Decent work is central to sustainable poverty reduction and is a means for achieving equitable, inclusive and sustainable development. The ILO *Declaration on Social Justice for a Fair Globalization* recommends the establishment of appropriate indicators to monitor the progress made in the implementation of the ILO Decent Work Agenda. The ILO is supporting member States through technical assistance and capacity building at national, sub-regional and regional levels in this regard.

In September 2008, the ILO convened an international Tripartite Meeting of Experts on the Measurement of Decent Work, and consequently, adopted a framework of Decent Work Indicators that was presented to the 18<sup>th</sup> International Conference of Labour Statisticians in December 2008. The framework covers ten substantive elements corresponding to the four strategic pillars of the Decent Work Agenda (full and productive employment, rights at work, social protection and the promotion of social dialogue): employment opportunities; adequate earnings and productive work; decent working time; combining work, family and personal life; work that should be abolished; stability and security of work; equal opportunity and treatment in employment; safe work environment; social security; and, social dialogue, employers' and workers' representation.

We are now presenting the second version of the ILO Manual on Decent Work Indicators, *Guidelines for Producers and Users of Statistical and Legal Framework Indicators*. This second version presents several enhancements and additions to the previous version and we think that it will provide a useful tool for those interested in a complete analysis of the various dimensions of decent work at the country level, as well as those more focused on the data production. The Manual is based on statistical and legal international standards, adopted by the international statistical community, and promoted for the harmonization of regional and international data on employment and decent work. As the discussions and use of statistics on decent work evolve, the Manual will be further improved, taking on board feedback received and new standards adopted. In particular, we think it will be very valuable for the forthcoming discussions on the post-2015 development agenda.

The ILO, through the Department of Statistics, is currently putting in place a new modernised and publicly available global database covering both short-term and annual indicators on decent work called ILOSTAT. It builds on national reporting and recalculations according to international definitions in a big effort to render the information available comparable. Besides, it provides technical advice to countries in order to implement correctly the various standards on labour statistics.

The ILO/EC MAP project (2009-2013), funded by the European Union was aimed to strengthening the national capacity to self-monitor and self-assess progress towards decent work. The project facilitated the identification of decent work indicators, supported data collection, and used the collected data for integrated policy analysis of decent work in order to make them relevant for policy making. It also has been supporting the production of guidelines and manuals on measuring and assessing decent work.

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Technical coordination of the second edition of the Manual was carried out by Monica Castillo who also prepared updates to the second edition primarily in chapters 1, 2 and 11. The Manual benefitted from the work accomplished in the first edition, whose technical coordination and conceptualization were carried out by Monica Castillo and Zeynep Orhun-Girard. Naïma Pagès and Dagmar Walter participated in the general review, standardization, editing and copyediting of the first edition of the Manual and also participated in a general review of the second edition. Nikolai Rogovsky provided editing based on feedback from validation workshops. Drafts of statistical indicator sheets prepared in the initial stages (2009) were coordinated by Malte Luebker.

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Some statements made in the report may not reflect the positions of the above national institutions and individuals. Any errors or omissions found herein are the sole responsibility of the International Labour Office.

## General introduction

In September 2008, the ILO convened an international Tripartite Meeting of Experts (TME) on the Measurement of Decent Work, and consequently, adopted a framework of Decent Work Indicators that was presented to the 18<sup>th</sup> International Conference of Labour Statisticians in December 2008.

The Framework on the Measurement of Decent Work covers ten substantive elements which are closely linked to the four strategic pillars of the Decent Work Agenda, that is, (i) International labour standards and fundamental principles and rights at work (ii) Employment creation (iii) Social protection and (iv) Social dialogue and tripartism:

- (i) employment opportunities;
- (ii) adequate earnings and productive work;
- (iii) decent working time;
- (iv) combining work, family and personal life;
- (v) work that should be abolished;
- (vi) stability and security of work;
- (vii) equal opportunity and treatment in employment;
- (viii) safe work environment;
- (ix) social security; and
- (x) social dialogue, employers' and workers' representation.

These 10 substantive elements represent the structural dimensions of the decent work measurement framework under which both statistical and legal framework indicators on decent work are organized and classified. There is an additional substantive element related to the economic and social context for decent work. The context indicators listed under this area are denoted by a "C" to highlight the fact that they are contextual indicators that do not measure decent work per se but rather serve to provide data users information that relates to the context of decent work measurement in an economy.

The statistical indicators are quantitative indicators derived from official national data sources. The legal framework indicators are qualitative in nature primarily based on legal texts and other related textual information. While statistical indicators make up the vast majority of the indicators in the Framework on the Measurement of Decent Work, the legal framework indicators are equally important. The two sets of indicators are mutually reinforcing and thus both considered essential for monitoring progress towards decent work in a given national economy.

Table A presents the full set of statistical and legal framework indicators. The statistical indicators are divided into main indicators (denoted "M"), additional indicators (denoted "A") and future indicators (denoted "F", to be developed by the ILO). The legal framework indicators are denoted by an "L".

In terms of defining a set of decent work indicators for a given economy, countries are encouraged to select from the total list of statistical and legal framework indicators and add additional indicators to reflect their national circumstances and decent work policy agenda. It is recommended that indicator selection at the national level be accomplished through a tripartite consultation process.

The decent work indicators are intended to support monitoring decent work in a given economy and should ideally be analyzed together in a holistic manner. This will allow data users to obtain a global snapshot of the decent work deficits and progress made for a given point in time, and make any necessary adjustments to decent work policy or programmes as well as periodically review the set of indicators for any necessary changes.

This Manual presents guidelines on the decent work statistical indicators and legal framework indicators presented to the 18th International Conference of Labour Statisticians. It is intended for use by national data producers and data users alike, and will also be useful for international data users.

The Manual is divided into eleven chapters which correspond to the ten substantive elements of decent work as well as to the economic and social context for decent work. Thus, each chapter contains the statistical and legal framework indicators associated with that topic area.

**Table A. Measurement of decent work based on guidance received at the Tripartite Meeting of Experts on the Measurement of Decent Work (September 2008)**

<b>Substantive element of the Decent Work Agenda</b>	<b>Statistical Indicators</b>	<b>Legal Framework Indicators</b>
Numbers in parentheses in the first column below refer to ILO strategic objectives: 1. Standards and fundamental principles and rights at work; 2. Employment; 3. Social protection; 4. Social dialogue.	Selection of relevant statistical indicators that allow monitoring progress made with regard to the substantive elements. M – Main decent work indicators A – Additional decent work indicators F – Candidate for future inclusion / developmental work to be done by the Office C – Economic and social context for decent work (S) indicates that an indicator should be reported separately for men and women in addition to the total.	L – Descriptive indicators providing information on rights at work and the legal framework for decent work. Description of relevant national legislation, policies and institutions in relation to the substantive elements of the Decent Work Agenda; where relevant, information on the qualifying conditions, the benefit level and its financing; evidence of implementation effectiveness (as recorded by ILO supervisory bodies); estimates of coverage of workers in law and in practice; information on the ratification of relevant ILO Conventions.
<b>Employment opportunities (1 + 2)</b>	M – Employment-to-population ratio (S)* M – Unemployment rate (S) M – Youth not in employment, education, or training, 15-24 years (S)* M – Informal employment rate (S)* A – Labour force participation rate (1) [to be used especially where statistics on Employment-to-population ratio and/or Unemployment rate (total) are not available] A – Youth unemployment rate, 15-24 years (S) A – Unemployment by level of educational attainment (S)* A – Employment by status in employment (S) A – Proportion of own-account workers and contributing family workers in total employment (S)* [to be used especially where statistics on informal employment are not available] A – Share of wage employment in non-agricultural employment (S) F – Labour underutilization (S) Memo item: Time-related underemployment rate (S) grouped as A under “Decent Working time”	L – Government commitment to full employment L – Unemployment insurance
<b>Adequate earnings and productive work (1 + 3)</b>	M – Working poverty rate (S)* M – Employees with low pay rate (below 2/3 of median hourly earnings) (S)*	L – Statutory minimum wage*

	A – Average hourly earnings by occupation group (S)* A – Average real wages (S) A – Minimum wage as a percentage of median wage A – Manufacturing wage index A – Employees with recent job training (past year / past 4 weeks) (S)	
<b>Decent Working Time (1 + 3)*</b>	M – Employment in Excessive Working Time (more than 48 hours per week) (S)* A – Employment by weekly hours worked (hours in standardized hour bands) (S)* A – Average annual working time per employed person (S)* A – Time-related underemployment rate (S) F – Paid annual leave (developmental work to be done by the Office; additional indicator)	L – Maximum hours of work L – Paid annual leave
<b>Combining work, family and personal life (1 + 3)</b>	F – Asocial / unusual hours (developmental work to be done by the Office) F – Maternity protection (developmental work to be done by the Office; main indicator)	L – Maternity leave (including weeks of leave, and rate of benefits) L – Parental leave*
<b>Work that should be abolished (1 + 3)</b>	M – Child labour rate [as defined by ICLS resolution] (S)* A – Hazardous child labour rate (S)* A – Rate of worst forms of child labour (WFCL) other than hazardous work (S)** A – Forced labour rate (S)** A - Forced labour rate among returned migrants (S) **	L – Child labour (including public policies to combat it) L – Forced labour (including public policies to combat it)
<b>Stability and security of work (1, 2 + 3)</b>	M - Precarious employment rate ** A - Job tenure** A - Subsistence worker rate** A – Real earnings of casual workers** (S) <u>Memo item:</u> Informal employment is grouped under employment opportunities.	L – Termination of employment* (incl. notice of termination in weeks) <u>Memo item:</u> ‘Unemployment insurance’ is grouped under employment opportunities; needs to be interpreted in conjunction for ‘flexicurity’.
<b>Equal opportunity and treatment in employment (1, 2 + 3)</b>	M – Occupational segregation by sex M – Female share of employment in senior and middle management* A – Gender wage gap A – Share of women in wage employment in the non-agricultural sector A – Indicator for Fundamental Principles and Rights at Work (Elimination of discrimination in respect of employment and occupation) to be developed by the Office. A – Measure for discrimination by race / ethnicity / of indigenous people / of (recent) migrant workers / of rural workers where relevant and available at the national level to be developed by the Office. F – Measure of dispersion for sectoral / occupational distribution of (recent) migrant workers	L – Equal opportunity and treatment* L – Equal remuneration of men and women for work of equal value*

	F – Measure for employment of persons with disabilities. Memo item: Indicators under other substantive elements marked (S) indicator should be reported separately for men and women in addition to the total.	
<b>Safe work environment (1 + 3)</b>	M – Occupational injury frequency rate, fatal* A – Occupational injury frequency rate, nonfatal* A – Time lost due to occupational injuries A – Labour inspection (inspectors per 10,000 employed persons)	L – Employment injury benefits* L – Occupational safety and health (OSH) labour inspection
<b>Social security (1 + 3)</b>	M – Share of population above the statutory pensionable age (or aged 65 or above) benefiting from an old-age pension (S) * M – Public social security expenditure (percentage of GDP) A – Healthcare expenditure not financed out of pocket by private households A – Share of economically active population contributing to a pension scheme (S) * F – Share of population covered by (basic) health care provision (S) (to be developed by the Office; additional indicator) F – Public expenditure on needs based cash income support (% of GDP) F – Beneficiaries of cash income support (% of the poor) F – Sick leave (developmental work to be done by the Office; additional indicator) [Interpretation in conjunction with legal framework and labour market statistics.]	L – Old-age social security or pension benefits (public/private)* L – Incapacity for work due to sickness / sick leave L – Incapacity for work due to invalidity <u>Memo item:</u> ‘Unemployment insurance’ is grouped under employment opportunities.
<b>Social dialogue, workers’ and employers’ representation (1 + 4)</b>	M – Trade union density rate (S) * M – Employers’ organization density rate (ED) (S)* M – Collective bargaining coverage rate (S) M/F – Indicator for Fundamental principles and rights at work (Freedom of association and collective bargaining) to be developed by the Office; main indicator A – Days not worked due to strikes and lockouts*	L – Freedom of association and the right to organize L – Collective bargaining right L – Tripartite consultations
<b>Economic and social context for decent work</b>	C – Children not in school (percentage by age) (S) C – Estimated percentage of working-age population who are HIV-positive C – Labour productivity (GDP per employed person, level and growth rate) C – Income inequality (90:10 ratio) C – Inflation rate (Consumer Price Index, CPI) C – Employment by branch of economic activity	L – Labour administration** Developmental work to be done by the Office to reflect environment for Sustainable enterprises, incl. indicators for (i) education, training and lifelong learning, (ii) entrepreneurial culture, (iii) enabling legal and regulatory framework, (iv) fair competition, and (v) rule of law and secure property rights. Developmental work to be done by the Office



	C – Education of adult population (adult literacy rate, adult secondary-school graduation rate) (S) C – Labour share of Gross Value Added (GVA)* C (additional) – Real GDP per capita (level and growth rate)* C (additional) – Female share of employment by economic activity (ISIC tabulation category)* C (additional) – Wage / earnings inequality (90:10 ratio)* C (additional) – Poverty measures **	to reflect other institutional arrangements, such as scope of labour law and scope of labour ministry and other relevant ministries.
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**Source:** ILO compilation on the basis of the Discussion paper for the Tripartite Meeting of Experts on the Measurement of Decent Work (Geneva, 8 -10 September 2008).

\*Wording modified by ILO in the pilot phase; \*\*Indicator added by ILO in the pilot phase (2009-2013).

# Presentation of the statistical indicators

## Introduction

Essential to measuring the progress towards decent work in a given economy is the selection of a broad priority set of statistical decent work indicators for which timely and reliable estimates can be produced with regular frequency. Statistical indicators on decent work can help describe a baseline scenario from which to set and monitor policy goals. They supply quantitative information not only on which areas of decent work are most critical but also which population groups within the priority areas may be experiencing the greatest decent work deficits.

Decent work statistics that are derived from reliable sources of data (i.e., those that apply sound scientific methods in data collection and estimation and offer transparency in data dissemination) can provide national constituents with solid inputs for social dialogue, including information exchange, consultations and negotiations, and policy development. Collaboration and inclusiveness in the development of decent work statistics are essential to successful outcomes in monitoring decent work.

Decent work statistical indicators presented in this Manual are grounded in the large body of international statistical standards on concepts, definitions, methods and classifications. In particular, the International Conference of Labour Statisticians (ICLS) which was first launched in 1923 and serves as the authoritative world body on international statistical standards on topics such as labour, social security, income, expenditures, consumer price index, among others, establishes international statistical recommendations that help provide guidance to countries, promote international comparability of labour statistics, and encourage coherence in concepts and methods across sources and domains. Through the ICLS, the ILO has long supported the development and use of concepts, definitions, and methods related to the measurement of decent work.

It should be noted that the set of statistical decent work indicators presented in this Manual is not intended to be exhaustive and countries are encouraged to select additional indicators according to their policy needs. The set of statistical indicators presented here should not be considered a final set, but rather serve to reflect a point of departure. Given the benefits of future research on this topic and the national experiences that will surely enrich the discussions and refinement of statistical indicators in the future, the set of recommended statistical indicators may be expected to change in the years to come.

## Content of the statistical indicator sheets

The eleven chapters presented in the Manual on specific substantive elements of the Decent Work Measurement Framework present guidelines for each indicator. Each statistical indicator sheet is divided into five sections as follows:

- (1) Measurement objective and rationale;
- (2) Method of computation;
- (3) Concepts and definitions;
- (4) Recommended data sources, metadata and disaggregation; and

## (5) Interpretation guidelines.

As some statistical concepts and definitions are used throughout each chapter to define different indicators, they are included in the introduction to the chapter.

There is a layered approach to the statistical indicators (shown in Table A1) as follows:

- Main indicators are denoted by an “M” and represent a parsimonious core set of indicators to monitor progress towards decent work.
- Additional indicators are denoted by an “A” and are to be used where appropriate, and where data are available.
- Future indicators are denoted by an “F” and are currently not feasible, but are to be included as data become more widely available. These indicators are to be developed by the ILO.

Note that because gender equality is a cross-cutting element in the decent work agenda, it is recommended that many of the indicators be disaggregated by sex. The indicators for which it is recommended to disaggregate the data by sex in addition to providing the total value are followed by the letter “S” in parentheses.

Many of the decent work statistical indicators are best calculated using estimates derived from a labour force survey (LFS). The primary objective of a LFS is to obtain reliable estimates about the labour force of a given population based on a sample of households. This instrument permits the estimation of the number of persons employed as well as the size of the working age population and can be designed to provide both stock and flow estimates. It generally covers all workers, including all self-employed persons and often allows disaggregation of data by demographic variables such as sex, age group and in some cases, ethnic group. Moreover, it often allows breakdowns by status in employment, occupation group and economic activity group. Other sources are used to complement the estimates from labour force surveys such as other topic-specific household surveys (like Child labour surveys) and other household surveys, employment-related establishment surveys, and administrative records (see Annex 1 on the types of sources for statistical decent work indicators).

Statistical classifications used to disaggregate labour data are sometimes necessary to calculate the statistical indicators. Moreover, the Manual on Decent Work Indicators provides recommendations on suggested disaggregations of the statistical indicators for example by age group, status in employment, occupation group or economic activity group. While national statistical systems may have their own classification systems, it is recommended that international classification systems be used to disaggregate the data in addition to national classification systems to allow for international comparability (see Annex 2 on the Classifications used to disaggregate statistical decent work indicators).

The recommended metadata, or statistical documentation of the indicator, allow data users to track the data source and key information on coverage, definitions, methods etc. related to the indicator. Publishing the metadata is essential for proper documentation and transparency in the calculation of the indicator.

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<sup>1</sup> Table A presents the list of decent work indicators selected by the Tripartite Meeting of Experts in September 2008 and presented to the 18th International Conference of Labour Statisticians in December 2008. See the ILO *Discussion paper of the TME on the measurement of decent work* (Geneva, September 2008) and the ILO *Report of the Conference of the 18th ICLS* (Geneva, 2009).

The interpretation of the statistical indicators requires careful analysis, as changes in the levels or trends in a given indicator must be understood in terms of underlying components and factors. Moreover, it is recommended that they be evaluated jointly with changes in other related decent work indicators and economic and social context indicators, both quantitative and qualitative (i.e. rights at work/legal framework) indicators. In other words, the level and change in any single statistical indicator (even a composite indicator) cannot determine the presence or absence of decent work. It is through analysing a full set of selected decent work indicators—including legal framework indicators—that a complex picture emerges regarding the progress made in a given economy towards decent work. Thus a decline in a given indicator in one country could contribute towards progress in the corresponding substantive element or dimension while signalling deterioration in that particular area in another country due to differences in underlying components or factors<sup>2</sup>.

### **Main ILO databases containing statistical data on decent work indicators**

- LABORSTA database, ILO Department of Statistics, Geneva. (<http://laborsta.ilo.org/>)
- ILOSTAT database, ILO Department of Statistics, Geneva. (<http://www.ilo.org/ilostat>)
- Key Indicators of the Labour Market, ILO Employment Trends Unit. Geneva. (<http://www.ilo.org/kilm>)
- QUIPUSTAT database, ILO Regional Office for Latin America and the Caribbean. Lima and Panama City. (<http://white.oit.org.pe/estad/lacispub/english/menu.php>)
- Latin America and Caribbean Labour Information System (LACLIS) internal use database, ILO Regional Office for Latin America and the Caribbean, Lima.

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<sup>2</sup> As an example of the need for caution in interpreting the trend in a statistical indicator, a declining unemployment rate may generally be viewed as a favourable development if there is simultaneously growing demand for labour as indicated by an increasing employment-to-population ratio. However, there are instances where a declining unemployment rate may be accompanied by a diminishing employment-to-population ratio outpaced by a declining labour force participation rate. In this scenario, the falling unemployment rate can be interpreted as persons leaving the labour force for various reasons (discouragement over job prospects, educational opportunities, retirement, etc.) and may or may not necessarily be viewed as a positive result.

### **Box 1. New international recommendations concerning statistics of work, employment and labour underutilization and the implications for key statistical concept definitions used in the Manual**

In October 2013, the Nineteenth International Conference of Labour Statisticians (ICLS) adopted the *Resolution concerning statistics of work, employment and labour underutilization*.<sup>3</sup> This Resolution presents not only refinements to existing ICLS standards on conceptual definitions and guidelines on the labour force and related components but also presents a new framework and guidelines for measuring different forms of work consistent with the System of National Accounts and recommendations on measures of labour underutilization. The Resolution encourages countries to develop their own system of work statistics, including statistics on the labour force, based on specific national needs and resources, to support monitoring different forms of work in the economy and related evidence-based decision making.

Users of this Manual should be aware that a rather important subset of decent work statistical indicators—all those that are calculated on the basis of existing concepts and definitions related to employment, unemployment and labour force—would eventually be affected by the implementation of the new international standard in the national statistical system. The indicators that would be affected are found in all chapters of the Manual that contain main or additional statistical indicators. A few context indicators would also be affected.

The new 19<sup>th</sup> ICLS Resolution will have an impact not only on certain previous ICLS recommendations related to employment, unemployment, labour force, underemployment, inadequate employment and employment promotion schemes that are specifically mentioned in the preamble of the Resolution, but also on other ICLS standards that are referred to in the statistical indicator sheets of the Manual. As examples, it will have an impact on the ICLS *Resolution concerning the International Classification of Status in Employment (ICSE-93)* and the *Guidelines concerning a statistical definition of informal employment*.

As regards the ICSE-93, special care must be given to the category of “subsistence workers” in countries that have such workers in light of the new recommendations on the operational definition of employment which now makes explicit the criterion “work for pay or profit” and thus excludes workers engaged in own-use production of goods. This will affect in particular, the statistical indicator in Chapter 6, “STAB-3 Subsistence worker rate”. Moreover, the existing ICLS Guidelines on informal employment include the category of “jobs (or) employment in households producing goods for their own final use” in the definition of informal employment. In this case too, such workers should not be included in employment according to the 19<sup>th</sup> ICLS Resolution on work statistics. This is relevant for the statistical indicator in Chapter 1, “EMPL-4 Informal employment rate”.

Each chapter in the Manual presents the ICLS standards on the concept definitions related to the statistical indicators contained in the chapter. In the case of the indicators affected by the 19<sup>th</sup> ICLS

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<sup>3</sup> ILO: *Resolution concerning statistics of work, employment and labour underutilization*, adopted by the Nineteenth International Conference of Labour Statisticians (Geneva, October 2013). Available at: [http://www.ilo.org/global/statistics-and-databases/meetings-and-events/international-conference-of-labour-statisticians/19/WCMS\\_230304/lang--en/index.htm](http://www.ilo.org/global/statistics-and-databases/meetings-and-events/international-conference-of-labour-statisticians/19/WCMS_230304/lang--en/index.htm)

Resolution, the recommendations would ideally be substituted, when feasible for national statistical systems, with those corresponding to those outlined in the 19th ICLS Resolution. In each country, it is suggested that the persons responsible for managing the production of statistics used to calculate the decent work indicators consider a strategic and coordinated approach in adopting the recommended statistical framework, and keep data users well informed of the process.

Finally, it is important to highlight the key advances that the 19th ICLS Resolution provides in terms of laying the foundation for developing the indicator sheet on the future indicator, “F-Labour underutilization” associated with Employment opportunities. The Resolution indicates that labour underutilization refers to mismatches between labour supply and demand, which translate into an unmet need for employment among the population. The establishment of an international standard on labour underutilization measures provides an important step towards supporting countries, and in particular developing countries, to go beyond the traditional measure of the unemployment rate as a measure to analyze the phenomenon of unmet need for employment. The Resolution provides a list of measures of labour underutilization, including time-related underemployment, unemployment and potential labour force, noting that the list is not restrictive. It also states that other dimensions of underutilization of labour exist, including skills mismatches and slack work. The Resolution indicates that the suggested measures of labour underutilization may be used as a basis to produce indicators and provides a recommended set of four labour underutilization indicators as well as other related measures.

# Presentation of the legal framework indicators

## Introduction

Taking into account the legal content of decent work is essential, not only for an integrated understanding of decent work, but also to monitor progress towards decent work. Indeed, all aspects of decent work have a legal dimension and while law alone cannot bring about decent work, well drafted, inclusive and implemented, labour laws are one of the preconditions for its achievement. Law helps to clarify the meaning of decent work by providing an authoritative answer to the question of what decent work implies in concrete terms. It contributes to securing the decent work agenda and its implementation.<sup>4</sup>

The need to supplement statistical indicators with legal ones has been acknowledged in the ILO from the beginning of its work on measuring decent work. As early as 2002,<sup>5</sup> the necessity to have a complementary and integrated set of indicators on national laws and regulations for each of the major aspects of decent work (e.g., unemployment insurance, protection from dismissal, restrictions on the right to organise, statutory minimum wage, etc.) was recognised. When the Governing Body agreed to test a comprehensive approach to the Measurement of Decent Work, by compiling detailed indicator definitions and preparing decent work country profiles, it was decided to provide a textual description of the legal framework and data on the actual application of rights, as well as on benefit levels and coverage for 21 aspects of decent work.

The Legal Framework Indicators do not provide for a full or thorough description of the legal framework for decent work. This would require a much deeper examination of the national legal regime and the context in which it operates. The Legal Framework Indicators are not complete – issues such as labour inspection is only dealt with regarding occupational safety and health (OSH), and the nine branches of social security (as defined by the Social Security (Minimum Standards) Convention, 1952 (No. 102)) are not completely covered. Additionally, a closer look at broader legal issues is important to put the selected legal aspects of decent work into context (the justice system in general, dispute resolution mechanisms and their accessibility, the way the legislation is drafted, the dissemination of the law, are some of the many issues that have an impact on the application of the law and which would need to be taken into account).

## Content of Legal Framework Indicators

The legal framework indicators are descriptive. They aim to summarize information on 21 pre-determined topics that have been deemed particularly relevant to decent work. The overall aim of each indicator is to give a snapshot of what the law is with regard to the topic it covers. To this end, several aspects of the law are examined for the Legal Framework Indicators whenever relevant: (1) Laws, policies or institutions that are in place; (2) benefit levels and thresholds; (3) qualifying conditions; (4) financing of benefits; (5) evidence of implementation effectiveness (i.e., ILO supervisory bodies comments, if available); (6) rough percentage of workers covered in law; (7) rough percentage of workers covered in practice; and (8) the ratification of relevant ILO Conventions.

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<sup>4</sup> See ILO: *Reducing the decent work deficit – A global challenge*, Report of the Director-General, ILC, 89th Session (Geneva, June 2001). DG report, ILC, 2001, p.59 available at:

<http://www.ilo.org/public/portugue/region/eurpro/lisbon/pdf/rep-i-a.pdf>

As was noted in the *World Social Security Report 2010/11* for example, although “the widest legal foundations can never result in adequate coverage outcomes if they are not enforced and not backed by sufficient resources (...), strong legal foundations are a necessary condition for securing higher resources; there are no national situations where generous resources are available despite the lack of a legal basis.” (p.3)

<sup>5</sup> R. Anker *et al.*: *Measuring decent work with statistical indicators*, Integration Working Paper No. 2 (Geneva, ILO, 2002).

This information is not judged against relevant ILO Conventions. However, in the event that the ILO supervisory bodies have commented on certain aspects of non-conformity of the law or practice with ILO principles or conventions, attention is brought to this under “Evidence of implementation effectiveness”.

<b>Law, policy or institutions:</b> This contains a brief description of the content of the law, policies and institutions related to the subject-matter of the indicator, as well as a description of the groups of persons that these law, policies and institutions apply to.
<b>Qualifying Conditions:</b> When relevant, the qualifying conditions are specified.
<b>Benefits (level and duration):</b> When relevant, the level and duration of benefits is specified.
<b>Financing:</b> When relevant, the source of funds is specified.
<b>Evidence of implementation effectiveness:</b> Comments of ILO supervisory bodies related to implementation (Observations and direct requests of the CEACR, conclusions and recommendations of the CFA, conclusions of the CCAS, Complaints, and Representations, if any).
<b>Coverage of workers in law:</b> If available, a broad estimate in percentage of the workforce covered by the law.
<b>Coverage of workers in practice:</b> If available, broad estimate in percentage of workers covered in practice.
<b>Ratification of ILO Conventions:</b> Title of relevant ILO Conventions and date of ratification, if any.

### ***Coverage in law/Coverage in practice***

Although the information provided in the Legal Framework Indicators is mainly of a qualitative nature, fourteen of the 21 Legal Framework Indicators<sup>6</sup> should include specific statistical estimates of workers covered by the law and workers covered in practice (under “coverage in law” and “coverage in practice”). As was highlighted during the Tripartite Meeting of Experts (TME) held in September 2008, noting differences in the benefits of national laws in different countries, or making a judgement on the national legislation may be meaningless and may often be misleading without information on the number of workers that are covered in law, but who are also, actually covered in practice.

Estimates in the percentage of *coverage in law* aim to highlight the scope of the legislation (i.e. to whom the law applies). The law might not apply to the whole workforce and might exclude, for example, certain sectors, enterprises, or professions, or certain workers on specific type of contracts (this information is detailed in the first heading of each Legal Framework Indicator : “Law, policy or institutions”). A clear understanding of who is covered by the law and who is excluded from it together with statistical information to that effect offers the necessary tools to further analyse the legal framework of a country and may have a direct impact on policy making concerning decent work.

Estimates of percentage of *coverage in practice* (or effective coverage) aim to highlight the actual application of the law and seek to show who is benefiting from the law. Coverage in practice may focus on actual coverage (e.g. number of people receiving unemployment benefits) or potential coverage (e.g. number of people contributing who could receive unemployment benefits if they lost their job). This measurement aims to capture the number of persons covered *de facto* (that is, those actually covered in practice) as a percentage of those covered *de lege* (that is, those expected to be covered and protected under the law). The estimate of coverage in practice is usually lower than the estimate of coverage in law for several reasons, including lack of enforcement, ignorance of the law, avoidance

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<sup>6</sup> These concern: unemployment insurance, minimum wage, hours of work, paid annual leave, maternity leave, parental leave, termination of employment, employment injury benefits, safety and health labour inspection, pension, incapacity to work due to sickness / sick leave, incapacity to work due to invalidity, freedom of association and the right to organize, collective bargaining.



of the application of the law, and more general lapses in governance. Hence, estimates of coverage in practice provide valuable information for policy makers.

As the estimation of coverage in law and in practice in percentage terms is generally not straightforward, and is impossible for most countries to calculate in a robust way, the Tripartite Meeting of Experts on the Measurement of Decent Work (TME) endorsed the proposition to use broad percentage ranges to make the estimates, such as: few (<10 per cent), some (10–32 per cent), about half (33–66 per cent), most (67–89 per cent), virtually all, or all (90+ per cent).

Difficulties of estimating the numbers of workers covered in law and in practice include: (1) when calculating the number of workers covered by the law, a distinction needs to be made, when relevant, between different types of workers such as employees or self-employed workers (the existence of disguised employment relationships, for example, makes this challenging); (2) the fact that formal/informal work is not a binary concept but operates on a spectrum<sup>7</sup> (a worker may be formal in certain aspects of his work and informal in others e.g. an employee's hours of work could be only partially declared); (3) lack of Government records; (4) lack of information; (5) methodological difficulties (for example: how do we find out if the law - which includes not only the legislative minimums but collective bargaining and contract law as well - has been respected); and (6) the importance of not ignoring qualifying conditions (this adds an additional layer of complexity when calculating the number of workers covered by the law).

### ***Coverage in practice is already reflected in statistical DWI***

Some of the data needed to reflect "coverage in practice" is already reflected in the statistical decent work indicators. This regards, for example, the statistical indicators on unemployment insurance (EMP-2), maternity (COMB-2 - methodology to be developed), pension (SECU-1), freedom of association and collective bargaining (DIAL-1 and DIAL-3). When this is the case, and when data are available, reference to the relevant statistical indicator is made.

### ***Sources of information to consult (common to all legal framework indicators)***

All LFIs draw on the following sources (additional sources and databases specific to each LFI are detailed in the following chapters):

#### ***ILO sources***

NORMLEX database provides abstracts of legislation and relevant citation information, and, where possible, the full text of the law or a relevant electronic source. It is available at:  
<http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:1:0::NO::>

The NORMLEX database provides access to the CEACR's *comments* (Observations and Direct Requests): Article 22 Government report; CEACR's comments; General Surveys; Article 19 Government report.

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<sup>7</sup> There are clearly international statistical standards which allow quantitative estimates to be produced separately for the concepts of informal employment and formal employment and also informal sector employment and formal sector employment. The use of the terms informal/formal work here are different from the aforementioned statistical concepts and refer to such aspects as declared or registered hours of work.

Information on ratifications, CEACR's *comments* and Conference Committee on the Application of Standards' *conclusions* as well as Article 26 *complaints* and Article 24 *representations* are consolidated in NATLEX Country profiles, available at:

[http://www.ilo.org/dyn/natlex/country\\_profiles.home?p\\_lang=en](http://www.ilo.org/dyn/natlex/country_profiles.home?p_lang=en)

### **Other sources**

Ministry of labour or other ministries websites (for general information and access to the text of national legislation).

OHCHR: Universal Periodic Review available at:

<http://www.ohchr.org/EN/HRBodies/UPR/Pages/UPRMain.aspx>

OHCHR: Human Rights by Country, available at:

<http://www.ohchr.org/EN/Countries/Pages/HumanRightsintheWorld.aspx>

International Encyclopaedia for Labour Law and Industrial Relations, Edited by R. Blanpain, available at:

<http://www.kluwerlawonline.com/toc.php?area=&mode=bypub&level=5&values=Looseleafs~~IEL+Labour+Law~National+Monographs>

## Chapter 1. Employment opportunities

The substantive element *Employment Opportunities*, a key element of decent work, is comprised of indicators that provide insights regarding the quantity of labour demand and supply in an economy. It thus targets an important aspect of the labour market conditions faced by workers and potential workers as well as employers. It includes indicators which permit the analysis of the quality of employment measured through the lens of informal employment and other key components of total employment. It also targets indicators related to labour slack and the underutilization of labour,<sup>8</sup> among which the unemployment rate is often used as a main indicator to signal changes in the business cycle.

Employment opportunities covers indicators derived on the basis of the labour force measurement framework, relying in particular on the concepts of employment, unemployment, labour force and not in labour force which are measured in relation to a broader reference variable of the population. Many of the indicators are defined in terms of disaggregations of labour force concepts, allowing data users to understand key differences in employment opportunities experienced by component groups, for example, by age group, level of educational attainment or status in employment.

*Employment opportunities* element encompasses the largest set of indicators within the decent work measurement framework, including eleven statistical indicators and two legal framework indicators (presented in Table 1).

**Table 1: Overview of decent work indicators for employment opportunities**

Statistical Decent Work Indicators	Income concept	Coverage	Preferred data source
<b>EMP-1. Employment-to-population ratio (M)</b>	Working-age population Employment	Employed persons	LFS Population census Other household surveys (with employment module)
<b>EMP-2. Unemployment rate (M)</b>	Unemployment Labour force	Unemployed persons	LFS Other household surveys (with employment module)
<b>EMP-3. Youth not in education and not in employment (M)</b>	Youth Employment Unemployment Not in labour force Education Training	Youth (15-24)	LFS Population census Other household surveys (with employment module)
<b>EMP-4. Informal employment (M)</b>	Employment Informal employment Informal sector	Employed persons	LFS Other household surveys (with employment module)
<b>EMP-5. Labour force participation rate (A)</b>	Employment Unemployment	Labour force	LFS Population census

<sup>8</sup> It should be noted that the indicator, "Time-related underemployment" which also measures labour underutilization is classified under the substantive element of Decent Working Time (chapter 3).

	Labour force Working-age population		Other household surveys (with employment module)
<b>EMP-6. Youth unemployment rate (A)</b>	Unemployment Labour force Youth	Youth labour force	LFS Population census Other household surveys (with employment module)
<b>EMP-7. Unemployment by level of education (A)</b>	Unemployment Education	Unemployed persons	LFS Other household surveys (with employment module)
<b>EMP-8. Employment by status in employment (A)</b>	Employment ICSE (status)	Employed persons	LFS Other household surveys (with employment module)
<b>EMP-9. Proportion of own-account and contributing family workers in total employment (A)</b>	Employment Own-account workers Contributing family workers	Employed persons	LFS Population census Other household surveys (with employment module)
<b>EMP-10. Share of wage employment in non-agricultural employment (A)</b>	Employment Classification of economic activity (ISIC)	Wage employees	LFS Other household surveys Establishment surveys Administrative data
<b>EMP-11. Labour underutilization (F) *</b>	n/a	n/a	n/a
<b>Legal framework indicators:</b> L1- Government commitment to full employment L2- Unemployment insurance			

\* This indicator under development by the ILO will allow data users to analyse the levels and trends of one or more alternative measures to the unemployment rate, EMPL-2. The concept of labour underutilization was discussed during the 18th Conference of Labour Statisticians in 2008, which adopted Resolution III, concerning the development of measures of labour underutilization, and containing recommendations on the future work of the Office on this topic. Progress on the topic has been achieved by the ILO Working Group for the Advancement of Employment and Unemployment Statistics which is expected to present a standard on the measurement of labour underutilization during the 19th ICLS in 2013.

Some of the indicators are in fact components of others (for example, youth unemployment rate is a disaggregation by age of the unemployment rate) which are deemed priority target indicators. Others are highly complementary and should be analyzed jointly, including the employment-to-population ratio, unemployment rate and labour force participation rate. Whenever possible, all indicators should be disaggregated by sex in order to evaluate the differences in employment opportunities experienced by women and men.

It is worth noting that three of the five employment-related Millennium Development Goal (MDG) indicators are contained under *Employment Opportunities*, namely the Employment-to-population ratio, the Proportion of own-account and contributing family workers in total employment, and Share of wage employment in non-agricultural employment (disaggregated by sex). While the MDG indicators were conceived as part of a broad development agenda targeting developing countries

during the period 2000-2015, their inclusion here among the full set of decent work indicators is intended to allow countries at all levels of development to monitor them.

This chapter and subsequent chapters are divided into sections by statistical indicator which in turn are divided into five subsections: (1) Measurement objective and rationale, (2) Method of computation, (3) Concepts and definitions, (4) Recommended data sources, metadata and disaggregations and (5) Interpretation guidelines. As some concepts and definitions are used throughout the chapter to define different indicators, they are provided in the section below.

### Concepts and definitions used throughout the chapter

The **reference population** comprises usual residents living in the country during the reference period, regardless of legal residency status or citizenship. For statistical purposes, the **working age population** comprises all persons above a specified minimum age threshold for which an inquiry on economic activity is made. While no international standard on age limits exists, for purposes of statistical measurement the working-age population is commonly defined as persons aged 15 years and older, but this varies from country to country. Some countries also apply an upper age limit, e.g. Finland defines its working age population as persons aged 15-74. Most countries, however, do not use a maximum age limit. The working age limits should correspond to those defined in a given data source.

The **employed** comprise all persons of working age who during a specified brief period, such as one week or one day, were in the following categories: a) paid employment (whether at work or with a job but not at work); or b) self-employment (whether at work or with an enterprise but not at work). Temporary absence from work includes reasons such as illness, maternity and parental leave, holiday, training, and industrial disputes.<sup>9</sup>

The concept *at work* refers to persons who during the reference period performed some work for wage or salary, in cash or in kind (for paid employment), or persons who during the reference period performed some work for profit or family gain, in cash or in kind (for self-employment). For operational purposes, the notion "some work" may be interpreted as work for at least one hour. Employed persons include those persons of working age who worked for at least one hour during the reference period as contributing family workers (formerly referred to as unpaid family workers) working in a family business.

It should be noted that the concept of employment does not include household members engaged in the provision of unpaid services for own household use (such as cooking in one's own home or caring for own children) nor does it include volunteers providing services to other households for own final use. These activities are not included within the production boundary of the System of National

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<sup>9</sup> ILO: *Resolution concerning statistics of the economically active population, employment, unemployment and underemployment*, adopted by the Thirteenth International Conference of Labour Statisticians. (Geneva, October 1982). Available at: [http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS\\_087481/lang--en/index.htm](http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS_087481/lang--en/index.htm)

Accounts (SNA).<sup>10</sup> However, persons engaged in the production of economic goods for own and household consumption should be considered as in self-employment if such production comprises an important contribution to the total consumption of the household.

The **unemployed** comprise all persons of working age who were: a) without work during the reference period, i.e. were not in paid employment or self-employment; 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 recent period to seek paid employment or self-employment.<sup>11</sup> For purposes of international comparability, the period of job search is often defined as the preceding four weeks, but this varies from country to country.

The specific steps taken to seek employment may include registration at a public or private employment exchange; application to employers; checking at worksites, farms, factory gates, market or other assembly places; placing or answering newspaper advertisements; seeking assistance of friends or relatives; looking for land, building, machinery or equipment to establish own enterprise; arranging for financial resources; and applying for permits and licences.

It should be noted that the ILO recommendations in some circumstances allow countries to apply a relaxed definition of unemployment, that is, taking into account persons who only meet the criteria of “without work” and “currently available for work”. Such a relaxation of the definition can have substantial implications for the measured unemployment rate.

The **economically active population (EAP)** 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. According to these systems, the production of economic goods and services includes all production and processing of primary products whether for the market for barter or for own consumption, the production of all other goods and services for the market and, in the case of households which produce such goods and services for the market, the corresponding production for own consumption.<sup>12</sup>

Two useful measures of the economically active population are the usually active population measured in relation to a long reference period such as a year and 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 **usually active population** comprises all persons above a specified age whose main activity status as determined in terms of number of weeks or days during a long specified period (such as the preceding 12 months or the preceding calendar year) was employed or unemployed as previously defined. Where this concept is considered useful and feasible the usually active population may be subdivided as employed and unemployed in accordance with the main activity.

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<sup>10</sup> UNSD: *System of National Accounts 2008*. (New York, 2009). Available at: <http://unstats.un.org/unsd/nationalaccount/docs/SNA2008.pdf>

<sup>11</sup> ILO: *Resolution concerning statistics of the economically active population, employment, unemployment and underemployment*, adopted by the Thirteenth International Conference of Labour Statisticians. (Geneva, October 1982). Available at: [http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS\\_087481/lang--en/index.htm](http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS_087481/lang--en/index.htm)

<sup>12</sup> Idem.

The **labour force** or "**currently active population**" comprises all persons who fulfil the requirements for inclusion among the employed or the unemployed as previously defined. It therefore consists of all persons of working age who were either employed or unemployed.

#### **EMPL-1. Employment-to-population ratio (EPR), (M)**

##### **Measurement objective and rationale**

The first of four main indicators within the Employment Opportunities substantive element, the employment-to-population ratio (EPR) is often considered a basic yardstick for understanding the overall labour input in an economy. It provides information on the ability of an economy to generate employment and can be analyzed together with indicators of economic growth in order to assess the extent to which growth has contributed to increased employment opportunities.

##### **Method of computation**

The EPR is defined as the percentage of employed persons in the working age population. The indicator is calculated as follows:

$$EPR (\%) = \frac{\text{Number of employed persons in the working age population}}{\text{Total number of persons in the working age population}} \times 100$$

For a given component group of the working age population, the EPR is the percentage of this group that is employed. For example, the EPR for women would be calculated as:

$$EPRw (\%) = \frac{\text{Number of employed women in the working age population}}{\text{Total number of women in the working age population}} \times 100$$

##### **Concepts and definitions**

For the definitions of working age population and employment, please refer to the section on concepts and definitions in the chapter introduction.

##### **Recommended data sources, metadata and disaggregations**

Both employment and population estimates should be derived from the same source whenever possible. The preferred official national data source for this indicator is a household-based labour force survey (LFS). The population census and/or other household surveys with an appropriate

employment module may also be used to obtain the required data to calculate the EPR, and employment and population related administrative records may serve as an additional source. Nonetheless, such sources may have limitations related to periodicity (in the case of a population census), geographic coverage or worker coverage about which data users should be made aware.

When the EPR is published, appropriate metadata (or statistical documentation information) regarding the data should be provided to users. For the EPR, it is recommended that at minimum information on the data source, data reference period, population coverage and geographic coverage be made easily available to data users.

Disaggregation of the EPR by component groups such as sex, age group, urban and rural areas, and educational attainment provides measures by which to evaluate the relative differences in employment demand across different population groups. Disaggregation of total employment by key classifications such as status in employment, economic activity, and occupation provides valuable information regarding the structure of employment whose changing composition will affect the EPR.

### **Interpretation guidelines**

An increasing trend in the EPR usually indicates increasing employment opportunities within the economy in terms of the quantity of workers.

- A *high ratio* is not necessarily a positive result, as it may signal for example limited education options for young people, minimal or non-existent unemployment assistance or other social benefits and/or economic hardship. Very high ratios often indicate an abundance of low quality jobs. Sharp increases could point to decreasing levels of labour productivity if not matched by increases in GDP.
- A *low ratio* means that a large share of the working-age population is unemployed and/or not attached to the labour force. Persons may not be in the labour force for reasons such as enrolment in an educational institution, retirement, carrying out domestic chores in their own household, illness or incapacity for work. Still others in this group may express a desire to work and be available to work but may not be seeking work for various reasons, both economic and noneconomic. This kind of information is essential for interpreting the EPR of various demographic groups, including youth, women and older persons.

There is no optimal value and EPR alone is not sufficient for assessing the *employment opportunities* element of decent work. For a better understanding of the labour demand and labour supply dynamic, changes in the indicator should be analysed jointly with changes in other key Employment Opportunities indicators (especially the unemployment rate and the labour force participation rate).

For a more complete understanding of labour market trends in terms of labour input and wage changes, it is also useful to analyze labour demand and supply indicators together with those of income (including employment-related income by status in employment) and earnings of employees for purposes of formulating and monitoring employment policies and programmes and income-generating schemes. It may also be useful to analyze the indicator jointly with the working poverty rate.



The EPR is typically relatively stable in the short term as compared with the unemployment rate and may vary over the medium-to-long term reflecting the impact of social, cultural, technological and economic changes as well as employment policy initiatives.

## EMPL-2. Unemployment rate (UR) - (M)

### Measurement objective and rationale

The unemployment rate (UR) signals to some extent 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.

### Method of computation

The UR is defined as the percentage of unemployed persons in the labour force. The indicator is calculated as follows:

$$UR(\%) = \frac{\text{Number of unemployed persons in the working age population}}{\text{Total number of persons in the labour force}} (\times 100)$$

For a given component group of the labour force, the UR is the percentage of this group that is unemployed. For example, the UR for youth would be calculated as:

$$UR_y(\%) = \frac{\text{Number of youth in the working age population who are unemployed}}{\text{Total number of youth in the labour force}} (\times 100)$$

### Concepts and definitions

For the definitions of unemployment and labour force, please refer to the section on concepts and definitions in the chapter introduction.

### Recommended data sources, metadata and disaggregations

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 are commonly used in many EUROSTAT Member States to supplement the information obtained in quarterly labour force surveys.

When the UR is published, appropriate metadata (or statistical documentation information) regarding the data should be provided to users. For the UR, it is recommended that information on the data source, data reference period, population coverage and geographic coverage be made available to

data users. Moreover, it is essential that data users be informed whether the standard unemployment definition (which applies all three criteria<sup>13</sup>) or the relaxed or partially relaxed definition of unemployment (where the job search criterion is not applied in all cases) is used.

Calculation of the unemployment rate by component groups such as by sex and age group provides a useful profile of the lack of access to employment of persons within key demographic groups of the economy. The UR may also be disaggregated by marital status, educational attainment, migrant status, race or ethnicity and for any other demographic groups that may demonstrate a differentiated access to employment or suffer from discrimination in the labour market. It is advisable to disaggregate according to the duration of unemployment such as long-term unemployment (or the number of persons who have been unemployed for a year or more), which tends to rise during economic downturns. Disaggregation by geographical area (especially rural/urban) is also highly desirable. Other indicators which provide additional detail on the unemployment situation are previous status in employment, industry and occupation group for persons formerly employed.

### Interpretation guidelines

Progress is measured by achieving acceptably low UR levels as per national circumstances. Different types of unemployment exist in an economy such that the UR in the best of circumstances can be expected to remain above zero. *Frictional unemployment* is always present as persons laid off from their jobs seek new ones and new entrants and re-entrants to the labour market begin their job search. If short-term (that is, monthly or quarterly) data are collected, *seasonal unemployment* trends may be observed in unadjusted data as unemployment levels vary predictably during the course of the year with changes in the seasons and calendar effects. *Cyclical unemployment* is periodic unemployment caused by fluctuations in the business cycle. Moreover, *structural unemployment*<sup>14</sup> which is characterized by long-term unemployment is also commonly present as industry-occupation staffing patterns shift over time.

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 underutilization. In developing countries, the significance and meaning of the unemployment rate is much more limited. In the absence of unemployment insurance, other unemployment relief schemes or social safety nets, the majority of persons of working age must engage in some form of economic activity, however insignificant or inadequate, often working in the informal economy and in self-employment characterized by poor working conditions and inadequate social protection.

The indicator is often used to analyze gender differences in labour force behaviour and trends. The unemployment rate is often higher for women than for men, but it varies by country. While labour markets have unique characteristics reflecting their particular social, cultural and economic factors, this general result points to the fact that worldwide, women are more likely than men to exit and re-

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<sup>13</sup> The only exception might be for future starters, that is, persons who are not working, but available to work and expect to start a job within a limited time period.

<sup>14</sup> Structural unemployment is defined as the coexistence and mismatching of the unemployed and existing job vacancies. It is associated with an insufficient pace of adaptation of production structures and employment to changes imposed by economic change. This type of unemployment is recurrent in the sense that it has existed for a long time and will continue to exist, despite processes that may mask its existence (e.g., emigration, artificial jobs ...). See the ILO terminology database, available at: <http://www.ilo.org/MultiTransWeb/Web.mvc>

enter the labour force for family-related reasons. Moreover, there is a general “crowding” of women into fewer occupations of lower decision-making status as compared with men so that women often find a smaller number of opportunities for employment. Other gender inequalities, for example in access to education and training, also negatively affect how women fare in finding jobs.

It is quite common in many developing countries for the UR in rural areas to be lower than that in urban areas given the higher incidence of poverty and weak or nonexistent safety nets in rural regions. Such circumstances force many rural dwellers to work in poor quality jobs, as unemployment is not a feasible option.

The UR is relatively volatile. It is measured monthly or quarterly in most developed countries with an established statistical system but less frequently in others. In order to conduct sound short-term trend analysis, it is advisable to seasonally adjust the UR to filter out usual seasonal fluctuations and typical calendar effects within the movements of the time series under review.

UR trends should be analyzed with changes in total output measured by the Gross Domestic Product (GDP). Healthy economic growth is often associated with a decrease in the UR, but this may depend on the point in the business cycle. At the start of economic expansion, the unemployment rate may actually increase as discouraged workers and other persons previously not in the labour force test the labour market by commencing a job search. Moreover, unemployment rates may move independently from the direction of GDP growth in periods of demographic changes when cohorts with markedly different unemployment rates grow larger or smaller in comparison to the overall working-age population. However, for many developed economies, a relatively stable link between changes in unemployment and GDP growth can be established, also known as the Okun’s elasticity.

Changes in the UR should also be analyzed jointly with measures of total labour supply and labour demand, in particular the labour force participation rate (LFPR)<sup>15</sup> and the employment-to-population ratio (EPR), respectively. In most cases, a decline in the UR is accompanied by an increase in the EPR. Occasionally however, the UR declines despite a fall in labour demand. In such cases, the decline in the EPR is outpaced by the decline in the LFPR, as unemployed and employed alike exit the labour force. This highlights the importance of analyzing the changes of the EPR and the LFPR, essential to understanding movements in the UR.

The UR should also be analyzed together with complementary measures of labour slack and labour underutilization, including time-related underemployment and discouraged workers<sup>16</sup> whose ranks often increase during periods of economic weakness.

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<sup>15</sup> The labour force participation rate, a key measure of labour supply, is defined as the labour force given as a percent of the working-age population.

<sup>16</sup> While no international statistical recommendation exists currently to define this population, current best practices suggest that *discouraged workers* refer to persons above a certain age (used to define the working age population) who during a specified reference period were without work and currently available for work, but did not look for work in the recent past (for example, the past four weeks) because they believed, for example that there were no jobs available, there were none for which they would qualify, or they had given up hope of finding employment. Thus, the concept of discouraged workers is often defined as persons without work and available for work who, in addition give specific reasons related to discouragement for not seeking work in the recent past. In addition to the criteria stated above, some best practices suggest adding two additional criteria to define discouraged workers: (1) a “desire for work” (or “willingness to work”) and (2) an

If job vacancy data are available, it is useful to analyze them jointly with the UR in order to evaluate the strength of the labour market and efficiency of labour market matching at a given point within the business cycle<sup>17</sup>. A period of high unemployment and low vacancies characterizes a recessionary period, while changing patterns such as increasingly higher unemployment rates associated with a given level of job vacancies over time suggesting decreasing efficiency in the labour market.

Complementary indicators regarding the proportion of the unemployed benefitting from unemployment insurance schemes or temporary work schemes (where they exist) are recommended to be analyzed together with the unemployment rate. Moreover, it is suggested that information on the availability of job skills development training and/or apprenticeships and the number of persons benefitting from such training/apprenticeships (including separately the number of unemployed who benefit) be collected and analyzed jointly with the unemployment rate. In order to monitor the effectiveness of such programmes, it is useful to monitor job placement of persons who have completed the training/apprenticeships.

Finally, household income and other measures of wellbeing (such as poverty incidence and working poverty<sup>18</sup>) may be analysed jointly with the unemployment rate to evaluate the relationship between these indicators and also measure the effectiveness of unemployment insurance schemes (where they exist) to adequately support the incomes of unemployed persons and members of their households.

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active job search at some time in the past over a long period, for example, at some time over the last year excluding the last four weeks.

<sup>17</sup> A Beveridge curve may be prepared which displays the relationship between the unemployment rate and the job vacancy rate (i.e., the number of unfilled jobs given as a percent of the labour force).

<sup>18</sup> The definition of working poverty to be used in such an analysis should refer to the number of persons in the labour force living in households with incomes below the nationally-defined poverty line, preferably based on real disposable household income, and refer to a nationally-defined real absolute poverty line if possible. The working poverty rate measure based on the labour force is used since we are interested in a broad measure that includes unemployment.

### EMPL-3. Youth not in employment, education or training, 15-24 years (NEET) - (M)

#### Measurement objective and rationale

Youth not in employment, education or training (NEET) provides a measure of youth who are outside the educational system, not in training and not in employment, and thus serves as a broader measure of potential youth labour market entrants than youth unemployment. It includes discouraged worker youth as well as those who are economically inactive due to disability and engagement in household chores, among other reasons. NEET is also a better measure of the current universe of potential youth labour market entrants as compared with the youth inactivity rate, as the latter includes those youth who are not in the labour force and are in education, and thus cannot be considered currently available for work.

#### Method of computation

The NEET is defined as the percentage of youth (15-24 years old) who are not in employment and not in education or training. The indicator is calculated as follows:

$$NEET(\%) = \frac{\text{Number of youth} - (\text{Number of youth in employment} + \text{Number of youth not in employment who are in education or training})}{\text{Total number of youth}} \times 100$$

The above formulation is particularly straightforward for data users, and it indicates that youth that are *both* in employment and education/training simultaneously should not be double counted when subtracted from the total number of youth. An *alternative formulation which may be best for data producers* is the following:

$$NEET(\%) = \frac{(\text{Number of unemployed youth} + \text{Number of youth not in the labour force}) - (\text{Number of unemployed youth who are in education or training} + \text{Number of youth not in the labour force who are in education or training})}{\text{Total number of youth}} \times 100$$

#### Concepts and definitions

For statistical purposes, the United Nations defines youth as those persons between the ages of 15 and 24 years, the age group recommended to define unemployed youth. In practice, many national statistics offices apply definitions of youth which differ from the international standard. Youth not economically active are youth who are neither employed nor unemployed.

According to the International Standard Classification of Education (ISCED),<sup>19</sup> *education* is defined as

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<sup>19</sup> See the International Standard Classification of Education (ISCED) developed by UNESCO, available at <http://www.uis.unesco.org/Education/Pages/international-standard-classification-of-education.aspx>

organized and sustained communication designed to bring about learning.<sup>20</sup> Youth in formal and nonformal educational programmes should be included in the scope of coverage for NEET. However, youth in informal educational programmes should not be included as they do not fall within the scope of ISCED for measuring participation in education.

*Formal education* is defined in ISCED as education that is institutionalized, intentional, and planned through public organizations and recognized private bodies and, in their totality, make up the formal education system of a country.

*Non-formal education*, like formal education is defined in ISCED as education that is institutionalized, intentional and planned by an education provider but is considered an addition, alternative and/or a complement to formal education. It may be short in duration and/or low in intensity and it is typically provided in the form of short courses, workshops or seminars.

*Informal learning*, which is to be excluded from the scope of NEET, is defined in ISCED as forms of learning that are intentional or deliberate, but not institutionalized. It is thus less organized and less structured than either formal or non-formal education. Informal learning may include learning activities that occur in the family, in the work place, in the local community, and in daily life, on a self-directed, family-directed or socially-directed basis.

The *training* concept as used in NEET refers to non-academic learning in which trainees acquire specific skills intended for vocational or technical jobs. *Vocational training* prepares trainees for jobs that are based on manual or practical activities, and for skilled operative jobs, both blue and white collar related to a specific trade, occupation or vocation. *Technical training* on the other hand imparts learning that can be applied in intermediate-level jobs, in particular those of technicians and middle managers.

The coverage of vocational and technical training includes only programmes that are solely school-based vocational and technical training. Employer-based training is, by definition, excluded from the scope of NEET.<sup>21</sup>

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<sup>20</sup> Concepts associated with this definition are defined as follows. *Educational activities*: deliberate activities, involving some form of communication intended to bring about learning. *Communication*: a relationship between two or more persons or an inanimate medium and persons, involving the transfer of information (messages, ideas, knowledge, strategies, etc.). *Learning*: individual acquisition of information, knowledge, understanding, attitudes, values, skills, competencies or behaviours through experience, practice, study or instruction. *Organized*: planned in a pattern or sequence with explicit or implicit aims. Instruction typically involves a teacher or trainer who is engaged in communicating and guiding knowledge and skills with a view to bringing about learning. *Sustained*: the learning experience has the elements of duration and continuity. For more information, please see ISCED-2011:

[http://www.uis.unesco.org/Education/Documents/UNESCO\\_GC\\_36C-19\\_ISCED\\_EN.pdf](http://www.uis.unesco.org/Education/Documents/UNESCO_GC_36C-19_ISCED_EN.pdf)

<sup>21</sup> Unpaid apprenticeships with an employer should be excluded, as by definition persons in NEET are not employed.

## **Recommended data sources, metadata and disaggregations**

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 can also be used to obtain the required data.

When the NEET is published, appropriate metadata (or statistical documentation information) regarding the data should be provided to users. For this indicator, it is recommended that information on the data source, data reference period, population coverage and geographic coverage be made available to data users. Moreover, the definition of youth (i.e. the age band(s)) as well as of the concepts of “in education and training” used to calculate the indicator should be made clear to data users. In some countries, more than one youth age group may be identified for policy purposes, for example ages 15-17 (adolescents of working age) and 18-24 (young adults).

The breakdown of NEET by sex can reveal differences in the extent to which young women and men are outside of the educational and training system and employment. A breakdown by geographical area (urban/rural) and by other relevant characteristics such as educational attainment<sup>22</sup> may inform policy actions for addressing the labour potential of the youth population.

Similarly, breakdowns by youth who are not economically active can provide insights regarding the reasons youth who are in this group and want a job are not in the labour force, including for example discouragement, disability, lack of transportation, domestic chores, etc.

## **Interpretation guidelines**

A high NEET rate as compared with the youth unemployment rate could mean that a large number of youths are discouraged workers, or do not have access to education or training. Some of these youths may be unable to participate in education or in employment due to severe disabilities, lack of transportation among other factors, and it is important to evaluate such reasons for potential policy interventions.

A high NEET rate among females as compared with males is often an indication that female youths are engaged in household chores such as washing clothes, cooking, cleaning and taking care of siblings. Such activities can be detected in the labour force survey questionnaire with appropriate probing of persons not in the labour force or through time-use surveys. When they involve excessive hours, such activities prevent female youth from going to school, thus placing young women at risk of not gaining the skills they need to succeed in the labour market.

While NEET includes unemployed and not-in-labour force youth who are not in training, it may be useful to analyze information on the availability of existing job skills development training and/or apprenticeships in the economy and the number of youth benefitting from such training/apprenticeships (including separately the number of unemployed youth who benefit) together with the NEET. If high NEET rates exist for females, the number and adequacy of

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<sup>22</sup> For more information, please refer to ISCED-2011:

[http://www.uis.unesco.org/Education/Documents/UNESCO\\_GC\\_36C-19\\_ISCED\\_EN.pdf](http://www.uis.unesco.org/Education/Documents/UNESCO_GC_36C-19_ISCED_EN.pdf)



training/apprenticeship programmes which specifically target female youth should be evaluated. Similarly, geographic regions (rural or urban areas) with high NEET rates should be analyzed for the existence or lack of training or apprenticeship opportunities and programmes. In order to monitor the effectiveness of such programmes, it is useful to monitor job placement of youth who have completed the training/apprenticeships.

If no job skills training or apprenticeship programmes exist, it could be useful to develop a core set of indicators related to the skills gap or requirements vis-à-vis jobs that exist or are likely to be in demand and that are suitable for youth at different levels of educational attainment. Such a core set of indicators could complement the NEET and provide information for policy action related to enhancing the youth labour supply and employability, for example through the development of targeted skills training or apprenticeship programmes.

#### EMPL-4. Informal employment rate (IER) - (M)

##### Measurement objective and rationale

Informal employment is a job-based concept and encompasses those jobs that generally lack basic social or legal protections or employment benefits<sup>23</sup> and may be found in the formal sector, informal sector or households. Nearly all categories of informal sector employment are also classified as informal employment. The informal employment rate (IER) is considered an important indicator regarding the quality of employment in an economy, and is relevant to developing and developed countries alike.

##### Method of computation

The informal employment rate (IER) is defined as the percentage of persons in total employment who are in informal employment. The indicator is calculated as:

$$IER(\%) = \frac{\text{Number of employed persons in informal employment}}{\text{Total number of employed persons}} \times 100$$

For a specific group of the employed population, the IER is the percentage of this group that are in informal employment. For example, IER for women would be calculated as:

$$IERw(\%) = \frac{\text{Number of employed women in informal employment}}{\text{Total number of employed women}} \times 100$$

##### Concepts and definitions

The definition of employment is provided in the introduction to this chapter.

Two separate but related concepts of informality are relevant for this indicator: employment in the informal sector and informal employment. These concepts refer to different aspects of the informalization of employment, as employment in the informal sector is an enterprise-based concept and informal employment is a job-based concept.

The *informal sector* consists of unregistered and/or small unincorporated private enterprises engaged in the production of goods or services for sale or barter.<sup>24</sup> The enterprises typically operate at a low

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<sup>23</sup> For the purposes of defining informal employment, employees are considered to have informal jobs if their employment relationship is, in law or in practice, not subject to national labour legislation, income taxation, social protection or entitlement to certain *employment benefits* such as advance notice of dismissal, severance pay, paid annual or sick leave, etc.).

<sup>24</sup> ILO: *Resolution concerning statistics of employment in the informal sector* adopted by the 15th ICLS (January 1993).

level of organisation, with little or no division between labour and capital as factors of production and on a small scale. Labour relations are based mostly on casual employment, kinship or personal and social relations. The fixed and other assets used do not belong to the production units as such but to their owners, and the units cannot engage in transactions or enter into contracts with other units, nor incur liabilities, on their own behalf. An unincorporated enterprise is a production unit that is not constituted as a separate legal entity independently of the individual (or group of individuals) who owns it, and for which no complete set of accounts is kept. An enterprise is unregistered when it is not registered under specific forms of national legislation (e.g. factories' or commercial acts, tax or social security laws, professional groups' regulatory acts). Issuing of a trade license or business permit under local regulations does not qualify as registration. An enterprise is considered small when its size in terms of employment is below a specific threshold (e.g. five employees) to be determined according to national circumstances.

*Employment in the informal sector* refers to the total number of jobs in informal sector enterprises. For practical reasons, the concept is measured as the number of persons employed in informal sector enterprises in their main job.<sup>25</sup>

The key elements of informal employment are that it is a job-based concept (focus on characteristics of the job) that includes: (1) all jobs (main and secondary jobs), (2) jobs in all types of production units, (3) workers in all status in employment, and (3) all branches of economic activity (agriculture and non-agriculture). This final element is particularly important in economies where subsistence agriculture exists.

*Informal employment*, which encompasses all of the jobs included in the concept of employment in the informal sector except those which are classified as formal jobs in informal sector enterprises, refers to those jobs that generally lack basic social or legal protections or employment benefits and may be found in formal sector enterprises, informal sector enterprises or households.<sup>26</sup> Formal sector enterprises include corporations (including quasi corporations, as defined by the System of National Accounts), non-profit organizations, government-owned unincorporated enterprises, and those unincorporated household enterprises that produce goods and services for sale or barter that do not form part of the informal sector. Informal sector enterprises are those defined by the 15th ICLS, but for measurement of informal employment they *exclude* households that employ paid domestic workers. Households are defined as production units that produce goods exclusively for their own final use (for example, subsistence farmers) and households employing paid domestic workers.

Informal employment includes the following types of jobs: (i) own-account workers employed in their own informal sector enterprises; (ii) employers employed in their own informal sector enterprises; (iii) contributing family workers, irrespective of whether they work in formal or informal sector enterprises; (iv) members of informal producers' cooperatives; (v) employees holding informal jobs in formal sector enterprises, informal sector enterprises, or as paid domestic workers employed by households; (vi) own-account workers engaged in the production of goods exclusively for own final use by their household, if considered employed given that the production comprises an important contribution to total household consumption.

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<sup>25</sup> ILO: *Resolution concerning statistics of employment in the informal sector* adopted by the 15th ICLS (January 1993).

<sup>26</sup> ILO: *Guidelines concerning a statistical definition of informal employment* adopted by the 17th ICLS (November 2003).

For operational reasons the concept is measured as the number of persons employed (and not the number of jobs) in informal employment in their main job. Where they exist, employees holding formal jobs in informal sector enterprises should be *excluded* from informal employment.

As regards (v) above, employees are considered to have informal jobs if their employment relationship is, *in law or in practice*, not subject to national labour legislation, income taxation, social protection or entitlement to certain employment benefits (e.g., advance notice of dismissal, severance pay, paid annual or sick leave, etc.). The reasons may be the following: non-declaration of the jobs or the employees; casual jobs or jobs of a limited short duration; jobs with hours of work or wages below a specified threshold; employment by unincorporated enterprises or by persons in households; jobs where the employee's place of work is outside the premises of the employer's enterprise; or jobs for which labour regulations are not applied, not enforced, or not complied with for any other reason. Operational criteria to identify employees in informal jobs include a lack of contributions to the social security system by the employer, a lack of entitlement to paid annual leave, or a lack of entitlement to paid sick leave. It should be noted that it is not sufficient to use the lack of a written employment contract or the casual/temporary nature of the work as a criterion for inclusion in informal employment.

As regards self-employed workers, the formal or informal nature of the job is established by criteria defined according to the worker's status in employment. In the case of employers, own-account workers and members of producers' cooperatives, the formal/informal nature of the job depends on characteristics of the enterprise, that is, they hold informal jobs if their enterprises are part of the informal sector. In the case of contributing family workers (CFW), employment is usually not subject to labour legislation, and there is no contractual relationship; thus, all CFW have informal jobs regardless of whether the enterprise is formal or informal. Finally, in the case of workers engaged in production of goods for own final use by household, employment is not subject to labour legislation and therefore all such workers have informal jobs.

### **Recommended data sources, metadata and disaggregations**

The preferred official national data source for this indicator is a household-based labour force survey which should include questions specifically designed to capture information on informal employment. Other household surveys with an appropriate employment module that include questions targeting informal employment can also be used to obtain the required data.

When the IER is published, appropriate metadata (or statistical documentation information) regarding the data should be provided to users. For the IER, it is recommended that information on the data source, data reference period, population coverage and geographic coverage be made available to data users. Moreover, it is essential that data users be informed regarding the operational definition of informal employment.

The breakdown of the IER by sex is useful for understanding gender differentials. The IER may also be disaggregated by age group (including child labour categories) to obtain the age profile of informal employment, and by other classifications including geographic area (urban/rural) and educational attainment. Disaggregating informal employment by status in employment and simultaneously by type of production unit (formal sector enterprises, informal sector enterprises, and households) is also recommended. New indicators may be obtained from these component categories.

Given its relatively low volatility, the frequency of data collection and dissemination for the IER may be less than that for other key employment opportunities indicators such as the unemployment rate.

### **Interpretation guidelines**

A decreasing IER indicates progress as regards the proportion of persons employed that generally lack basic social or legal protections or employment benefits, whether they work in the formal sector, informal sector, or households.

As informal employment is comprised of several component categories defined by status in employment and type of production unit, data users are advised to analyze the levels and changes in component rates which may differ in direction and magnitude from the overall change in the IER. Analysts are encouraged to track those components which are numerically important and those in which workers are most likely to be at risk of poverty or not covered by social safety nets. Thus, countries with high concentrations of self-employed workers may wish to monitor the trends in component groups such as contributing family workers and workers producing goods for own final use.

Employees in informal employment and its subcomponents (such as those in the formal sector, or paid domestic workers) may be of particular relevance to countries with a high proportion of employees in total employment where the informal sector is very small. Analysing the levels and trends of the component categories of informal employment will be critical to addressing policy needs.

It is also recommended that data users analyze the trends of the proportion of total employment in the informal sector and evaluate this jointly with changes in the IER to analyze the interaction between the two indicators. Employment in the informal economy is defined as the sum of employment in the informal sector and informal employment which is outside the informal sector. It is also useful to track this aggregate indicator to understand the full dimensions of informality in an economy.

The IER is an indicator which reflects the social, economic and legal framework context in an economy and may vary over the medium or long term depending on changes in this context. It may be helpful to analyze the IER jointly with other decent work indicators under Adequate Earnings and Productive Work, as informal employment does not by itself indicate poor employment-related income or earnings. Moreover, it may be helpful to analyze the IER with indicators such as those classified under Decent Hours and Stability and Security of Work.

## EMPL-5. Labour force participation rate (LFPR) - (A)

### Measurement objective and rationale

The first of six additional indicators (denoted by an “A”) within the Employment Opportunities substantive element, the labour force participation rate (LFPR) provides information about the relative size of the supply of labour currently available for the production of goods and services in an economy. It is a key indicator of the potential for economic growth, since the level of GDP and its growth rate depend in large measure on the quantity and quality of the labour force, as well as on capital resources and their utilization.

### Method of computation

The LFPR is defined as the number of persons in the labour force given as a percentage of the working age population. The indicator is calculated as:

$$LFPR(\%) = \frac{\text{Number of persons employed} + \text{Number of persons unemployed}}{\text{Total number of persons in the working age population}} \times 100$$

For a given group of the working age population, the LFPR is the percentage of this group that is in the labour force. For example, the LFPR for women would be calculated as:

$$LFPRw(\%) = \frac{\text{Number of women employed} + \text{Number of women unemployed}}{\text{Total number of women in the working age population}} \times 100$$

### Concepts and definitions

For definitions of employment, unemployment, labour force and working age population, please refer to the concepts and definitions section in the chapter introduction.

### Recommended data sources, metadata and disaggregations

The preferred official national data source for this indicator is a household-based labour force survey.<sup>27</sup> The population census and/or other household surveys with an appropriate employment module may also be used to obtain the required data.

When the LFPR is published, appropriate metadata (or statistical documentation information) regarding the data should be provided to users. For the LFPR, it is recommended that at a minimum information on the data source, data reference period, population coverage and geographic coverage

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<sup>27</sup> For additional information on the labour force survey, please refer to the recommended data sources and metadata section of the indicator EMPL-1. Employment-to-population ratio (EPR), presented above in this chapter.

be made easily available to data users.

The breakdown of this indicator by sex and age gives a more detailed profile of the demographic structure of the labour supply in the economy. Disaggregations by classifications such as geographic area (urban/rural) and educational attainment are also valuable for analysis. A well-educated labour force has a greater capacity to create and adapt new technologies, which are essential for increasing GDP and labour productivity, and in turn have a positive impact on real wages.

### **Interpretation guidelines**

As an indicator of the overall labour supply in an economy, the LFPR is generally relatively stable over the short term as compared with the unemployment rate and may vary over the medium-to-long term reflecting the impact of socio-cultural, demographic, economic, and legal framework changes as well as employment and educational policy initiatives. For example, increases in the legal school leaving age could reduce the value of the LFPR, while rising educational attainment among women and an increasing acceptance of women's participation in the labour market often leads to a higher LFPR. Net increases in flows of migrant workers into the labour force yield upward pressure on the LFPR.

There is no optimal value of the LFPR and the indicator alone is not sufficient for assessing the employment opportunities dimension of decent work. At the macroeconomic level, what is observed are average aggregated labour force participation rates for the whole population or subgroups (male, female, prime age, youth, etc.). Month-to-month changes or quarter-to-quarter changes in the LFPR should be evaluated using seasonally-adjusted data.

When analyzing LFPR disaggregated by age group, the data often present an inverted U shape as the labour supply is relatively small among younger workers, then increases as successive age groups enter the labour market, and finally declines as older workers begin to exit the labour force for reasons of retirement, health or other reasons. The LFPR disaggregated by sex *and* age group presented on the same graph often reveals a "double inverted U" effect, with men's LFPR taking on higher values than women's for each respective age group. This reflects the fact that in many economies, men are still more likely than women to participate in the labour force.

Youth LFPRs are more sensitive to economic changes than adult LFPRs. During times of economic downturns, young workers who lack the job experience and tenure of adult workers are often more likely to become unemployed and also to exit the labour force as they become discouraged by the lack of job prospects or decide to return to school to gain new skills.

As a measure of the labour supply in an economy, the LFPR should be analysed together with the employment-to-population ratio (EPR), a key measure of labour demand. The joint analysis of the changes of the EPR and the LFPR is essential to understanding movements in the unemployment rate (UR). The LFPR may also be analyzed together with measures of marginally attached workers such as discouraged workers whose ranks often increase during periods of economic weakness or recession.

It may be useful to analyze labour demand and supply indicators together with those of income (including employment-related income by status in employment) and earnings of employees.

Determinants of the LFPR can be decomposed into structural or long-term factors, cyclical factors and accidental factors. Structural factors include policy and legal determinants (e.g. flexibility of working-

time arrangements, taxation, family support, retirement schemes, apprenticeships, work permits, unemployment benefits, and minimum wage) as well as other determinants (e.g. demographic and cultural factors, level of education, technological progress, and availability of transportation).



## EMPL-6. Youth unemployment rate, 15-24 years (YUR) - (A)

### Measurement objective and rationale

The indicator reflects the extent to which youth are available to work and are seeking employment in a given economy. As youth often have little or no work experience, they usually suffer higher unemployment rates and have fewer employment opportunities (often in jobs with low pay and poor social protection) as compared with adults.

### Method of computation

The youth unemployment rate (YUR) is defined as the proportion of the youth labour force that is unemployed. The indicator is calculated as:

$$YUR (\%) = \frac{\text{Number of unemployed youths}}{\text{Total number of persons in the youth labour force}} \times 100$$

For a given group of unemployed youth, the YUR is the percentage of this group that is unemployed. For example, the YUR for females would be calculated as:

$$YURf (\%) = \frac{\text{Number of unemployed female youths}}{\text{Total number of females in the youth labour force}} \times 100$$

### Concepts and definitions

For definitions related to unemployment and labour force, please refer to the concepts and definitions section in the chapter introduction.

For statistical purposes, the United Nations defines youth as those persons between the ages of 15 and 24 years, the age group recommended to define unemployed youth. It is thus recommended that the youth labour force refer to all persons aged 15-24 who are either employed or unemployed. In practice, many national statistics offices apply definitions of youth which differ from the international standard.

### Recommended data sources, metadata and disaggregations

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 employment module can be used to obtain the required data.

When the YUR is published, appropriate metadata (or statistical documentation information) regarding the data should be provided to users. For the YUR, it is recommended that information on the definition of youth, data source, data reference period, population coverage and geographic coverage be made available to data users. Moreover, it is essential that data users be informed whether the standard unemployment definition (which applies all three criteria<sup>28</sup>) or the relaxed or partially relaxed definition of unemployment (where the job search criterion is not applied in all cases)

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<sup>28</sup> The only exception might be for future starters, that is, persons who are not working, but available to work and expect to start a job within a limited time period.

is used.

The breakdown of YUR by sex provides useful information on the different access to employment experienced by female and male youths. YUR may also be calculated for urban and rural areas, as well as for educational attainment groups, race or ethnicity and for other demographic groups that may demonstrate a differentiated access to employment or suffer from discrimination in the labour market. The YUR may also be disaggregated by age to enable the analysis of unemployment differences between component youth groups, for example, between those aged 15-17 (children) and 18-24 (young adults).

### **Interpretation guidelines**

As in the case of the unemployment rate, progress in the YUR is measured by achieving acceptably low levels. Given that frictional unemployment is always present as new entrants and re-entrants begin their job search and structural unemployment is also commonly present as economic activity-occupation staffing patterns shift over time, the YUR can be expected to remain above zero. For additional interpretation guidelines regarding the unemployment rate generally which also generally apply to the YUR, please see the section on the unemployment Rate (UR).

YUR is typically two to three times higher than the adult unemployment rates in economies throughout the world. One reason is that youth comprise the majority of first-time job seekers, who usually have difficulties finding employment due to lack of experience and inadequate access to job vacancy information. Another factor is that youth tend to have high job turnover rates and at each separation they risk a spell of unemployment.

There are gender differences in the unemployment experience of young persons. Female youth tend to have higher unemployment rates than their male counterparts, but this varies by country. Possible explanations are similar to those for the total female labour force described previously under EMPL-2. Like the UR, the YUR is relatively volatile. Monthly or quarterly changes in the YUR should be evaluated using seasonally-adjusted data.

As in the case of the UR, YUR trends should be analyzed jointly with changes in measures of total youth labour supply, in particular the youth labour force participation rate, and youth labour demand, especially the youth employment-to-population ratio. Declining youth unemployment rates could in some cases signal not an increasing labour demand for young workers, but a falling labour supply among youth.

It may also be useful to examine the YUR in relation to the following supplementary indicators: (a) ratio of the youth unemployment rate to the adult unemployment rate, (b) youth unemployment as a proportion of the total unemployment, and (c) youth unemployment as a proportion of the youth population.

Information on the availability of existing job skills development training and/or apprenticeships and the number of youth benefitting from such training/apprenticeships (including separately the number of unemployed youth who benefit) should be collected and analyzed jointly with the YUR. In order to monitor the effectiveness of such programmes, it is useful to monitor job placement of youth who have completed the training/apprenticeships.

## EMPL-7. Unemployment by level of educational attainment (ULEA) - (A)

### Measurement objective and rationale

Unemployment by level of educational attainment (ULEA) aims to provide insights into the human capital dimension of unemployment with potential implications for both employment and education policy.

### Method of computation

ULEA is defined as the number of unemployed persons with each specified level of educational attainment<sup>29</sup> given as a percentage of the total number of persons who are unemployed. The indicator is calculated as:

$$ULEA (\%) = \frac{\text{Number of unemployed persons with a given level of educational attainment}}{\text{Total number of persons who are unemployed}} \times 100$$

For a given group of the unemployed, the ULEA is the percentage of this group that has a given educational attainment level. For example, the ULEA for women would be calculated as:

$$ULEAw (\%) = \frac{\text{Number of unemployed women with a given level of educational attainment}}{\text{Total number of women who are unemployed}} \times 100$$

### Concepts and definitions

For the definition of unemployment, please refer to the introduction to this chapter. The six levels of educational attainment recommended are: (i) no schooling (less than 1 year), (ii) pre-primary level (less than primary), (iii) primary level, (iv) secondary level, (v) tertiary level and (vi) not classifiable by level of educational attainment. The levels are based on the following categories of the International Standard Classification of Education, 1997 (ISCED-97): no schooling (category X); pre-primary education (Level 0); primary education or first stage of basic education (Level 1); lower secondary or second stage of basic education (Level 2); upper secondary education (Level 3); post-secondary non-tertiary education (Level 4), first stage of tertiary education (Level 5); and second stage of tertiary education (Level 6).<sup>30</sup>

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<sup>29</sup> It is recommended that it be calculated using in the numerator the number of unemployed persons separately for *each one of the six levels of educational attainment* as defined in the section on concepts and definitions. Thus, there will be six distinct indicators calculated which will provide the percent distribution of the unemployed by educational attainment group. The value of the sixth level indicator should in most cases be rather small.

<sup>30</sup> United Nations Educational, Scientific and Cultural Organization (UNESCO) (1997): *International Standard Classification of Education (ISCED-97)*. [http://www.uis.unesco.org/TEMPLATE/pdf/isc97/ISCED\\_A.pdf](http://www.uis.unesco.org/TEMPLATE/pdf/isc97/ISCED_A.pdf)

## Recommended data sources, metadata and disaggregations

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 are commonly used in many EUROSTAT Member States to supplement the information obtained in quarterly labour force surveys.

When the ULEA is published, appropriate metadata (or statistical documentation information) regarding the data should be provided to users. For the ULEA, it is recommended that information on the data source, data reference period, population coverage and geographic coverage be made available to data users. It is essential that data users be informed whether the standard unemployment definition (which applies all three criteria<sup>31</sup>) or the relaxed or partially relaxed definition of unemployment (where the job search criterion is not applied in all cases) is used. Moreover, the definitions for the educational attainment levels should be provided to users.

The breakdown of this indicator by sex provides information for the analysis of gender differences of the unemployed by educational attainment. The indicator can also be analyzed for urban and rural areas, ethnicity and for other demographic groups that may demonstrate a differentiated access to education or employment and suffer from discrimination in the labour market.

## Interpretation guidelines

Progress is achieved when the ULEA for different educational attainment groups reaches acceptably low levels and when gaps between different educational attainment groups are also acceptably low. Achieving acceptable levels should be considered in the context of national circumstances. However, as in the case of the unemployment rate (UR), the ULEA will not adequately reflect labour underutilization. It should also be analyzed together with complementary measures of labour slack and labour underutilization, including time-related underemployment and discouraged workers<sup>32</sup> whose ranks often increase during periods of economic weakness or recession.

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<sup>31</sup> The only exception might be for future starters, that is, persons who are not working, but available to work and expect to start a job within a limited time period.

<sup>32</sup> While no international statistical recommendation exists currently to define this population, current best practices suggest that *discouraged workers* refer to persons above a certain age (used to define the working age population) who during a specified reference period were without work and currently available for work, but did not look for work in the recent past (for example, the past four weeks) because they believed, for example that there were no jobs available, there were none for which they would qualify, or they had given up hope of finding employment. Thus, the concept of discouraged workers is often defined as persons without work and available for work who, in addition give specific reasons for not seeking work in the recent past, as noted in the paragraph above. In addition to the criteria stated above, some best practices suggest adding two additional criteria to define discouraged workers: (1) a “desire for work” (or “willingness to work”) and (2) an active job search at some time in the past over a long period, for example, at some time over the last year excluding the last four weeks.

ULEA levels and trends over time should be analyzed together with the volume of unemployment in each educational attainment group to understand whether unemployment affects a large number of people in selected groups.

In many economies and particularly among developed economies, unemployment rates are often highest among persons with lower levels of educational attainment. This reflects the fact that the demand for workers with higher levels of educational attainment (with more professional and technical skills) is higher in many economies than that for workers with lower levels of schooling (less skilled workers). However, there is not always a clear relationship between educational attainment levels and unemployment. Upward pressure on unemployment rates among better-educated youth results from 'queuing' for high-quality jobs where 'job competition' may be strong. However, in countries where unemployment insurance schemes or social safety nets are weak or nonexistent, persons with lower levels of education without alternative income sources will need to find or create employment for themselves, resulting in downward pressure on the unemployment rate for this group in particular. This is especially true in rural areas where the educational infrastructure is weak and subsistence farming is prevalent. Such factors should be taken into consideration when interpreting results.

## EMPL-8. Employment by status in employment (ESE) - (A)

### Measurement objective and rationale

Employment by status in employment (ESE) provides information on how jobs held by persons are classified based on the associated type of economic risk and the type of authority of job incumbents over establishments and other workers.

### Method of computation

Employment by status in employment (ESE) refers to the number of workers in each category of the status in employment classification<sup>33</sup> given as a percentage of the employed population. The indicator is calculated as:

$$ESE (\%) = \frac{\text{Number of employed persons in a given status in employment category}}{\text{Total employed population}} \times 100$$

For a given group of the total employed population, the ESE is the percentage of this group that is classified in a given status in employment category. For example, the ESE for women would be calculated as:

$$ESE_w (\%) = \frac{\text{Number of employed women in a given status in employment category}}{\text{Total number of women who are employed}} \times 100$$

### Concepts and definitions

For the definition of employment, please refer to the introduction to this chapter. As defined by the International Classification of Status in Employment (ICSE-93), employed persons are classified according to the following categories: (a) employees; (b) employers; (c) members of producers' cooperatives; (d) own-account workers; (e) contributing family workers (formerly referred to as unpaid family workers); and (f) workers not classifiable by status.<sup>34</sup>

The groups in the ICSE-93 are defined with reference to the distinction between "paid employment" jobs and "self-employment" jobs. *Paid employment jobs* are those jobs where the incumbents hold explicit (written or oral) or implicit employment contracts which give them a basic remuneration which is not directly dependent upon the revenue of the unit for which they work. *Self-employment jobs* are those jobs where the remuneration is directly dependent upon the profits (or the potential for profits) derived from the goods and services produced (where own consumption is considered to be part of

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<sup>33</sup> It is recommended that it be calculated using in the numerator the number of employed persons separately for each one of the six levels of status in employment as defined in the section on concepts and definitions. Thus, there will be six distinct indicators calculated which will provide the percent distribution of the employed by status in employment group. The value of the sixth level indicator should in most cases be rather small.

<sup>34</sup> ILO: *Resolution concerning the International Classification of Status in Employment (ICSE)*. Adopted by the Fifteenth International Conference of Labour Statisticians (Geneva, January 1993). Available at: [http://www.ilo.org/wcmsp5/groups/public/---dgreports/---integration/---stat/documents/normativeinstrument/wcms\\_087562.pdf](http://www.ilo.org/wcmsp5/groups/public/---dgreports/---integration/---stat/documents/normativeinstrument/wcms_087562.pdf)

profits). The incumbents make the operational decisions affecting the enterprise, or delegate such decisions while retaining responsibility for the welfare of the enterprise.

*Employees* are all those workers who hold "paid employment jobs". It is often useful to differentiate between key components of the employee group. *Employees with stable contracts* are those "employees" who have had, and continue to have, an explicit (written or oral) or implicit contract of employment, or a succession of such contracts, with the same employer on a continuous basis. *Regular employees* are those 'employees with stable contracts' for whom the employing organization is responsible for payment of relevant taxes and social security contributions and/or where the contractual relationship is subject to national labour legislation.

*Employers* are those workers who, working on their own account or with one or a few partners, hold a "self-employment job", and, in this capacity, on a continuous basis have engaged one or more persons to work for them in their business as "employee(s)". The partners may or may not be members of the same family or household.

*Own-account workers* are those workers who, working on their own account or with one or more partners, hold a 'self-employment job' and have not engaged *on a continuous basis* any 'employees' to work for them during the reference period. The partners may or may not be members of the same family or household.

*Members of producers' cooperatives* are workers who hold a "self-employment" job in a cooperative producing goods and services, in which each member takes part on an equal footing with other members in determining the organization of production, sales and/or other work of the establishment, the investments and the distribution of the proceeds of the establishment amongst their members.

*Contributing family workers* are those workers who hold a 'self-employment' job in a market-oriented establishment operated by a related person living in the same household, who cannot be regarded as partners, because their degree of commitment to the operation of the establishment, in terms of working time or other key factors, is not at a comparable level to that of the head of the establishment.

### **Recommended data sources, metadata and disaggregations**

The preferred official national data source for this indicator is a household-based labour force survey (LFS). This instrument permits the estimation of the number of persons employed. It generally covers all workers, including all self-employed persons and often allows disaggregations of data by demographic variables such as sex, age group and in some cases, ethnic group.

Other household surveys with an appropriate employment module may also be used to obtain the required data to calculate the ESE, and employment-related administrative records may serve as an additional source. Nonetheless, such sources may have limitations related to periodicity, geographic coverage or worker coverage about which data users should be made aware.

When the ESE is published, appropriate metadata (or statistical documentation information) regarding the data should be provided to users. For the EPR, it is recommended that information on the data source, data reference period, population coverage, definition of status of employment categories and geographic coverage be made easily available to data users.

Disaggregation of the ESE by component groups such as sex, age group, and urban and rural areas, provides measures by which to evaluate the relative differences in employment cross-tabulated by

status in employment and simultaneously a selected key variable. Disaggregation by age group and particularly for youth is especially relevant, given that in many developing countries youth are more likely to be classified as contributing family workers, a group associated with a high risk of decent work deficits. Care must be taken to ensure the statistical reliability of such cross-tabulations if the estimates are derived from a sample survey.

### **Interpretation guidelines**

Classification of an employed person into any of the aforementioned status in employment categories by itself is not an indication of decent work and data users are encouraged to analyze the indicator with complementary indicators which provide information regarding decent work deficits among the component categories. However, to the extent that the categories reveal a degree of economic risk and type of authority, the categories by their definitions do suggest some important differences.

The category of *employees* is a heterogeneous group that includes both formal and informal workers and workers in the formal and informal sectors, such that analyzing the informal characteristics of employees is recommended together with analysis of the extent to which employees have stable versus unstable contracts and the extent to which there are regular versus irregular employees in the economy. Regular employees are the most privileged component group (among employees) while irregular employees and those with unstable contracts are characterized by decent work deficits in this particular dimension.

Each of the ICSE categories corresponding to self-employed jobs (that is, employers, own-account workers, members of producers' cooperatives and contributing family workers) is characterized as having a greater degree of economic risk than that of employees (since their remuneration is directly dependent upon the profits or potential for profits), but employers by definition hold positions of authority over employees while own-account workers and producers' cooperatives may supervise other workers including employees<sup>35</sup>.

There is therefore not a clear hierarchy among these self-employed and employee groups in terms of *both* economic risk and authority. Nonetheless, contributing family workers are viewed as having the highest economic risk and least authority of all the groups, and are therefore at greatest risk of decent work deficits in this dimension.

The analysis of the indicator disaggregated by sex is recommended in order to understand the different experience of men and women as regards status in employment. For example, in countries where contributing family workers are prevalent, it is common for the majority to be comprised of women. It follows that these female workers experience a higher degree of economic risk and lack of authority vis-à-vis other status in employment categories. The proportions and number of workers by sex should be evaluated in each status of employment category.

Since employment by status in employment reflects the structure of employment, changes in the indicator can be expected to occur slowly over time. Economic development is often accompanied by an increasing proportion of employees and a decline in self-employment jobs. Some self-employment

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<sup>35</sup> According to the ICSE-93, own-account workers may supervise employees but not on a continuous basis.



groups, such as own-account workers or contributing family workers are often associated with small production units or even subsistence agriculture (in the case of own-account workers) in developing countries while employees can be found in production units of all sizes. Small-scale enterprises are at greater risk of lacking access to credit and experiencing low economies of scale and low productivity compared with large enterprises, but at the same time they may be in a better position to seize new business opportunities in niche markets and create more jobs. It is therefore useful to analyze the indicator jointly with the size of production units associated with employment by status in employment.

Moreover, it is recommended that the indicator be analyzed together with complementary indicators disaggregated by status in employment which may point to decent work deficits in key areas including informal employment, employment-related income (or earnings in the case of employees), and excessive hours of work.<sup>36</sup> To the extent that certain status-in-employment categories (e.g., contributing family workers) are associated with notable decent work deficits, progress in the indicator would be achieved by a declining trend in that particular component (e.g., fewer CFW relative to total employment) and/or by progress made vis-à-vis the complementary indicators which establish decent work deficits in that worker category.

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<sup>36</sup> If possible, the share of workers in each category covered by social protection contingencies (job-related old-age pension, job-related health insurance scheme) could also be analyzed. Some labour force surveys or employment-related household surveys will contain questions on these topics.

## EMPL-9. Proportion of own-account workers and contributing family workers in total employment (POACFW) - (A)

### Measurement objective and rationale

The indicator provides information regarding the proportion of workers whose status in employment may place them at higher degree of economic risk than employees and/or whose authority may be less than that of other status in employment groups. It is an aggregation of two of the components of indicator EMPL-8. Employment by status in employment (ESE).<sup>37</sup>

### Method of computation

POACFW is defined as the percentage of total employed persons who are own-account workers or contributing family workers. It is calculated as:

$$POACFW (\%) = \frac{\text{Total number of own account workers} + \text{Total number of contributing family workers}}{\text{Total employed population}} \times 100$$

For a given group of the total employed population, the POACFW is the percentage of this group that is classified as own-account workers and contributing family workers. For example, the POACFW for women would be calculated as:

$$POACFW_w (\%) = \frac{\text{Number of women own account workers} + \text{Number of women contributing family workers}}{\text{Total number of women who are employed}} \times 100$$

### Concepts and definitions

For the definition of employment, please refer to the introduction of the chapter. For the definitions associated with own account workers and contributing family workers, please see the section on concepts and definitions under indicator EMPL-8, Employment by status in employment (ESE).

### Recommended data sources, metadata and disaggregations

The preferred official national data source for this indicator is a household-based labour force survey

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<sup>37</sup> It should be noted, as indicated under indicator EMPL-8, Employment by status in employment (ESE), that status in employment categories other than own-account workers and contributing family workers may also experience decent work deficits. For example, employees with unstable contracts and irregular employees do not meet the standards of decent work in that dimension.

(LFS). Other household surveys with an appropriate employment module may also be used to obtain the required data to calculate the POACFW, and employment-related administrative records may serve as an additional source. Nonetheless, such sources may have limitations related to periodicity, geographic coverage or worker coverage about which data users should be made aware.

When the POACFW is published, appropriate metadata (or statistical documentation information) regarding the data should be provided to users. For the POACFW, it is recommended that information on the data source, data reference period, population coverage, definitions used for own-account workers and contributing family workers, and geographic coverage be made easily available to data users.

Disaggregation of the POACFW by component groups such as sex and urban and rural areas provides information to help evaluate the relative differences within the aggregate group of own-account and contributing family workers by one of these key variables. Care must be taken to ensure the statistical reliability of such cross-tabulations if the estimates are derived from a sample survey.

### **Interpretation guidelines**

As stated under indicator EMPL-8, Employment by status in employment (ESE), contributing family workers (CFW) (workers who hold a self-employment' job in a market-oriented establishment operated by a related person living in the same household) are viewed as having the highest economic risk and least authority of all the status in employment groups, and are therefore at greatest risk of decent work deficits in this dimension.

By virtue of their status in employment, CFW are classified in informal employment reflecting the fact that they are likely to hold jobs without clearly agreed working conditions or social protection. In many economies, contributing family workers tend to be women, warranting disaggregation and analysis of the indicator by sex.

Some own-account workers (that is, workers holding self-employment jobs who may be working alone or with one or more partners and haven't hired any employees on a continuous basis) may have inadequate employment conditions (for example, inadequate employment-related income and excessive hours) and jobs of short duration. This may be especially true in developing countries among many own-account informal sector enterprises and own-account subsistence agriculture production units.

Thus, high levels of the indicator may point to inadequate employment conditions. However, in order to establish *actual decent work deficits* among own-account workers and CFW, the indicator should be analyzed together with other indicators, including informal employment of own-account workers and CFW, employment-related income of such workers relative to cost of living, excessive hours and social protection coverage. To the extent that the indicator is associated with decent work deficits, progress in the indicator would be achieved by a declining trend over time and/or by progress made as regards the complementary indicators which establish decent work deficits in specific dimensions.

## EMPL-10. Share of wage employment in non-agricultural employment (SENAE) - (A)

### Measurement objective and rationale

The share of wage employment in non-agricultural employment (SENAE) provides information about the proportion of employees in the non-agricultural sector. Employees may be exposed to less economic risk than some categories of self-employed workers; however this applies primarily to employees with stable contracts and in particular to regular employees, as defined by the International Classification of Status in Employment, ICSE-93. Regular employees are the most privileged component group of employees while irregular employees and those with unstable contracts are characterized by decent work deficits in this particular dimension.

### Method of computation

SENAE is defined as the percentage of total employment in the non-agricultural sector that is represented by employees. The indicator is calculated as:

$$SENAE(\%) = \frac{\text{Number of employees in the non agricultural sector}}{\text{Total employment in the non agricultural sector}} \times 100$$

For a given group of the total employed population in the non-agricultural sector, the SENAE is the percentage of this group that is classified as employees. For example, the SENAE for women would be calculated as:

$$SENAE(\%) = \frac{\text{Number of women employees in the non – agricultural sector}}{\text{Total women in employment in the non – agricultural sector}} \times 100$$

### Concepts and definitions

The definition of employment is provided in the introduction to this chapter. For the definition of employees, please see the section on concepts and definitions under indicator EMPL-8, Employment by status in employment (ESE).

The indicator is defined in part by the classification of economic activity, in particular, the non-agricultural sector. The classification by economic activity refers to the main activity of the establishment in which a person worked during the reference period. Thus, the branch of economic activity of a person does not depend on the specific duties or functions of the person's job, but on the characteristics of the economic unit in which the person works.

If possible, the classification used should be the International Standard Industrial Classification of All Economic Activities (ISIC), which provides a framework for the international comparison of national statistics, or a national classification that allows easy conversion to the ISIC. Moreover if the ISIC is used, it is best that the latest version be used, that is, ISIC Revision 4.

The non-agricultural sector refers to industry and services activities. Industry includes mining and quarrying (including oil production), manufacturing, construction, electricity, gas, and water (categories B-F in ISIC Rev. 4). Services include wholesale and retail trade and restaurants and hotels; transport, storage, and communications; financing, insurance, real estate and business services; and community, social and personal services (categories G-U in ISIC Rev. 4).<sup>38</sup>

### **Recommended data sources, metadata and disaggregations**

The preferred official national data source for this indicator is a household-based labour force survey (LFS). A LFS permits the estimation of the number of *persons employed* and generally allows disaggregations of data by economic activity and demographic variables such as sex, age group, etc.

Other household surveys with an appropriate employment module may also be used to obtain the required data to calculate the indicator, and employment-related administrative records may serve as an additional source. Nonetheless, such sources may have limitations related to periodicity, geographic coverage or worker coverage about which data users should be made aware.

An employment-based establishment survey (intended to capture the *number of jobs* by economic activity) with good coverage of non-agricultural sectors may be considered as a secondary option. However, this type of instrument excludes self-employment from the survey scope and may not allow disaggregation of data by sex.

When the SENA is published, appropriate metadata (or statistical documentation information) regarding the data should be provided to users. For the SENA, it is recommended that information on the data source, data reference period, population coverage, definition of the non-agricultural sector, and geographic coverage be made easily available to data users.

Disaggregation of the SENA by variables such as sex, age group, educational attainment, economic activity group within the non-agricultural sector, working time (hours actually worked or hours paid for and working time arrangements), and establishment size may provide useful information for analyzing the relative differences between employees in non-agricultural employment by these key variables. Care must be taken to ensure the statistical reliability of such cross-tabulations if the estimates are derived from a sample survey.

In order to help understand the nature of employee contracts in the economy and thus interpret appropriately the changes in the indicator, it is recommended that the total number of employees in the non-agricultural sector be disaggregated by those with (1) stable contracts and (2) regular employees.

### **Interpretation guidelines**

Classification of an employed person as an employee or engaged in a given economic activity or aggregate grouping (in this case, non-agricultural employment) by itself is not an indication of decent work, and data users are encouraged to analyze the indicator jointly with complementary indicators such as earnings and excessive hours of employees.

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<sup>38</sup> UNSD: *International Standard Industrial Classification of All Economic Activities (ISIC) Rev. 4*. (New York, 2008). Available at: <http://unstats.un.org/unsd/cr/registry/regcst.asp?Cl=27>

The category of employees is a heterogeneous group that includes both formal and informal employees and employees in the formal and informal sectors, such that analyzing the incidence of informality among this category of workers is recommended. Moreover, it is recommended that data users analyze the extent to which employees have stable versus unstable contracts and also the extent to which regular versus irregular employees are employed in the economy. Regular employees are the most privileged component group of employees while irregular employees and those with unstable contracts are characterized by decent work deficits in this particular dimension.

The analysis of the indicator disaggregated by sex is recommended in order to measure the degree to which women have equal access to paid employment in the industry and services sectors. It also provides information on the openness of labour markets to women in these sectors. In this case too, joint analysis with complementary indicators (e.g., earnings, excessive hours) and type of employees is recommended.

Changes in the indicator can be expected to occur slowly over time given that status in employment and economic activity classification categories reflect the structure of employment. Economic development is often accompanied by an increasing proportion of employees and a decline in self-employment jobs. Employees can be found in establishments of all sizes and it is therefore useful to analyze the indicator by establishment size.

In those economies where employees are associated with notable decent work deficits (because of a high proportion of unstable contracts and irregular employees and/or due to excessive hours, low earnings, and high rates of informal employees), progress would not be achieved by an increase in the indicator but rather by progress made vis-à-vis the indicators which establish the decent work deficits among the group (for example, by achieving higher proportions of stable and regular contracts among employees). Where employees are not associated with such decent work deficits, progress would be achieved by an increase in the indicator.

The value of the indicator could decrease through an increase in the number of employed persons engaged in self-employment, for example as a result of rural-urban migration. In recent years, with urbanization and rapid rural-urban migration, non-agricultural wage employment has not been able to keep pace with urban population growth. Many urban workers, unsuccessful in finding suitable wage employment, rely on self-employment to support themselves and their families.

## Legal Framework Indicator 2. Government commitment to full employment

### Scope

An employment policy contains the State's strategy to achieve full productive and freely chosen employment, to overcome unemployment and underemployment, to stimulate economic growth and development, raise levels of living, and meet workforce requirements.

### Selected ILS on employment policy

The Employment Policy Convention, 1964 (No. 122), a governance Convention, requires ratifying states to declare and pursue an *active employment policy* designed to promote full, productive and freely chosen employment. This policy needs to take due account of the stage and level of economic development and the mutual relationships between employment objectives and other economic and social objectives, and is pursued by methods that are appropriate to national conditions and practices. Convention No. 122 also requires ratifying states to consult workers' and employers' representatives and representatives of other persons affected such as those working in the rural sector and the informal economy.

### Information provided on the indicator

<b>Law, policy or institutions:</b> Information concerning the national law or stated government policy committing to full employment; the structure in place to implement/stimulate full employment, including its membership and date of last meeting.
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<b>Evidence of implementation effectiveness:</b> Comments of the ILO supervisory bodies (if any).
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<b>Ratification of ILO Conventions:</b> Employment Policy Convention, 1964 (No. 122).
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### Additional sources of information

#### *ILO sources*

- CEACR: General Survey concerning employment instruments in light of the 2008 Declaration on Social Justice for a Fair Globalization, ILC, 99th Session, 2010 ([http://www.ilo.org/wcmsp5/groups/public/---ed\\_norm/---relconf/documents/meetingdocument/wcms\\_123390.pdf](http://www.ilo.org/wcmsp5/groups/public/---ed_norm/---relconf/documents/meetingdocument/wcms_123390.pdf)) and Article 19 Government report (if Convention No. 122 has not been ratified);
- Employment Policy Department (EMPLOYMENT) website (<http://www.ilo.org/employment/lang-en/index.htm>).

## Legal Framework Indicator 3. Unemployment insurance

### Scope

Unemployment insurance aims to provide income support, usually over a limited period, to those who face temporary unemployment.

### Selected ILS on unemployment insurance

The Social Security (Minimum Standards) Convention, 1952 (No. 102) and the Employment Promotion and Protection against Unemployment Convention, 1988 (No. 168) are applicable in situations where earnings of a protected person, who is capable of, and available for, work are suspended or lost due to the inability to obtain suitable employment. Unemployment benefits are usually granted (1) after completion of a certain qualifying period of contributions or employment, and (2) for a limited period; the amount paid may depend on the previous salary or be a flat rate. Convention No. 102 covers 9 branches of social security, including unemployment. Part IV provides for periodic payments, corresponding to at least 45% of the reference wage. Convention No. 168 covers cases of full unemployment, partial unemployment (temporary reduction in the normal statutory hours of work) and suspension or reduction of earnings due to a temporary suspension of work (without break in the employment relationship). It provides for periodic payments, corresponding to at least 50% of the reference wage. Beyond the initial period, it is possible to apply special rules of calculation; the total benefits to which the unemployed may be entitled must however guarantee them healthy and reasonable living conditions in accordance with national standards.

### Information provided on the indicator

<b>Law, policy or institutions:</b> Information on national law requiring unemployment insurance; coverage of the law; information on who is considered unemployed under the law.
<b>Qualifying Conditions:</b> Duration/number of contributions, or other, to qualify?
<b>Benefits (level and duration):</b> Replacement level of the unemployment insurance and duration.
<b>Financing:</b> How are the benefits financed?
<b>Evidence of implementation effectiveness:</b> Comments by ILO supervisory bodies, if any.
<b>Coverage of workers in law:</b> Broad estimate of the workforce covered by the law.
<b>Coverage of workers in practice:</b> See SECU 1.
<b>Ratification of ILO Conventions:</b> The Social Security (Minimum Standards) Convention, 1952 (No. 102), Part IV and the Employment Promotion and Protection against Unemployment Convention, 1988 (No. 168).

### Additional sources of information

#### **ILO sources**

- CEACR: General Survey concerning social security instruments in light of the 2008 Declaration on Social Justice for a Fair Globalization, ILC, 100th Session, 2011: [http://www.ilo.org/ilc/ILCSessions/99thSession/reports/WCMS\\_152602/lang--en/index.htm](http://www.ilo.org/ilc/ILCSessions/99thSession/reports/WCMS_152602/lang--en/index.htm) and Article 19 reports
- SOCPRO website : <http://www.ilo.org/secsoc/lang--en/index.htm>
- GESS Country Profiles : <http://www.socialsecurityextension.org/gimi/gess/ShowCountryProfiles.do?aid=2>

#### **Other sources**

- ISSA Country Profiles: <http://www.issa.int/aiss/Observatory/Country-Profiles>
- Social security throughout the world: <http://www.socialsecurity.gov/policy/docs/progdesc/ssptw/>



## Chapter 2. Adequate earnings and productive work

In order to be consistent with the concept of decent work, work has to be productive and provide workers with adequate earnings. One of the objectives of the ILO, as set down in the Declaration of Philadelphia, is to ensure “a just share of the fruits of progress to all, and a minimum living wage to all employed and in need of such protection”. Equally, promoting adequate earnings and productive work is a central element of the Decent Work Agenda.

Eight statistical indicators are introduced in this section to help countries to monitor the progress they have made in achieving this objective. One of these indicators is also a Millennium Development Goal (MDG) indicator, namely the working poverty rate. While the MDG indicators were conceived as part of a broad development agenda targeting developing countries during the period 2000-2015, the inclusion of the working poverty rate here among the full set of decent work indicators is intended to allow countries at all levels of development to monitor working poverty levels and trends. The legal framework indicator corresponding to these statistical indicators is the statutory minimum wage. These statistical and legal framework indicators are presented in Table 2 below.

**Table 2: Overview of decent work indicators for adequate earnings, employment-related income and productive work**

Statistical Decent Work Indicators	Income concept	Coverage	Measure of central tendency	Preferred data source
EARN-1. Working poverty rate, two indicators: (1) Working poverty Rate of employed persons (WPR-E) – (M); (2) Working poverty rate of the labour force (WPR-LF) – (M)	Total household income / consumption	(1) Total employed population; and (2) Total economically active population or labour force	Mean equivalized per capita household income	(1) Household Income and expenditure Survey (HIES) or Living Standard Measurement Survey (LSMS), each with an employment module (2) Labour Force Survey (LFS) with household income module
EARN-2. Employees with Low Pay Rate (ELPR) – (M)	Gross earnings	All employees	Low-pay threshold based on median hourly earnings	(1) Labour Force Survey (LFS) with earnings module (2) Establishment survey on employment and earnings
EARN-3. Mean Hourly Earnings in Selected Occupations (MHE) – (A)	Gross earnings	All employees	Mean, per hour	(1) Labour Force Survey (LFS) with earnings module (2) Establishment survey on occupational earnings
EARN-4. Mean Real Earnings – (A)	Gross earnings	All employees	Mean, per month	(1) Labour Force Survey (LFS) with earnings module (2) Establishment survey on employment and earnings

EARN-5. Minimum Wage as a Percentage of the Median Wage – (A)	Gross earnings	All employees	Median monthly wage as the denominator	(1) Labour Force Survey (LFS) with earnings module, (2) Establishment surveys on employment and earnings (3) Wage orders for minimum wage rates
EARN-6. Manufacturing Wage Index – (A)	n/a (Index of wage rates)	All employees in manufacturing	n/a (Index of wage rates)	Establishment survey on wage rates by economic activity (manufacturing)
EARN-7. Employees with Recent Job Training – (A)	n/a	All employees	n/a	Labour Force Survey (LFS) with module on job training
<b>Legal Framework Indicator:</b> L3- Statutory Minimum Wage				

Since many of the indicators share common concepts, this introduction provides some of the key concepts and definitions.

**Earnings:** The concept of earnings, as applied in wages statistics, relates to gross remuneration in cash and in kind paid to employees, as a rule at regular intervals, for time worked or work done together with remuneration for time not worked, such as annual vacation, other types of paid leave or holidays. *Gross remuneration* implies the total before any deductions are made by the employer in respect of taxes, contributions of employees to social security and pension schemes, life insurance premiums, union dues and other obligations of employees. Earnings should **include**: direct wages and salaries, remuneration for time not worked (excluding severance and termination pay), bonuses and gratuities and housing and family allowances paid by the employer directly to this employee. Earnings **exclude** employers' contributions in respect of their employees paid to social security and pension schemes and also the benefits received by employees under these schemes. They also exclude severance and termination pay.<sup>39</sup> Earnings estimates for the purposes of the indicators in this chapter should be calculated in real terms, that is, deflated for inflation **except** the indicator, "EARN-5, Minimum Wage as a Percentage of the Median Wage" which uses nominal values and also a median monthly wage in the denominator. The concept is relevant for decent work indicators EARN-2, EARN-3, EARN-4 and EARN-5.

**Working time concepts<sup>40</sup>:** Different working time concepts may be applied, depending on the source of data. If a household or labour force survey is used, it would be preferable to use the concept of *hours actually worked*, the key concept of working time defined for statistical purposes applicable to all jobs and to all working persons. Hours actually worked is the time spent in a job for the performance of activities that contribute to the production of goods and/or services during a specified short or long reference period. Hours actually worked measured within the SNA production boundary includes time spent directly on, and in relation to, productive activities; down time; and resting time.

<sup>39</sup> ILO: *Resolution concerning an integrated system of wage statistics*, adopted by the Twelfth International Conference of Labour Statisticians (Geneva, October 1973). Available at : [http://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/normativeinstrument/wcms\\_087496.pdf](http://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/normativeinstrument/wcms_087496.pdf)

<sup>40</sup> See the Resolution concerning the measurement of working time adopted by the 18th International Conference of Labour Statisticians, available at: [http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS\\_112455/lang--en/index.htm](http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS_112455/lang--en/index.htm)

If an establishment survey is used, it is preferable to use the concept of **hours paid for**. *Hours paid for* applies to a paid-employment job and to a self-employment job paid on the basis of time units (*within the SNA production boundary*). For a paid-employment job, hours paid for is:

- (a) The time for which persons have received payment from their employer (at normal or premium rates, in cash or in kind) during a specified short or long reference period, regardless of whether the hours were actually worked or not;
- (b) This **includes** time paid but not worked such as paid annual leave, paid public holidays and certain absences such as paid sick leave.
- (c) This **excludes** time worked but not paid by the employer, such as unpaid overtime, and absences that are not paid by the employer, such as unpaid educational leave or maternity leave that may be paid through transfers by government from social security systems.

**Overtime hours of work** applies to all types of jobs (*within and beyond the SNA production boundary*) and is defined as:

- (a) the hours stipulated as overtime in a contract during a specified short reference period, plus hours actually worked in excess of contractual hours of work, if these exist; or
  - (b) the hours actually worked in excess of hours usually worked in a job where no contractual hours exist.
- (2) Overtime hours of work **excludes** hours actually worked in excess of contractual hours of work as a result of rotation periods in established work arrangements (such as flexitime or shift work) in a short or long reference period.
- (3) Overtime hours of work for paid-employment jobs may be paid or unpaid. Payment maybe in cash at the same rate as the other hours in the job or in cash at higher rates; or in kind and/or in the form of compensation with time off.

**Consumer Price Index (CPI):** The Consumer Price Index measures changes over time in the general level of prices of consumer goods and services that households acquire, use or pay for consumption. It is constructed as a weighted average of a large number of elementary aggregate indices. Each of the elementary aggregate indices is estimated using a sample of prices for a defined set of goods and services obtained in, or by residents of, a specific region from a given set of outlets or other sources of consumption goods and services. The index aims to measure the change in consumer prices over time or it may also aim to measure the effects of price changes on the cost of achieving a constant standard of living (i.e. level of utility or welfare). This concept is called a cost-of-living index (COLI). For this indicator, the CPI is used to adjust for inflation and to provide the real average hourly earnings in a given occupation.<sup>41</sup> See CONT-5 for a more detailed definition of CPI. Information on the CPI is needed to convert nominal wages into real wages in EARN-3 and EARN-4.

**Employed persons:** Indicator EARN-1 contains two indicators, the first of which is computed for all employed persons. Persons of working age are classified as employed if, during a short reference period such as a day or a week, (i) they did some work (even for just one hour) for pay, profit or family gain, in cash or in kind; or (ii) they were attached to a job or had an enterprise from which they were ‘temporarily’ absent during this period (for such reasons as illness, maternity, parental leave, holiday, training, industrial dispute). Employed persons include those persons of working age who worked for at least one hour during the reference period as contributing family workers (formerly referred to as

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<sup>41</sup> ILO, IMF, OECD, Eurostat, UN, and WB: *Consumer price index manual. Theory and practice*. (Geneva, 2004); and UNECE: *Practical guide to producing Consumer Price Indices* (Geneva, 2009).

unpaid family workers) working in a family business.<sup>42</sup>

It should be noted that the concept of employment does not include household members engaged in the provision of unpaid services for their own family use, such as cooking at home or caring for their own children as well as volunteers providing services to households for their own final use. These activities are not included within the production boundaries of the System of National Accounts (SNA).<sup>43</sup> However, persons engaged in the production of economic goods and services for their own and household consumption should be considered to be in self-employment if such production comprises an important contribution to the total consumption of the household.<sup>44</sup> For purposes of measuring working poverty (first indicator), it is advisable to use measure main employment status over a long observation period such as the preceding 12 months that should coincide with the household income or consumption expenditure observation period.

The ***economically active population (EAP)*** 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. According to these systems, the production of economic goods and services includes all production and processing of primary products whether for the market for barter or for own consumption, the production of all other goods and services for the market and, in the case of households which produce such goods and services for the market, the corresponding production for own consumption.<sup>45</sup>

Two useful measures of the economically active population are the usually active population measured in relation to a long reference period such as a year and 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 ***usually active population*** comprises all persons above a specified age whose main activity status as determined in terms of number of weeks or days during a long specified period (such as the preceding 12 months or the preceding calendar year) was employed or unemployed as previously defined. Where this concept is considered useful and feasible the usually active population may be subdivided as employed and unemployed in accordance with the main activity. Note that if a continuous labour force survey is not available with which to establish main labour force status over the course of the full preceding year, for purposes of measuring working poverty (second indicator) it is advisable to use the usually active population concept.

The ***labour force*** or "***currently active population***" comprises all persons who fulfil the requirements for inclusion among the employed or the unemployed as previously defined. It therefore consists of all persons of working age who were either employed or unemployed.

***Employees:*** Indicators EARN-2, EARN-3, EARN-4, EARN-5 and EARN-7 are usually computed for all employees. Employees are all those workers who hold 'paid employment jobs'. These are jobs where the incumbents hold explicit (written or oral) or implicit employment contracts which give them a basic remuneration that is not directly dependent upon the revenue of the unit for which they work

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<sup>42</sup> ILO: *Resolution concerning statistics of the economically active population, employment, unemployment and underemployment*, adopted by the Thirteenth International Conference of Labour Statisticians (Geneva, October 1982). Available at: [http://www.ilo.org/wcmsp5/groups/public/---dgreports/---integration/---stat/documents/normativeinstrument/wcms\\_087481.pdf](http://www.ilo.org/wcmsp5/groups/public/---dgreports/---integration/---stat/documents/normativeinstrument/wcms_087481.pdf)

<sup>43</sup> UNSD: *System of National Accounts 2008* (New York, 2009). Available at: <http://unstats.un.org/unsd/nationalaccount/docs/SNA2008.pdf>

<sup>44</sup> ILO: *Ibid.*

<sup>45</sup> *Idem.*

(this unit can be a corporation, a non-profit institution, a government unit or a household). Some or all of the tools, capital equipment, information systems and/or premises used by the incumbents may be owned by others, and the incumbents may work under the direct supervision of, or according to strict guidelines set by the owner(s) or persons in the owners' employment. Persons in 'paid employment jobs' are typically remunerated by wages and salaries, but may be paid by commission from sales, by piece-rates, bonuses or in-kind payments such as food, housing or training.<sup>46</sup>

**Employed persons in self employment:** These are employed persons who hold self-employment jobs, that is jobs where the remuneration is directly dependent upon the profits (or the potential for profits) derived from the goods and services produced (where own consumption is considered to be part of profits). The incumbents make the operational decisions affecting the enterprise, or delegate such decisions while retaining responsibility for the welfare of the enterprise. (In this context "enterprise" includes one-person operations.) Such self-employed workers may fall into one of the following groups: employers, own-account workers, members of producers' cooperatives, and contributing family workers.<sup>47</sup> EARN-8 is computed for employed persons in self employment.

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<sup>46</sup> ILO: *Resolution concerning the International Classification of Status in Employment (ICSE)*, adopted by the Fifteenth International Conference of Labour Statisticians (Geneva, January 1993). Available at: [http://www.ilo.org/wcmsp5/groups/public/---dgreports/---integration/---stat/documents/normativeinstrument/wcms\\_087562.pdf](http://www.ilo.org/wcmsp5/groups/public/---dgreports/---integration/---stat/documents/normativeinstrument/wcms_087562.pdf)

<sup>47</sup> Ibid.

## Statistical indicators

### EARN-1. Working poverty rate (WPR) - (M)

#### Measurement objective and rationale

The concept of the working poor aims to measure how many employed persons, despite being in employment, live in poverty. An alternative and broader concept of working poverty measures how many economically active persons live in poverty. The working poverty rate thus gives the percentage of the employed population (or alternatively, the percentage of the economically active population) living in households that are classified as poor, i.e. have income (or consumption) levels below a determined national poverty line.<sup>48</sup> The working poverty rate is an indicator which can be calculated for countries of all income categories.

#### Method of computation

There are two key indicators which are important to analyze levels and trends in working poverty and which complement each other:

(1) Working poverty rate of employed persons:

$$WPR_{e}(\%) = \frac{\text{Number of employed persons living in households with incomes below the national poverty line}}{\text{Total number of employed persons}} \times 100$$

(2) Working poverty rate of the economically active population:

$$WPR_{eap}(\%) = \frac{\text{Number of persons in the economically active population living in households with incomes below the national poverty line}}{\text{Total number of persons in the economically active population}} \times 100$$

Calculation of the indicators depends on the availability of household survey data which permit the reliable estimation of household income or household consumption expenditures (to establish household poverty) and employment (or economically active population) within the associated poor households for a given reference period. Nonetheless, for countries that do not have household surveys, good practices exist using population census data to calculate poverty measures using the basic needs approach as described below.

#### Concepts and definitions

For a definition of **employed persons**, **economically active population**, and **consumer price index** see the introduction to this chapter.

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<sup>48</sup> WPR is also an MDG indicator (1.6) for monitoring progress towards Goal 1: Eradicate extreme poverty and hunger, Target 1B: Achieve full and productive employment and Decent Work for all, including women and young people. For this measurement, the indicator involving employed persons is used and an international absolute poverty line serves as a threshold against which the household incomes or consumption expenditures of households with employed persons are measured to calculate the working poor.

**Household income** consists of all receipts whether monetary or in kind (goods and services) that are received by households and their individual members at annual or more frequent intervals. Household income arises from employment (both employee and self-employed), property income (interests, dividends, rents received, royalties), income from the production of household services for own consumption (owner-occupied housing), current transfers received from governments, non-profit institutions and other households.

**Disposable income**, the concept which is recommended to be used to calculate the household income for defining poverty status, is defined as total income less direct taxes (net of refunds), compulsory fees and fines, social security contributions as well as compulsory and quasi-compulsory inter-household transfers paid.

While disposable income data are preferred, **total income** data may also be used to define poverty status of households. Whenever household income statistics are not available or are unreliable, **household expenditure statistics** may be used as a substitute. The expenditures could be based on household consumption expenditure, household expenditure, or actual final consumption.

**Household consumption expenditure** is the value of consumer goods and services acquired, used or paid for by a household through direct monetary purchases, own-account production, barter or as income in-kind for the satisfaction of the needs and wants of its members.

**Household expenditure** is defined as the sum of household consumption expenditure and the non-consumption expenditures of the household. The latter are those expenditures incurred by a household as transfers made to government, non-profit institutions and other households, without acquiring any goods or services in return for the satisfaction of the needs of its members. Household expenditure represents the total outlay that a household has to make to satisfy its needs and meet its “legal” commitments.

The **actual final consumption** of a household is the sum of its household consumption expenditure and the value of consumer goods and services acquired or used by the household through transfers from government, non-profit institutions or other households<sup>49</sup>.

**Poverty Line:** For the purposes of measuring national working poverty, the poverty line is defined as the threshold below which individuals in the total reference population are considered poor and above which they are considered non-poor. The threshold is generally defined as the per-capita monetary requirements an individual needs to afford the purchase of a basic bundle of goods and services. It is recommended that poverty line data be calculated, whenever possible, in terms of an absolute poverty line in real (that is, deflated) monetary terms in local currency.

Although for purposes of this Manual it is recommended to use an absolute poverty line, there is no internationally recognized statistical recommendation on the best approach to measure a national

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<sup>49</sup> For more detailed information on household income and expenditure concepts and definitions, please refer to the *Resolution concerning household income and expenditure statistics*, adopted by the Seventeenth International Conference of Labour Statisticians (November–December 2003), available at: [http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS\\_087503/lang--en/index.htm](http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS_087503/lang--en/index.htm)

poverty line. Three common methods are: an absolute poverty line, a relative poverty line and the unmet basic needs method, described below:

- An **absolute poverty line** is a fixed poverty threshold which defines the minimum cost of a reference living standard which can include minimal standards of food, clothing, health care and shelter. Many developing countries have adopted absolute national poverty lines while more developed countries often prefer to use a **relative poverty line**, for example, setting the threshold at 60 percent of the median disposable income or consumption expenditure.
- Some countries calculate the poverty line or threshold using the **unmet basic needs (UBN) method**. The UBN approach focuses on a set of primary goods that are basic elements of well-being and considered necessary to live a good life. In country contexts where household surveys are not commonly found and income and consumption are difficult to measure, the census-based UBN measures can serve as alternative poverty analysis tools. The UBN approach often combines population census information on the condition of households (for example, construction material and number of people per room), access to sanitary services, children attending school and education and economic capacity of household members (generally the household head).<sup>50</sup>

**Household in poverty:** Households are defined as poor if their disposable income or consumption expenditure is below the poverty line taking into account the number of household members and composition (e.g., number of adults and children).<sup>51</sup>

Note that ideally the observation period for household disposable income (or consumption expenditure) should be over a *long observation period* (for example, one year) in order to take into account seasonal variations in household income (or expenditure). The observation period should coincide with that for measurement of employment (or alternatively, for the second indicator, of the economically active population).

### Recommended data sources, metadata and disaggregation

The preferred data source is a household survey with variables that can identify both the poverty status of households and give information on the economic activity of the household's members. Examples include household income and expenditure surveys (HIES), living standards measurement surveys (LSMS) with employment modules, or labour force surveys (LFS) that collect information on household income. Such surveys offer the benefit of allowing the employment (or economically active population) status and income (or consumption expenditure) variables to be derived from the same sampled households ideally *for the same long observation period (past 12 months)*.

Employment and economically active population estimates derived from a household survey other than the labour force survey may not, however, be robust due to the differences in the design and questionnaire of the survey and sampling.<sup>52</sup> Similarly, a labour force survey may not be the best

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<sup>50</sup> For a discussion of the use of the Basic Needs Approach, see Maria Emma Santos, Maria Ana Lugo, Luis Felipe Lopez-Calva Guillermo Cruces and Diego Battiston : *Refining the Basic Needs Approach: A multidimensional analysis of poverty in Latin America*, ECLAC, Santiago de Chile, 2010.

<sup>51</sup> For a discussion of measures of welfare see A. Deaton: *The analysis of household surveys: A microeconomic approach* (The Johns Hopkins University Press, Baltimore, 1997); and J. Haughton and S. R. Khandker: *Handbook on Poverty and Inequality* (The World Bank, Washington, D.C., 2009).

<sup>52</sup> E. Bardasi. et al.: "Do Labor Statistics Depend on How and to Whom the Questions Are Asked? Results from a Survey Experiment in Tanzania," *World Bank Economic Review* (2011), advance access published online June 14, 2011.



instrument for collecting household income or consumption expenditure data given the survey design which typically targets the unemployment rate as the headline indicator, although an attached income module can be designed to achieve maximum, statistically reliable results, including ensuring an overlap in the long observation period between household income (or consumption expenditure) and employment (or economically active population) status. Another possibility is to use data from a household income and expenditure survey, as well as from a separate labour force survey when the respondent households can be matched and consistency in the long observation period between the surveys can be obtained.

It is recommended to document metadata including the source, and, as regards the variables used to calculate the indicator, concept definitions, population coverage, geographic coverage, observation period, and poverty line calculation method. In order to determine likely biases in the working poverty estimate, it is also desirable to compare the employment and unemployment rates derived from the HIES/LSMS to estimates derived from a labour force survey from the same year and observation period.

Disaggregation by sex and geographic area (urban/rural) is highly recommended. Other informative breakdowns include age band, educational attainment level, and household size and composition (presence of adults and children and their labour force status). Countries may wish to differentiate between households where members are unrelated individuals from those whose members are related, and by households with children headed by women, by men or with two (or more) workers. For the working poverty rate of employed persons, it is recommended to disaggregate by economic activity group, occupation group, and status in employment and that a disaggregation be made available by usual full-time and usual part-time status if such a breakdown is useful. Breakdowns according to presence of unemployed (second indicator), low earnings or low employment-related income of the self-employed), and time-related underemployment will also be useful to understand the labour market factors related to working poverty.

### **Interpretation guidelines**

The Working Poverty Rate combines the data on household income or consumption with that of labour force framework variables measured at the individual level and sheds light on the relationship between household poverty and employment (or alternatively, between household poverty and the economically active population). National poverty thresholds are recommended for this indicator, and data users should be aware of the poverty line measurement approach used and how a different approach could lead to different results.

Note that poverty in the context of this indicator is a concept that is applied to households, and not to individuals. Based on the assumption that households pool their income, the question asked is whether a household's total income is sufficient to ensure that it isn't classified as being in poverty. The poverty status of a household is therefore a function of the wage and other employment-related income secured by those household members who work (plus any non-employment-related income such as transfer payments) and the number of household members. Whether a worker is counted as working poor therefore depends on his own income, the income of other household members and the number of household members – for example, children – who need to be supported.

It is thus often valuable to study household structure in relation to working poverty. For example, it may be relevant for some countries to assess the differences in working poverty rates between persons living in households whose members are unrelated individuals (e.g. young, single workers or unrelated older workers) from those whose members are related. Urban areas often have a higher proportion of households of unrelated individuals as compared with rural areas; such persons may live together in order to reduce housing costs and may share other household expenditures such as utilities and food. Moreover, it is recommended to analyze the working poverty rates of individuals living in households with and without children; and sole-worker women-headed households with children, sole worker men-headed households with children and individuals living in two (or more) worker households with children. Reflecting the fact that women's employment-related income remains well below men's on average, women in sole-worker women-headed households with children tend to experience higher working poverty rates on average than men in sole-worker men-headed households with children. Analyzing the changing size and structures of households will help to understand changing working poverty rates.

The working poor tend to have lower levels of educational attainment and often are younger on average than the non-working poor, although persons of all age categories may be found among the working poor. Such analysis may signal the types of educational policy and incentives needed to ensure that youth achieve an adequate level of educational attainment before entering the labour market.

Analyzing the industry groups, occupation groups and status in employment categories of the employed working poor will help identify the structural categories associated with this population. For example, it may provide information on specific industry or occupation groups that could be targeted for improved investments, occupational training and enhanced productivity outcomes that yield improved employment-related incomes. Or it may reveal whether certain categories of self-employed workers are at higher risk of working poverty that may be supported through micro- and small enterprise development policies.

In countries where unemployment rates are generally low even during economic downturns, the difference between the working poverty rate given as a percent of employed persons (first indicator) and the rate for the economically active population (second indicator) will usually be relatively small. Such countries may wish to concentrate only on the first indicator. In countries where unemployment rates can be somewhat high during downturns in the business cycle, it is recommended to calculate both working poverty rates.

The working poor can be analyzed by the key types of labour market challenges they experience: (1) degree of unemployment (second indicator only), (2) employees with low earnings or self-employed workers with low employment-related income (first and second indicators) and/or (3) prevalence of time-related underemployment (first and second indicators). In countries where high levels of self-employment exist, it is advisable to measure the employment-related income of the self employed against a "low" threshold that reflects national circumstances. For employees, a low earnings threshold could be two-thirds of the median hourly earnings. Understanding the key labour market challenges faced by the working poor can help address the underlying causes of working poverty which in turn can be combined with information on the demographics of working poverty (age groups, sex, and ethnicity), household structure and structural variables (industry groups, occupation groups, and

status in employment) to allow more targeted policymaking. When high working poverty rates (as defined by national circumstances) are observed, it is recommended to analyze the indicator(s) with other decent work indicators, including social security indicators (to establish the adequacy of the social safety net), stability and security of work indicators (to determine the degree of employment instability and insecurity which is prevalent), and, where relevant, indicators on work that should be abolished, particularly child labour which is linked to poor households. When women-headed households have particularly high rates of working poverty, indicators of equal opportunity and treatment in employment should also be analyzed jointly for policy implications.

## EARN-2. Employees with low pay rate (ELPR) - (M)

### Measurement objective and rationale

The employees with low pay rate (ELPR) aims to capture the percentage of employees that are working for low wages. It is defined as the percentage of employees whose hourly earnings in all jobs equal less than two-thirds of the median hourly earnings of all employees.

### Method of computation

$$ELPR (\%) = \frac{\text{Number of employees paid less than } \frac{2}{3} \text{ of median earnings}}{\text{Total number of employees}} \times 100$$

### Concepts and definitions

For a definition of *employees* and *earnings*, see the introduction to this chapter.

Employees should include both full-time and part-time workers. Employee earnings from all jobs should be expressed in median real hourly earnings. However, if a time unit other than hourly is used, such as weekly or monthly, part-time employees should be converted into full-time equivalents to adjust for different working hours of part-time and full-time employees.

### Recommended data sources and metadata

In order to be able to obtain earnings data on all jobs, labour force surveys or other household surveys that include an employment module should be used. In practice, sample surveys of establishments, such as an occupational or industry wage survey, provide data on the distribution of earnings and hours of work. In some cases, administrative records related to social security may be used as a source of data. However, when the data source is one other than a household survey, earnings estimates for specific jobs rather than employees will be obtained, thus not targeting the number of employees and their earnings from all jobs as intended by the indicator. Furthermore, the coverage of the data source is likely to be limited to formal sector establishments. This may give a partial view of the situation, especially in developing countries where the informal sector is a major source of employment and earnings for informal sector employees.

While developed countries are often able to calculate the ELPR with reference to hourly median earnings (or convert part-time jobs into full-time equivalents in the case of weekly or monthly median earnings), this information is often not available in reliable form for many developing countries. In this case, the ELPR can be calculated on the basis of monthly earnings although this is not ideal since hours worked over the month will likely differ by employee. When presenting the data, the wage time unit (e.g. hourly, weekly or monthly median earnings) as well as the observation period (e.g. a precise week, month or year) which was used should be made clear.

The breakdown of the ELPR by sex and geographic area (urban/rural), and full-time versus part-time employees is recommended. Further breakdowns by age group, occupation group, economic activity group, educational attainment level, and migration status can help to identify key characteristics of low-paid employees, which can serve as a basis for policy interventions such as minimum-wage

setting. It may also be of interest to disaggregate the data according to employees in the formal versus informal sector (using the concept of informal sector<sup>53</sup>, an enterprise-based concept) or by informal employees versus formal employees (using the concept of informal employment<sup>54</sup>).

### **Interpretation guidelines**

The ELPR is based on a relative measure of earnings, and depends on the distribution of hourly earnings in a country. It is likely to decrease when low-paid employees at the low end of the earnings distribution increase their hourly earnings relative to other employees. If all employees increase (or decrease) their hourly earnings by relatively the same proportion, the rate would remain the same. It is therefore useful to analyse the indicator in conjunction with the indicator “average real wages” (EARN-4) that allows mapping trends in average real wages. The use of the median wage as a reference point to establish the low-pay threshold helps to limit the influence of outliers in the wage data.

In addition to the analysis of time-series data, it is highly informative to compare low-pay incidence between different groups of employees. Typically, women employees have a higher incidence of low pay than men, and low pay tends to be concentrated in certain occupations or economic activities, for example, among domestic workers.

Differentiating between part-time and full-time employees (based on a count of total working time hours in all jobs) as defined by national circumstances, may be useful to understand the different low pay rates between these different groups of employees.<sup>55</sup> It may also be helpful to analyze these indicator disaggregations jointly with indicators on decent working time (specifically targeting disaggregations of employees). Part-time employees may work shorter hours voluntarily or may prefer to work longer hours. It may thus be useful to analyze this indicator for part-time employees jointly with the time-related underemployment rate (TRU), noting that the hours threshold used as a criterion to define the TRU may not coincide with the national threshold used to define “part-time”.

As a measure of employees with “relative” low pay, this indicator complements the “absolute” measure of household poverty provided by the working poverty rate (WPR) related to total employment in countries that use an absolute poverty threshold. The joint analysis of these two indicators may be valuable in countries with a large percentage of employees to obtain a better understanding of the share of employees with adequate earnings and its potential bearing on working poverty rates. Typically, a decrease in the LPR will signal an improvement in the living conditions of workers and their households at the low end of the wage distribution, and therefore may contribute to a decline in the WPR, reflecting improvements in household income among those households with at least one employee. However, there may be cases where the creation of new, low-wage

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<sup>53</sup> See the Resolution concerning statistics of employment in the informal sector, Adopted by the Fifteenth International Conference of Labour Statisticians (January 1993, available at: [http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS\\_087484/lang--en/index.htm](http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS_087484/lang--en/index.htm))

<sup>54</sup> Guidelines concerning a statistical definition of informal employment endorsed by the Seventeenth International Conference of Labour Statisticians (ICLS), available at: [http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/guidelines-adopted-by-international-conferences-of-labour-statisticians/WCMS\\_087622/lang--en/index.htm](http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/guidelines-adopted-by-international-conferences-of-labour-statisticians/WCMS_087622/lang--en/index.htm)

<sup>55</sup> This will not be possible if a conversion to full-time equivalents has been made.

employment generates additional household income and an increase in the LPR coincides with a falling WPR.<sup>56</sup>

The cut-off point of two-thirds of the median hourly real earnings used for the LPR may be unrealistic for developing countries, as in many of these countries this value would be below the absolute subsistence minimum. In such circumstances, it may be advisable to use the minimum living wage as the cut-off point instead, and to document the choice of the low-pay threshold in the metadata.

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<sup>56</sup> See Chapter 2 of the ILO, *Decent Work Country Profile for Austria* (Geneva, 2009).

### EARN-3. Average hourly earnings by occupation group (AHE) - (A)

#### Measurement objective and rationale

The average hourly earnings (AHE) indicator refers to the arithmetic average of the hourly earnings of employees by occupation group. AHE provides information on the remuneration of employees in specific standardized occupation groups and hence may be very informative for targeted policy making.

#### Method of computation

AHE refers to the arithmetic average of the hourly earnings of paid employees in different occupation groups. The indicator is calculated as:

Step 1

Option a:

$$AHE_i = \frac{\text{Total earnings for paid employees in occupation } i}{\text{Total hours worked by paid employees in occupation } i}$$

Option b:

$$AHE_i = \frac{\sum_{j=1}^n (AHE_{ij} \times H_{ij})}{\sum_{j=1}^n H_{ij}}$$

Step 2

$$\text{Real } AHE_i = \frac{AHE_i}{CPI}$$

When calculating average hourly earnings from occupational wage establishment surveys that usually contain establishment-level data on total earnings and total hours for the same reference period, Option 'a' is the natural choice to calculate AHE. However, when using household surveys, such as a labour force survey, it can be difficult to compute total earnings and total hours worked for a given reference period. In this case, Option b can be used where a weighted average of the AHE of all workers in an occupation group is calculated. Note that the hours worked are used as a weight so that the AHE of workers who work more hours have a greater weight.

When the indicator is computed from labour force surveys or other household surveys that contain data about the hourly earnings of individual employees, Option b is the natural choice for the first step.  $AHE_{ij}$  refers to the average hourly earnings of individual,  $j$ , in occupation,  $i$ . Similarly,  $H_{ij}$  refers to the number of hours worked by individual,  $j$ , in occupation,  $i$ . The numerator results in the sum of the total wage bill for all paid employees in occupation  $i$ , divided by the sum of total hours worked by paid employees in the same occupation. In effect, it calculates a weighted average of the hourly earnings off all employees in a given industry, where the number of hours worked serves as a weight.

## Concepts and definitions

For a definition of **Consumer Price Index (CPI)**, **earnings**, **working time concepts** and **employees**, see the introduction to this chapter.

**Real total gross hourly earnings** are preferred for the calculation of the indicator, that is, total gross hourly earnings adjusted for inflation.

Earnings should correspond to the extent possible to the remuneration of **all employees**, including all full-time and part-time workers.

**Occupation group.** Countries may wish to apply their national statistical occupational classification to identify occupational groups for the calculation of the indicator, preferably using a classification structure which permits for a correspondence table to be established with the International Standard Classification of Occupations (ISCO-08) adopted in 2007. Alternatively, countries may wish to apply ISCO-08 directly as an internationally adopted tool for organizing jobs into a clearly defined set of groups according to the tasks and duties undertaken in the job. Its main aims are to provide a basis for the international reporting, comparison and exchange of statistical and administrative data about occupations; a model for the development of national and regional classifications of occupations; and a system that can be used directly in countries that have not developed their own national classifications.

The level of disaggregation of the occupational groups selected to construct the indicator (i.e., whether to use the ISCO Major group level, Submajor group level, etc.) should preferably take into account the reliability of the estimates.

It is recommended that total hours worked include all overtime hours for the purposes of calculating this indicator.

## Recommended data sources, metadata and disaggregation

Sample surveys of establishments, such as occupational or industry wage surveys, provide data on average earnings and hours of work. Note that occupational wage establishment surveys often exclude agricultural establishments and smaller establishments from the sampling frame, and usually cover only the formal sector. Thus, using this type of a survey in developing country contexts may not be the most appropriate for obtaining average earnings of employees by occupation group, particularly as they often exclude the informal sector.

In the absence of the above, labour force surveys and other appropriate household surveys with employment, working time and earnings data can be used. The earnings estimates from household surveys are not always of the best quality however, and sometimes the sample size is reduced for such questions limiting further the reliability of the estimates. In some cases, administrative records related to social security may also be used as a source of data.

It is important to give information on the CPI used to adjust this indicator, for example, the end-of-year or average CPI, which CPI series is used if more than one is produced, and whether the time reference periods of the numerator and the denominator match. It is also important to report the occupational classification used and level of disaggregation of the occupation groups.



It is recommended to study this indicator disaggregated by sex, and also by age bands (youth versus adult population), full-time versus part-time employees (using nationally defined working time thresholds), and geographic area (urban/rural), however many of these disaggregation variables will only be possible to define through a labour force survey. Disaggregation by educational attainment and economic activity may be interesting if the sample size permits representative estimates. Likewise, disaggregation by informal/formal sector and informal/formal employment may provide interesting information for policymaking in some country contexts but such disaggregations require using a labour force survey with additional probes.

### **Interpretation guidelines**

The analysis of this indicator is conducted separately for different occupation groups in order to be sufficiently informative for policy making. In particular, it is useful for setting wage rates through collective bargaining and for minimum wage fixing in countries where minimum wage rates are set by occupation. All data users should familiarise themselves with the components of the earnings concept applied to collect the data.

Data users should bear in mind when analysing estimates for this indicator that worker coverage extends only to employees, that is, the employment-related income of self-employed workers in a given occupation group will not be included as the “earnings” of that occupation group, even though employment-related income could exceed the total wage bill for the occupation group.

The indicator will not be useful to analyse trends in real weekly, monthly or annual average earnings by occupation since working time will vary and moreover because the indicator includes both full-time and part-time workers. Conducting a separate analysis of the real hourly earnings by occupation group of full-time versus part-time employees will be essential to understanding the different pay trends of the different employee groups.

## EARN-4. Average real wages (ARW) - (A)

### Measurement objective and rationale

Average real wages aims to capture the general evolution of real monthly earnings over time. Real wages have been defined in the *Resolution concerning the international comparison of real wages* adopted by the Eighth ICLS (1954) as the goods and services which can be purchased with wages or are provided as wages. They are calculated by dividing nominal monthly wages by the CPI in order to control for changes in consumer prices over time.

### Method of computation

ARW refers to the arithmetic average of total monthly real earnings of employees in all jobs.

Step 1

$$\text{Average nominal earnings} = \frac{\text{Total nominal earnings per month}}{\text{Total number of employees}}$$

Step 2

$$ARW = \frac{\text{Average nominal earnings}}{CPI} \times 100$$

### Concepts and definitions

For a definition of **Consumer Price Index (CPI)**, **earnings** and **employees**, see the introduction to this chapter.

### Recommended data sources and metadata

The preferred sources of data are establishment surveys or labour force surveys that collect information on earnings which, if not based on a monthly reference period, can be converted into monthly earnings. In the absence of the above, other household surveys with employment and income data such as household budget surveys or household income surveys may be used as long as earnings estimates can be calculated as separate from income or expenditures. When the data source is an establishment survey or an administrative record, not all jobs will be taken into account and the coverage of the data source is likely to be limited to formal sector establishments. This may give a partial view of the situation, especially in developing countries where the informal sector is a major source of employment.

It is important to give information on the CPI used to adjust this indicator, for example, the end-of-year or average monthly CPI, which CPI series is used if more than one is produced, and whether the time reference periods of the numerator and the denominator match.

It is recommended to study this indicator disaggregated by sex, and also by age bands (youth versus adult population), full-time versus part-time employees (using nationally defined working time thresholds), and geographic area (urban/rural), however many of these disaggregation variables will only be possible to define through a labour force survey. Disaggregation by educational attainment and economic activity may be interesting if the sample size permits representative estimates.

Likewise, disaggregation by informal/formal sector and informal/formal employment may provide interesting information for policymaking in some country contexts but such disaggregations require using a labour force survey with additional probes.

### **Interpretation guidelines**

Data users should bear in mind when analysing estimates for this indicator that worker coverage extends only to employees and that real wage statistics are usually based on gross earnings. This affects the explanatory power of the indicator with regard to the monetary aspects of purchasing power, for which net wages are relevant (i.e. wages after deduction of taxes and mandatory contributions to social security).

Earnings data show fluctuations which reflect the influence of changes both in base pay (wages and salaries) and in any additional supplementary wage and non-wage payments. Weekly, daily and monthly earnings are also dependent on variations in hours of work. The fluctuations of average earnings obtained from global payrolls or responses to household surveys are also influenced by compositional changes among those in paid employment, i.e. the relative importance of male and female employees, young and older employees, unskilled and skilled employees, full-time and part-time employees etc.

Sometimes, counter-intuitive developments can be observed over the business cycle. For example, during a recession low-skilled employees with temporary employment contracts might be the first to be dismissed by enterprises. Since the remaining work-force then consists of relatively better-paid workers, this can bias trends in average wages upwards. The reverse effect can sometimes be observed during the recovery, when low-paid workers are often the first to be re-hired. However, this effect is often dominated by changes in working time that generally decrease during a recession (and hence monthly wages fall) and increase during a recovery (when monthly wages rise as a result). Some countries therefore also compute average real monthly wages of full-time workers or full-time equivalents.

It may be valuable to analyse the indicator jointly with earnings distribution estimates to gain an understanding of how the average monthly earnings relate to the distribution of earnings, and whether there might be a large share of employees clustered at the high and/or low end of the earnings distribution which are masked in the average monthly earnings measure.

It may be useful also to analyse changes in the indicator against changes in the CPI deflator (used to calculate the average real monthly earnings estimates) to evaluate to what extent real earnings growth is keeping pace with inflation growth.

Moreover, it may also be valuable to analyse real labour productivity growth against average real earnings, but in this case the comparison should be made either on a quarterly or annual basis in line with the publication of national output measures. There frequently is not a one-to-one relationship in terms of percentage increase between the two indicators, as real labour productivity growth often far outpaces growth in real earnings, indicating unbalanced wage growth. In times of surplus labour when unemployment rates and/or other measures of labour slack (such as time-related underemployment and numbers of discouraged workers) are high or rising, even if labour productivity expands, real earnings may not increase or, if they do, at a much lower growth rate vis-à-vis that of labour productivity.

## EARN-5. Minimum wage as percentage of median wage - (A)

### Measurement objective and rationale

Statutory minimum wages benefit from the force of law and establish a wage floor in order to protect low-paid workers against unduly low wages. To determine the level of minimum wages in relation to the overall pay structure, the indicator expresses the minimum wage as a percentage of median monthly earnings.

### Method of computation

This indicator refers to the minimum wage expressed as a percentage of median monthly earnings and is calculated as:

$$\text{Minimum wage as a percentage of median wage} = \frac{\text{Monthly minimum wage}}{\text{Median monthly earnings}} \times 100$$

### Concepts and definitions

For the definition of *earnings*, see the introduction to this chapter. The denominator for this indicator uses the median as the measure of central tendency (and not the mean) and thus helps to minimize the impact of extreme values and outliers. The indicator is calculated using nominal values in both the numerator and denominator.

**Minimum wages:** Minimum wages benefit from the force of law and may be defined as the lowest level of wage rate permitted, which is enforceable under threat of penal or other appropriate sanctions. The Minimum Wage Fixing Convention, 1970 (No. 131), which considers that minimum wage systems are necessary to protect wage earners against unduly low wages, calls for setting levels that take into consideration: (a) the needs of workers and their families, taking into account the general level of wages in the country, the cost of living, social security benefits, and the relative living standards of other social groups; as well as (b) economic factors, including the requirements of economic development, levels of productivity and the desirability of attaining and maintaining a high level of employment.<sup>57</sup>

According to the Minimum Wage Fixing Recommendation, 1970 (No. 135), the minimum wage fixing machinery can take a variety of forms, such as the fixing of minimum wages by (a) statute; (b) decision of the competent authority, with or without formal provision for taking account of recommendations from other bodies; (c) decisions of wages boards or councils; (d) industrial or labour courts or tribunals; or (e) giving the force of law to provisions of collective agreements. The system of minimum wages may be applied either by fixing a single minimum wage of general application or by fixing a series of minimum wages applying to particular groups of workers.

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<sup>57</sup> ILO: *The Minimum Wage Fixing Convention, 1970 (No. 131)*. Available at: <http://www.ilo.org/ilolex/cgi-lex/convde.pl?C131>

When countries have multiple minimum wage rates, one option is to calculate a single national indicator by using as a numerator a weighted average of the different minimum wage rates or the most representative rate. An alternative is to calculate multiple indicators, for example by region or industry (depending on the minimum wage structure). In this case, both the minimum wage rate and the median wage should refer to the same group of employees.

### **Recommended data sources and metadata**

The underlying data for the numerator can be obtained from official sources, such as wage orders or laws that set the minimum wage (MW). The preferred sources of data for the denominator are establishment surveys that allow the estimation of monthly median earnings or labour force surveys that similarly allow for the estimation of this variable. In the absence of the above, other household surveys with employment and income data such as household budget surveys, or household income surveys can be used provided that the instrument allows the estimation of monthly median earnings. When the data source is one other than a household survey, not all paid jobs will be taken into account and the coverage of the data source is likely to be limited to formal establishments.

When there is a change in minimum wages during the course of a given month, a weighted monthly average may be calculated whereby the weights are represented by the number of days at the relevant MW rate as a percentage of the total days in the month. The information on the level of minimum wage as well as its coverage should be indicated for each data point.

### **Interpretation guidelines**

Expressing minimum wage (typically set between one-third and two-thirds of the median wage) as a percentage of the median earnings provides information on the relevance and potential effectiveness of the minimum wage to serve as an adequate wage of low-paid employees in a given country using median earnings as a benchmark average value. If a minimum wage is set at a very low level, it will not meet this objective. On the other hand, if the minimum wage is too high relative to the median wage, this may have negative effects on compliance and/or employment generation.

The minimum wage also serves as a reserve wage or signal for the so-called labour reserve of potential job seekers. As labour market conditions improve following an economic downturn, persons outside the labour force who want a job may take into consideration factors such as the minimum wage when deciding whether to test the labour market. If the minimum wage as percentage of median wage is relatively low, such persons may remain outside the labour force as they weigh costs of transportation, child care, etc. against potential earnings defined by the minimum wage.

It is recommended that the nominal minimum wage be analysed not only in relation to the nominal median wage but that period-to-period changes in the real minimum wage be analysed vis-à-vis the rate of inflation (as measured by corresponding period-to-period changes in the CPI) to see whether adjustments to the MW are keeping pace with inflation, allowing employees that depend on MWs to enjoy adequate purchasing power of their earnings over time.

## EARN-6. Manufacturing wage index - (A)

### Measurement objective and rationale

The manufacturing wage index (MWI) is used to measure the change in wage rates in the manufacturing sector.<sup>58</sup> It measures how wage rates in the manufacturing sector in the latest year compare with those for the last base period when the index equalled 100. Statistics on average wages in manufacturing are influenced by shifts in employment between different industries (for example, from textiles manufacturing to machinery manufacturing), hence the index controls for changes in the structure of employment in order to isolate the effect of changes in wage rates.

### Method of computation

The manufacturing wage index is constructed as a Laspeyres price index.

$$\text{Manufacturing Wage Index} = \sum_{i=1}^n \left[ \frac{w_i^t}{w_i^o} \times \left( \frac{w_i^o \times e_i^o}{\sum_{i=1}^n w_i^o \times e_i^o} \right) \right]$$

Where  $w_i^t$  is the average wage rate of employees<sup>59</sup> in manufacturing industry group  $i$ , for instance, employees working in the manufacturing of food products, at current period  $t$ , and  $w_i^o$  is the average wage rate of employees in manufacturing industry group  $i$  at base period  $o$ . The number of employees in manufacturing industry group  $i$  at base period  $o$  is given by  $e_i^o$ . The expression in the parentheses comprises the weight based on the base period.<sup>60</sup>

### Concepts and definitions

For a definition of **employees**, see the introduction to this chapter.

**Wage Rate:** wages can refer to the price of labour service, workers' labour income or to the labour cost to an employer. For each of these uses, different data sources and methodologies should be used. Since the purpose of the manufacturing wage index is to inform on the trend of the basic price of labour service, it is an index of wage rates. The data on time rates of wages should relate to an appropriate time period such as the hour, day, week, month or other customary period used to determine wage rates. The nominal wage rates cover basic wages, cost-of-living allowances and other guaranteed and regularly paid allowances, but exclude overtime payments, bonuses and gratuities, family allowances and social security contributions made by employers. Ex gratia payments in kind, supplementary to normal wage rates, are also excluded.

As indicated above, the MWI is constructed as a Laspeyres index. For wage statistics, the Laspeyres formula is preferred, as it keeps base period weights over time considering that data availability on the current period is often limited.

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<sup>58</sup> The manufacturing sector is defined as all economic activities contained in Section C of the International Standard Industrial Classification of All Economic Activities (ISIC) Revision 4. See UNSD: *International Standard Industrial Classification of All Economic Activities (ISIC) Rev. 4*. (New York, 2008). Available at: <http://unstats.un.org/unsd/cr/registry/regcst.asp?Cl=27>

<sup>59</sup> It is possible to introduce additional variables such as sex and part-time/full-time workers in grouping employees.

<sup>60</sup> Swiss Federal Statistical Office: *Statistic of the wage evolution – Swiss wage index – Methodological foundations* (2005).

## Recommended data sources and metadata

Sample surveys of establishments may provide data on average wage rates. Wage indices can be updated quarterly and annually. Indices of wage rates, including for manufacturing, are often compiled by central banks as part of their programmes to monitor changes in prices.

When providing manufacturing wage index data, detailed information on the construction of the index should be provided. For instance, the computation of lower level indices, the aggregation structure and the aggregation formula should be given. In addition, weighting procedures should be explained, for example, if different weights are used by manufacturing industry activity, sex and hours of work. Similarly, the coverage of the wage data should be clearly indicated, and should include, for instance conceptual coverage as well as geographical, economic activity, etc. Any revisions, for instance, of the base year should be explained. Metadata should indicate whether wage rates actually paid or legally fixed or collectively agreed wage rates are used to construct the index.

## Interpretation guidelines

It is important for data users to understand that wage rates, the wage concept used to construct the MWI, represent the price of labour service and do not constitute a concept of labour cost.<sup>61</sup> The MWI does not give information on wage levels per se but rather on the relative change in wage rates in the manufacturing sector. It can be a useful substitute when data on EARN-4 “Average real wages” are not available. It is, however, of limited relevance in countries where wage employment in the manufacturing sector represents only a small fraction of total wage employment. Seasonal effects may be removed using seasonally adjusted quarterly MWI series, allowing underlying trend data to be analysed more clearly.

This indicator is related to changes in the wage rate and corrects for changes in the structure of employment in the various manufacturing industries. As the MWI is based on the Laspeyres index which keeps the base period weights constant over time, the nominal wage index can take a different path from the nominal average wages. In addition, wage indices with different base periods can diverge. Note that the MWI is normally calculated in nominal terms since often its primary purpose is to monitor inflationary pressure emerging from wages. Nominal wage rates are therefore only informative about changes in real wage rates when they are compared to changes in the CPI.

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<sup>61</sup> Labour cost includes additional wage components such as employer payments and contributions toward social security and pensions and employer cost for vocational training, welfare services, taxes and other labour costs incurred by employers. A second indicator that uses labour cost as the key input variable may however be constructed using the Laspeyres price index.

## EARN-7. Employees with recent job training (past year / past 4 weeks) - (A)

### Measurement objective and rationale

Employees with recent job training provides information on the share of employees who have received job training in the last 12 months (or alternatively, in the last 4 weeks) and is a measure of recent skills development provided by the employer.

### Method of computation

$$\begin{aligned} &\text{Employees with recent job training (past 12 months)} \\ &= \frac{\text{Number of employees who had training in the last 12 months}}{\text{Total number of employees}} \times 100 \end{aligned}$$

$$\begin{aligned} &\text{Employees with recent job training (past 4 weeks)} \\ &= \frac{\text{Number of employees who had training in the last 4 weeks}}{\text{Total number of employees}} \times 100 \end{aligned}$$

### Concepts and definitions

For a definition of **employees**, see the introduction to this chapter.

**Training:** The 18<sup>th</sup> ICLS *Resolution concerning the measurement of working time* provides a definition of training to be counted as part of hours actually worked measured *within the SNA production boundary*. This refers to “training and skills enhancement required by the job or for another job in the same economic unit, at or away from the work location. In a paid-employment job this may be given by the employer or provided by other units.”<sup>62</sup> Training in this context therefore considers maintaining employees’ skills and competencies related to their job as work, technology and skill requirements change.<sup>63</sup> It does not consider other types of training undertaken by the employee which are not related to the employee’s job(s).

It suffices for an employee to have participated in at least one training in the previous 12 months (or, alternatively, in the last 4 weeks) for them to be included in the numerator.

### Recommended data sources and metadata

It is recommended to use a labour force survey or other household surveys that include an employment module in order to collect the required data. Sample surveys of establishments may provide data on occupational training financed by the employer, albeit limited to formal establishments.

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<sup>62</sup> ILO: *Report II, Measurement of Working Time*. Eighteenth International Conference of Labour Statisticians (Geneva, 24 November-5 December, 2008).

<sup>63</sup> See the ILO definition of a broad definition of training and skills in “A Skilled Workforce for Strong, Sustainable and Balanced Growth: A G20 Training Strategy”. Geneva, November, 2010.



It is possible to disaggregate the indicator by sex, age band, geographic area (urban/rural), occupation group and economic activity in order to help to identify targeted policy actions. Moreover, disaggregating by the type of training received will help identify the training valued by employers.

### **Interpretation guidelines**

The indicator gives the share of employees who have recently participated in job-related training. It does not provide information on the content, quality or duration of training. If further information on the coverage of the training activities and the duration, etc. can be categorized, it may be useful for more in-depth analysis.

Training activities give employees an opportunity to improve job-related competencies, including soft skills and technical skills, yielding potential benefits for the employer in terms of productivity gains and also for the employee in terms of wage increases and greater job satisfaction. It may be thus interesting to complement the analysis of this indicator and related measures on the content, quality and duration of job training activities with selected indicators such as labour productivity and average wages, perhaps disaggregated by industry group.

Moreover, it may be useful to analyse this indicator jointly with a separate indicator on the number of self-employed workers who had job-related training in the last 12 months (or alternatively, in the last 4 weeks) as a percentage of total self-employed persons during the same time reference period. Training needs will differ greatly between employees and self-employed workers and, if combined with information on the content, quality and duration of training, such indicators may be quite useful to inform policy that targets enhanced productivity and competitiveness of key industries and occupations.

## Legal Framework Indicator 4. Statutory minimum wage

### Scope

Minimum wage is calculated either on the basis of time or output and constitutes a level which may not be undercut. Its application is guaranteed by law. Minimum wage should be determined taking into account the minimum needs of the worker and his/her family, in light of the prevailing national economic and social conditions.

### Selected ILS on minimum wage

Minimum Wage Fixing Convention, 1970 (No. 131) requires ratifying states to establish a minimum wage fixing mechanism capable of setting and periodically reviewing and adjusting minimum wage rates. These rates are legally binding.

### Information provided on the indicator

<b>Law, policy or institutions:</b> Information on the existence of a national minimum wage-fixing system. Are regional or sectoral minimum wages set instead of, or in addition to, a national minimum wage? How is the minimum wage fixed (by law, collective agreement or award from a minimum wage board or other)? What structure is in place to set and/or implement the minimum wage? Who are the members of this structure? When was the minimum wage last adjusted? Which workers are covered by minimum wages? Which workers are excluded?
<b>Minimum wage levels:</b> Level of the minimum wage in local currency and if possible in \$US; and if possible as a percentage of the mean wage actually paid (in the sector if applicable).
<b>Evidence of implementation effectiveness:</b> Comments of ILO supervisory bodies (if any).
<b>Coverage of workers in law:</b> Broad estimate of workforce covered by minimum wage legislation.
<b>Coverage of workers in practice:</b> Broad estimate of workers covered in practice (methodology TBD).
<b>Ratification of ILO Conventions:</b> The Minimum Wage Fixing Convention, 1970 (No. 131) (if not ratified, Convention No. 26 and/or Convention No. 99).

### Additional sources of information

#### *ILO sources*

- TRAVAIL Database of Conditions of Work and Employment Laws (<http://www.ilo.org/dyn/travail/travmain.home>).

## Chapter 3. Decent working time

Adequate working time arrangements constitute an essential part of Decent Work. The Decent Working Time substantive element covers indicators that are related to employment and working time, that is, the time associated with activities within the System of National Accounts production boundary and the arrangement of this time.

Under decent working time, five statistical indicators and two legal framework indicators are included. There are two types of statistical indicators: (1) those that provide information on *employment* by working time band(s) or according to a lack of work relative to a working time threshold and (2) those that focus on measures of time worked by employed persons, that is, the *hours worked*. Such measures complement each other, offering information on the number of employed persons working long or short hours and the actual hours worked per employed person. The statistical and legal framework indicators are presented in Table 3 below.

**Table 3: Overview of decent work indicators for decent working time indicators**

Statistical Decent Work Indicators	Concepts	Coverage	Preferred data source
<b>TIME-1. Employment in excessive working time (more than 48 hours per week) – (M)</b>	Employment Working time	Employed persons	LFS, household survey with employment module, establishment survey
<b>TIME-2. Employment by weekly hours worked – (A)</b>	Employment Working time	Employed persons	LFS, household survey with employment module, establishment survey
<b>TIME-3. Average annual working time per employed person – (A)</b>	Employment Working time	Employed persons	LFS, household survey with employment module, establishment survey
<b>TIME-4. Time-related underemployment rate – (A)</b>	Employment Working time Time-related underemployed persons	Employed persons	LFS, household survey with employment module, administrative records
<b>TIME-5. Paid annual leave – (F)*</b>	Under development	Employees	LFS, household survey with employment module, administrative records
<b>Legal Framework Indicators:</b> L5- Maximum hours of work L6- Paid annual leave			

\* Classified as a future statistical indicator ("F") within the Decent Working Time substantive element, paid annual leave is an indicator under development by the ILO. It is an indicator that will seek to quantify the incidence (and perhaps also key provisions) of paid annual leave among employees.

Employment in excessive working time and time-related underemployment rate, which fall under the first type of indicator described above, can reveal deficits in the quality of employment as regards the dimension of working time. Excessive working time interferes with the balance between work and family life and personal life, increases injury hazard risks, may signal an inadequate hourly pay and, in the long term, represents a threat to workers' physical and mental capacity to work. Working excessive hours on a regular basis can also reduce marginal productivity. Time-related

underemployment (that is, employed persons who want and are available to work more hours vis-à-vis a specified time threshold) is an indicator of labour underutilization<sup>64</sup> in the dimension of working time and is often accompanied by inadequate employment-related income or earnings. Average annual hours worked per employed person measures the volume of time worked and serves as a more refined indicator of labour input for a given year as compared with total average annual employment.

The interpretation of the indicators is best carried out through a joint analysis with other related decent work indicators, both qualitative (e.g., normal hours of work defined in national legislation and paid annual leave) and quantitative indicators (e.g., the unemployment rate and employment-related income or earnings) as well as context indicators such as GDP growth. Additional topics suggested for joint analysis include combining work, family and personal life; working time of child labour<sup>65</sup>; stability and security of work (including precarious employment and working time) and labour productivity defined using a working time variable for labour input.

### Concepts and definitions used throughout the chapter

The concept of employment concerns the supply of labour for the production of economic goods and services (that is, it refers to productive activity *within the production boundary*) as defined by the United Nations systems of national accounts and balances during a specified time-reference period. The **employed** comprise all persons of working age who during a specified brief period, such as one week or one day, were in the following categories: a) paid employment (whether at work or with a job but not at work); or b) self-employment (whether at work or with an enterprise but not at work). Temporary absence from work includes reasons such as illness, maternity and parental leave, holiday, training, and industrial disputes.<sup>66</sup>

The concept *at work* refers to persons who during the reference period performed some work for wage or salary, in cash or in kind (for paid employment), or persons who during the reference period performed some work for profit or family gain, in cash or in kind (for self-employment). For operational purposes, the notion "some work" may be interpreted as work for at least one hour. Employed persons include those persons of working age who worked for at least one hour during the reference period as contributing family workers (formerly referred to as unpaid family workers) working in a family business.

The preferred concept of working time used to calculate the indicators in this chapter is hours actually worked. The concept of **hours actually worked** is defined as the time spent in a job for the performance of activities that contribute to the production of goods and/or services during a specified short or long reference period. It applies to all types of jobs and is not linked to administrative or legal concepts of working time. For purposes of the working time indicators presented in this chapter, it

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<sup>64</sup> For complementary measures, please refer to unemployment indicators and labour underutilization outlined under the chapter on Employment Opportunities.

<sup>65</sup> Note that according to the Resolution concerning statistics of child labour adopted by the Eighteenth International Conference of Labour Statisticians (2008), the concept of child labour may be measured with respect to the general production boundary.

<sup>66</sup> ILO: *Resolution concerning statistics of the economically active population, employment, unemployment and underemployment*, adopted by the Thirteenth International Conference of Labour Statisticians. (Geneva, October 1982). Available at: [http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS\\_087481/lang--en/index.htm](http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS_087481/lang--en/index.htm)

refers to time spent on productive activities defined within the SNA production boundary. It covers time spent directly on and in relation to productive activities, as well as down time and resting time. Hours actually worked excludes time not worked, e.g. annual and sick leave, public holidays, parental leave, commuting time, educational activities and longer pauses, e.g. lunch breaks.<sup>67</sup>

Should hours actually worked not be adequately captured by data collection instruments, as a secondary option countries may consider using the concept of hours paid for.<sup>68</sup> For a paid-employment job, **hours paid for** refers to the time for which employees have received payment from their employer (at normal or premium rates, in cash or in kind) during a specified reference period, regardless of whether the hours were actually worked or not. It includes time paid but not worked such as paid annual leave, paid public holidays and certain absences such as paid sick leave, and excludes time worked but not paid by the employer, such as unpaid overtime, and absences that are not paid by the employer, such as unpaid educational leave or maternity leave.<sup>69</sup>

Data on working time reported should reflect the hours worked in different types of working time arrangements (e.g. full-time and part-time) and include the hours worked in all jobs of employed persons (if the data are derived from a labour force survey).

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<sup>67</sup> ILO: Resolution concerning the measurement of working time, adopted by the Eighteenth International Conference of Labour Statisticians: [http://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/normativeinstrument/wcms\\_112455.pdf](http://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/normativeinstrument/wcms_112455.pdf)

<sup>68</sup> Unlike the concept of hours actually worked, the concept “hours paid for” covers the working time of covered employees only and thus excludes the hours worked of self-employed workers, a category which may be particularly important in developing countries.

<sup>69</sup> Idem.

## STATISTICAL INDICATORS

### TIME-1. Employment in Excessive Working Time (more than 48 hours per week) - (M)

#### Measurement objective and rationale

Employment in excessive working time (EEWT) provides information about the share of employed persons whose hours actually worked exceed 48 hours per week. It is an indicator of exposure to overwork, i.e. of persons experiencing working time that exceeds the threshold beyond which negative effects on workers become visible—not only on workers' health, but also on their safety (e.g. increasing injury hazard rates) and on work-life balance.

#### Method of computation

EEWT is defined as the percentage of the employed population whose hours actually worked in the reference week in all jobs are more than 48 hours, i.e. 49 hours or more, per week.

$$EEWT (\%) = \frac{\text{Number of employed persons whose number of hours actually worked is more than 48 hours per week}}{\text{Total number of employed persons}} \times 100$$

#### Concepts and definitions

For the definition of **employment** and **working time** concepts, please refer to the concepts and definitions in the chapter introduction.

While data users may wish to apply national thresholds used to define excessive working time for national monitoring, they are encouraged to use the 48-hour threshold to construct the indicator in order to enhance international data comparability. The principle of the 8-hour day or the 48-hour week threshold was first adopted in ILO Convention No. 1, Hours of Work (Industry) Convention, 1919 and later in the Hours of Work (Commerce and Offices) Convention, 1930 (No. 30). This threshold was referenced in 2008 in the Resolution concerning the measurement of working time, adopted by the Eighteenth International Conference of Labour Statisticians (ICLS). In particular, the ICLS Resolution recommends that States collect and report working time statistics for different hour bands, including the band “up to and including 48 hours”.

In order to maintain consistency with the recommendations outlined in the *Resolution concerning statistics of child labour* adopted by the Eighteenth International Conference of Labour Statisticians (2008), it is important to note that **employed children** (including persons of working age below 18 years) may be considered to be working **long hours of work** if the number of hours actually worked at all jobs during the reference period is above a specified threshold. The threshold may be determined in terms of the maximum number of hours of work that the national law or regulation sets for children who have reached the minimum working age. In the absence of such a specific limit for children, the threshold may be decided taking account of the regulation on the adult workers' normal working time. Hours actually worked should be defined in accordance with the latest international standards on the topic. Long hours of work among working children may also be defined in terms of usual hours of work per week. The use of this concept would include in child labour, any children who usually work long

hours but during the reference period were temporarily absent from work owing to illness, holidays or, for other reasons, worked fewer hours than usual.<sup>70</sup>

### **Recommended data sources, metadata and disaggregations**

The preferred official national data source for this indicator is a household-based labour force survey (LFS). A LFS permits the estimation of the number of *employed persons* and generally allows disaggregations of data by economic activity and demographic variables such as sex, age group, etc. The concept of hours actually worked (cross tabulated with employed persons) is best captured through a labour force survey or other household survey with an appropriate employment module. Nonetheless, household surveys other than labour force surveys may have limitations related to periodicity, geographic coverage or worker coverage about which data users should be made aware.

An employment-based establishment survey (intended to capture the *number of jobs* by economic activity) with good economic activity coverage may be considered only as a secondary option. This type of instrument excludes self-employment from the survey scope, is generally better suited to capturing data on the concept of hours paid for and may not allow disaggregation of data by sex.

If a country applies a different excessive working time threshold in the national context it is encouraged to produce estimates using both the national threshold as well as the “over 48 hours” threshold in order to facilitate international comparisons.

When the EEWT is published, appropriate metadata (or statistical documentation information) regarding the data should be provided to users. For this indicator, it is recommended that at a minimum information on the data source, data reference period, population coverage, job coverage (main job or all jobs), definition of excessive hours (if different from “over 48 hours per week”) and geographic coverage be made easily available to data users.

Disaggregation of EEWT by sex is recommended and is fundamental to understanding the different experiences of women and men as regards employment in excessive working time. Disaggregating EEWT by urban and rural areas, status in employment (especially employees versus self-employed workers and in particular the latter’s component category “contributing family workers”) as well as by other household-related variables, such as presence of dependants, can provide useful information regarding conditions of work prevailing for these different groups.

### **Interpretation guidelines**

Progress is achieved when acceptably low levels of employment in excessive working time (EEWT) are achieved according to national circumstances. Progressive increases in the indicator point to a deterioration of decent work in this dimension.

Labour markets adjust to the business cycle differently, depending on factors such as structural changes (e.g., sectors expanding or contracting), macroeconomic conditions, employment policy and

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<sup>70</sup> For more information, please see the *Resolution concerning statistics of child labour* adopted by the Eighteenth International Conference of Labour Statisticians (2008), available at [http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS\\_112458/lang-en/index.htm](http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS_112458/lang-en/index.htm)

the labour supply. The adjustment mechanisms most evident during periods of cyclical economic expansion or contraction are changes in employment levels, working time as well as changes in employment-related income which over a given interval of time may occur in one, two or even all three dimensions simultaneously. Such cyclical changes are best monitored through short-term observations (e.g., quarterly or continuous LFS), and it is recommended that data be seasonally adjusted in order to capture true underlying trends.

As employment in excessive working time is often sensitive to the business cycle (potentially, procyclical), it is recommended that the indicator be analyzed together with changes in total output (e.g. GDP growth) as well as other key indicators such as the employment-to-population ratio and mean weekly hours actually worked. While average working time often declines during recessions, there may be economic sectors or status in employment categories that experience increases in employment in excessive working time if layoffs of some workers (e.g. temporary hires) yield longer work hours for remaining workers; it is therefore recommended that the indicator be analyzed by economic sector, status in employment categories, and/or by stability and security of work (e.g., contract duration).

Time-related underemployment (which measures employed persons who want and are available to work more hours vis-à-vis a specified time threshold) is often counter-cyclical and may be analyzed jointly with this indicator in order to compare the magnitude of labour underutilization in the working time dimension vis-à-vis that of employment in excessive working time. Moreover, if reliable estimates are available, data users may wish to evaluate employment-related income or earnings indicators cross-tabulated by employment in excessive working time in order to evaluate the adequacy of hourly remuneration among those working excessive hours.

It is recommended that employment in excessive working time be analyzed for differences between women and men. Given that employment by definition covers productive work within the SNA production boundary, it is found that a higher percentage of men in paid employment work excessive hours as compared with women in paid employment in many countries.<sup>71</sup> To the extent that working time data are available for work activities in relation to the general production boundary (measured for example through time-use surveys), it is recommended that data users analyze employment in excessive working time jointly with information regarding the share of men's and women's responsibility for unpaid household service work, by age-group, household composition (presence of dependants), marital status, etc.

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<sup>71</sup> Lee, Sangheon et al., *Working Time Around the World*. (Geneva, Switzerland, ILO), 2007 and Eurofound, "Changes over time—First findings from the fifth European Working Conditions Survey", (Dublin, Ireland, Eurofound). Available at: <http://www.eurofound.europa.eu/pubdocs/2010/74/en/3/EF1074EN.pdf>



## TIME-2. Employment by weekly hours worked (hours in standardized hour bands) - (A)

### Measurement objective and rationale

Employment by weekly hours worked (EHW) provides information on the distribution of employed persons according to their weekly hours actually worked. This indicator is also an indirect measure of how much time employed people can dedicate to other activities, e.g. household work, family, leisure and recreation, and self-development.

### Method of computation

EHW is defined as the percentage of the employed population whose weekly hours actually worked in all jobs correspond to a selected weekly hours time band, i.

$$EHW \text{ (hour band } (i) \text{)} (\%) = \frac{\text{Number of employed persons whose weekly hours actually worked fell within hour band } (i)}{\text{Total number of employed persons}} \times 100$$

### Concepts and definitions

For the definition of employment and working time concepts, please refer to the concepts and definitions in the chapter introduction.

### Recommended data sources, metadata and disaggregations

The preferred official national data source for this indicator is a household-based labour force survey (LFS). A LFS permits the estimation of the number of *employed persons* and generally allows disaggregations of data by economic activity and demographic variables such as sex, age group, etc. The concept of hours actually worked (cross-tabulated with employed persons) is best captured through a labour force survey or other household survey with an appropriate employment module. Nonetheless, household surveys other than labour force surveys may have limitations related to periodicity, geographic coverage or worker coverage about which data users should be made aware.

An employment-based establishment survey (intended to capture the *number of jobs* by economic activity) with good economic activity coverage may be considered only as a secondary option. This type of instrument excludes self-employment from the survey scope, is generally better suited to capturing data on the concept of hours paid for and may not allow disaggregation of data by sex.

The weekly hours band intervals selected should reflect national circumstances. However, in order to enhance data comparability between countries, it is recommended that countries provide data for the following weekly hours band intervals (using the concept of hours actually worked in the reference week): (1) no hours actually worked, (2) 1-14 hours, (3) 15-29 hours, (4) 30-34 hours, (5) 35-39 hours, (6) 40-48 hours, (7) 49 hours or more, and (8) Total (all weekly hours band categories).

When the EHW is published, appropriate metadata (or statistical documentation information) regarding the data should be provided to users. For this indicator, it is recommended that at a minimum information on the data source, data reference period, population coverage, job coverage ((main job or all jobs if data are collected from a labour force survey), and geographic coverage be made easily available to data users.

Disaggregation of EWHW by sex is recommended and is fundamental to understanding the different experiences of women and men as regards the distribution of employment by selected weekly hours bands. Disaggregating EWHW by urban and rural areas, status in employment (especially employees versus self-employed workers and in particular the latter's component category "contributing family workers") as well as by other household-related variables, such as presence of dependants, can provide useful information regarding conditions of work prevailing for these different groups.

### **Interpretation guidelines**

The indicator provides information on the distribution of employed persons according to their weekly hours actually worked. Economies will present different distributions from one another and also show changes over time in the distribution, reflecting differences in macroeconomic conditions and the business cycle, employment policy, social and cultural factors, among others.

The full distribution of working time in an economy can make an important contribution towards understanding the type of working time regime which exists. For example, the clustering of hours actually worked around one or more time band value(s) may indicate adherence to statutory or collectively-bargained norms regarding working time.

There is no ideal employment by weekly hours worked distribution, however, high concentrations of workers in the time band "49 hours or more", which classifies workers in excessive working time points to a decent work deficit in this dimension. Thus, progress is achieved when acceptably low levels of employment in excessive working time are achieved.

Workers classified in the lower weekly hours time bands (e.g., 1-14 hours, 15-29 hours, and 30-34 hours) may be voluntarily working short hours or may experience time-related underemployment (i.e. are working less than a specified threshold and are willing and available to work longer hours), the latter indicating a lack of decent work in this dimension. This indicator can thus be used as a screening indicator before studying in depth the phenomenon of inadequate employment.

The adjustment mechanisms in the labour market most evident during periods of cyclical economic expansion or contraction are changes in employment levels, working time as well as changes in employment-related income which over a given interval of time may occur in one, two or even all three dimensions simultaneously. Such cyclical changes are best monitored through short-term observations (e.g., quarterly or continuous LFS), and it is recommended that data be seasonally adjusted in order to capture true underlying trends.

Analysis of the indicator disaggregated by sex often reveals important differences in the distribution of working time of women and men. Women are often more likely to work in part-time jobs (which often lack social protection) while men are more likely to work excessive hours, in both cases reflecting employment activities within the SNA production boundary. To the extent that working time data are available for work activities in the general production boundary (measured for example through time-use surveys), it is recommended that data users analyze this indicator jointly with information regarding the share of men's and women's responsibility for unpaid household service work, by age-group, household composition (presence of dependants), marital status, etc.

### TIME-3. Average annual working time per employed person - (A)

#### Measurement objective and rationale

The indicator average annual working time per employed person (AAWTE) or equivalently, average annual hours actually worked per employed person is a measure of the aggregate level of labour utilization in an economy in terms of the working time of employed persons.

#### Method of computation

This indicator is defined as the total number of hours actually worked of all employed persons in a year given as a percent of the total average number of employed persons during the year. It is calculated as:

$$\text{Average annual hours actually worked per employed person} = \frac{\text{Total annual hours actually worked of all employed persons}}{\text{Total average number of employed persons over the year}} \times 100$$

The numerator, i.e. the total annual hours actually worked of all employed persons, is best calculated by aggregating weekly or monthly hours actually worked of this group over the entire year.

#### Concepts and definitions

For the definition of employment and working time concepts, please refer to the concepts and definitions in the chapter introduction.

#### Recommended data sources, metadata and disaggregations

The preferred official national data source for this indicator is a household-based labour force survey (LFS). A LFS permits the estimation of the number of *employed persons* and generally allows disaggregations of data by economic activity and demographic variables such as sex, age group, etc. The concept of hours actually worked is best captured through a labour force survey or other household survey with an appropriate employment module. Nonetheless, household surveys other than labour force surveys may have limitations related to periodicity, geographic coverage or worker coverage about which data users should be made aware.

An employment-based establishment survey (intended to capture the *number of jobs* by economic activity) with good economic activity coverage may be considered only as a secondary option. This type of instrument excludes self-employment from the survey scope, is generally better suited to capturing data on the concept of hours paid for and may not allow disaggregation of data by sex.

When the AAWTE is published, appropriate metadata (or statistical documentation information) regarding the data should be provided to users. For this indicator, it is recommended that at a minimum information on the data source, data reference period, population coverage, job coverage (main job or all jobs), and geographic coverage be made easily available to data users.

It is recommended to study this indicator by sex, and if possible by age, status in employment, occupation and economic activity as well as geographic area (urban/rural).

#### Interpretation guidelines

The indicator is intended to measure aggregate average annual levels of labour utilization per employed person through the working time concept of hours actually worked. This is a more refined measurement of labour utilization than average annual employment since it reflects the labour input of workers across the working time distribution, i.e. those who work long, average and short hours, rather than count their labour input equally. It is recommended to complement the analysis of this indicator with that of the distribution of employment by working time (employment by weekly hours worked) to evaluate how the levels and changes in the distribution of employment by working time are affecting average annual aggregate working time per worker.

Similar to other working time indicators, changes in the indicator will reflect changing economic structure and macroeconomic conditions, the business cycle, employment policy and social and cultural factors, etc. Yet, because this is an annual indicator, it is not susceptible to seasonal factors and will reflect fundamental underlying changes in working time. The analysis of the year-over-year changes in this indicator jointly with changes in total output, the employment-to-population ratio and employment-related income (or total earnings where employees represent an important employment component) will be useful to understand the mechanisms through which changes in GDP growth are being transmitted to the labour market: through adjustments in employment, working time and/or employment-related income.

Progress in the indicator is achieved when an acceptable level of average annual hours actually worked per employed person is observed. To help determine this, data users may wish to establish time band thresholds of low, average, and high annual working hours that are based on national circumstances.<sup>72</sup>

When disaggregated by sex, age group, status in employment group, economic activity or occupation group, the indicator provides information about the aggregate working time per worker in the various sub-groups of the employed population over a given year. Breakdowns by sex often reveal a gender gap in annual working time within the SNA production boundary (men working longer hours in employment than women, on average). It is recommended that the analysis by sex be complemented with an evaluation of the time spent by women and men in unpaid work activities in the general production boundary (e.g. unpaid housework, child rearing etc.)

Breakdowns by economic activity, occupation group or status in employment allow data users to evaluate the effect of such variables on aggregate working time, for example due to differences in paid leave of employees (including public holidays) or related to the seasonality of employment of some economic activities or occupation groups (e.g. agricultural sector and occupations).

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<sup>72</sup> To accomplish this, data users are advised to consider the range of working time arrangements prevalent in the economy (e.g. part-time and full-time work) as well as holidays and weekends which may reduce the working time of some workers during the course of the year.

## TIME-4. Time-related underemployment rate (TRU) - (A)

### Measurement objective and rationale

Time-related underemployment rate (TRU) is a measure of labour underutilization that provides information regarding the share of employed persons who are willing and available to increase their working time (for production within the SNA production boundary) and worked fewer hours than a specified time threshold during the reference period. It signals inadequate employment and complements other indicators of labour slack and labour underutilization such as the unemployment rate and discouraged workers.

### Method of computation

TRU is defined as the percentage of employed persons who worked less than a specified threshold of hours during the reference period and were willing and available to work more hours than those worked in their job(s). The indicator is calculated as:

$$TRU (\%) = \frac{\text{Number of employed persons who are in time-related underemployment}}{\text{Total number of employed persons}} \times 100$$

When the denominator is replaced by the labour force, i.e. the sum of employed and unemployed persons, the resulting indicator can supplement the unemployment rate.<sup>73</sup>

### Concepts and definitions

For the definition of employment and working time concepts, please refer to the concepts and definitions in the chapter introduction.

The measurement of time-related underemployment is considered an integral part of the framework for measuring the labour force. The time-related underemployed includes all employed persons whose working time in all jobs is “insufficient in relation to an alternative employment situation in which the person is willing and available to engage”. The criteria for defining time-related underemployment are: (i) willingness to work additional hours;<sup>74</sup> (ii) availability to work additional hours and, (iii) having worked (total number of *hours actually worked*) below a threshold of working hours. The threshold of working time has to be determined at the national level in order to identify those who worked a sufficient number of hours and to integrate the labour demand aspect into the indicator.<sup>75</sup>

Examples of practices used to determine a national threshold of hours actually worked include the boundary between full-time and part-time employment; median values, averages, or norms for hours of work as specified in relevant legislation; and collective agreements, or agreements on working time arrangements or labour practices in countries. In some instances, countries may consider applying

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<sup>73</sup> For the definition of the labour force, please refer to the chapter introduction of Employment Opportunities.

<sup>74</sup> Note that in the number of time-related underemployed, those who want to work one additional hour and those who want to work, for instance, 15 additional hours are given the same weight.

<sup>75</sup> ILO: *Resolution concerning the measurement of underemployment and inadequate employment situations*. Adopted by the Sixteenth International Conference of Labour Statisticians, October 1998. Available at: [http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS\\_087487/lang--en/index.htm](http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS_087487/lang--en/index.htm).

sub-national thresholds of hours actually worked in addition to a national threshold, for example in the agricultural and non-agricultural sectors where working time norms may be quite different.

### **Recommended data sources, metadata and disaggregations**

The preferred official national data source for this indicator is a household-based labour force survey (LFS). A LFS permits the estimation of the number of *employed persons* and generally allows disaggregations of data by demographic variables such as sex, age group, etc. The concept of hours actually worked is best captured through a labour force survey or other household survey with an appropriate employment module. Nonetheless, household surveys other than labour force surveys may have limitations related to periodicity, geographic coverage or worker coverage about which data users should be made aware. Administrative records may in some cases provide adequate data to calculate the indicator.

When TRU is published, appropriate metadata (or statistical documentation information) regarding the data should be provided to users. For this indicator, it is recommended that at a minimum information on the data source, data reference period, population coverage, job coverage (main job or all jobs), national threshold of hours worked used to define TRU and time unit, and geographic coverage be made easily available to data users.

It is recommended to disaggregate TRU by sex and if possible by age, educational attainment, geographic area (urban/rural) and economic activity (of the main job). Additional disaggregations may include status in employment categories and occupation group (of the main job). Data users may also wish to disaggregate TRU by persons actively seeking additional work in order to confirm the willingness and availability of the underemployed to increase their working time.

### **Interpretation guidelines**

Time-related underemployment is an employment indicator that highlights a particular decent work deficit, namely labour underutilization in the dimension of working time. As some degree of time-related underemployment is likely to exist even during periods of favourable employment conditions, progress is achieved when TRU reaches an acceptably low level according to national circumstances.

TRU is often counter-cyclical, increasing during economic recessions and declining with economic expansion. The cyclical changes in the indicator are best monitored through short-term observations (e.g., quarterly or continuous LFS), and it is recommended that data be seasonally adjusted in order to capture underlying trends.

It is recommended that the indicator be analyzed together with changes in total output (e.g. GDP growth) as well as other key indicators such as the employment-to-population ratio, the unemployment rate and employment-related income (or earnings where employees are an important component of total employment) in order to establish the key transmission mechanisms of economic changes to the labour market or new employment policies that may affect working time and related indicators.

The volume (number of additional hours or days that can be worked) and duration of TRU (number of days, weeks, months, or years that employed persons have been continually in TRU) present the magnitude of underemployment in time units. Data users may wish to analyze the rate of volume of time-related underemployment, i.e. the volume of time-related underemployment as a share of potential time for work of the employed population.<sup>76</sup> The potential time for work can be calculated by adding the volume of underemployment and the total hours actually worked by the employed.<sup>77</sup> The latter provides one measure of the extent of labour underutilization in a country.

When the denominator used to calculate TRU is the labour force in lieu of total employed persons, it is possible to compare this with the unemployment rate as a distinct measure of labour underutilization or even to add the two indicators together to yield a summary indicator of labour underutilization.

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<sup>76</sup> Idem.

<sup>77</sup> Bureau of Statistics, ILO: *Module 1, Statistics of employment, unemployment, underemployment: economically active population*. International Compendium on Labour Statistics. (Geneva, 2003).

## Legal Framework Indicator 5. Maximum hours of work

### Scope

Number of daily and weekly hours in excess of which any time worked is remunerated at overtime rates. The aim of limiting hours of work is to preserve the workers' health and well-being and to ensure their productiveness and motivation. While this indicator focuses specifically on maximum hours of work, it is essential to also look at daily and weekly rest periods and annual leave to have a better understanding of working time.

### Selected ILS on hours of work

The Hours of Work (Industry) Convention, 1919 (No. 1) and the Hours of Work (Commerce and Offices) Convention, 1930 (No. 30) are the most relevant conventions. *Convention No. 1 applies to industrial workers*: it stipulates 8 hours a day; 48 hours a week (56 hours a week if continuous work in shifts; averaging working hours over a period of time is possible + temporary or general exceptions). *Convention No. 30 applies to persons employed in commerce and office sectors* (and does not extend to those employed in agriculture, maritime, fisheries or domestic services): it stipulates 8 hours a day; 48 hours a week (flexibility allowed if hours do not exceed 10 hours a day; allows flexibility in case of force majeure, local holidays or accident; exceptional legislation may be adopted allowing hours of work to be distributed + temporary or general exceptions).

### Information provided on the indicator

<b>Law, policy or institutions:</b> Is there a national law (supplemented by regulations or collective agreement?) on maximum working hours? What is the definition of "working hours"? How is overtime remunerated? Which workers are covered by the law? Which workers are excluded?
<b>Number of hours allowed:</b> What is the limit for normal working hours? Is there a limit on overtime?
<b>Evidence of implementation effectiveness:</b> Comments of ILO supervisory bodies (if any).
<b>Coverage of workers in law:</b> Broad estimate of the workforce covered by the law.
<b>Coverage of workers in practice:</b> Broad estimate of workers covered in practice (methodology TBD).
<b>Ratification of ILO Conventions:</b> The Hours of Work (Industry) Convention, 1919 (No. 1) and the Hours of Work (Commerce and Offices) Convention, 1930 (No. 30).

### Additional sources of information

#### ILO sources

- CEACR: General Survey concerning the Hours of Work (Industry) Convention, 1919 (No. 1), and the Hours of Work (Commerce and Offices) Convention, 1930 (No. 30), ILC, 93th Session, 2005 (<http://www.ilo.org/public/english/standards/relm/ilc/ilc93/pdf/rep-iii-1b.pdf>) and Article 19 Government report (if the relevant Convention has not been ratified);
- TRAVAIL Database of Conditions of Work and Employment Laws (<http://www.ilo.org/dyn/travail/travmain.home>).



## Legal Framework Indicator 6. Paid annual leave

### Scope

Paid annual leave refers to the period during which an employee is off work while continuing to (1) receive earnings from their current employer and (2) be entitled to social protection. Other forms of paid leave, which are not considered annual leave, include public holidays, sick leave, weekly rest, maternity and parental leave. The aim of annual leave is to preserve workers' health and well-being and ensuring their productiveness and motivation.

### Selected ILS on paid annual leave

Under the Holidays with Pay Convention (Revised), 1970 (No. 132), every person to whom the convention applies shall enjoy at least *three working weeks* of annual paid holiday for one year of service.

### Information provided in the indicator

<b>Law, policy or institutions:</b> Is annual leave provided for by legislation (or collective agreement)? Which workers are covered by the law?
<b>Qualifying conditions:</b> Duration/type of contract?
<b>Levels of leave:</b> What paid annual leave is required by the law?
<b>Evidence of implementation effectiveness:</b> Comments of the ILO supervisory bodies (if any).
<b>Coverage of workers in law:</b> Estimate of the workforce covered by the law.
<b>Coverage of workers in practice:</b> Broad estimate of workers covered in practice (methodology TBD).
<b>Ratification of ILO Conventions:</b> The Holidays with Pay Convention (Revised), 1970 (No. 132). If not ratified, the Holidays with Pay Convention, 1936 (No. 52) and the Holidays with Pay (Agriculture) Convention, 1952 (No. 101).

### Additional sources of information

#### **ILO sources**

- CEACR: General Survey concerning the Hours of Work (Industry) Convention, 1919 (No. 1), and the Hours of Work (Commerce and Offices) Convention, 1930 (No. 30), ILC, 93th Session, 2005 (<http://www.ilo.org/public/english/standards/relm/ilc/ilc93/pdf/rep-iii-1b.pdf>) and Article 19 Government report (if the relevant convention has not been ratified);
- TRAVAIL Database of Conditions of Work and Employment Laws (<http://www.ilo.org/dyn/travail/travmain.home>).

## Chapter 4. Combining work, family and personal life

The substantive element Combining Work, Family and Personal Life covers a small set of decent work indicators related to standards and fundamental principles and rights at work and social protection. Two statistical indicators have been identified in this grouping, both of which are established as future indicators where developmental work is to be done by the Office: (1) Asocial/unusual hours and (2) Maternity protection. The Legal Framework Indicators corresponding to the statistical indicators are: (1) Maternity leave (including weeks of leave, and rate of benefits) and (2) Parental leave.

Some pilot experiences at the national level provide inputs for initial discussion and analysis of potential statistical indicators.<sup>78</sup>

### 1. Brazil

In Brazil, the following statistical indicators have been tested:

- Home-to-work commuting time, given as a percent by time band (S)<sup>79</sup>
- Average weekly hours spent on housework and in the main job (S)

This country has also identified four additional statistical indicators which are being further developed:

- Access to childcare facilities:
  - Percent of employed women aged 16 years and over with children up to 3 years old as a percent of total employed women and by frequency of childcare use<sup>80</sup>
- Administrative record data on maternity leave (social insurance) and corroboration with household survey data on fertility and the labour market:
  - Maternity leave beneficiaries granted job leave as a percent of employed women in childbearing age who had children over the past year.
- Family arrangements:
  - Percent distribution of families by type of family living arrangements
- Family care (restriction of activities):
  - Percent of persons that have difficulties to carry out basic activities (eating, walking, etc.) due to health problems<sup>81</sup>

### 2. Tanzania

In Tanzania, time-use survey data were used to calculate the distribution of time devoted to key categories of daily activities, disaggregated by sex.<sup>82</sup> The categories used are:

- Employment
- Primary production

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<sup>78</sup> For sources of the information presented here, see the Decent Work Country Profiles of the selected countries: <http://www.ilo.org/mdw> and [www.ilo.org/map](http://www.ilo.org/map)

<sup>79</sup> Note that a similar indicator has been developed in Indonesia for key metropolitan areas.

<sup>80</sup> A second indicator proposes the child age range of 4 to 6 years.

<sup>81</sup> The indicator targets the demand for personal care in households, which is increasing due to the ageing population. The indicator may be measured as a percent of families or households that have at least one family member under care.

<sup>82</sup> A similar indicator has been developed in South Africa, where categories included unpaid care work which includes household maintenance (housework), care of persons in the household (mainly childcare), and unpaid care for people from other households.

- Service for income
- Household maintenance
- Care of family
- Community service
- Learning
- Mass media use
- Social and cultural
- Personal care

### **3. Ukraine**

In Ukraine, the following statistical indicators have been used to measure the Combining Work, Family and Personal Life dimension of decent work:

- Relative number of workers on leave to care for a child until attainment of a statutory age, in percent of the registered number of employees
- Relative number of women on maternity leave, in percent of the registered number of employees
- Share of economically inactive population performing household (family) duties, caring for children, sick and other family members, in percent
- Share of children enrolled in pre-school education, in percent
- Total fertility rate (per woman)

### **4. Indonesia**

In Indonesia, various statistical indicators have been used from different sources:

- Coverage of workers by maternity leave benefits (number of men and women having enjoyed the benefit of paternity/ maternity leave, and their proportion in per cent of informal workers and formal workers) from specific surveys at provincial level
- Informal and casual employment rates and the proportion of workers with excessive working hours, given the direct implications for the allocation of family and private life time
- The female labour force participation rate
- Commuting times between home and work, given their impact on the time allocated to family and personal life (proportion of workers having less than 30 minutes, between 31 and 60 minutes and more than 60 minutes, by sex and marriage status) from a specific study on metropolitan areas in Indonesia.

### **5. Philippines**

In Philippines, three statistical indicators have been used from labour force surveys:

- Economic inactivity rate due to household/family duties (percent of working age population, by sex and age bands)
- The proportion of the employed who are married (percent of employed, by sex and age bands)

- The proportion of the employed who are household heads (percent of employed, by sex and age bands).

The first indicator aims to measure the segment of the working age population who are outside of the labour force, voluntarily or involuntarily, due to household/family duties, e.g., taking care of young children or the elderly.

The other two indicators indicate the proportion of the employed that are doubly burdened as workers and as family members, and who have to strike a balance between potentially competing demands on their time and attention.

Another source has been used (establishments surveys) to measure the proportion of establishments implementing various programs to help workers balance their work and family responsibilities: flexible work schedule, compressed workweeks, work and family programs and conducting seminars on balancing work as well as non-statutory leave arrangements allowed by employers (use of leave benefits to attend to urgent family concerns, extended maternity leave with pay and without pay, extended paternity leave with pay and without pay, flexible holiday schedule, time off in lieu of extra hours worked, career break, study leave).

## **6. Cambodia**

In Cambodia, despite the absence of data on the extent to which working men and women benefit from the work-life balance provisions of the labour law, the following statistical indicators have been used:

- Factory compliance rates (compliance rates: % of factories complying with maternity leave) in the garment sector, to assess whether or not employers pay their staff for maternity leave
- Excessive working hours, that can be damaging since they not only infringe on the ability to balance work-family responsibilities, but they may also have a negative effect on individual and family health and wellbeing
- Commuting patterns in Cambodia since nine in every ten employed workers worked outside the home
- The share of employed persons working at home by sex.

## Legal Framework Indicator 7. Maternity leave

### Scope

Maternity leave provides women with time off work, before and after childbirth, to prevent harm during pregnancy to themselves and to their unborn child and to allow them to recover from childbirth and nurse their child for an adequate amount of time. The aim of maternity leave is to allow women to successfully combine their reproductive and productive roles. It is, along with other measures protecting against the dismissal of pregnant women and women on maternity leave (see Legal Framework Indicator 10), one of the essential elements to achieving equality of opportunity and treatment.

### Selected ILS on maternity leave

The Maternity Protection Convention, 2000 (No. 183) is the most up-to-date convention on maternity protection; earlier relevant instruments (Maternity Protection Convention, 1919 (No. 3) and Maternity Protection Convention (revised), 1952 (No. 103)) are, however, still in force in certain countries. Maternity *protection* is broader than maternity *leave* and covers, with maternity leave, health protection, leave in case of illness or complications, cash and medical benefits, employment protection and non-discrimination as well as provisions on breastfeeding.

Regarding maternity leave, Convention No. 183 provides for a minimum of *14 weeks of maternity leave* to women to whom the instrument applies (Recommendation No. 191 extends this to *18 weeks*). Women on maternity leave are entitled to a cash benefit which ensures that they can maintain themselves and their child in proper conditions of health and with a suitable standard of living (*no less than two-thirds* of her previous earnings). Convention No. 3 is limited to women employed in public or private industrial or commercial undertakings. It provides basic protection by, *inter alia*, entitling women to 12 weeks' maternity leave with cash benefits. Convention No. 103 extended the scope of the protection. The Social Security (Minimum Standards) Convention, 1952 (No. 102), Part VIII provides for periodical payments, corresponding to at least 45% of the reference wage.

Convention No. 183 states that benefits are to be provided through compulsory social insurance or public funds, or in a manner determined by national law and practice. However, an employer may be liable to the cost of maternity cash benefits (1) where that employer specifically agrees to do so; (2) where such liability was provided for in national law or practice prior to the date of adoption of the Convention; or (3) where such liability is subsequently agreed upon by the government and the representative organizations of employers and workers.

### Information provided on the indicator

<b>Law, policy or institutions:</b> Do laws (or collective agreement) guarantee paid maternity leave? Which workers are covered by this system? Which workers are excluded?
<b>Qualifying conditions:</b> Length of contract, type of contract, number of contributions, etc?
<b>Benefits (level and duration):</b> How many weeks of maternity leave are required? Is it paid or unpaid?
<b>Financing:</b> How are the benefits financed? What are the contributions?
<b>Evidence of implementation effectiveness:</b> Comments of ILO supervisory bodies (if any).
<b>Coverage of workers in law:</b> Broad estimate of workers covered in law.
<b>Coverage of workers in practice:</b> See COMB-2.
<b>Ratification of ILO Conventions:</b> The Maternity Protection Convention, 1919 (No. 3), the Maternity Protection (revised), 1952 (No. 103), the Maternity Protection Convention, 2000 (No. 183) and the Social Security (Minimum Standards) Convention, 1952 (No. 102).

### Additional sources of information

#### ILO sources

- TRAVAIL Database of Conditions of Work and Employment Laws:  
<http://www.ilo.org/dyn/travail/travmain.home>

- ILO: Maternity at work: A review of national legislation. Findings from the ILO's Conditions of Work and Employment Database. Second edition, 2010: [http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms\\_124442.pdf](http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_124442.pdf)
- Social Protection Department (SOCPRO) website : <http://www.ilo.org/secsoc/lang--en/index.htm>

**Other sources**

- ISSA: maternity <http://www.issa.int/aiss/Observatory/Country-Profiles>;
- Social security throughout the world: <http://www.socialsecurity.gov/policy/docs/progdesc/ssptw/>.

## Legal Framework Indicator 8. Parental leave

### Scope

Parental leave refers to longer periods of leave for either or both parents (or adoptive parents), to be taken after maternity and paternity leave. It offers qualifying parents the right to take time off work to look after their child. It can help strike a better balance between work and family responsibilities.

### ILS on parental leave

The Workers with Family Responsibilities Convention, 1981 (No. 156) requires ratifying states to make it a goal of national policy to enable persons with family responsibilities, in relation to their dependent children and other members of their immediate family who clearly need their care or support, who are engaged or wish to engage in employment to exercise their right to do so without being subject to discrimination and, to the extent possible, without conflict between their employment and family responsibilities. The Workers with Family Responsibilities Recommendation, 1981 (No. 165) defines parental leave as the possibility available to either parent of obtaining leave of absence, without relinquishing employment and with rights resulting from employment being safeguarded, within a period immediately following maternity leave.

### Information provided on the indicator

<b>Law, policy or institutions:</b> Do laws/collective agreement guarantee parental leave? Which workers are covered by this system? Which workers are excluded?
<b>Qualifying conditions:</b> Are there any qualifying conditions?
<b>Benefits (level and duration):</b> What is the length of parental leave? Is it paid or unpaid?
<b>Financing:</b> How are the benefits financed? What are the contributions?
<b>Evidence of implementation effectiveness:</b> Comments of ILO supervisory bodies (if any).
<b>Coverage of workers in law:</b> Broad estimate of workers covered in law.
<b>Coverage of workers in practice:</b> Broad estimate of workers covered in practice (methodology TBD).
<b>Ratification of ILO Conventions:</b> The Workers with Family Responsibilities Convention, 1981 (No. 156).

### Additional sources of information

#### ***ILO sources***

- TRAVAIL Database of Conditions of Work and Employment Laws (<http://www.ilo.org/dyn/travail/travmain.home>);
- ILO: Maternity at work: A review of national legislation. Findings from the ILO's Conditions of Work and Employment Database. Second edition, 2010 ([http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms\\_124442.pdf](http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_124442.pdf));

#### ***Other sources***

- ISSA: maternity <http://www.issa.int/aiss/Observatory/Country-Profiles>;
- Social security throughout the world: <http://www.socialsecurity.gov/policy/docs/progdesc/ssptw/>.

## Chapter 5. Work that should be abolished

International Conventions and the ILO Declaration on Fundamental Principles and Rights at Work require that certain types of work, such as child and forced labour, should be abolished.

With this goal in mind, measurement of work that should be abolished is essential in order to gauge its incidence, distribution and characteristics and thus ultimately inform action and monitor progress towards its elimination. For the purpose of statistical measurement, national legislation, where available, and guidelines provided by international labour standards, international statistical standards and other international instruments should be used as the starting point for developing statistical concepts and definitions of child labour and forced labour. Therefore, in accordance with relevant international standards, this section presents the concepts, definitions, and statistical measurement of child labour and forced labour.

Five statistical indicators are presented and two legal framework indicators on Child labour and Forced labour (Table 5).

**Table 5: Overview of decent work indicators for work that should be abolished**

Statistical Decent Work Indicators	Concepts	Coverage	Preferred data source
ABOL-1. Child labour rate – (M)	Child labour	Children 5-17 years	Household-based child labour survey Labour force surveys with child labour module
ABOL-2. Hazardous child labour rate – (A)	Child labour Hazardous work by children	Children 5-17 years	Establishment surveys administered at children's workplace Population census Other household survey with employment module
ABOL-3. Rate of worst forms of child labour (WFCL) other than hazardous work – (A)	Child labour Hazardous work by children	Children 5-17 years	Sector-specific surveys
ABOL-4. Forced labour rate – (A)	Forced labour	Employed persons	Dedicated surveys Forced labour modules in household income and expenditure surveys, labour force surveys and child labour surveys Establishment surveys
ABOL-5. Forced labour rate among returned migrants – (A)	Forced labour Trafficking in persons	Employed persons	Household survey (migration, labour force or household income and



			expenditure surveys) with a module on forced labour Administrative records
<b>Legal Framework Indicators:</b> L9. Child Labour L10. Forced Labour			

Since many of the indicators share common concepts, this introduction provides some of the key concepts and definitions.

The 18<sup>th</sup> Conference of Labour Statisticians (ICLS, 2008) established directions for the statistical measurement of child labour. The resulting *Resolution concerning statistics of child labour* adopted at the Conference set forth the definitions that guide all subsequent statistical work on child labour.

**Child labour** may be measured in terms of the engagement of children in productive activities either on the basis of the general production boundary, or on the basis of the SNA production boundary. For the purpose of the ILO global estimation of child labour, child labour is measured on the basis of the SNA production boundary. Child labour under the SNA production boundary is a subset of “children in employment” or “working children”. It includes all persons aged 5 to 17 years who, during a specified time period, were engaged in one or more of the following categories of activities:

- (a) worst forms of child labour; and
- (b) employment below the minimum age, excluding children in permissible light work.

In terms of the implementation of this framework, the estimate of child labour consists of all children in the age group 5 to 14 who are in economic activity, excluding those between 12 and 14 years old who spend less than 14 hours a week on their jobs, unless their activities or occupations are hazardous by nature or circumstances. Added to this, is the category of children 15 to 17 years old in hazardous work.<sup>83</sup>

According to the international statistical standards, children are considered to be in child labour if they are (i) below the age of 12 and working; (ii) aged 12 to 14 years and usually working more than 14 hours per week; (iii) aged 12 to 14 years, usually working 14 hours or less per week (permitted light work), but stated s/he was working in a designated hazardous industry and/or occupation or worked under hazardous conditions; (iv) aged 15 to 17 years and usually working more than 42 hours per week; and (v) aged 15 to 17 years and usually working less than or 42 hours per week (normal work), but stated s/he was working in a designated hazardous industry and/or occupation.<sup>84</sup>

**Hazardous work by children** is statistically defined in terms of the engagement of children in activities of a hazardous nature (designated hazardous industries and occupations) or as work under hazardous conditions, for example, long hours of work in tasks and duties which by themselves may or may not

<sup>83</sup> For further details on the ILO estimation of child labour, see Y. Diallo et al.: *Global child labour developments: Measuring trends from 2004 to 2008* (Geneva, ILO/IPEC, 2010). A specific sequential procedure for measuring child labour within the framework of the international standards is schematically presented (page 19).

<sup>84</sup> ILO: *Resolution concerning statistics of child labour*, adopted by the Eighteenth International Conference of Labour Statisticians (Geneva, 2008). Available at: [http://www.ilo.org/wcmsp5/groups/public/---dgreports/---integration/---stat/documents/normativeinstrument/wcms\\_112458.pdf](http://www.ilo.org/wcmsp5/groups/public/---dgreports/---integration/---stat/documents/normativeinstrument/wcms_112458.pdf)

be of a hazardous nature for children (paragraph 21 of the *Resolution concerning statistics of child labour*). The measurement of children in these hazardous work conditions depends on the extent to which the relevant elements are covered by the surveys.

In the implementation of this framework by ILO,<sup>85</sup> the total number of children in designated hazardous industries, designated hazardous occupations, as well as children with long hours of work and those working in other hazardous work conditions comprise in aggregate the total number of children in hazardous work. When the SNA production boundary is the basis for child labour measurement, “hazardous work by children” is a subcategory of “child labour”, which in turn is a subcategory of “children in economic activity” or “children in employment”.

Therefore, children below the age of 18 years are considered to be engaged in hazardous work<sup>86</sup> if (i) they performed “tasks and duties of hazardous nature even for one hour during the reference period (designated hazardous occupations)” or (ii) “worked long hours (usually working more than 42 hours per week) or worked under hazardous conditions” regardless of the tasks and duties being of hazardous nature or not. The hazardous occupations are designated by national legislation.<sup>87</sup>

Some countries may also designate hazardous industries, for example, mining and quarrying. In addition, the criterion of working conditions can be expanded to cover an unhealthy work environment, unsafe equipment or heavy loads, dangerous work location and exposure to abuse, in addition to long working hours.<sup>88</sup>

**Forced labour** is defined as “all work or service which is extracted from any person under the menace of any penalty and for which the said person has not offered him or herself voluntarily.” In terms of measuring forced labour, two criteria are applied: (i) involuntariness/deception, and (ii) penalty and coercion. A methodology<sup>89</sup> including operational criteria to measure involuntariness and coercion in a survey has been developed. The criterion of involuntariness covers the three phases of an employment relationship during which coercion may be applied: recruitment (i.e. entry into the employment relationship), conditions of work and living conditions if imposed by employer (i.e. during the employment), and possibility to leave employer (i.e. exit from the relationship). The assessment of a forced labour situation requires the presence of the criteria of both involuntariness and coercion.

The relevant international standards are the Forced or Compulsory Labour Convention, 1930 (No. 29)<sup>90</sup> and the Abolition of Forced Labour Convention, 1957 (No. 105).<sup>91</sup> The legal definition of forced labour is closely aligned with the definition of Trafficking in Persons.<sup>92</sup>

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<sup>85</sup> See Y. Diallo et al. : op.cit.

<sup>86</sup> See Y. Diallo et al. : op.cit.

<sup>87</sup> ILO: *Resolution concerning statistics of child labour*, adopted by the Eighteenth International Conference of Labour Statisticians (Geneva, 2008). Available at: [http://www.ilo.org/wcmsp5/groups/public/---dgreports/---integration/---stat/documents/normativeinstrument/wcms\\_112458.pdf](http://www.ilo.org/wcmsp5/groups/public/---dgreports/---integration/---stat/documents/normativeinstrument/wcms_112458.pdf)

<sup>88</sup> ILO: Ibid.

<sup>89</sup> ILO: *Hard to see, harder to count: Survey guidelines to estimate forced labour of adults and children* (Geneva, 2011).

<sup>90</sup> ILO: *The Forced or Compulsory Labour Convention, 1930 (No. 29)*. Available at: <http://www.ilo.org/ilolex/cgi-lex/convde.pl?C029>

<sup>91</sup> ILO: *The Abolition of Forced Labour Convention, 1957 (No. 105)*. Available at: <http://www.ilo.org/ilolex/cgi-lex/convde.pl?C105>

<sup>92</sup> United Nations: *Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children, supplementing the United Nations Convention against Transnational Organized Crime* (2000). The definition of human trafficking is subject to different interpretations in national law and practice. It is therefore the responsibility of national competent authorities to determine the relevant categorization of victims, according to national standards.

## STATISTICAL INDICATORS

### ABOL-1. Child labour rate (CLR) - (M)

#### Measurement objective and rationale

The international standards define the target population for measuring child labour as “all persons in the age group from 5 to 17 years” (paragraph 9 of the *Resolution concerning statistics of child labour*).<sup>93</sup> CLR is the percentage of overall child population in child labour aged 5 to 17 years.

The term *child labour* reflects the engagement of children in prohibited work and, more generally, in types of work to be eliminated as they are socially and morally undesirable as guided by national and international standards.

#### Method of computation

$$\text{Child labour rate (\%)} = \frac{\text{Number of children in child labour aged 5 to 17}}{\text{Total number of children aged 5 to 17}} \times 100$$

#### Concepts and definitions

For a definition of *child labour*, see the introduction to this chapter.

#### Recommended data sources and metadata

The preferred data source for this indicator is the household-based child labour survey. In the absence of the above, labour force surveys with a child labour module, as well as establishment surveys administered at children’s workplace or a population census/other household survey with an employment module may be used.

The CLR should be disaggregated by sex, as there are significant differences in the experiences of girls and boys with respect to child labour. This is particularly so when hazardous unpaid household services are included in the measurement of child labour (hazardous unpaid household services – not all unpaid household services – are included in the estimate of child labour when child labour is measured on the basis of the general production boundary).

Also, cultural norms, especially with respect to the age of marriage of girls, may impact on the value of the CLR (married girls would tend to be excluded when data is being collected on the grounds that they are no longer children). Analysis by urban/rural location would identify more clearly the economic activities and occupations in which child labour predominate, and thus facilitate the formulation of action programmes to address its elimination.

#### Interpretation guidelines

Several elements in the definition of child labour require national consensus and consistency with the national legislation. This includes the list of designated hazardous occupations and/or industries, a cut-off point in terms of weekly hours worked and legislated minimum age of employment.

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<sup>93</sup> ILO: *Resolution concerning Statistics of Child Labour*, adopted by the Eighteenth International Conference of Labour Statisticians (Geneva, 2008). Available at: [http://www.ilo.org/wcmsp5/groups/public/---dgreports/---integration/---stat/documents/normativeinstrument/wcms\\_112458.pdf](http://www.ilo.org/wcmsp5/groups/public/---dgreports/---integration/---stat/documents/normativeinstrument/wcms_112458.pdf)

Differences between countries regarding the measurement of employment and of usual hours of work also apply when computing the CLR. Another key challenge is the quality of data collection methods, considering the possible variation in the nature of the target population.

The above international standard definition includes hazardous unpaid household services as child labour when child labour is measured on the basis of the general production boundary.<sup>94</sup> These are services performed in the child's own household that are "performed (a) for long hours, (b) in an unhealthy atmosphere, involving unsafe equipment or heavy loads, (c) in dangerous locations, and so on." Countries differ in the application of this criterion in their measurement of child labour.<sup>95</sup>

Child labour indicators should be analysed together with indicators such as Children not in school and other education and/or health-related indicators for the age group concerned.

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<sup>94</sup> This inclusion is not systematic since child labour may be measured in terms of the engagement of children in productive activities either on the basis of the general production boundary, or on the basis of the SNA production boundary.

<sup>95</sup> ILO: *Report III, Child Labour Statistics*. Eighteenth International Conference for Labour Statisticians (Geneva, 2008).

## ABOL-2. Hazardous child labour rate (HCLR) – (A)

### Measurement objective and rationale

HCLR gives the prevalence of hazardous work among the population of children aged 5 to 17 years. In this way, the indicator reveals the extent of hazardous work within the category of child population aged 5 to 17 years.

### Method of computation

$$\begin{aligned} & \text{Hazardous child labour rate (\%)} \\ &= \frac{\text{Number of children in hazardous child labour aged 5 to 17}}{\text{Total number of children aged 5 to 17}} \times 100 \end{aligned}$$

### Concepts and definitions

For a definition of *child labour* and *hazardous work by children*, see the introduction to this chapter.

### Recommended data sources

The preferred data source for this indicator is the household-based child labour survey. In the absence of the above, labour force surveys with a child labour module, as well as establishment surveys administered at children's workplace or a population census/other household survey with an employment module may be used.

A list of hazardous occupations and industries in which employment of children is prohibited, as identified by individual countries, is very useful for the estimation of hazardous child labour.

The HCLR should be disaggregated by sex, as there are significant differences in the experiences of girls and boys with respect to hazardous child labour.

### Interpretation guidelines

Several elements in the definition of child labour require national consensus and consistency with national legislation. This includes the list of designated hazardous occupations and/or industries, a cut-off point in terms of weekly hours worked and legislated minimum age of employment. The differences between countries regarding the measurement of employment and of usual hours of work also apply when computing the CLR. Another key challenge is the quality of data collection methods, considering the possible variation in the nature of the target population.

The above international standard definition includes *hazardous unpaid household services* as child labour. These are services performed in the child's own household that are "performed (a) for long hours, (b) in an unhealthy atmosphere, involving unsafe equipment or heavy loads, (c) in dangerous locations, and so on." Countries differ in the application of this criterion when measuring child labour.

Child labour indicators should be analysed together with indicators such as Children not in school and other education and/or health-related indicators for the age group concerned.

## ABOL-3. Rate of worst forms of child labour (WFCL) other than hazardous work (ROWFCL) – (A)

### Measurement objective and rationale

The ROWFCL indicator gives the prevalence of the worst forms of child labour other than hazardous work among the population of children in the age group 5 to 17 years.

### Method of computation

$$\begin{aligned} & \text{Rate of worst forms of child labour (\%)} \\ &= \frac{\text{Number of children in ROWFCL aged 5 to 17}}{\text{Total number of children aged 5 to 17}} \times 100 \end{aligned}$$

### Concepts and definitions

For a definition of **child labour** and **hazardous work by children**, see the introduction to this chapter.

Hazardous work is a component of the worst forms of child labour. Hazardous work is defined by Article 3(d) of the Worst Forms of Child Labour Convention, 1999 (No. 182). The “worst forms of child labour other than hazardous work” refer to child trafficking, forced child labour, bonded child labour, children in armed conflict/child soldiers, commercial sexual exploitation of children and children in illicit activities, as defined by Article 3(a), 3(b) and 3(c) of the Convention.<sup>96</sup>

### Recommended data sources and metadata

Household surveys are not an effective data collection tool for identifying most of the worst forms of child labour other than hazardous work, as most of these activities are clandestine and illicit. There are also difficulties with regard to interviewing children due to fear of the employer or guardian.

Methodologies are currently being developed by SIMPOC for estimating the number of children in “the worst forms of child labour other than hazardous work” and some sector-specific surveys have been piloted for testing.<sup>97</sup>

The ROWFCL should be disaggregated by sex, as there are significant differences in the experiences of girls and boys.

### Interpretation guidelines

Several elements in the definition of child labour require national consensus and consistency with national legislation. This includes the list of designated hazardous occupations and/or industries, a cut-off point in terms of weekly hours worked and legislated minimum age of employment. Another key challenge is the quality of data collection methods, given the nature of the target population.

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<sup>96</sup> ILO: *The Worst Forms of Child Labour Convention*, 1999 (No. 182). Available at: <http://www.ilo.org/ilolex/cgi-lex/convde.pl?C182>

<sup>97</sup> ILO: *Hard to see, harder to count: Survey guidelines to estimate forced labour of adults and children*, 2011 and 2012 editions.

Child labour indicators should be analysed together with indicators such as Children not in school and other education and/or health-related indicators for the age group concerned.

## ABOL-4. Forced labour rate - (A)

### Measurement objective and rationale

This indicator provides the magnitude of forced labour (or the stock of those currently in forced labour) in a given country at a given point in time. In other words, the indicator is the proportion of the employed that are currently in forced labour.

### Method of computation

$$\text{Forced Labour rate (\%)} = \frac{\text{Number of employed in forced labour}}{\text{Total number of employed}} \times 100$$

Alternatively, the absolute number of workers in forced labour or households affected by forced labour may be provided (requiring that at least one household member is in forced labour).

### Concepts and definitions

For a definition of *forced labour*, see the introduction to this chapter.

### Recommended data sources and metadata

The most appropriate data collection tools for forced labour depends on the forms of forced labour to be surveyed (e.g. state - or military imposed, forced labour in the private economy, including commercial sexual exploitation). Up until now, methodologies to survey only forced labour in the private economy have been developed and tested by the ILO.

Data on forced labour is best collected through a dedicated survey but it is also possible to include forced labour modules in household income and expenditure surveys, as well as labour force surveys and child labour surveys (when the coverage is limited to children in forced labour, which is one of the worst forms of child labour). The recommended reference period for measuring the forced labour rate should be short, for instance, the last seven days, as the purpose is to capture those *currently* in forced labour. The reference periods of the numerator and the denominator should be the same.

If the scope of the survey is limited to an economic activity, it is also possible to use establishment surveys, although this would cover only formal establishments.

The greatest limitation for this indicator is the difficulty in getting a large enough set of observations which permits extrapolation and the required breakdowns.

It is crucial to report the reference period together with the figures, as well as the international and national criteria for identifying forced labour.

The forced labour rate should be given by sex, age, economic activity, location (urban/rural), and informal/formal employment, if possible. It is also important to analyse forced labour by its form, i.e. (i) state - or military imposed, and (ii) private economic exploitation, and to analyse as well the main mechanisms of forced labour (i.e. the forms of coercion and deception employed).



Although the main purpose of this indicator is to measure the national forced labour rate, it may be more efficient to limit the scope of the survey to those economic activities (ISIC) and/or geographical areas where forced labour is known to be concentrated. In any case, such concentration should be taken into account when designing the sample, for example, by oversampling in activities and/or areas where forced labour is known to exist. This approach is also recommended for estimating forced labour among internal labour migrants.

### **Interpretation guidelines**

All operational criteria regarding forced labour have to be customized according to the national context in order to be relevant to the situations of forced labour existing in the country and they also need to be consistent with the national legislation on forced labour. The framework for the identification of forced labour on the basis of the operational criteria is part of the survey methodology proposed by the ILO.

Although forced labour usually takes place in the context of a paid employment relationship (whether formal or informal), it can also occur in disguised employment relationships, in which similar means of coercion are used against the own-account worker.

If this indicator is measured through a labour force or an establishment survey, it is unlikely to detect forced labour in illicit activities such as drug trade.

## ABOL-5. Forced labour rate among returned migrants - (A)

### Measurement objective and rationale

This indicator reveals the proportion of returned labour migrants (economically active migrants) for a given reference period (12-24 months) that have been in forced labour (including as a result of trafficking). The indicator relates to decent work for the nationals of a given country who have worked abroad.

### Method of computation

$$\begin{aligned} & \text{Forced Labour rate among returned migrants (\%)} \\ &= \frac{\text{Number of returned migrants who have been in forced labour}}{\text{Total number of returned migrants}} \\ &\times 100 \end{aligned}$$

It is recommended to present this indicator as a percentage of the total number of returned migrants. If this is not possible, the denominator could be the total number of labour emigrants from the country (whether or not they have returned to their source country).

If data are available on labour emigrants, it may be possible to measure the proportion of households affected by forced labour among migrants (requiring that at least one household member be in forced labour abroad, currently or previously).

### Concepts and definitions

According to the Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children, supplementing the United Nations Convention against Transnational Organized Crime (2000), trafficking in persons refers to “the recruitment, transportation, transfer, harbouring or receipt of persons, by means of the threat or use of force or other forms of coercion, of abduction, of fraud, of deception, of the abuse of power or of a position of vulnerability or of the giving or receiving of payments or benefits to achieve the consent of a person having control over another person, for the purpose of exploitation”.<sup>98</sup>

Exploitation, according to the Protocol, includes, “at a minimum, the exploitation of the prostitution of others or other forms of sexual exploitation, forced labour or services, slavery or practices similar to slavery, servitude or the removal of organs”.<sup>99</sup>

### Recommended data sources and metadata

The recommended data collection instrument for this indicator is a dedicated household survey (migration, labour force or household income and expenditure surveys) with a module on forced labour. The recommended reference period for measuring the forced labour rate among returned

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<sup>98</sup> United Nations: *Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children, supplementing the United Nations Convention against Transnational Organized Crime* (2000).

<sup>99</sup> United Nations: *Ibid.* The definition of human trafficking is subject to different interpretations in national law and practice. It is therefore the responsibility of national competent authorities to determine the relevant categorization of victims, according to national standards.

migrants is the last 12 to 24 months, as those previously involved in forced labour abroad should be captured.

When the denominator is total labour emigrants, administrative records or registers (from source or destination countries where data exchange is available) can also be used.

The greatest limitation for this indicator for the forced labour rate is the difficulty in getting a large enough set of observations which permits extrapolation and the required breakdowns. In addition, when entire households migrate outside the country, they fall out of the sampling frame making it impossible to capture them through household surveys conducted in the source country.

It is crucial to report the reference period together with the figures, as well as the international and national criteria for forced labour. The scope of the indicator does not cover trafficking for purposes other than forced labour.

The forced labour rate among returned migrants should be provided by sex, age, by type of forced labour, by type of recruitment and by economic activity, if possible. It is also important to analyse forced labour by its form, i.e. (i) state - or military imposed, and (ii) private economic exploitation. Since the main purpose of the indicator is to measure forced labour rate among returned migrants, it may be more efficient to limit the scope of the survey to those geographical areas or at least to oversample in these areas if they are known to be concentrated in certain geographical areas.

### **Interpretation guidelines**

All operational criteria of forced labour have to be customized according to the national context in order to be relevant to the situations of forced labour existing in the country and they also have to be consistent with the national legislation on forced labour and trafficking. The framework for the identification of forced labour on the basis of the operational criteria is part of the methodology proposed by the ILO.

## Legal Framework Indicator 9. Child Labour

### Scope

Designating a particular form of work as “child labour” depends on the child’s age, the type of work performed and the conditions under which it is performed, as well as certain determinations made by individual countries. “Child labour” is often described and condemned as work that deprives children of their childhood, their potential and their dignity, and that is harmful to their physical and mental development.

### Selected ILS on child labour

Fundamental Convention No. 138 on Minimum Age, 1973, requires the *general minimum working age* to be not less than the age of completion of compulsory schooling and, in any case, not less than 15 years. It sets the minimum age for *hazardous work* at 18 (16 under certain strict conditions – hazardous work is work which, by its nature or the circumstances in which it is carried out, is likely to jeopardise or harm the health, safety or morals). The exact list of hazardous work must be determined in each country following tripartite consultation. Several flexibility options are foreseen: e.g. an exception for *light work* may be allowed as from 13 years of age, that is, work that is not harmful and does not hinder schooling, for a limited number of hours in permitted types of work only. Developing economies may initially set the general minimum age at 14 (12 for light work).

Fundamental Convention No. 182 on the Worst Forms of Child Labour, 1999, defines a “child” as a person under 18 years of age. The Convention requires ratifying states to eliminate the worst forms of child labour *as a matter of urgency*. This needs to be prohibited in national legislation and includes all forms of slavery or practices similar to slavery, such as the sale and trafficking of children, debt bondage and serfdom and forced or compulsory labour, including forced or compulsory recruitment of children for use in armed conflict; the use, procuring or offering of a child for prostitution and pornography; using children for illicit activities, in particular for the production and trafficking of drugs; and work which is likely to harm the health, safety or morals of children (i.e. hazardous work).

### Information provided on the indicator

**Law, policy or institutions:** Is there a provision in national legislation on the minimum age for employment or work? Does this minimum age apply to all sectors of the economy? Or are there exclusions from the coverage of the law, such as family enterprises, family farms, domestic work and agriculture? Is there a national law on compulsory education? Does the end of compulsory education coincide with the minimum working age?

Are there exceptions to this minimum age for light work? If so, has a minimum age for admission to light work been established, and the types of permissible light work determined?

Is there a minimum age of 18 for hazardous work? Has a list of types of hazardous work been determined?

What are the applicable penalties for violations in this respect?

Does the national legislation prohibit each of the worst forms of child labour for all persons under 18? Does this legislation establish appropriate penal sanctions for the worst forms of child labour?

Is there a national policy on the elimination of child labour, including its worst forms? Is there a national plan/programme of action against child labour? Is there an institution (Commission, Board, Ministry, Unit) responsible for taking action against child labour?

**Evidence of implementation effectiveness:** Comments of ILO supervisory bodies (if any), including comments on court cases concerning child labour and its worst forms? Labour inspection records and its findings on child labour? Documented results of the execution of the plan/programme of action? Any relevant reports on children or Child Labour Surveys (carried out by ILO/SIMPOC)?

**Ratification of ILO Conventions:** The Minimum Age Convention, 1973 (No. 138) and the Worst Forms of Child Labour Convention, 1999 (No. 182).

### Additional sources of information

- Country baselines under the ILO Declaration Annual Review (2000-2010): the Effective Abolition of Child Labour (CL) – for countries which haven’t ratified the C138 and/or the C182 available at:

[http://www.ilo.org/wcmsp5/groups/public/---ed\\_norm/---declaration/documents/publication/wcms\\_091263.pdf](http://www.ilo.org/wcmsp5/groups/public/---ed_norm/---declaration/documents/publication/wcms_091263.pdf)

- Understanding Children's Work Programme (an inter-agency research cooperation initiative involving the ILO UNICEF and the World Bank): <http://www.ucw-project.org/>
- Accelerating action against child labour. Report of the Director-General, International Labour Conference, 99th session, 2010, available at: [http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/publication/wcms\\_126752.pdf](http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/publication/wcms_126752.pdf)
- IPEC website: <http://www.ilo.org/ipeclang--en/index.htm>
- The CEACR's 2012 *General Survey on the fundamental Conventions* concerning rights at work (see particularly Part IV of the Report on the elimination of child labour).

## Legal Framework Indicator 10. Forced Labour

### Scope

Forced labour occurs when work or service is exacted by the State or individuals who have the will and power to threaten workers with severe deprivations.

### Selected ILS on forced labour

The fundamental convention on Forced Labour, 1930 (No. 29) prohibits all forms of forced or compulsory labour, which is defined as "all work or service which is exacted from any person *under the menace of any penalty* and for which the said person *has not offered himself voluntarily*." Exceptions are provided for work required by compulsory military service, normal civic obligations, as a consequence of a conviction in a court of law (provided that the work or service in question is carried out under the supervision and control of a public authority and that the person carrying it out is not hired to or placed at the disposal of private individuals, companies or associations), in cases of emergency, and for minor communal services performed by the members of a community in the direct interest of the community. The convention also requires that the illegal extraction of forced or compulsory labour be punishable as a *penal offence*, and that ratifying states ensure that the relevant penalties imposed by law are *adequate and strictly enforced*.

The fundamental Convention on the Abolition of Forced Labour, 1957 (No. 105) prohibits forced or compulsory labour as a means of political coercion or education or as a punishment for holding or expressing political views or views ideologically opposed to the established political, social or economic system; as a method of mobilising and using labour for purposes of economic development; as a means of labour discipline; as a punishment for having participated in strikes; and as a means of racial, social, national or religious discrimination.

The fundamental Convention on the Worst Forms of Child Labour, 1999 (No. 182) considers forced or compulsory labour, including child trafficking and forced recruitment for armed conflict, by anyone under 18 years of age as one of the worst forms of child labour to be tackled urgently.

### Information provided on the indicator

<b>Law, policy or institution:</b> Is there a provision in legislation regarding the prohibition, criminalisation and punishment of forced labour, including trafficking for forced labour? Is trafficking defined? How? Is there a plan of action/national policy regarding the elimination of forced labour? Is there an institution coordinating action against forced labour? Is there an institution responsible for enforcing the ban on forced labour and/or trafficking?
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<b>Evidence of implementation effectiveness:</b> Comments of ILO supervisory bodies (if any).
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<b>Ratification of ILO Conventions:</b> Forced Labour Convention, 1930 (No. 29), the Abolition of Forced Labour Convention, 1957 (No. 105).
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### Additional sources of information

#### ILO sources

- CEACR: General Survey based on Article 19 Reports. Convention, 1930 (No. 29), and the Abolition of Forced Labour Convention, 1957 (No. 105) General survey of the Committee of Experts on the Application of Conventions and Recommendations on the Eradication of forced labour, ILC, 96th Session, 2007: <http://www.ilo.org/public/english/standards/relm/ilc/ilc96/pdf/rep-iii-1b.pdf>  
The General Survey Giving globalization a human face, ILC 101<sup>st</sup> session, 2012.
- DECLARATION Country baselines under the ILO Declaration Annual Review (2000-2010): the Elimination of All Forms of Forced or Compulsory Labour (FL): [http://www.ilo.org/wcmsp5/groups/public/---ed\\_norm/---declaration/documents/publication/wcms\\_091264.pdf](http://www.ilo.org/wcmsp5/groups/public/---ed_norm/---declaration/documents/publication/wcms_091264.pdf), or status by Country: <http://www.ilo.org/declaration/follow-up/annualreview/ratificationstatus/lang--en/index.htm>
- ILO Indicators on forced labour, ILO 2012: [http://www.ilo.org/sapfl/Informationresources/Factsheetsandbrochures/WCMS\\_203832/lang--en/index.htm](http://www.ilo.org/sapfl/Informationresources/Factsheetsandbrochures/WCMS_203832/lang--en/index.htm)

## Chapter 6. Stability and security of work

Stability and security of work is a dimension that allows the differentiation of workers into those whose jobs are characterized by a degree of relative permanence and soundness in terms of the absence of subsistence working conditions from others. The indicators are given in terms of the share of employment falling into the particular unstable or insecure worker category.

Stability and security of work covers three statistical indicators and one legal framework indicator within the decent work measurement framework (see Table 6).

**Table 6: Overview of decent work indicators for stability and security of work**

Statistical Decent Work Indicators*	Concepts	Coverage	Preferred data source
<b>STAB-1. Precarious employment rate (M)</b>	Employed persons Works in precarious employment	Employed persons	LFS, other household surveys
<b>STAB-2. Job tenure (A)</b>	Employed persons Job tenure	Employed persons	LFS, other household surveys
<b>STAB-3. Subsistence worker rate (A)</b>	Employed persons Self-employed Subsistence workers	Employed persons	LFS, other household surveys with employment module
<b>STAB-4. Real earnings of casual workers (A)</b>	Employment Earning Hours actually worked CPI	Employed persons	LFS (with information by job contract duration) Other household surveys (with employment, earnings and hours data)
<b>Legal Framework Indicator: L11- Termination of employment</b>			

\*At the time of the Expert Group Meeting in September 2008, only one main statistical indicator had been identified for this substantive element: "Stability and security of work" (M), for which developmental work was to be done by the Office. The three new indicators listed above have replaced this main indicator (of which only one is a main indicator, M), and "number of casual workers" has been modified and incorporated as a complementary indicator to the new indicator, "Precarious employment rate".

While the precarious employment concept centers on the duration of the length of job contracts (which may be renewed with the same employer over long periods of time yielding "*employees with stable contracts*") or the possibility of rapid dismissal, the job tenure concept focuses on the length of time workers have been in their current or main job or with their current employer regardless of the contract duration.

Measurement of the concepts used to define the indicators requires adequate questionnaire design and probing, and reliability of estimates will require sufficient a sample size as the concepts refer to subgroups of employment which are best analyzed by disaggregating by key components and classifications.

Changes in the levels or trends in a given indicator are best understood in terms of the changes in underlying components. The indicators should be analyzed together with changes in other related decent work indicators, both quantitative and qualitative (i.e. rights at work/legal framework)

indicators. The rights at work and legal framework for decent work indicator which has been identified is employment protection legislation (including notice of termination in weeks). Moreover, it is important to analyze together with economic and social context indicators, and, in the case of subsistence workers, it may also be beneficial to analyze the indicator jointly with environmental, climatic and land/natural resource use indicators.

### Concepts and definitions used throughout the chapter

The concept of employment concerns the supply of labour for the production of economic goods and services (that is, it refers to productive activity *within the production boundary*) as defined by the United Nations systems of national accounts and balances during a specified time-reference period.

The **employed** comprise all persons of working age who during a specified brief period, such as one week or one day, were in the following categories: a) paid employment (whether at work or with a job but not at work); or b) self-employment (whether at work or with an enterprise but not at work). Temporary absence from work includes reasons such as illness, maternity and parental leave, holiday, training, and industrial disputes.<sup>100</sup>

The concept *at work* refers to persons who during the reference period performed some work for wage or salary, in cash or in kind (for paid employment), or persons who during the reference period performed some work for profit or family gain, in cash or in kind (for self-employment). For operational purposes, the notion "some work" may be interpreted as work for at least one hour. Employed persons include those persons of working age who worked for at least one hour during the reference period as contributing family workers (formerly referred to as unpaid family workers) working in a family business.

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<sup>100</sup> ILO: *Resolution concerning statistics of the economically active population, employment, unemployment and underemployment*, adopted by the Thirteenth International Conference of Labour Statisticians. (Geneva, October 1982). Available at: [http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS\\_087481/lang--en/index.htm](http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS_087481/lang--en/index.htm)



## STATISTICAL INDICATORS

### STAB-1. Precarious employment rate - (M)

#### Measurement objective and rationale

The precarious employment rate (PER) provides information regarding the share of the employed whose contract of employment, whether verbal or written, is of relatively short duration or whose contract can be terminated on short notice.

#### Method of computation

The PER is defined as the percentage of employed persons who are in precarious employment. The indicator is calculated as follows:

$$PER (\%) = \frac{\text{Number of persons who are in precarious employment}}{\text{Total number of employed persons}} \times 100$$

The indicator may be complemented by a component indicator by calculating the share of a given component in total precarious employment. For example, the share of casual workers in precarious employment (CWPE) would be calculated as:

$$CWPE (\%) = \frac{\text{Number of casual workers}}{\text{Total number of persons who are in precarious employment}} \times 100$$

#### Concepts and definitions

For the definition of employed persons, please see the concepts and definitions section in the chapter introduction. Workers in precarious employment can either: (a) be workers whose contract of employment leads to the classification of the incumbent as belonging to the groups of "casual workers", "short-term workers" or "seasonal workers"; or (b) be workers whose contract of employment will allow the employing enterprise or person to terminate the contract at short notice and/or at will, the specific circumstances to be determined by national legislation and custom. In the case of workers falling under category (a) above, workers may be classified as "employees" or "own-account workers" according to the characteristics of the employment contract.<sup>101</sup>

Workers under category (a) refer to the following:

- Casual workers: contracts are not expected to continue for more than a very short period
- Seasonal workers: contract duration is influenced by seasonal factors such as climate, public holidays, agriculture season, etc.

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<sup>101</sup> Despite this, concept measurement methods are better suited for capturing employees than own-account workers.

- Short-term workers: contracts are expected to last for a short period, but longer than that of casual workers<sup>102</sup>

The common element among the precarious employment categories is the precarious, short-term nature of the employment contracts (category a) or their instability, as employers may terminate them upon short notice (category b).

### **Recommended data sources, metadata and disaggregations**

The preferred official national data source for this indicator is a household-based labour force survey (LFS) which includes information by job contract duration. Other household surveys with an appropriate employment module may also be used to obtain the required data to calculate the PER. Nonetheless, such sources may have limitations related to periodicity, geographic coverage or worker coverage about which data users should be made aware.

When the PER is published, appropriate metadata (or statistical documentation information) should be provided to users. It is recommended that at minimum information on the data source, data reference period, population coverage and geographic coverage be made easily available to data users. Moreover, the definition of precarious employment should be provided.

Breakdowns of the indicator by component groups such as sex, age group, urban and rural areas, and educational attainment provides measures by which to evaluate the relative differences in precarious employment across different groups. Disaggregation by key classifications such as economic activity (agricultural and non-agricultural), status in employment (employee or own-account workers), and key occupation groups may also be quite valuable for the analysis of precarious employment.

### **Interpretation guidelines**

Progress in the precarious employment rate is measured by achieving acceptably low levels according to national circumstances and/or a declining trend. An increasing trend in the indicator corresponds to a worsening of the decent work situation in this dimension, as it points to an increasing number of jobs becoming unstable and/or insecure.

Different experiences suggest that the indicator is sensitive to changes in the business cycle, having a counter cyclical nature. An economic downturn or recession may result primarily in layoffs of employees with short-term contracts, often younger and less experienced workers. When an economy begins a period of expansion, businesses may wish to avert risk and keep costs down at least initially by cautiously hiring workers on short-term contracts.

In the aggregate, firm decisions regarding their employees during the business cycle will depend on the economic structure, product/service demand and prices in the output market as well as labour supply and earnings in the labour market. It is therefore worth analyzing the indicator together with indicators of GDP growth by sector, labour force participation rate, unemployment rate and average

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<sup>102</sup> ILO: *Resolution concerning the International Classification of Status in Employment (ICSE)*. Adopted by the Fifteenth International Conference of Labour Statisticians. (Geneva, January 1993). Available at: [http://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/normativeinstrument/wcms\\_087562.pdf](http://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/normativeinstrument/wcms_087562.pdf)

earnings. An analysis of the differences by sex for each of the components of precarious employment is valuable for understanding the gender dimension of the indicator.

Seasonal employment may occur in key industries, like agriculture or tourism, and hiring may be subject to special legislation which should be analyzed jointly with the indicator. Seasonal employment contracts in agriculture may be defined by work gang or crew members where working conditions (including health, safety and sanitation) and earnings may be inadequate. Similarly, workers in casual employment are often hired as day labourers in sectors such as construction or agriculture where working conditions and pay can be substandard.

Some degree of overlap may exist between this indicator and informal employment, reflecting the fact that precarious employment jobs generally lack basic social or legal protections or employment benefits. Assessing the extent to which self-employment jobs are precarious could be done in terms of defining the stability of the enterprises in which they work; for example, an analysis of the average time in operation of self-employed enterprises (disaggregated by formal/informal sector) could be established.

It should be noted that some workers (including working students) may prefer casual, seasonal, or short-term jobs hence it is important to identify whether the engagement in this type of employment is voluntary or not given the possibility of an alternative employment situation that is not precarious.

## STAB-2. Job tenure - (A)

### Measurement objective and rationale

Job tenure measures the length of time workers have been in their current or main job or with their current employer and is valuable for analyzing the degree of fluidity in the job market. There are two indicators for job tenure: (i) mean job tenure for all employed persons and (ii) percent distribution of employed persons by length of job tenure.

### Method of computation

1. The mean job tenure gives the mean number of years of tenure per employed person. It is calculated as:

$$\text{Mean job tenure} = \frac{\text{Total number of years of job tenure among employed persons}}{\text{Total number of employed persons}} \times 100$$

2. The percent distribution of employed persons by length of job tenure is computed as:

$$\begin{aligned} \text{Percent of employed persons with job tenure in length of time } i \\ = \frac{\text{Number of employed persons whose job tenure falls in length of time } i}{\text{Total number of employed persons}} \times 100 \end{aligned}$$

Where  $i$  is a standardized job tenure time band.

### Concepts and definitions

For the definition of *employment*, please see the concepts and definitions section in the chapter introduction. Note within the status of employment categories, *employees with stable contracts* are those “employees” who have had, and continue to have, an explicit (written or oral) or implicit contract of employment, or a succession of such contracts, with the same employer on a continuous basis.<sup>103</sup>

*Job tenure* measures the length of time employed persons have been in their current or main job (self-employed workers) or with their current employer (employees).

Job tenure time band categories should reflect national circumstances. Nonetheless, data users are encouraged to apply the following categories for purposes of international comparability: (1) less than 6 months, (2) 6 months or more but less than 12 months, (3) one year or more but less than 5 years and (4) 5 years or more but less than 10 years and (5) 10 years or more.

### Recommended data sources, metadata and disaggregations

The preferred official national data source for these indicators is a household-based labour force survey (LFS). Other household surveys with an appropriate employment module may also be used to

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<sup>103</sup> For more information regarding status in employment categories, please refer to decent work indicator EMPL-8. Employment by status in employment (ESE). See also: ILO: *Resolution concerning the International Classification of Status in Employment (ICSE)*. Adopted by the Fifteenth International Conference of Labour Statisticians. (Geneva, January 1993). Available at: [http://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/normativeinstrument/wcms\\_087562.pdf](http://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/normativeinstrument/wcms_087562.pdf)

obtain the required data to calculate the indicators. Nonetheless, such sources may have limitations related to periodicity, geographic coverage or worker coverage about which data users should be made aware.

Appropriate metadata (or statistical documentation information) should be provided to users when job tenure data are published. For these indicators, it is recommended that at minimum information on the data source, data reference period, population coverage and geographic coverage be made easily available to data users. Moreover, the definition of job tenure applied should be provided.

Disaggregation of the indicators by component groups such as sex, age group, urban and rural areas, and educational attainment provides measures by which to evaluate the relative differences in job tenure across different groups. Disaggregation by key classifications such as economic activity, status in employment (employees and self-employed workers), and key occupation groups may also be quite valuable for the analysis of job tenure.

### **Interpretation guidelines**

An increasing mean job tenure may be interpreted as increasing employment security and thus an improvement in decent work in this dimension.

However, the indicator should be analyzed cautiously with regard to the point in time of the business cycle and taking into account the key transmission mechanism of changes in total output to the labour market (i.e., whether employment, working time and/or employment-related income or earnings are most affected). For instance, during periods of economic recession or contraction, when a large number of workers risk losing their jobs, mean job tenure may tend to increase, as those laid off are often workers with shorter tenure. In this scenario, the share of employed persons with job tenure in the lower time band categories would likely decrease while the share in higher time band categories would increase.

At times of increasing employment opportunities, the mean job tenure may tend to decrease as there would be a higher number of newly employed persons (new entrants or persons changing employers). In this case, the share of employed persons with employment tenure in the lower time band categories would likely increase.

The age distribution of the labour force is also important to consider in analyzing job tenure, as younger workers tend to have shorter tenure and therefore less job stability. Hence, in an economy where the labour force mostly comprises younger persons, the mean job tenure is expected to be lower. Women workers may be more likely to show greater flows into and out of the labour force due to child bearing, and thus present lower mean job tenure than men of the same age group.

It is recommended that data users analyze the indicators disaggregated by status in employment, and in particular, by employees and self-employed worker categories to evaluate the different experiences of these groups as regards job tenure. Employees who are in informal employment may present poor job tenure characteristics. Moreover, it may be quite useful to disaggregate the indicators by economic activity in order to identify the sectors where turnover of labour is more rapid or slower.

### **STAB-3. Subsistence worker rate -(A)**

## Measurement objective and rationale

The subsistence worker rate (SWR) measures the share of employed persons who work in subsistence production of goods or services, that is, production which constitutes the predominant consumption of the household. Such workers face enormous challenges of stability and security of work due to the nature of the work which is often dependent upon rights to use land and water resources as well as favourable climatic and environmental conditions.

## Method of computation

The subsistence worker rate is defined as the percent of employed persons who are subsistence workers. It is calculated as:

$$\text{Subsistence worker rate} = \frac{\text{Total number of persons employed as subsistence workers}}{\text{Total number of employed persons}} \times 100$$

## Concepts and definitions

For the definition of *employment*, please see the concepts and definitions section in the chapter introduction.

The International Classification of Status in Employment (ICSE-93) defines *self-employment jobs* as those jobs where the remuneration is directly dependent upon the profits (or the potential for profits) derived from the goods and services produced (where own consumption is considered to be part of profits). The incumbents make the operational decisions affecting the enterprise, or delegate such decisions while retaining responsibility for the welfare of the enterprise.<sup>104</sup>

*Subsistence workers* are workers who hold a “self-employment job” and in this capacity produce goods or services which are predominantly consumed by their own household and constitute an important basis for its livelihood.<sup>105</sup> They are defined according to activities that fall within the production boundary of the System of National Accounts, i.e. includes all production of goods for own use, but excludes all production of services for own final consumption within households.<sup>106</sup>

Subsistence workers are primarily found in agriculture, forestry and fishing activities, for which reason it is essential to properly code these economic activities if one seeks to capture such workers. For operational purposes, it may be useful to target International Standard Classification of Occupations (ISCO-08) Sub-Major Group 63, “Subsistence farmers, fishers, hunters and gatherers”.

It should be noted that subsistence workers should in theory be included in the measurement framework of informal employment (a category in the production unit “households”). However, many countries that measure informal employment exclude the agricultural sector where the majority of subsistence workers are often found.

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<sup>104</sup> ILO: *Resolution concerning the International Classification of Status in Employment (ICSE)*. Adopted by the Fifteenth International Conference of Labour Statisticians. (Geneva, January 1993). Available at: [http://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/normativeinstrument/wcms\\_087562.pdf](http://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/normativeinstrument/wcms_087562.pdf)

<sup>105</sup> Idem.

<sup>106</sup> Production of services is excluded except for the services produced by employing paid domestic staff and the own-account production of housing services by owner-occupiers.

## **Recommended data sources, metadata and disaggregations**

The preferred official national data source for these indicators is a household-based labour force survey (LFS). Other household surveys with an appropriate employment module may also be used to obtain the required data to calculate the indicators. Nonetheless, such sources may have limitations related to periodicity, geographic coverage or worker coverage about which data users should be made aware.

Appropriate metadata (or statistical documentation information) should be provided to users when subsistence worker data are published. For these indicators, it is recommended that at minimum information on the data source, data reference period, population coverage and geographic coverage be made easily available to data users. The definition of subsistence workers applied should also be provided.

Disaggregation of the indicators by component groups such as sex, age group, urban and rural areas, and educational attainment provides measures by which to evaluate the relative differences in subsistence workers across different groups. Disaggregations by ethnicity (including indigenous populations) where data are available may also be very useful. Disaggregation by key classifications such as economic activity and occupation may also be quite valuable. In particular, if reliability of estimates permits, disaggregations of ISCO-08 sub major group 63, "Subsistence farmers, fishers, hunters and gatherers" into 3-digit minor groups may help to better quantify the types of subsistence occupations which are prevalent.

## **Interpretation guidelines**

An increasing subsistence worker rate may be interpreted as declining stability and security of work, and thus a deterioration of decent work in this dimension.

While subsistence workers are mainly found in developing countries, they may also exist in developed countries, particularly in less developed regions or regions facing extreme economic hardship. Economies that suffer prolonged contractions, experience mass layoffs of workers and do not offer adequate employment opportunities or safety nets may witness unemployed persons seeking refuge in subsistence production activities.

Similarly, employees (including those with higher levels of education) whose real earnings are well below cost of living and living in extreme poverty may abandon their paid employment and join the ranks of subsistence workers where the "payoff" is higher per unit of time worked. Thus, in some economies subsistence workers may include some workers with higher levels of education. In any case, it is recommended that the indicator be analyzed by level of educational attainment.

Subsistence workers often suffer deficits of decent work in other dimensions, and it is recommended that the indicator be analyzed jointly with other indicators which are disaggregated by economic activity (agriculture, forestry, fishing) or occupation group (ISCO-08 sub major group 63), including excessive working time, working poverty, safe work environment, and social security indicators.

A cycle of poverty within subsistence-worker households may exist whereby children do not attend school and begin working alongside adult subsistence workers, later becoming adult subsistence workers themselves. Child labour is often prevalent in areas of subsistence production, and it is recommended that the indicator be measured jointly with the incidence of child labour as well as the

working time of children (using the general production boundary).<sup>107</sup> It is suggested that such indicators be measured jointly with the percent of children not in school by geographic area.

If data on environmental degradation (e.g. soil erosion, destruction of forests, or contamination of water resources) and adverse climatic conditions (e.g. severe droughts or flooding) in regions populated by subsistence workers are available, it may be useful to analyze this information together with the subsistence worker rate by region. Moreover, if qualitative policy or legal framework information on subsistence worker access to land and water resources are available, this will also contribute to better understanding the stability and security of subsistence workers.

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<sup>107</sup> ILO: the *Resolution concerning statistics of child labour*, adopted by the 18th International Conference of Labour Statisticians. Available at : [http://www.ilo.org/wcmsp5/groups/public/---dgreports/--stat/documents/normativeinstrument/wcms\\_112458.pdf](http://www.ilo.org/wcmsp5/groups/public/---dgreports/--stat/documents/normativeinstrument/wcms_112458.pdf)



#### STAB-4. Real earnings of casual workers - (A)

##### Measurement objective and rationale

The indicator for the real earnings of casual workers conveys information about the remuneration in real terms. The duration of the contract of employment of casual workers is not expected to continue for more than a short period, and such workers are considered a component of precarious workers.

##### Method of computation

The indicator is obtained by dividing the total nominal earnings of casual workers by the total number of hours actually worked of casual workers for a given reference period; this amount is deflated to obtain the real mean hourly earnings of casual workers.

##### Step 1

$$\begin{aligned} & \text{Mean nominal hourly earnings of casual workers} \\ &= \frac{\text{Total nominal earnings of casual workers}}{\text{Total number of hours actually worked by casual workers}} \end{aligned}$$

##### Step 2

$$\begin{aligned} & \text{Real mean hourly earnings of casual workers} \\ &= \frac{\text{Mean nominal hourly earnings of casual workers}}{\text{CPI in decimal form}} \end{aligned}$$

##### Concepts and definitions

For the definition of **employment**, please see the introduction to Chapter 1.

**Casual workers** are workers who have an explicit or implicit contract of employment which is not expected to continue for more than a short period, whose duration is to be determined by national circumstances.<sup>108</sup> These workers may be classified as being "employees" or "own-account workers" according to the specific characteristics of the employment contract. However, for purposes of calculating this indicator, only the earnings of *employee* casual workers are captured in the numerator. That is, employment income of the self-employed is excluded from the numerator.

**Earnings** refer to regular remuneration received from employers, in cash and in kind. This includes direct wages and salaries for time worked or work done, remuneration for time not worked (e.g. paid annual leave), as well as bonuses and gratuities regularly received. This definition of earnings excludes contributions paid to social security and pension schemes by employers in respect of their employees, as well as the benefits received by employees under these schemes. Earnings also exclude severance

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<sup>108</sup> ILO: Resolution concerning the International Classification of Status in Employment (ICSE). Adopted by the Fifteenth International Conference of Labour Statisticians (January 1993). Available at: [http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS\\_087562/lang-en/index.htm](http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS_087562/lang-en/index.htm)

and termination pay.<sup>109</sup> It should be noted that most casual workers do not receive earnings components other than direct wages (see introduction to Chapter 2).

The concept of **hours actually worked** is defined as the time spent in a job for the performance of activities that contribute to the production of goods and/or services during a specified short or long reference period. It applies to all types of jobs and is not linked to administrative or legal concepts of working time. For purposes of the working time indicators presented in this chapter, it refers to time spent on productive activities defined within the SNA production boundary. This concept covers time spent directly on and in relation to productive activities, as well as down time and resting time, but excludes time not worked, for example, annual and sick leave, public holidays, parental leave, commuting time, educational activities and longer pauses, such as lunch breaks (see the introduction to Chapter 3).<sup>110</sup> To be consistent with the scope of the numerator, only the total hours actually worked by all *employee* casual workers should be captured in the denominator. In other words, it is recommended that hours actually worked by own-account casual workers be excluded from the denominator.

The **Consumer Price Index** (CPI) is a current social and economic indicator that is constructed to measure changes over time in the general level of prices of consumer goods and services that households acquire, use or pay for consumption. The index aims to measure the change in consumer prices over time. This may be done by measuring the cost of purchasing a fixed basket of consumer goods and services of constant quality and similar characteristics and using these to be representative of households' expenditure during a year or other specified period. Such an index is called a fixed-basket price index (see Chapter 11).

For this indicator, the CPI is used to adjust for inflation and thus provide the real average hourly earnings among casual workers.<sup>111</sup>

### **Recommended data sources, metadata and disaggregation**

The preferred official national data source for these indicators is a household-based labour force survey (LFS) which includes information by job contract duration. In the absence of a LFS, other household surveys with data on employment, earnings and hours can be used. Nonetheless, such sources may have limitations related to periodicity, geographic coverage or worker coverage about which data users should be made aware.

Appropriate metadata (or statistical documentation information) should be provided to users when data are published on real earnings of casual workers (metadata on the source, reference period, gross

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<sup>109</sup> ILO: *Resolution concerning an integrated system of wage statistics*, adopted by the Twelfth International Conference of Labour Statisticians (Geneva, October 1973). Available at : [http://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/normativeinstrument/wcms\\_087496.pdf](http://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/normativeinstrument/wcms_087496.pdf)

<sup>110</sup> ILO: *Resolution concerning the measurement of working time*, adopted by the Eighteenth International Conference of Labour Statisticians (Geneva, 2009). Available at: [http://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/normativeinstrument/wcms\\_112455.pdf](http://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/normativeinstrument/wcms_112455.pdf)

<sup>111</sup> A consumer price index is usually estimated as a series of summary measures of the period-to-period proportional change in the prices of a fixed set of consumer goods and services of constant quantity and characteristics, acquired, used or paid for by the reference population. Each summary measure is constructed as a weighted average of a large number of elementary aggregate indices. Each of the elementary aggregate indices is estimated using a sample of prices for a defined set of goods and services obtained in, or by residents of, a specific region from a given set of outlets or other sources of consumption goods and services; see ILO: *Resolution concerning consumer price indices*, adopted by the Seventeenth International Conference of Labour Statisticians (Geneva, 2003). Available at: [http://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/normativeinstrument/wcms\\_087521.pdf](http://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/normativeinstrument/wcms_087521.pdf)

or net earnings concept used, population coverage and geographic coverage, currency unit). It is important to provide information regarding the coverage of workers, for example whether part-time and full-time workers are included, whether only full-time workers are included, whether remuneration includes self-employed workers or only employee pay of casual workers.

Disaggregation of the indicators by component groups such as sex, age group, urban and rural areas is recommended if data are available. Disaggregation by key classifications such as economic activity may also be quite valuable for the analysis of this indicator.

### **Interpretation guidelines**

Given that the indicator provides information about the average earnings per hour of casual workers, progress is made when the real earnings reach an acceptable level vis-à-vis a low pay threshold of real median weekly earnings (low pay is defined as earnings less than two-thirds of real median weekly earnings). Analysing this indicator jointly with the average weekly hours actually worked of (employee) casual workers will provide some understanding of these workers' real weekly earnings against which to evaluate the low pay threshold. Declining trends in the indicator point to a worsening purchasing power of casual workers, who by definition are considered a component of precarious workers.

It is important to analyse the real earnings of casual workers together with the number of such workers and their relative importance within precarious employment and in total employment. Such information will shed light on the magnitude of the deficit in decent work as regards casual workers. The average real earnings of casual workers may be analysed together with indicators under "adequate earnings and productive work", and in particular, it may be useful to evaluate the extent of working poverty among casual workers and their households. Casual workers are often employed in industries such as construction and agriculture, where occupational safety and health problems may be prevalent. It is therefore recommended that such indicators also be analysed by economic sector and by safe work environment indicators.

## Legal Framework Indicator 11. Termination of employment

### Scope

The rules regulating termination of employment aim to ensure the employer's right to dismiss a worker for a valid reason and the worker's right not to be deprived of work unfairly.

### Selected ILS on termination of employment

The Termination of Employment Convention, 1982 (No. 158), and its corresponding Recommendation No. 166, deal with termination of employment at the initiative of the employer. Employment should not be terminated unless there is a *valid reason* for such termination connected with the worker's capacity or conduct or the business' operational requirements. Reasons which are not considered valid include those based on union membership or participation in union activities, filing of a complaint against an employer, race, colour, sex, marital status, family responsibilities, pregnancy, religion, political opinion, national extraction or social origin, temporary absence due to illness, or absence from work during maternity leave. The convention also deals with, *inter alia*, period of notice, right of the worker to defend him or herself before termination, appeal procedures against dismissal, severance pay, unemployment insurance, as well as, in cases of dismissals for economic reasons, consultation with workers' representatives and advance notification to be given to authorities.

### Information provided on the indicator

**Law, policy or institutions:** Does the national labour law (including collective agreements, arbitration awards and court decisions) set conditions on dismissals? Which workers/enterprises are covered/excluded by the law?

**Substantive requirements for dismissals:** authorised and prohibited grounds, categories of workers enjoying particular protection?

**Procedure for individual dismissals:** Form of notification, length of notice by tenure, pay in lieu of notice?

**Collective dismissals for economic reasons:** Definition? Prior consultations notification and/or approval by workers' representatives and public authorities? Priority rules for dismissal and re-employment?

**Severance pay:** Calculation by tenure, redundancy payments?

**Evidence of implementation effectiveness:** Comments by ILO supervisory bodies, if any.

**Coverage of workers in law:** Estimate of workers covered by the law (methodology TBD).

**Coverage of workers in practice:** Broad estimate of workers covered in practice (methodology TBD).

**Ratification of ILO Conventions:** The Termination of Employment Convention, 1982 (No. 158).

### Additional sources of information

#### ILO Sources

- DIALOGUE EPLex: <http://www.ilo.org/dyn/eplex/termmain.home>
- DIALOGUE Termination of Employment Digest: <http://www.ilo.org/public/english/dialogue/ifpdial/downloads/term/digest.pdf> (last update was in 1998; replaced by EPLex).

## Chapter 7. Equal opportunity and treatment in employment

Promoting equal opportunity and treatment in employment is a central element of the Decent Work Agenda. The 2008 *ILO Declaration on Social Justice for a Fair Globalization* indicates that gender equality and non-discrimination must be considered to be cross-cutting issues in the strategic objectives of decent work. This aim is also closely aligned with one of the key Millennium Development Goals, namely to promote gender equality and empower women.

While the main focus of this chapter is on equal opportunity and treatment in employment as regards gender, it is also intended to cover these topics as regards other population groups which may suffer discrimination including groups differentiated by race, ethnicity or indigenous group and also rural workers, migrant workers and persons with disabilities.

The indicators introduced in this section can help countries to monitor the progress they have made in achieving the objective of promoting equal opportunity and treatment in employment. Four statistical indicators have been developed and four others are to be developed by the ILO. One of these indicators is also a Millennium Development Goal (MDG) indicator, namely the Share of women in wage employment in the non-agricultural sector. While the MDG indicators were conceived as part of a broad development agenda targeting developing countries during the period 2000-2015, the inclusion of this indicator here among the full set of decent work indicators is intended to allow countries at all levels of development to monitor working poverty levels and trends. The Legal Framework Indicators corresponding to these statistical indicators are: Equal remuneration of men and women for work of equal value and Equal opportunity and treatment (Table 7).

**Table 7: Overview of decent work indicators for equal opportunity and treatment in employment**

Statistical Decent Work Indicators	Concepts	Coverage	Preferred data source
<b>Indicators developed</b>			
<b>EQUA-1. Occupational segregation by sex - (M)</b>	Employment	Employed persons	LFS, other household surveys with an employment module
<b>EQUA-2. Female share of employment in senior and middle management - (M)</b>	Employment ISIC	Employed persons	Establishment surveys Administrative records
<b>EQUA-3. Gender wage gap -(A)</b>	Employees Earnings	Employees	LFS, other household surveys with an employment module
<b>EQUA-4. Share of women in wage employment in the non-agricultural sector - (A)</b>	Employees ISIC	Employees	including earnings data Establishment surveys Administrative data
<b>Indicators to be developed by the ILO</b>			
<b>EQUA-5 (A) Indicator for Fundamental Principles and Rights at Work (Elimination of discrimination in respect of employment and occupation)</b>			
<b>EQUA -6 (A) Measure of discrimination by race/ethnicity/of indigenous people/of (recent) migrant workers/of rural workers where relevant and available at the national level *</b>			
<b>EQUA -7 (F) Measure of dispersion for sectoral/occupational distribution of (recent) migrant workers</b>			
<b>EQUA -8 (F) Measure for employment of persons with disabilities *</b>			
<b>Legal framework indicators :</b>			
L12- Equal opportunity and treatment			

### L13- Equal remuneration of men and women for work of equal value

\* These indicators can comprise a set of indicators disaggregated by ethnicity in order to give a profile of discrimination in the country: Employment-to-population ratio (EPR), Labour force participation ratio (LFPR), Unemployment rate, Average real wages, etc. Ethnicity is a recommended level of disaggregation for key indicators.

Since many of the indicators share common concepts, this introduction provides some of the key concepts and definitions.

Persons of working age are classified as **employed** if, during a short reference period such as a day or a week, (i) they did some work (even for just one hour) for pay, profit or family gain, in cash or in kind; or (ii) they were attached to a job or had an enterprise from which they were ‘temporarily’ absent during this period (for such reasons as illness, maternity, parental leave, holiday, training, industrial dispute). Employed persons include those persons of working age who worked for at least one hour during the reference period as contributing family workers (formerly referred to as unpaid family workers) working in a family business.<sup>112</sup>

It should be noted that the concept of employment does not include household members engaged in the provision of unpaid services for their own family use such as cooking at home or caring for their own children, as well as volunteers providing services to households for their own final use. These activities are not included within the production boundaries of the System of National Accounts (SNA).<sup>113</sup> However, persons engaged in the production of economic goods and services for their own and household consumption should be considered as in self-employment if such production comprises an important contribution to the total consumption of the household (see Chapter 2).<sup>114</sup>

**Employees** are all those workers who hold “paid employment jobs”. These are jobs where the incumbents hold explicit (written or oral) or implicit employment contracts which give them a basic remuneration that is not directly dependent upon the revenue of the unit for which they work (this unit can be a corporation, a non-profit institution, a government unit or a household). Some or all of the tools, capital equipment, information systems and/or premises used by the incumbents may be owned by others, and the incumbents may work under direct supervision of, or according to strict guidelines set by the owner(s) or persons in the owners' employment. Persons in “paid employment jobs” are typically remunerated by wages and salaries, but may be paid by commission from sales, by piece-rates, bonuses or in-kind payments such as food, housing or training.<sup>115</sup>

## STATISTICAL INDICATORS

<sup>112</sup> ILO: *Resolution concerning statistics of the economically active population, employment, unemployment and underemployment*, adopted by the Thirteenth International Conference of Labour Statisticians. (Geneva, October 1982). Available at:

[http://www.ilo.org/wcmsp5/groups/public/---dgreports/---integration/---stat/documents/normativeinstrument/wcms\\_087481.pdf](http://www.ilo.org/wcmsp5/groups/public/---dgreports/---integration/---stat/documents/normativeinstrument/wcms_087481.pdf)

<sup>113</sup> UNSD: *System of National Accounts 2008*. (New York, 2009). Available at:

<http://unstats.un.org/unsd/nationalaccount/docs/SNA2008.pdf>

<sup>114</sup> ILO: *Resolution concerning statistics of the economically active population, employment, unemployment and underemployment*, adopted by the Thirteenth International Conference of Labour Statisticians (Geneva, October 1982). Available at:

[http://www.ilo.org/wcmsp5/groups/public/---dgreports/---integration/---stat/documents/normativeinstrument/wcms\\_087481.pdf](http://www.ilo.org/wcmsp5/groups/public/---dgreports/---integration/---stat/documents/normativeinstrument/wcms_087481.pdf)

<sup>115</sup> ILO: *Resolution concerning the International Classification of Status in Employment (ICSE)*, adopted by the Fifteenth International Conference of Labour Statisticians (Geneva, January 1993). Available at: [http://www.ilo.org/wcmsp5/groups/public/---dgreports/---integration/---stat/documents/normativeinstrument/wcms\\_087562.pdf](http://www.ilo.org/wcmsp5/groups/public/---dgreports/---integration/---stat/documents/normativeinstrument/wcms_087562.pdf)

## EQUA-1. Occupational segregation by sex - (M)

### Measurement objective and rationale

This indicator and its three measures provide information on the tendency for men and women to work in different occupations, – where an occupation refers to a set of jobs whose main tasks and duties are characterized by a high degree of similarity. In this way, the indicator sheds light on the extent to which women and men benefit from different opportunities and treatment in work life.

### Method of computation

Three measures of occupational segregation by sex are being proposed:

- (a) Female share of employment (relative to the male share) in each of the ISCO sub-major groups
- (b) Occupational distribution of employment by sex (using sub-major groups)
- (c) Duncan Index of Dissimilarity (using sub-major groups)

If  $W_i$  and  $M_i$  are respectively the numbers of employed females and employed males in the  $i^{th}$  ISCO sub-major group;

$W$  will be the total number of employed females:  $W = \sum W_i$ ; and

$M$  will be the total number of employed males:  $M = \sum M_i$

$N_i$  will be the total employed persons in sub-major group  $i$ :  $N_i = W_i + M_i$  and

$N$  will be the total employed persons:  $N = \sum N_i = W + M$

The proposed measures are computed as follows:

- (a) The female share of employment in the  $i^{th}$  ISCO sub-major group =  $W_i / N_i$
- (b) The female occupational distribution is obtained by computing  $W_i / W$  for the  $i^{th}$  ISCO sub-major group; and correspondingly the male occupational distribution is obtained by computing  $M_i / M$
- (c) The Index of Dissimilarity (ID) is given by  $ID = \frac{1}{2} \sum | (W_i / W) - (M_i / M) |$  where the summation is of the absolute difference over all sub-major groups.

### Concepts and definitions

For a definition of **employed persons**, see the introduction to this chapter.

**The International Standard Classification of Occupations** (ISCO) organizes jobs into a clearly defined set of groups according to the tasks and duties undertaken in the job. The first version of ISCO was published in 1958 and since then ISCO has been revised in 1968, 1988 and 2008.<sup>116</sup>

### Recommended data sources and metadata

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<sup>116</sup> ILO: *International Standard Classification of Occupations (ISCO)*. Available at: <http://www.ilo.org/public/english/bureau/stat/isco/index.htm>

The recommended data source for this indicator is the labour force survey or, if not available, other household surveys with an employment module. In the absence of either of the above, 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 used should be taken into account.

Besides analysing occupational segregation by sex, these measures can be calculated for any two groups that need to be compared, for example, workers with disability versus those without. Metadata on the coverage and concepts used for the measures should be clearly identified.

### **Interpretation guidelines**

This first measure indicates the extent to which there is a concentration of women (and men) in each sub-major group of occupations. It can be used in two ways as follows:

(i) This measure is frequently used to discuss the degree of feminization of occupational groups. A group in which the female share of employment is high (for example, more than 80 per cent), may be considered as “female dominated”. If the female share is low (for example, less than 20 per cent), it may be taken as “male dominated”. Other occupations are considered as “integrated occupations”. The share can vary depending on the overall share of women in employment.

(ii) Given the relationship between ISCO-88 and ISCO-08 major groups and skill level, increases in the female shares in Major Groups 1, 2 and 3 may be interpreted as progress with regard to the extent to which women are accessing managerial or high-skill jobs. Care should be exercised, however, in the interpretation of data with respect to specific high-skill groups such as teachers and nurses that have traditionally been female dominated. In these cases an increase in the share of female employment may reflect an increase in segregation.

The second measure shows the number of females and the number of males employed in each occupational group, as a proportion of total female and male employment, respectively. Differences between the female and male distributions of occupations may reflect gender differences in access to employment opportunities in each occupational group. It allows identification of the groups in which employed females (and males) tend to work. Taken together with the first measure, it allows an analysis not only of the access that females have to a particular occupational group, relative to males, but also of the proportion of females employed in the said occupational group.

The Duncan Index of Dissimilarity is the most popular summary indicator of segregation. It ranges from 0 to 1, with 0 meaning no occupational segregation and 1 being complete occupational segregation between the two sexes. An increase in the Index of Dissimilarity will mean a greater tendency of men or women to do different jobs. The Duncan Index represents full integration as being a situation in which the occupational distribution for each sex is the same as the occupational distribution of the total employed population. The index measures the tendency of labour markets to be segmented on the basis of sex, but it does not identify which occupational groups create these differences. As a single



value, the index has the advantage that comparisons over time and between countries are easier to present. A disadvantage of using this index is that changes over time, as well as differences between countries are not only driven by the sex composition of occupations but also by the occupational structure of the labour market.

## EQUA-2. Female share of employment in senior and middle management - (M)

### Measurement objective and rationale

This indicator refers to the proportion of females in total employment in senior and middle management corresponding to the ISCO-88 categories 11 (legislators and senior officials) and 12 (corporate managers). In this way, the indicator provides information on the proportion of women who are employed in decision-making and management roles in government, in large enterprises and institutions. ISCO-88 Sub-major group 13 – general managers – is not included in the calculation of this indicator, as this group mainly includes managers of small enterprises.

### Method of computation

$$\begin{aligned} & \text{Female share of employment in ISCO 88, 11 and 12 (\%)} \\ &= \frac{\text{Number of women employed in ISCO 88, 11 and 12}}{\text{Total number of employed in ISCO 88, 11 and 12}} \times 100 \end{aligned}$$

### Concepts and definitions

For a definition of **employed persons**, see the introduction to this chapter.

**The International Standard Classification of Occupations** (ISCO) organizes jobs into a clearly defined set of groups according to the tasks and duties undertaken in the job. The first version of ISCO was published in 1958 and since then, ISCO has been revised in 1968, 1988 and 2008.<sup>117</sup> This indicator is based on the ISCO-88 structure. When statistics are based on the ISCO-68, major group 2 will be used; where they are based on ISCO-08, sub-major groups 11, 12 and 13 will be used. If statistics are not disaggregated at the sub-major level, then major group 1 will be used.

### Recommended data sources and metadata

The recommended data source for this indicator is the labour force survey or, if not available, other household surveys with an employment module. In the absence of either of the above, 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.

If 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 females that exists across more detailed occupational groups.

### Interpretation guidelines

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<sup>117</sup> ILO: *International Standard Classification of Occupations (ISCO)*. Available at: <http://www.ilo.org/public/english/bureau/stat/isco/index.htm>

The female share of employment in ISCO-88 11 and 12 provides some insight into women's power in decision making and in the economy. However, its principle 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.

## EQUA-3. Gender wage gap - (A)

### Measurement objective and rationale

This indicator measures the relative difference between the average hourly pay for men and the average hourly pay for women.

### Method of computation

The gender wage gap is the difference between the gross average hourly earnings of male and female employees expressed as percentage of gross average hourly earnings of male employees.

$$\text{Gender pay gap (\%)} = \frac{(E_m - E_w)}{E_m} \times 100$$

where  $E_m$  is the gross average hourly earnings of men in any given population group and  $E_w$  is the gross average hourly earnings of women.

### Concepts and definitions

For a definition of **employees**, see the introduction to this chapter.

**Earnings** in this context refer to regular remuneration received from employers, in cash and in kind. The concept includes direct wages and salaries for time worked or work done, remuneration for time not worked (e.g. paid annual leave), as well as bonuses and gratuities that are regularly received. It excludes the contributions paid by employers to social security and pension schemes in respect of their employees, as well as the benefits received by employees under these schemes. Earnings also exclude severance and termination pay.<sup>118</sup>

### Recommended data sources and metadata

The preferred data source for this indicator is the labour force survey or other household surveys with an employment module including earnings data, because this is the only source that guarantees full coverage of paid employment, including paid employment in the informal economy. Still, they have a number of drawbacks as concerns the elaboration of statistics on earnings. First, depending on the methodology used to capture information, the quality of statistics on earnings may be variable, especially for workers in the informal sector. Second, statistics may relate to net earnings (after deductions for social security schemes and advance income tax). And third, the calculation of hourly earnings requires assumptions about the hours worked for periods outside of the usual reference period (of a week). This is because hourly earnings are based on statistics on earnings and on hours worked but these are usually collected for different reference periods.

In the absence of the above, establishment surveys may be used; however, the coverage is likely to be limited to workers in formal enterprises or enterprises of a certain size. Information on the coverage should be provided with the figures. Administrative records can also be used as another data source, although this would imply that coverage in terms of workers, concepts and economic activity

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<sup>118</sup> ILO: *Resolution concerning an integrated system of wage statistics*, adopted by the Twelfth International Conference of Labour Statisticians. (Geneva, October 1973). Available at : [http://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/normativeinstrument/wcms\\_087496.pdf](http://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/normativeinstrument/wcms_087496.pdf)

would be reduced. Should hourly data on earnings not be available, another variant of earnings data may be used, such as monthly, weekly, etc. However, the interpretation will differ slightly from the hourly data since monthly and weekly earnings data also capture differences between men and women as concerns the number of hours worked.

The analytical capacity of the indicator is much stronger when disaggregated. Most importantly, gender pay gap can be best analysed by occupational group (ISCO), economic activity (ISIC), level of education or age group.

### **Interpretation guidelines**

The gender pay gap measures the extent to which the wages of men differ from those of women.

When the gender pay gap equals “0”, it denotes equality of earnings. Positive values reflect the extent to which women’s earnings fall short of those received by men, where a value closer to “100” denotes more inequality than a value closer to “0”. Negative values reflect the extent to which women’s earnings are higher than men’s (though these are rarely encountered in reality).

The gender pay gap presented above is in an unadjusted form. Specifically, this means that some of the difference between the average hourly earnings of men and women can be explained by observable characteristics, such as differences in education or experience. In this regard, while the gender pay gap is a useful measure to show on average how far behind women are, it is less useful for understanding the underlying reasons for which the gap exists.

The gender pay gap is calculated for paid employees only, as earnings data are typically available for employees. Hence, the gender pay gap does not cover large numbers of own-account workers or employers, especially in the informal sector where income differences between men and women may be larger. The gender pay gap does not capture either income differences between the sexes that result from uneven access to paid employment. For instance, when men are over-represented among paid employees (with relatively high incomes) and women are over-represented among the self-employed in the informal sector (with relatively low incomes), the overall gap in incomes is likely to be greater than what can be captured by the gender wage gap.

## EQUA-4. Share of women in wage employment in the non-agricultural sector - (A)

### Measurement objective and rationale

This indicator presents the share of women in paid employment in the non-agricultural sector as a percentage of total paid employment in the non-agricultural sector. It is MDG indicator 3.2, under Target 3A: Eliminate gender disparity in primary and secondary education, preferably by 2005 and in all levels of education no later than 2015 and Goal 3: Promote gender equality and empower women.

### Method of computation

$$\begin{aligned} & \text{Share of women in wage employment in the non agricultural sector (\%)} \\ &= \frac{\text{Number of women in paid employment in the non – agricultural sector}}{\text{Total number of persons in paid employment in the non – agricultural sector}} \times 100 \end{aligned}$$

### Concepts and definitions

For a definition of **employed persons** and **employees**, see the introduction to this chapter.

**The International Standard Industrial Classification of All Economic Activities** (ISIC) classifies productive activities in a set of activity categories. The non-agricultural sector refers to all economic activities excluding agriculture (ISIC, Revision 4 section A). Industry can be understood as including mining and quarrying (including oil production), manufacturing, construction, electricity, gas, and water (, i.e. categories B-F in ISIC, Revision 4). Services can be understood as including wholesale and retail trade and restaurants and hotels; transport, storage, and communications; financing, insurance, real estate and business services; and community, social and personal services (categories G-U in ISIC, Revision 4).<sup>119</sup>

### Recommended data sources and metadata

The preferred data source for this indicator is the labour force survey or other household surveys with an employment module. In the absence of the above, establishment surveys may be used, however, the coverage is likely to be limited to workers in formal enterprises or enterprises of a certain size. Information on the coverage should be provided with the figures. Another data source is administrative records, although this would imply that coverage in terms of workers and economic activity would be reduced.

The versions of ISIC used should be harmonized as and when the indicator is analysed over time.

The indicator can be disaggregated by geographical location and broken down further by economic activity.

### Interpretation guidelines

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<sup>119</sup> UNSD: *International Standard Industrial Classification of All Economic Activities, Revision 4* (2008). Available at: <http://unstats.un.org/unsd/cr/registry/isic-4.asp>

The indicator may vary from 0 (only men) to 100 per cent (only women). Equal numbers of women and men in the sectors would give an indicator value of 50 per cent.

Progress is assessed by an increase in the value of the indicator (often aiding poverty reduction). Due to growing levels of development and related structural economic changes, production tends to move from the agricultural sector towards the non-agricultural sectors. At the same time, this causes a movement to paid employment jobs away from other types of jobs, with an accompanying emergence of monetized industrial and services sectors. The extent to which women have access to paid employment could thus reflect their integration into the monetary economy while benefiting from a more regular and largely monetary income. This in turn would be expected to have a positive impact on women's autonomy and decision-making powers.

In some countries, non-agricultural wage employment represents only a small portion of total employment. Therefore, this indicator should be considered together with additional information on the situation of women in the labour market: for instance, the share of women in total employment – by status in employment, level of education, level of remuneration, wage differentials, and women's and men's access to social protection – as well as in unemployment and in the economically active population.

Another indicator that can be used for similar analysis is Female share of employment by ISIC category (CONT-10). That indicator may be analysed together with EMPL-10 Share of wage employment in non-agricultural employment.

## Legal Framework Indicator 12. Equal opportunity and treatment

### Scope

Discrimination exists when less favourable treatment is explicitly or implicitly based on a particular ground (or grounds), such as sex, race, etc. (*direct discrimination*), or although neutral on the surface, the same condition, treatment or criterion leads in practice to a harsh impact on some persons on the basis of characteristics such as race, colour, sex, etc. (*indirect discrimination*). The right to equality and non-discrimination is a fundamental human right and is essential for workers to be able to choose their employment freely and to develop their potential to the full.

### Selected ILS on equal opportunity and treatment

The Discrimination (Employment and Occupation) Convention, 1958 (No. 111) requires ratifying states to declare and pursue a national policy designed to promote, by methods appropriate to national conditions and practice, equality of opportunity and treatment in respect of employment and occupation, with a view to eliminating any discrimination in respect thereof. It defines discrimination as “any distinction, exclusion or preference made on the basis of race, colour, sex, religion, political opinion, national extraction or social origin, which has the effect of nullifying or impairing equality of opportunity or treatment in employment or occupation”. The Equal remuneration Convention, 1951 (No. 100) requires ratifying countries to ensure the application to all workers of the principle of *equal remuneration for men and women workers for work of equal value*. The term “remuneration” includes the ordinary, basic or minimum wage or salary and any additional emoluments payable directly or indirectly, whether in cash or in kind, by the employer to the worker and arising out of the worker's employment.

### Information provided on the indicator

<b>Law, policy or institutions:</b> Is there a national law or stated government policy on non-discrimination and equal opportunity and treatment in employment and occupation? What grounds of discrimination are covered? Is there a national mechanism to promote or protect this right (Equal Opportunities Commission, etc.)? Does the mechanism have enforcement or advisory powers? What is the role of the labour inspectorate? Is there an individual right of complaint? Have there been court cases or other legal proceedings to enforce this right? If so, what remedies have been provided or penalties imposed? Which workers are covered by the law?
<b>Evidence of implementation effectiveness:</b> Comments of ILO supervisory bodies (if any).
<b>Coverage of workers in law:</b> Estimate of the workforce covered by the law/policy.
<b>Ratification of ILO Conventions:</b> The Equal remuneration Convention, 1951 (No. 100) and the Discrimination (Employment and Occupation) Convention, 1958 (No. 111).

### Additional sources of information

#### ILO sources

- Country baselines under the ILO Declaration Annual Review (2000-2010): Elimination of Discrimination in Respect of Employment and Occupation (DISC) - [http://www.ilo.org/wcmsp5/groups/public/---ed\\_norm/---declaration/documents/publication/wcms\\_091265.pdf](http://www.ilo.org/wcmsp5/groups/public/---ed_norm/---declaration/documents/publication/wcms_091265.pdf) (for information on countries which have not ratified the fundamental conventions No. 100 and 111);
- Equality at work: tackling the challenges. Global report under the follow-up to the ILO Declaration on fundamental principles and rights at work. Report of the Director-General, 2007 - [http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---webdev/documents/publication/wcms\\_082607.pdf](http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---webdev/documents/publication/wcms_082607.pdf)
- Giving globalization a human face, General survey on the fundamental Conventions concerning rights at work, Report III (Part 1B), ILO, 2012.



## Legal Framework Indicator 13. Equal remuneration for men and women for work of equal value

### Scope

Equal remuneration for men and women for work of equal value refers to rates of remuneration established without discrimination based on sex. Determining whether jobs are of equal value requires some method of measuring and comparing the relative value of different jobs, normally through objective job evaluation.

### Selected ILS on Equal remuneration of men and women for work of equal value

Fundamental Convention No. 100 (Equal remuneration Convention, 1951) requires ratifying countries to ensure the application to all workers of the principle of equal remuneration for men and women workers for work of *equal value*. The term "remuneration" is broadly defined to include the ordinary, basic or minimum wage or salary and any additional emoluments payable directly or indirectly, whether in cash or in kind, by the employer to the worker and arising out of the worker's employment. The principle of equal remuneration applies to all workers. Reference to "work of *equal value*" is broader than "equal work" and is key to tackling occupational sex segregation. The Discrimination (Employment and Occupation) Convention, 1958 (No. 111), defines discrimination as "any distinction, exclusion or preference made on the basis of race, colour, sex, religion, political opinion, national extraction or social origin, which has the effect of nullifying or impairing equality of opportunity or treatment in employment or occupation". The Discrimination (Employment and Occupation) Recommendation, 1958 (No. 111) provides that all persons should, without discrimination, enjoy equality of opportunity and treatment in respect of, among others, remuneration for work of equal value.

### Information provided on the indicator

**Law, policy or institutions:** Is there a national law or stated government policy on equal remuneration for men and women for work of equal value? How is remuneration defined? How is equal value defined? Is there an objective method for comparing different jobs and determining value free from gender bias? Is there a national mechanism to promote or protect this right (Equal Opportunities Commission, etc.)? Does the mechanism have enforcement or advisory powers? What is the role of the labour inspectorate? Have there been court cases or other legal proceedings to enforce this right? If so, what remedies have been provided or penalties imposed? Which workers are covered by the law?

**Evidence of implementation effectiveness:** Comments of ILO supervisory bodies (if any).

**Coverage of workers in law:** Estimate of the workforce covered by the law/policy.

**Ratification of ILO Conventions:** The Equal remuneration Convention, 1951 (No. 100) and the Discrimination (Employment and Occupation) Convention, 1958 (No. 111).

### Additional sources of information

#### ILO sources

- Country baselines under the ILO Declaration Annual Review (2000-2010): Elimination of Discrimination in Respect of Employment and Occupation (DISC) - [http://www.ilo.org/wcmsp5/groups/public/---ed\\_norm/---declaration/documents/publication/wcms\\_091265.pdf](http://www.ilo.org/wcmsp5/groups/public/---ed_norm/---declaration/documents/publication/wcms_091265.pdf) (for information on countries which have not ratified the fundamental conventions No. 100 and 111);  
Equality at work: tackling the challenges. Global report under the follow-up to the ILO Declaration on fundamental principles and rights at work. Report of the Director-General, 2007 - [http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---webdev/documents/publication/wcms\\_082607.pdf](http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---webdev/documents/publication/wcms_082607.pdf)  
Giving globalization a human face, *Op. cit.*

## Chapter 8. Safe work environment

Occupational safety and health at work are vital components of decent work. The extent to which workers are protected from work-related hazards and risks is captured, assessed and monitored through four statistical indicators: (i) Occupational injury frequency rate, fatal; (ii) Occupational injury frequency rate, non-fatal; (iii) Time lost per occupational injury; (iv) Labour inspection (Inspectors per 10,000 employed persons). The legal framework indicators corresponding to these statistical indicators are: OSH labour inspection and Employment injury benefits (Table 8).

**Table 8: Overview of decent work indicators for safe work environment**

Statistical Decent Work Indicators	Concepts	Coverage	Preferred data source
SAFE-1. Occupational injury frequency rate, fatal - (M)	Occupational injury Occupational accident	Workers in the reference group	National systems for the notification of occupational injuries Administrative data Household surveys Establishment surveys
SAFE-2. Occupational injury frequency rate, non-fatal - (A)	Fatal and non-fatal occupational injury		
SAFE-3. Time lost per occupational injury - (A)	Days lost by cases of temporary incapacity		
SAFE-4. Labour inspection (Inspectors per 10,000 employed persons) - (A)	Employment Labour inspection	Employed persons	
<b>Legal Framework Indicators</b> L 14- Employment injury benefits L 15- Occupational Safety and Health (OSH) labour inspection			

Since many of the indicators share common concepts and definitions (See Table 8) this introduction provides some of the key concepts and definitions.

**Occupational injury:** any personal injury, disease or death resulting from an occupational accident.<sup>120</sup> An occupational injury is different from an occupational disease, which comes as a result of an exposure over a period of time to risk factors linked to the work activity. Diseases are included only in cases where the disease arose as a direct result of an accident.

**Occupational accident:** an unexpected and unplanned occurrence, including acts of violence, arising out of or in connection with work which results in one or more workers incurring a personal injury, disease or death.<sup>121</sup> Occupational accidents are to be considered travel, transport or road traffic accidents in which workers are injured and which arise out of or in the course of work; that is, while engaged in an economic activity, or at work, or carrying out the business of the employer.

**Workers in the reference group:** workers in the reference group refer to the average number of workers in the particular group under consideration and who are covered by the source of the statistics of occupational injuries (for example, those of a specific sex or in a specific economic activity,

<sup>120</sup> See the Resolution concerning statistics of occupational injuries (resulting from occupational accidents), adopted by the Sixteenth International Conference of Labour Statisticians (1998), available at: [http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS\\_087528/lang-en/index.htm](http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS_087528/lang-en/index.htm)

<sup>121</sup> Ibid.

occupation, region, age group, or any combination of these, or those covered by a particular insurance scheme, accident notification systems, or household or establishment survey).

The four indicators could be used by enterprises, governments and other stakeholders to formulate policies and programmes for the prevention of occupational injuries, diseases and deaths. They could also be used to monitor the implementation of these programmes and to signal particular areas of increasing risk such as a particular occupation, industry or location.

Although the principal objective of the indicators is to provide information for prevention purposes, they may be used for a number of other purposes, such as:

- to identify the occupations and economic activities where occupational injuries occur, along with their extent, severity and the way in which they occur, as a basis for planning preventive measures;
- to set priorities for preventive efforts;
- to detect changes in the pattern and occurrence of occupational injuries, so as to monitor improvements in safety and reveal any new areas of risk;
- to inform employers, employers' organizations, workers and workers' organizations of the risks associated with their work and workplaces, so that they can take an active part in their own safety;
- to evaluate the effectiveness of preventive measures;
- to estimate the consequences of occupational injuries, particularly in terms of days lost or costs; and
- to provide a basis for policy-making aimed at encouraging employers, employers' organizations, workers and workers' organizations to introduce accident prevention measures.

## STATISTICAL INDICATORS

### SAFE-1. Occupational injury frequency rate, fatal - (M)

#### Measurement objective and rationale

The fatal occupational injury frequency rate provides information on the number of fatal occupational injury cases per hours worked by the concerned population during the reference period. It is a measure of the risk of having a fatal occupational injury based on the duration of exposure to adverse work-related factors.

#### Method of computation

The fatal occupational injury frequency rate is calculated as the number of new cases of fatal injury during the reference year divided by the total number of hours worked by workers in the reference group during the reference year, multiplied by 1,000,000.

*Fatal occupational injury frequency rate*

$$= \frac{\text{Number of new cases of occupational fatalities during the reference period}}{\text{Total number of hours worked by workers in the reference group during the reference period}} \times 1,000,000$$

Ideally, the denominator should be the number of hours actually worked by workers in the reference group. When this is not possible, the denominator can be calculated on the basis of normal hours of work taking into account entitlements to periods of paid absence from work, such as paid vacations, paid sick leave and public holidays.

If the data needed for calculating the frequency rate are not available, the incidence rate defined below may be calculated instead.

The fatal occupational injury incidence rate is calculated as the number of new cases of fatal injury during the reference year divided by the average number of workers in the reference group during the reference year, multiplied by 100,000.

*Fatal occupational injury incidence rate*

$$= \frac{\text{Number of new cases of occupational fatalities during the reference period}}{\text{Total number of workers in the reference group during the reference period}} \times 100,000$$

In calculating the average number of workers, the number of part-time workers should be converted to full-time equivalents. For the calculation of rates, the numerator and the denominator should have the same coverage. For example, if self-employed persons are covered in the statistics of fatal occupational injuries they should also be covered in the denominator.

## Concepts and definitions<sup>122</sup>

For the definitions of *occupational injury*, *occupational accident*, *workers in the reference group*, see the introduction to this chapter.

**Fatal occupational injury:** an occupational injury leading to death within one year of the day of the occupational accident.

**Case of fatal occupational injury:** the case of a worker fatally injured as a result of one occupational accident, and where death occurred within one year of the day of the accident.

## Recommended data sources, metadata and disaggregation

The recommended data sources are national systems for the notification of occupational injuries (such as, labour inspection records and annual reports; insurance and compensation records, death registers), supplemented by household surveys (especially in order to cover informal sector enterprises and the self-employed) and/or establishment surveys.

The metadata should specify (i) whether the data relate to cases of occupational injury which have been reported (to an accident notification system or to an accident compensation scheme), compensated (by an accident insurance scheme) or identified in some other way (for example through a survey of households or establishments) and (ii) whether cases of occupational disease and cases of injury due to commuting accidents are included in the statistics.

It is recommended to disaggregate this indicator by sex, occupation, economic activity, or any combination of these.

The indicator should be compiled at least once a year for a reference period of not more than a year.

## Interpretation guidelines

Data on occupational injuries are essential for planning preventive measures. The role of the indicators is to identify important areas to which attention should be paid. In order to be able to design more targeted prevention mechanisms and related policies it is recommended to disaggregate and analyse this indicator by sex, occupation, economic activity, or any combination of these. For instance, workers in occupations and activities of highest risk can be targeted more effectively for inspection visits, development of regulations and procedures, and also for safety campaigns.

There may be problems of under reporting of fatal occupational injuries, and proper systems should be put in place to ensure the best reporting and data quality. Under reporting is thought to be present in countries at all levels of development, but may be particularly problematic in some developing countries. Data users should be aware of this issue when analyzing the data.

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<sup>122</sup> For more detailed information refer to ILO: *Resolution concerning statistics of occupational injuries (resulting from occupational accidents)*, adopted by the Sixteenth International Conference of Labour Statisticians (October 1998). Available at: <http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/lang--en/index.htm>

Because data quality issues may be present, it may be more relevant to analyze indicator trends rather than levels. When measured over a period of time, the data can reveal progress or deterioration in occupational safety and health, and thus point to the effectiveness of prevention measures.

This indicator is volatile and strong annual fluctuations may occur due to unexpected but significant accidents or national calamities. The underlying trend should therefore be analysed.

For a more comprehensive analysis, the indicator should be analysed together with the incidence rate of new cases of occupational injuries, severity of new cases of non-fatal occupational injuries and days lost per new case of non-fatal occupational injury. In addition, the non-fatal occupational injury frequency rate (SAFE-2) should be computed in order to have a more complete picture of risks at work.

## SAFE-2. Occupational injury frequency rate, non-fatal - (A)

### Measurement objective and rationale

The non-fatal occupational injury frequency rate provides information on the number of new cases of non-fatal occupational injury per hours worked by the concerned population during the reference period. It is a measure of the risk of having a non-fatal occupational injury based on the duration of exposure to adverse work-related factors.

### Method of computation

The non-fatal occupational injury frequency rate is calculated as the number of new cases of non-fatal injury during the reference year divided by the total number of hours worked by workers in the reference group during the reference year, multiplied by 1,000,000.

*Non fatal occupational injury frequency rate*

$$= \frac{\text{Number of new cases of non – fatal occupational injury during the reference period}}{\text{Total number of hours worked by workers in the reference group during the reference period}} \times 1,000,000$$

Ideally, the denominator should be the number of hours actually worked by workers in the reference group. When this is not possible, the denominator can be calculated on the basis of normal hours of work, taking into entitlements to periods of paid absence from work, such as paid vacations, paid sick leave and public holidays.<sup>123</sup>

If the data needed for calculating the frequency rate are not available, the incidence rate and/or severity rate defined below may be calculated instead.

The non-fatal occupational injury incidence rate is calculated as the number of new cases of non-fatal injury during the reference year, divided by the number of workers in the reference group during the reference year, multiplied by 100,000.

*Non fatal occupational injury incidence rate*

$$= \frac{\text{Number of new cases of non – fatal occupational injury during the reference period}}{\text{Total number of workers in the reference group during the reference period}} \times 100,000$$

In calculating the average number of workers, the number of part-time workers should be converted to full-time equivalents.

The non-fatal occupational injury severity rate is a useful indicator of the consequences of occupational injuries and is therefore important for prevention measures. It is calculated as the number of days lost as a result of new cases of occupational injury during the reference period, divided

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<sup>123</sup> For a definition of hours actually worked and normal hours, please see the *Resolution concerning the measurement of working time* adopted by the Eighteenth International Conference of Labour Statisticians (2008), available at [http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS\\_112455/lang-en/index.htm](http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS_112455/lang-en/index.htm)

by the total amount of time worked by workers in the reference group during the reference period, multiplied by 100,000.

*Non fatal occupational injury severity rate*

$$= \frac{\text{Number of days lost due to new cases of non – fatal occupational injury during the reference period}}{\text{Total number of hours worked by workers in the reference group during the reference period}} \times 1,000,000$$

This should be calculated only for temporary incapacity for work. The amount of time worked by workers in the reference group should preferably be measured in hours actually worked.

For the calculation of each of the above rates, the numerator and the denominator should have the same coverage. For example, if self-employed persons are covered in the statistics of non-fatal occupational injuries they should also be covered in the denominator.

### **Concepts and definitions<sup>124</sup>**

For the definitions of **occupational injury**, **occupational accident**, and **workers in the reference group**, see the introduction to this chapter.

**Cases of non-fatal injury** with lost work time (permanent and temporary incapacity):

- Cases of permanent incapacity for work are cases of occupational injury where the persons injured were unable to work from the day of the accident, and were never able to perform again the normal duties of work in the job or post occupied at the time of the occupational accident causing the injury.
- Cases of temporary incapacity are cases of occupational injury where the workers injured were unable to work from the day after the day of the accident, but were later able to perform again the normal duties of work in the job or post occupied at the time of the occupational accident causing the injury within a period of one year from the day of the accident.

### **Recommended data sources, metadata and disaggregation**

The recommended data sources are national systems for the notification of occupational injuries (e.g. labour inspection records and annual reports; insurance and compensation records, death registers), supplemented by household surveys (especially in order to cover informal sector enterprises and the self-employed) and/or establishment surveys.

The metadata should specify (i) whether the data relate to cases of occupational injury which have been reported (to an accident notification system or to an accident compensation scheme), compensated (by an accident insurance scheme) or identified in some other way (for example through a survey of households or establishments) and (ii) whether cases of occupational disease and cases of injury due to commuting accidents are included in the statistics.

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<sup>124</sup> For more detailed information, refer to ILO: *Resolution concerning statistics of occupational injuries (resulting from occupational accidents)*, adopted by the Sixteenth International Conference of Labour Statisticians (October 1998). Available at: <http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/lang--en/index.htm>



It is recommended to disaggregate this indicator by sex, occupation, economic activity, or any combination of these.

The indicator should be compiled at least once a year for a reference period of not more than a year.

### **Interpretation guidelines**

Data on occupational injuries are essential for planning preventive measures. The role of the indicators is to identify important areas to which attention should be paid. In order to be able to design more targeted prevention mechanisms and related policies it is recommended to disaggregate and analyse this indicator by sex, occupation, economic activity, or any combination of these. Workers in occupations and activities of highest risk can be targeted more effectively for inspection visits, development of regulations and procedures, and also for safety campaigns.

There may be problems of under reporting of non-fatal occupational injuries, and proper systems should be put in place to ensure the best reporting and data quality. Under reporting is thought to be present in countries at all levels of development, but may be particularly problematic in some developing countries. Data users should be aware of this issue when analyzing the data.

Because data quality issues may be present, it may be more relevant to analyze indicator trends rather than levels. When measured over a period of time, the data can reveal progress or deterioration in occupational safety and health, and thus point to the effectiveness of prevention measures.

This indicator is volatile and strong annual fluctuations may occur due to unexpected but significant accidents or national calamities. The underlying trend should therefore be analysed.

For a more comprehensive analysis it is recommended to analyse this indicator together with the incidence rate of new cases of occupational injuries, severity of new cases of non-fatal occupational injuries and days lost per new case of non-fatal occupational injury. In addition, the fatal occupational injury frequency rate (SAFE-1) should be computed in order to have a more complete picture of risks at work.

## SAFE-3. Time lost due occupational injuries - (A)

### Measurement objective and rationale

Time lost due to occupational injuries is an indicator that measures the consequences of occupational injuries in terms of lost days. It may be used to design targeted prevention mechanisms and to estimate the cost of occupational injuries. Hence, it gives a quantifiable measure of the impact of the injuries which is comparable across cases.

### Method of computation

Time lost per occupational injury is defined as the median or mean number of calendar days lost per new cases of non-fatal occupational injury resulting in temporary incapacity.

It is calculated by dividing the total number of days lost due to new cases of non-fatal injuries resulting in temporary incapacity during the reference year with the total number of occupational injuries in the reference group during the reference year.

*Time lost per occupational injury*

$$= \frac{\text{Number of days lost due to new cases of occupational injuries during the reference period}}{\text{Number of occupational injuries during the reference period}}$$

Both the numerator and the denominator should have the same coverage.

### Concepts and definitions<sup>125</sup>

For the definitions of **occupational injury**, **occupational accident**, and **workers in the reference group**, see the introduction to this chapter.

**Incapacity for work:** inability of the victim, due to an occupational injury, to perform the normal duties of work in the job or the post occupied at the time of the occupational accident.

**Cases of non-fatal injury** with lost work time (permanent and temporary incapacity)

- Cases of permanent incapacity for work are cases of occupational injury where the persons injured were unable to work from the day of the accident, and were never able to perform again the normal duties of work in the job or post occupied at the time of the occupational accident causing the injury.
- Cases of temporary incapacity are cases of occupational injury where the workers injured were unable to work from the day after the day of the accident, but were later able to perform again the normal duties of work in the job or post occupied at the time of the occupational accident causing the injury within a period of one year from the day of the accident.

**Days lost by cases of temporary incapacity:** days lost due to temporary incapacity refer to the number of calendar days during which those persons temporarily incapacitated were unable to work,

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<sup>125</sup> For more detailed information refer to ILO: *Resolution concerning statistics of occupational injuries (resulting from occupational accidents)*, adopted by the Sixteenth International Conference of Labour Statisticians (Geneva, October 1998). Available at: <http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/lang--en/index.htm>

excluding the day of the accident, up to a maximum of one year. Time lost is counted inclusively from the day after the day of the accident until the day prior to the return to work. Recurrent absences due to an occupational injury should be counted as one case. Time lost excludes temporary absences from work for medical treatment of less than one day.

### **Recommended data sources, metadata and disaggregation**

The recommended data sources are national systems for the notification of occupational injuries ( e.g. labour inspection records, and annual reports, as well as insurance and compensation records) supplemented by household surveys (especially in order to cover informal sector enterprises and the self-employed) and/or establishment surveys.

The metadata should specify (i) whether the data relate to cases of occupational injury which have been reported (to an accident notification system or to an accident compensation scheme), compensated (by an accident insurance scheme) or identified in some other way (for example through a survey of households or establishments) and (ii) whether cases of occupational disease and cases of injury due to commuting accidents are included in the statistics.

If time lost due to permanent incapacity or death is measured, it should be compiled and disseminated separately from time lost due to temporary incapacity (death registers would be an additional source of data in this case).

In order to be able to design more targeted prevention mechanisms and related policies, it is recommended to disaggregate and analyse this indicator by sex, occupation, economic activity, or any combination of these.

The indicator should be compiled at least once a year for a reference period of not more than a year.

### **Interpretation guidelines**

Time lost should be measured in terms of the number of calendar days during which the injured person is temporarily incapacitated, in order to assess the severity of the injury. If time lost is measured in workdays, attempts should be made to assess the total number of calendar days lost.

The average number of calendar days lost is useful for targeting accident prevention, while the average number of workdays lost is useful for measuring the economic impact of the absence from work caused by the injury for both the worker and the employer. Where the purpose is to estimate the full cost of occupational injuries, in addition to days lost or days of absence from work, other variables should be included in the estimation, such as production losses.

The measurement of time lost should cover only cases of temporary incapacity for work. If time lost as a result of permanent incapacity for work or a fatality is also measured, the information should be presented separately for temporary incapacity for work, permanent incapacity for work and fatalities.

There may be problems of under reporting of time lost due occupational injuries, and proper systems should be put in place to ensure the best reporting and data quality. Under reporting is thought to be present in countries at all levels of development, but may be particularly problematic in some developing countries. Data users should be aware of this issue when analyzing the data.

Because data quality issues may be present, it may be more relevant to analyse indicator trends rather than levels. It is recommended to analyse the trends of this indicator together with the frequency rates of new cases of occupational injuries and the severity of new cases of non-fatal occupational injuries.

## SAFE-4. Labour inspection (Inspectors per 10,000 employed persons) - (A)

### Measurement objective and rationale

The rate of inspectors per 10,000 employed persons is a crude proxy measure of the resources for monitoring and enforcing work conditions and standards.

### Method of computation

$$\text{Labour inspection} = \frac{\text{Number of labour inspectors}}{\text{Number of employed persons}} \times 10,000$$

### Concepts and definitions

**The system of labour inspection** is in charge of: (i) securing “the enforcement of the legal provisions relating to conditions of work and the protection of workers while engaged in their work;” (ii) supplying “technical information and advice to employers and workers concerning the most effective means of complying with legal provisions;” (iii) bringing “to the notice of the competent authority defects or abuses not specifically covered by existing laws”.<sup>126</sup>

Persons of working age are classified as **employed** if, during a short reference period such as a day or a week, (i) they did some work (even for just one hour) for pay, profit or family gain, in cash or in kind; or (ii) they were attached to a job or had an enterprise from which they were ‘temporarily’ absent during this period (for such reasons as illness, maternity, parental leave, holiday, training, industrial dispute). Employed persons include those persons of working age who worked for at least one hour during the reference period as contributing family workers (formerly referred to as unpaid family workers) working in a family business (see Chapter 2).<sup>127</sup>

The concept of employment does not include household members engaged in the provision of unpaid services for own family use such as cooking at home or caring for own children as well as volunteers providing services to households for own final use. These activities are not included within the production boundaries of the System of National Accounts (SNA).<sup>128</sup> However, persons engaged in the production of economic goods and services for own and household consumption should be considered as in self-employment if such production comprises an important contribution to the total consumption of the household (see Chapter 2).

### Recommended data sources and metadata

The required data for the numerator and the denominator can be obtained from administrative records and labour force surveys or other household surveys with an employment module. It is

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<sup>126</sup> ILO: *The Labour Inspection Convention, 1947 (No. 81)*. Available at: <http://www.ilo.org/ilolex/cgi-lex/convde.pl?C081>

<sup>127</sup> ILO: *Resolution concerning statistics of the economically active population, employment, unemployment and underemployment*, adopted by the Thirteenth International Conference of Labour Statisticians (Geneva,, October 1982). Available at: <http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/lang--en/index.htm>

<sup>128</sup> UNSD: *System of National Accounts 2008* (New York, 2009). Available at: <http://unstats.un.org/unsd/nationalaccount/docs/SNA2008.pdf>

important to synchronize the reference periods used for computing the number of labour inspectors and the number of employed persons.

### **Interpretation guidelines**

Labour inspectors are in charge of monitoring and evaluating many labour-related practices of which safety and health at the workplace is one. Hence, the indicator at hand may not give a complete picture of whether health- and safety-related practices at the workplace are monitored to a sufficient extent. In addition, it does not provide information on the number of inspections conducted or the quality of the work conducted by the labour inspectorate. In order to be able to evaluate the results, a benchmark of an acceptable or a desired number of labour inspectors per 10,000 employed persons is necessary.

## Legal Framework Indicator 14. Employment injury benefits

### *Income replacement in case of employment injury*

#### Scope

Employment injury benefits provide compensation for work-related injuries and occupational diseases and include medical care, cash benefits for temporary or permanent loss of earning and cash benefits in case of death of the breadwinner. This Legal Framework Indicator focuses on *income replacement in case of employment injury* (cash benefits for loss of earnings).

#### Selected ILS on income replacement in case of employment injury

Contingencies covered by the Social Security (Minimum Standards) Convention, 1952 (No. 102) and the Employment Injury Benefits Convention, 1964 (No. 121) include, *inter alia*, morbid condition, incapacity for work or loss of faculty due to work-related injuries and occupational diseases. Convention 121 places an obligation to provide for a definition of “industrial accident” and a list and/or definition of occupational diseases. Convention No. 102 covers 9 branches of social security, including employment injury benefits. Part VI provides, *inter alia*, for periodic payments corresponding to at least 50% of the reference wage in cases of incapacity for work or invalidity. Convention No. 121 provides for periodic payments corresponding to at least 60% of the reference wage. The rate should be revised following substantial changes in the cost of living. A lump sum is also permitted in some exceptional circumstances. No qualifying period may be prescribed; the benefits must be granted throughout the contingency.

#### Information provided on the indicator

<b>Law, policy or institutions:</b> Is there a national occupational safety and health insurance system providing for income replacement in case of employment injury? What workers are covered/excluded by the system? Who administers this system?
<b>Qualifying conditions:</b> What is the minimum level of incapacity giving entitlement to compensation? What are the other qualifying conditions, in any?
<b>Benefits (level and duration):</b> What cash benefits are payable for permanent incapacity (as % of previous earnings)? What cash benefits are payable for temporary incapacity (as % of previous earnings)? Other?
<b>Financing:</b> How are the benefits financed?
<b>Evidence of implementation effectiveness:</b> Comments of ILO supervisory bodies (if any).
<b>Coverage of workers in law:</b> Broad estimate of workers covered in law.
<b>Coverage of workers in practice:</b> Broad estimate of workers covered in practice (methodology TBD).
<b>Ratification of ILO Conventions:</b> The Social Security (Minimum Standards) Convention, 1952 (No. 102) and the Employment Injury Benefits Convention, 1964 (No. 121). Additional info to be included: National action in the area of OSH (Conventions No. 155 and 187).

#### Additional sources of information

##### *ILO sources*

- CEACR: General Survey concerning social security instruments in light of the 2008 Declaration on Social Justice for a Fair Globalization, ILC, 100th Session, 2011 (*not yet published*) and Article 19 reports
- GESS Country Profiles: <http://www.socialsecurityextension.org/gimi/gess/ShowCountryProfiles.do?aid=2>
- Social Protection Department (SOCPRO) website - <http://www.ilo.org/secsoc/lang--en/index.htm>

##### *Other sources*

- ISSA Country Profiles: <http://www.issa.int/aiss/Observatory/Country-Profiles>

## Legal Framework Indicator 15. Occupational Safety and Health (OSH) labour inspection

### Scope

Labour inspection in the field of OSH involves examining a workplace to assess and control risks from health and safety at work issues or other work-related pressures. It should be noted that the enforcement of health and safety regulation is only one dimension of the work of the labour inspectorate which is also concerned with the enforcement of regulations concerning working conditions in general.

### Selected ILS on OSH Labour inspection

The Labour Inspection Convention, 1947 (No. 81) and Labour Inspection (Agriculture) Convention, 1969 (No. 129) are concerned with labour inspection in its broad sense. Convention No. 81 asks ratifying states to maintain a system of labour inspection for workplaces in industry and commerce (exceptions are possible with regard to mining and transport). It sets out the basic functions and fields of action covered by labour inspection, the duties and rights of labour inspectors as well as the basic structure of labour inspection as a system. Convention No. 129 is similar in content to Convention No. 81 but concerns the agriculture and confers more rights to labour inspectors.

Other Conventions have specific provisions on OSH labour inspection (Labour Inspection (Seafarers) Convention, 1996 (No. 178), Occupational Safety and Health and the Working Environment Convention, 1981 (No. 155) and Promotional Framework for Occupational Safety and Health Convention, 2006 (No. 187)).

### Information provided in the indicator

**Law, policy or institutions:** (1) Existence of a national labour inspection system and structure (is there a central authority which assumes a coordinating role and a decentralized labour inspection structure?); (2) Legislative framework (does it allow inspectors to impose sanctions and executive measures themselves, without going through third units, and provide for their duties and rights?); (3) Existence of an enterprise registry at central level and at the level of labour inspection units status of labour inspectors (civil servants with independent status? stable employment?); (4) Do they receive training? ; (5) What resources do they have to undertake their tasks? ; and (6) Are there national/regional labour inspection plans/programs?

**Evidence of implementation effectiveness:** Comments of ILO supervisory bodies (if any).

**Coverage of workers in law:** Broad estimate of workers covered by the law.

**Coverage of workers in practice:** Broad estimate of workers covered in practice (methodology TBD).

**Ratification of ILO Convention:** The Labour Inspection Convention, 1947 (No. 81), its 1995 Protocol, the Labour Inspection (Agriculture) Convention, 1969 (No. 129), Convention concerning Occupational Safety and Health and the Working Environment, 1981 (No. 155) and Convention concerning the promotional framework for occupational safety and health, 2006 (No. 187).

### Additional sources of information

#### ILO sources

- Lab/Admin website: <http://www.ilo.org/labadmin>;
- LAB/Admin: Labour Inspection country profiles, if any ([http://www.ilo.org/labadmin/info/lang--en/WCMS\\_DOC\\_LAB\\_INF\\_CTR\\_EN/index.htm](http://www.ilo.org/labadmin/info/lang--en/WCMS_DOC_LAB_INF_CTR_EN/index.htm));
- OSH profiles (NATLEX), if any;
- CEACR, *General Survey of the reports concerning the Labour Inspection Convention, 1947 (No. 81), and the Protocol of 1995 to the Labour Inspection Convention, 1947, and the Labour Inspection Recommendation, 1947 (No. 81), the Labour Inspection (Mining and Transport) Recommendation, 1947 (No. 82), the Labour Inspection (Agriculture) Convention, 1969 (No. 129), and the Labour Inspection (Agriculture) Recommendation, 1969 (No. 133)*, ILC, 95th Session, 2006 (<http://www.ilo.org/public/english/standards/relm/ilc/ilc95/pdf/rep-iii-1b.pdf>) and article 19 reports, if any;
- ILO Audit reports and TC projects reports, if any.

#### Other sources

National registries and annual reports.



## Chapter 9. Social security

Social security covers all measures that provide benefits, whether in cash or in kind, to secure protection, *inter alia*, from (a) lack of work-related income (or insufficient income) caused by sickness, disability, maternity, employment injury, unemployment, old age, or death of a family member; (b) lack of access or unaffordable access to health care; (c) insufficient family support, particularly for children and adult dependants; and (d) general poverty and social exclusion.<sup>129</sup>

Ten statistical indicators are introduced in this section, to monitor the progress made at the national level in achieving this objective and some of them are yet to be developed by the ILO. Three legal framework indicators correspond to these statistical indicators: Old-age social security or pension benefits (public/private), Incapacity for work due to sickness/sick leave (income replacement in case of sickness / sick leave) and Incapacity for work due to invalidity (income replacement in case of non-occupational invalidity) (Table 9).

**Table 9: Overview of decent work indicators for social security**

Statistical Decent Work Indicators	Concepts	Coverage	Preferred data source
<b>Indicators developed</b>			
<b>SECU-1. Share of population above the statutory pensionable age (or aged 65 or above) benefiting from an old-age pension – (M)</b>	Old-age pension Beneficiary	Population above the statutory pensionable age or aged 65 +	Administrative records Household surveys Population Census
<b>SECU-2. Public social security expenditure (percentage of GDP) – (M)</b>	Annual public social security expenditure	n/a	National accounts Social security scheme
<b>SECU-3. Health expenditure not financed out of pocket by private households – (A)</b>	Healthcare costs Out-of-pocket spending by private households	All Households	National health account Demographic health survey
<b>SECU-4. Share of economically active population contributing to a pension scheme – (A)</b>	Protected persons or Affiliated persons Active contributors Contributory schemes Basic schemes Labour force	Employed and unemployed persons	Administrative data Household surveys
<b>Indicators to be developed by the ILO (future indicators)</b>			
<b>SECU-5 (F) Share of eligible population covered by (basic) health care provision</b>			
<b>SECU-6 (F) Public expenditure on needs-based cash income support (% of GDP)</b>			

<sup>129</sup> The relevant ILO Conventions are: *The Social Security (Minimum Standards) Convention, 1952 (No. 102)*; *The Medical Care and Sickness Benefits Convention, 1969 (No. 130)*; *The Invalidity, Old-Age and Survivors' Benefits Convention, 1967 (No. 128)*; *The Revision of the Maternity Protection Convention (Revised), 1952 (No. 183)*; *The Employment Promotion and Protection against Unemployment Convention, 1988 (No. 168)* and: *The Employment Injury Benefits Convention, 1964 (No. 121)*. All available at: <http://www.ilo.org/ilolex/>

<b>SECU-7 (F) Beneficiaries of cash income support (% of the poor)</b>
<b>SECU-8 (F) Sick leave</b>
<b>SECU-9 (F) Share of unemployed receiving regular periodic social security unemployment benefits</b>
<b>SECU-10 (F) Ratio of average old-age pension received to minimum wage</b>
<b>Legal Framework Indicators</b> L16- Old-age social security or pension benefits (public/private) L17- Incapacity for work due to sickness / sick leave (Income replacement in case of sickness / sick leave) L18- Incapacity for work due to invalidity (Income replacement in case of non-occupational invalidity)

An extended operational definition of social security that is relevant for the calculation of Decent Work Indicators comprises ten elements. Some of the indicators for the social security dimension refer to all of them (e.g. SECU-2. Public social security expenditure in percentage of GDP); others refer to one of the ten following elements, in particular as concerns coverage which has to be directly and separately measured for each of the specific social security functions:<sup>130</sup>

(1) and (2) Medical care and income support in the form of cash sickness benefits, as defined in Parts II and III of the Social Security (Minimum Standards) Convention, 1952 (No. 102) and by the Medical Care and Sickness Benefits Convention, 1969 (No. 130);

(3), (4) and (5) Protection in old age, including income support and long-term care – income support old-age benefit; protection in disability, including income support but also medical care, rehabilitation and long term care – income support invalidity benefit; and protection of survivors in case of death of a family member (“breadwinner”) – income support benefit as defined respectively in Parts V, IX and X of the Social Security (Minimum Standards) Convention, 1952 (No. 102) and by the Invalidity, Old-Age and Survivors' Benefits Convention, 1967 (No. 128);

(6) Protection in maternity, including medical care and income support maternity benefit, as defined in Part VIII of the Social Security (Minimum Standards) Convention, 1952 (No. 102) and by the Revision of the Maternity Protection Convention (Revised), 1952 (No. 183);

(7) Protection in “responsibility for the maintenance of children”, including the provision in kind to, or in respect of, children, of “food, clothing, housing, holidays or domestic help” and of cash income support family benefits as defined in Part VII of the Social Security (Minimum Standards) Convention, 1952 (No. 102);

(8) Protection in unemployment, including income support in the form of unemployment benefits, and also other labour market policies promoting employment – income support benefits as defined in Part IV of the Social Security (Minimum Standards) Convention, 1952 (No. 102), and income support and other labour market policies as defined by the Employment Promotion and Protection against Unemployment Convention, 1988 (No. 168);

<sup>130</sup> See also ILO: “Chapter 1 Definitions, standards and concepts” in *World Social Security Report 2010/11, providing coverage in times of crisis and beyond* (Geneva, 2010). Available at : <http://www.ilo.org/gimi/gess/RessFileDownload.do?ressourceId=15263>

(9) Protection in case of employment injury: medical care, rehabilitation and income support in the form of sickness, invalidity or survivors' benefit as defined in Part VI of the Social Security (Minimum Standards) Convention, 1952 (No. 102) and by the Employment Injury Benefits Convention, 1964 (No. 121);

(10) General protection against poverty and social exclusion through social assistance that provides protection to all residents without sufficient other means of income from work and not covered (or not covered sufficiently) by the social security functions listed above.

## STATISTICAL INDICATORS

### SECU-1. Share of population above the statutory pensionable age (or aged 65 or above) benefiting from an old - age pension - (M)

#### Measurement objective and rationale

This indicator measures the proportion of the population above the statutory pensionable age or aged 65 and above that receives an old-age pension, which is a fundamental social security instrument that contributes to the income security of older persons. It sheds light on the share of the older population benefiting from social security.

#### Method of computation

It is recommended to present the indicator as a percentage of the total number of persons above the statutory pensionable age.

$$\begin{aligned} & \text{Share of old - age pension beneficiaries (\%)} \\ &= \frac{\text{Number of old - age pension beneficiaries s above statutory retirement age}}{\text{Total number of persons above statutory retirement age}} \\ & \times 100 \end{aligned}$$

#### Concepts and definitions

An **old-age pension** refers to periodic payments intended: (i) to maintain the income of the beneficiary after retirement from gainful employment at the statutory/standard age or (ii) to support the income of older persons (excluding support for a limited duration).

A **beneficiary** is the person in respect of whom social security benefit is granted, irrespective of whether he is a titular beneficiary or not.

The **benefits covered** are periodic cash retirement benefits. They can be means-tested or non means-tested and provided through contributory or non-contributory schemes. **Means-tested social benefits** are social benefits which are explicitly or implicitly conditional on the beneficiary's income and/or wealth falling below a specified level. Thus, **Non means-tested benefits** are those benefits that are established entirely independently of the beneficiary's income and/or wealth.

**Contributory schemes** are social protection schemes that require the payment of contributions, by the protected persons or by other parties on their behalf, in order to secure individual entitlement to benefits.<sup>131</sup> Conversely, **non-contributory schemes** normally do not require direct contribution from beneficiaries or their employers as a condition of entitlement to receive relevant benefits. Non-contributory schemes include a broad range of schemes including universal schemes for all residents and some categorical means-tested schemes. Non-contributory schemes are usually financed through tax or other state revenues.

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<sup>131</sup> European Commission and Eurostat: *ESSPROS Manual - The European System of integrated Social Protection Statistics* (European Communities, 2008). Available at: [http://epp.eurostat.ec.europa.eu/cache/ITY\\_OFFPUB/KS-RA-07-027/EN/KS-RA-07-027-EN.PDF](http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-RA-07-027/EN/KS-RA-07-027-EN.PDF)

Beneficiaries who receive supplementary benefits that complement other basic old-age benefits (i.e. “second-pillar” schemes) are excluded to avoid double counting.

The age limit can be set at the statutory pensionable age or, in cases where international comparison is desired, at 65 or above.

To the extent possible, the numerator includes survivors’ and disability benefits once the beneficiary reaches the statutory pensionable age (or the age of 65). In other words, the numerator should capture all beneficiaries of an old-age pension, whether they themselves were participants in a social security scheme (contributors) or not, for instance, family members of deceased contributors who receive a part of the latter’s pension. Both in the case of survivors’ and disability benefits, it is important to note that only those who fall within the age group will be counted.

The denominator corresponds to the total size of the population defined as above the statutory pensionable age or aged 65 or above. The same age group should be used for the numerator.

For general information on social security statistics, please refer to the *Resolution concerning the development of social security statistics*, adopted by the Ninth International Conference of Labour Statisticians in April-May 1957.<sup>132</sup>

### **Recommended data sources, metadata and disaggregation**

The administrative data on old-age pension schemes are often the most current and provide comprehensive information for the numerator of this indicator. In the absence of reliable administrative records, data from household surveys (household budget surveys or labour force surveys) could be used, provided that persons receiving old-age pensions can be identified. The recommended reference period for obtaining pension information through household surveys is the last 12 months or the last calendar year, depending on the country. Data from a household survey may also be used to estimate the denominator of the indicator.

When providing time series for this indicator, it is important to note any changes in the statutory pensionable age. The indicator should be computed using the statutory pensionable age that was valid at the time of data collection.

Even if ‘supplementary’ pension schemes – the main source of double counting – are excluded, some double counting may still occur. This is the case, for example, if recipients have moved between different pension schemes during the course of their working lives and receive pensions from several pension schemes when they are retired. The numerator can also be overestimated in cases such as in Luxembourg where a significant proportion of old-age pensioners (possibly included in the numerator) living on the other side of the border are not counted in the old-age national population (denominator). In order to avoid over-estimation of old-age pension beneficiaries (including through double counting), it is recommended to conduct additional analyses on the national level or to use micro-data in order to complement/adjust administrative data collected at the scheme level.

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<sup>132</sup> ILO: *Resolution concerning the development of social security statistics*, adopted by the Ninth International Conference of Labour Statisticians (April-May 1957). Available at : [http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS\\_087550/lang--en/index.htm](http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS_087550/lang--en/index.htm)

It is recommended that data for this indicator be published with metadata on the data source(s), data coverage (age group, social security schemes), reference period and any methodological breaks in the time series. It is also suggested that the indicator be disaggregated by sex, type of social security scheme and benefits (see interpretation guidelines below).

### **Interpretation guidelines**

This indicator does not capture all beneficiaries of an old-age pension; for example, it would not capture those who receive an old-age pension before reaching the statutory pensionable age as a result of opting for early retirement or survivors' benefit below the age of statutory retirement.

It is recommended that the results (levels and changes over time) be analysed in relation to contextual information, in particular regarding the type of schemes and combination of schemes existing in the country. These can include contributory schemes, provident funds, universal or targeted schemes; defined benefit versus defined contribution schemes; private versus public; and means tested or non means-tested benefits. For example, because of the ambiguous role of means-tested old-age pensions, two variants of coverage indicators can be calculated: one excluding and one including means-tested old-age pensions.

In order to observe effective coverage, this indicator will preferably be analysed together with average old-age pension benefits per month per person who is above the statutory pensionable age (or aged 65 and above) benefiting from an old-age pension. When such information is not available, statutory information on the legal replacement rate can be considered in analysing this indicator. The legal replacement rates for specific branches or functions of social security are usually measured (for cash periodic benefits) by benefit ratios or replacement ratios calculated for specified categories of beneficiaries, using benefit formulas or benefit amounts specified in the legislation. For example, the Social Security (Minimum Standards) Convention, 1952 (No. 102) sets minimum replacement rates for cash benefits in seven of its nine functions (expressed as a percentage of total previous earnings of the beneficiary or his/her breadwinner). It specifies that such minimum rates should apply to a defined "standard" beneficiary meeting qualifying conditions, and be guaranteed at least to those with earnings up to a certain prescribed selected level.<sup>133</sup>

The fact that in most countries workers can postpone retirement and continue working after the statutory pensionable age should be taken into account when interpreting the results.

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<sup>133</sup> ILO: *The Social Security (Minimum Standards) Convention, 1952 (No. 102)*. Available at: <http://www.ilo.org/ilolex/cgi-lex/convde.pl?C102>

## SECU-2. Public social security expenditure (percentage of GDP) - (M)

### Measurement objective and rationale

This indicator represents the total public social security expenditure expressed as a percentage of the Gross Domestic Product (GDP). Total public social security expenditure synthesizes the overall public redistributive effort and is closely correlated with the overall coverage. Public social security expenditure as a percentage of the total GDP reflects the social spending effort in a given country relative to the size of its economy.

### Method of computation

$$\begin{aligned} & \text{Public social security expenditure (\%)} \\ &= \frac{\text{Total annual public social security expenditure}}{\text{GDP}} \times 100 \end{aligned}$$

### Concepts and definitions

Total **annual public social security expenditure** is the sum of expenditures (including benefit expenditure and administration costs) of all existing public social security/social protection schemes/programmes in the country. The scope of the indicator corresponds to the scope of the Social Security (Minimum Standards) Convention, 1952 (No.102), which establishes nine classes of benefits: medical care, sickness benefit, unemployment benefit, old-age benefit, employment injury benefit, family benefit, maternity benefit, invalidity benefit and survivors' benefit, plus other income support and assistance programmes, including conditional cash transfers, available to the poor and not included under the classes above.<sup>134</sup>

Both the numerator and the denominator should be in current prices and national currency.

For general information on social security statistics, refer to the *Resolution concerning the development of social security statistics*, adopted by the Ninth International Conference of Labour Statisticians in April-May 1957.<sup>135</sup>

### Recommended data sources, metadata and disaggregation

The national aggregates of government spending can be obtained from the national accounts (general government accounts, as well as expenditure by function) or government finance statistics (expenditure by function). However, the desired functional disaggregation of expenditure is often not available. Public social security expenditure is based on data extracted from the administrative social security scheme. Similarly, GDP is obtained from the national accounts.

It is recommended that data for this indicator be published with metadata on the data source(s), types of public social security or social protection schemes and programmes covered, geographic coverage

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<sup>134</sup> ILO: *The Social Security (Minimum Standards) Convention, 1952 (No. 102)*. Available at: <http://www.ilo.org/ilolex/cgi-lex/convde.pl?C102>

<sup>135</sup> ILO: *Resolution concerning the development of social security statistics*, adopted by the Ninth International Conference of Labour Statisticians (April-May 1957). Available at : [http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS\\_087550/lang--en/index.htm](http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS_087550/lang--en/index.htm)

when relevant, and types of contingencies covered. Definitions of the numerator and denominator should be made readily available to data users.

It is possible to estimate the proportion of the total amount of benefits received separately by men and women if the data on beneficiaries and benefits paid are available by sex in selected branches of social security, such as old-age pension, etc. For analytical purposes, this indicator should be disaggregated by health and non-health public social security expenditure. Furthermore, when possible, it is useful to disaggregate the non-health social security expenditure by old-age benefit expenditure and other non-health social security expenditure.

### **Interpretation guidelines**

This indicator is useful for comparative analysis at the national level and also component (social security scheme) level, but its interpretation presents inherent difficulties. These include, from an overall perspective, understanding the composition of the national social security system or changes to the composition over time. In relation to other contextual information, difficulties pertain to the interpretation of the legal framework of public social security, as well as of the economic and social context.

While social protection expenditure – in the longer run – is positively correlated with overall coverage (its scope, extent and level), it may also change due to factors other than changes in coverage, such as:

- Changes in social security expenditure are often countercyclical; a fall in total public social security expenditure as a percentage of GDP could result from higher employment rates (declining unemployment) or from a reduction in occupational injuries which could point towards progress. In other words, in specific branches/functions of social security (e.g. employment injury insurance and unemployment, in particular) an increase or decrease in expenditure may be due to changes in the need or utilization of those benefits (such as more or fewer accidents at work) and not to changes in coverage.
- The demographic structure, and in particular the share of older persons, is another factor that can have a direct impact on old-age and health expenditure, as well as on the global public expenditure indicator.
- The size of the formal and informal economy has direct implications on the coverage of social insurance and other contributory schemes.
- Aggregate expenditure can be distributed in various ways among lower- and higher-income populations. Expenditure may be high (or increase) as a result of the expansion of a specific generous programme for a relatively narrow, better-off group of the population (such as civil servants, military personnel, etc.) In other words, an increase in the expenditure may not necessarily correspond to an increase in the number of people covered.
- This indicator should be analysed in relation to the different branches/functions of social security covered at the statutory level and also to their respective share in total expenditure (health, old-age, unemployment). Many developing countries do not have, at a statutory level, a comprehensive social system covering all nine branches



as mentioned above. One common situation is a system covering long-term benefits (old-age, survivors and invalidity) and the work injury benefit.

- Countries differ in terms of the level of direct and indirect taxes levied on social benefits. Such changes over time in taxation rules within a given country should be taken into account when interpreting trends in social protection expenditure.

Social security systems around the world relate to various institutional structures, including public, private and mixed; compulsory and voluntary; universal and targeted programmes. This indicator relates to public expenditure on social security schemes and has to be considered in relation to the national context and the possible development of private social security schemes. In many countries, private (mandatory or voluntary) expenditure substitutes expenditure on public programmes. In Latin American and European Union countries with large private mandatory funded schemes, focusing only on public expenditure does not provide an accurate picture of total social protection expenditures. For such countries, this indicator should be analysed in combination with private expenditures (making the distinction between mandatory and voluntary expenditures).

Many social security arrangements are employment-based, but not all. Population groups which are covered can go beyond workers, as the common goal of social security is to provide basic protection against the financial consequences of basic life contingencies for workers and their families. Hence, in interpreting this indicator, it should be kept in mind that the social security expenditures concern persons beyond the employed or the working age population to include expenditures for non-working age children and the elderly.

### SECU-3. Health expenditure not financed out of pocket by private households - (A)

#### Measurement objective and rationale

This indicator is used as a proxy of affordable access to health care. The percentage of total (public and private) healthcare expenditure which is not financed by out-of-pocket payments by private households is approximately equivalent to the percentage of total (public and private) healthcare expenditure in the country covered either by general government or by pre-paid private insurance, by private employers or NGOs.

#### Method of computation

$$\text{Healthcare expenditure not financed out of pocket by private households (\%)} = \frac{\text{Total healthcare expenditure} - \text{Out of pocket payments (OOP)}}{\text{Total expenditure on health care}} \times 100$$

Where:

$$\begin{aligned} \text{Total healthcare expenditure} \\ &= \text{Public healthcare expenditure} + \text{Private healthcare expenditure} \end{aligned}$$

$$\begin{aligned} \text{Public healthcare expenditure} \\ &= \text{Government expenditure on healthcare} \\ &+ \text{Social security schemes expenditure on healthcare} \end{aligned}$$

$$\text{Private healthcare expenditure} = \text{OOP} + \text{Private insurance} + \text{NPISH} + \text{Corporations}$$

Non-profit institutions serving households (NPISH) and corporations in the above equations refer to those other than social security or health insurance. Out-of-pocket payments should ideally exclude cost-sharing payments for the purpose of this indicator.

#### Concepts and definitions

The level of financial protection provided by existing social health protection mechanisms refers to the proportion of **healthcare costs** covered through pooling and pre-payment mechanisms either by general government (national health services, social health insurance) or by private health insurance or other non-profit institutions and corporations. In other words, it is the proportion of costs *not borne* out of pocket at the point of service delivery. Levels of coverage become lower when out-of-pocket payments increase. High out-of-pocket payment rates thus indicate gaps in financial coverage, as well as insufficient financial protection provided by the existing social health protection mechanisms.

**Out-of-pocket spending by private households** (OOPs) is the direct outlay of households, including gratuities and payments in kind made to health practitioners and suppliers of pharmaceuticals, therapeutic appliances and other goods and services, whose primary intent is to contribute to the restoration or to the enhancement of the health status of individuals or population groups. OOPs expenditure comprises expenditures on medications purchased without a prescription and not reimbursable. It also comprises other healthcare expenditures directly paid by private households, irrespective of whether contact with the healthcare system was established on referral or on the patient's own initiative, or whether it includes cost-sharing. Ideally, OOPs should be split into cost-

sharing and OOPs excluding cost-sharing for the calculation of the indicator. Cost-sharing means that a health insurance or third party payers provide for beneficiaries to cover part of the medical cost via a fixed amount per service (co-payment) or a set share of the price tagged to services (co-insurance, also labelled in some countries 'ticket modérateur'), or a fixed amount to be borne before the third-party gets involved (deductible). OOPs without cost-sharing means that payments are borne directly by a patient without the benefit of insurance. These include informal payments to health care providers but exclude cost-sharing payments.<sup>136</sup>

In practice, however, it is difficult to separate the cost-sharing component of OOPs, especially in developing countries. In addition, cost-sharing often represents a negligible part of OOPs. As a consequence, total OOPs is used most of the time in computing the numerator of this indicator.

### **Recommended data sources, metadata and disaggregation**

The preferred data source for this indicator is the National Health Account (NHA) for a given economy.

The NHA provides information regarding expenditure on health by financing agent, i.e. for government expenditure (social security funds: social insurance), expenditure by other levels of general government (central, provincial or local) as well as for private expenditure (financed by private insurance, corporations, non-profit institutions and by households, out-of-pocket). One can calculate the above indicator using these components.

Alternatively, household surveys such as household budget surveys and demographic health surveys can be used to calculate this indicator.<sup>137</sup>

It is recommended that key metadata be published with the data, including the data source(s), concept definitions used for variables in the numerator and denominator, and population coverage.

It is also recommended that the indicator be disaggregated by private and public healthcare expenditure. As regards public health expenditure, it is also recommended to disaggregate the data by financing agent, in particular between social security funds expenditure and public expenditure other than social security funds expenditure. **Interpretation guidelines**

When interpreting this indicator, limitations related to the measurement of out-of-pocket expenditure<sup>138</sup> should be taken into account. These limitations are mostly due to the limited capacity to monitor and track meaningful change in out-of-pocket health spending, as well as catastrophic payments for healthcare over time. Difficulties also arise when separating cost-sharing from the rest of out-of-pocket expenditure.

More importantly, the multiple dimensions of health should be considered when measuring health coverage. One has to look at a number of interlinked indicators of effective access to health coverage: (i) statutory coverage by social health protection measures, (ii) affordability of healthcare services to

<sup>136</sup> OECD, Eurostat, WHO: *A System of Health Accounts* (2011). Available at: [http://epp.eurostat.ec.europa.eu/cache/ITY\\_OFFPUB/KS-30-11-270/EN/KS-30-11-270-EN.PDF](http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-30-11-270/EN/KS-30-11-270-EN.PDF)

<sup>137</sup> In terms of methodology, the main manuals or guides are the following: WHO, World Bank and USAID (2003) *Guide to producing national health accounts* [http://www.who.int/entity/nha/docs/English\\_PG.pdf](http://www.who.int/entity/nha/docs/English_PG.pdf) and WHO *Statistical World Health Statistics 2010 Indicator compendium* (Interim version). [http://www.who.int/whosis/indicators/WHS10\\_IndicatorCompendium\\_20100513.pdf](http://www.who.int/whosis/indicators/WHS10_IndicatorCompendium_20100513.pdf) ; OECD, Eurostat, WHO (2011), *A System of Health Accounts* [http://epp.eurostat.ec.europa.eu/cache/ITY\\_OFFPUB/KS-30-11-270/EN/KS-30-11-270-EN.PDF](http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-30-11-270/EN/KS-30-11-270-EN.PDF), [http://www.oecd-ilibrary.org/social-issues-migration-health/a-system-of-health-accounts\\_9789264116016-en](http://www.oecd-ilibrary.org/social-issues-migration-health/a-system-of-health-accounts_9789264116016-en)

<sup>138</sup> WHO: "Limitations of methods for measuring out-of-pocket and catastrophic private health expenditures" in *Bulletin of the World Health Organization* (2009). Available at: <http://www.who.int/bulletin/volumes/87/3/08-054379/en/index.html>

households and (iii) availability and quality of services in terms of qualified health workforce, infrastructure, etc. Partial indicators widely available both at the national and international levels (WHO, OECD, Eurostat, ILO) relate to these different dimensions of coverage, for example: the percentage of persons covered by law; out-of-pocket expenditure as a percentage of total health expenditure; density of medical personnel of different skills and some infrastructure indicators; overall levels of healthcare spending; and, finally, information on the actual utilization of selected healthcare services, such as percentage of births attended by skilled medical personnel and percentage of children vaccinated.

Effective access to healthcare and levels of actual utilization certainly depend on all the above factors, as well as the availability of services with the level of financial protection being determined both by statutory coverage and effective coverage.<sup>139</sup> However, at the same time there are other factors that influence access, including cultural ones.

Finally, WHO definitions and metadata should be closely followed in interpreting this indicator.

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<sup>139</sup> See also ILO: "Chapter 1 Definitions, standards and concepts" in *World Social Security Report 2010/11, providing coverage in times of crisis and beyond* (Geneva, 2010). Available at : <http://www.ilo.org/gimi/gess/RessFileDownload.do?ressourceId=15263>

## SECU-4. Share of economically active population contributing to a pension scheme - (A)

### Measurement objective and rationale

This indicator aims to capture the share of the economically active population protected through a contributory pension scheme (with benefits guaranteed but not currently being received). It seeks to avoid double counting active contributors who contribute to more than one scheme. It thus provides information about the proportion of the economically active population that will receive an old age pension once reaching pensionable age. This right to income security in old age is guaranteed by the prior payment of premiums or contributions, i.e. before the occurrence of the insured contingency.

### Method of computation

$$\begin{aligned} & \text{Share of the economically active contributing to a pension scheme} \\ &= \frac{\text{Number of economically active contributing to an old – age pension scheme}}{\text{Total number of economically active persons}} \times 100 \end{aligned}$$

The age interval for this indicator should be the economically active population below the statutory age for retirement, for example, 15 to 64.

### Concepts and definitions

The scope of the numerator for this indicator is contributory or partially contributory pension schemes. The indicator focuses on active contributors who are a sub-group of the affiliated or protected population.

**Active contributors** are insured individuals who have made at least one contribution or on whose behalf at least one contribution has been made during the reporting period (i.e. the 12 month period).

**Protected persons or affiliated persons** are persons who are insured by the social protection scheme. This includes persons who are active contributors, as well as persons who have not made any contributions or on whose behalf no contributions have been made during the reporting period but who are still protected by the scheme and would benefit should a contingency arise. For example, long-term unemployed persons who may no longer be contributing to the old-age pension scheme (and on whose behalf no contributions are being made) but who have the minimum number of contributions to qualify for an old-age benefit upon reaching the statutory age for retirement qualify as protected or affiliated persons.<sup>140</sup> Protected persons have guaranteed benefits but are not necessarily currently recipients of such benefits, e.g., persons who actively contribute to social insurance and are thus guaranteed benefits for a specified contingency.

In **contributory schemes**, entitlement to a benefit is based on contributions from insured persons and/or their employer.

As in the case of SECU-1, SECU-4 considers contributions for entitlement to periodic cash retirement

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<sup>140</sup> ILO: *ILO Social Security Inquiry 2005 Manual* (Geneva, 2005). Available at: <http://www.socialsecurityextension.org/gimi/gess/ResFileDownload.do?ressourceId=6622>

benefits but here this is restricted to old-age contributory schemes. Contributors to supplementary schemes in addition to the basic old-age pension scheme, i.e. “second-pillar” schemes, are excluded to avoid double counting.

**Basic schemes** are social protection schemes that guarantee a basic level of protection. (By means of comparison, supplementary schemes are social protection schemes that top up cash benefits granted by the basic scheme, or extend the coverage of the basic scheme.) According to this concept definition, “basic” scheme does not refer to the level of benefits. In particular, it is not to be understood as referring to a minimum level of benefits; it may well be that the benefits provided by a basic scheme are fairly generous. The distinction between basic schemes and supplementary schemes rather reflects the relationship between different types of benefits.

For further information on the above concept definitions, please refer to the *Resolution concerning the development of social security statistics*,<sup>141</sup> adopted by the 9<sup>th</sup> International Conference of Labour Statisticians in April-May 1957.

The reference population is the economically active population. Persons of working age are classified as **employed** if, during a short reference period such as a day or a week, (i) they did some work (even for just one hour) for pay, profit or family gain, in cash or in kind; or (ii) they were attached to a job or had an enterprise from which they were ‘temporarily’ absent during this period (for such reasons as illness, maternity, parental leave, holiday, training, industrial dispute). Employed persons include those persons of working age who worked for at least one hour during the reference period as contributing family workers (formerly referred to as unpaid family workers) working in a family business.

It should be noted that the concept of employment does not include household members engaged in the provision of unpaid services for their own family use, such as cooking at home or caring for their own children as well as volunteers providing services to households for their own final use. These activities are not included within the production boundaries of the System of National Accounts (SNA).<sup>142</sup> However, persons engaged in the production of economic goods and services for their own and household consumption should be considered as in self-employment if such production comprises an important contribution to the total consumption of the household (see Chapter 2).<sup>143</sup>

Persons of working age are classified as **unemployed** if, during a short reference period such as a day or a week, they (i) were without work, i.e. did not work for even one hour in any economic activity (paid employment, self-employment, or unpaid work for a family business or farm); (ii) were available for work and; (iii) had taken active steps to seek work during a specified recent period. While no international standard exists regarding the recommended length of time for a person to conduct an active job search in order to be classified as unemployed, in practice, many countries have used a period of four weeks prior to the reference period.

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<sup>141</sup> ILO: *Resolution concerning the development of social security statistics*, adopted by the Ninth International Conference of Labour Statisticians (April-May 1957). Available at : [http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS\\_087550/lang-en/index.htm](http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS_087550/lang-en/index.htm)

<sup>142</sup> UNSD: *System of National Accounts 2008* (New York, 2009). Available at: <http://unstats.un.org/unsd/nationalaccount/docs/SNA2008.pdf>

<sup>143</sup> ILO: Ibid.

The **labour force** (total number of economically active persons) consists of all persons of working age who were either employed or unemployed.

For further information on employment, unemployment and labour force concepts and definitions, please refer to the *Resolution concerning statistics of the economically active population, employment, unemployment and underemployment*, adopted by the Thirteenth International Conference of Labour Statisticians (Geneva, October 1982).<sup>144</sup>

### **Recommended data sources, metadata and disaggregation**

Administrative record data from old-age pension schemes often give the most up-to date and comprehensive information to calculate the numerator for this indicator. However, the availability and quality of such data vary across countries, and across schemes within countries. Very often, administrative data trace certain administratively registered events (such as payment of contributions or benefits) rather than the persons behind such events. This may lead to double counting, in particular when aggregating administrative data. For example, a person can be contributing to the same scheme through more than one job, or to more than one scheme covering the same contingency, or be receiving similar types of benefits from more than one source.

Data from national household surveys (labour force surveys in particular and household budget surveys) can be used to estimate the numerator provided that persons contributing to an old-age pension scheme can be identified. Household surveys have the advantage of reducing the risk of double counting active contributors since the person is counted and not the contribution record (note that a person may contribute to more than one scheme).

Establishment surveys can possibly be used as an alternative source to estimate the numerator, bearing in mind however that they are limited to jobs of employees rather than employed persons, and thus cannot avoid double counting. They can however be used as a benchmark rather than a substitute of labour force survey data. When using establishment survey data, adequate care should be taken to ensure adequate geographic, industry coverage, etc.

The source for the denominator will preferably be census data or labour force survey data.

For this indicator, it is recommended that at a minimum, metadata on the source (type of source, indication of the scheme(s) for which data are collected as well as the scheme(s) which should have been covered but for which data are not available), reference period and geographic coverage be made available.

Data for this indicator should be disaggregated by sex, age (youth aged 15-24 and adults aged 25-64), status in employment (if social protection covers groups other than employees), and economic activity, including agricultural and non-agricultural activities. They may also be disaggregated by public or private sector activities.

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<sup>144</sup> ILO: *Resolution concerning statistics of the economically active population, employment, unemployment and underemployment*, adopted by the Thirteenth International Conference of Labour Statisticians (Geneva, October 1982). Available at: [http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS\\_087481/lang--en/index.htm](http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS_087481/lang--en/index.htm).

## Interpretation guidelines

The scope of this indicator is limited to contributory pension schemes which still represent a large majority of the existing pension schemes. However, some non-contributory schemes now exist, notably in developing countries, covering a larger part of the population than the contributory schemes which are limited to formal economy workers. Hence, the results (levels and changes over time) should be analysed in relation to the contextual information, in particular regarding the type of pension schemes and combination of schemes existing in the country: contributory schemes, provident funds, universal or targeted schemes; defined benefit versus defined contribution schemes; and, private versus public schemes.

It is recommended that this indicator of effective coverage be analysed together with additional information on:

- the proportion of older persons above retirement age receiving an old age pension. When measuring the extent of effective coverage, a distinction has to be made between coverage measured in terms of protected persons (objective of indicator 4.b1) and coverage measured in terms of actual beneficiaries which takes into account both contributory and non contributory old age pension schemes;
- actual benefit levels for workers and the population (if not available, at least in relation to statutory information on the legal replacement rate);
- information on the statutory provisions concerning eligibility for contributory benefits: the minimum contributory period required for being eligible for any periodic benefit (like a partial pension); the minimum contributory period required for a full periodic benefit or pension (possibly different for men and women).
- an estimate of the extent of statutory coverage, i.e. a quantification of the groups covered, according the law, by a contributory pension scheme. In estimating the extent of the statutory coverage, the information on the groups covered by statutory schemes for a given branch in national legislation is used, as well as available statistical information on the number of persons concerned at the national level.

When measuring the effective extent of coverage, a distinction has to be made between coverage measured in terms of protected persons and coverage measured in terms of actual beneficiaries. Protected persons are those who have benefits guaranteed but are not necessarily currently recipients of such benefits, e.g. persons who actively contribute to social insurance and are thus guaranteed benefits for a specified contingency. Actual beneficiaries are covered by SECU-1, for example, which as presently defined, includes beneficiaries from contributory and non-contributory schemes.

In estimating the extent of the statutory coverage information on the groups covered by statutory schemes for a given branch in national legislation is used, as well as available statistical information on the number of persons concerned at the national level. The statutory coverage rate for a given branch of social security is the ratio between the estimated number of people legally covered and – as appropriate – the total number of employees (that is, wage and salary workers), the total number of employed persons (including employees and the self-employed), the total number of economically active persons (including or not their dependants), or the total population. Measurements of effective



coverage using SECU-4 should reflect how, in reality, the statutory provisions are implemented. Effective coverage is usually different from and, lower than, statutory coverage because of non-compliance, problems with enforcement of the legal provisions, or deviations of actual policies from the text of the legislation.

## Legal Framework Indicator 16. Old-age social security or pension benefits (public/private)

### Scope

Old-age social security or pension benefits refers to all benefits paid to persons who have withdrawn from the labour market due to retirement. They are paid to persons who meet certain requirements (insured active persons reaching retirement age, with a given residence, nationality, etc).

### Selected ILS on old-age social security or pension benefits (public/private)

Part V of the Social Security (Minimum Standards) Convention, 1952 (No. 102) provides for periodic payments, corresponding to at least 40% of the reference wage. The rates of relevant benefits must be revised following substantial changes in the general level of earnings and /or the cost of living. The Invalidity, Old-Age and Survivors' Benefits Convention, 1967 (No. 128) provides for periodic payments, corresponding to at least 45% of the reference wage. See also Invalidity, Old-Age and Survivors' Benefits Recommendation, 1967 (No. 131). A qualifying period may be prescribed (full benefit: 30 years of contributions or 20 years of residence; reduced benefits: 15 years of contributions or employment); these benefits last until the death of the beneficiary.

### Information provided on the indicator

<b>Law, policy or institutions:</b> Is there a national law providing for pension benefits? What are the schemes? Who do they cover? Which is (are) the institution(s) responsible?
<b>Qualifying conditions:</b> What is the legal retirement age (female and male, if different retirement age)? Number of contributions or other qualifying conditions?
<b>Benefits (level):</b> Lump sum? Periodic payments?
<b>Financing:</b> How are the benefits financed? What are the contributions?
<b>Evidence of implementation effectiveness:</b> Comments of ILO supervisory bodies, if any.
<b>Coverage of workers in law:</b> Estimate of workforce covered by the law.
<b>Coverage of workers in practice:</b> See SECU-1.
<b>Ratification of ILO Conventions:</b> The Social Security (Minimum Standards) Convention, 1952 (No. 102), applicability of Part V, and Invalidity, Old-Age and Survivors' Benefits Convention, 1967 (No. 128).

### Additional sources of information

#### ILO Sources

- CEACR - General Survey concerning social security instruments in light of the 2008 Declaration on Social Justice for a Fair Globalization, ILC, 100th Session, 2011 (*not yet published*) and Article 19 Government report (if the C102/C128 have not been ratified)
- GESS Country Profiles: <http://www.socialsecurityextension.org/gimi/gess/ShowCountryProfiles.do?aid=2>
- Social Protection Department (SOCPRO) website - <http://www.ilo.org/secsoc/lang--en/index.htm>

#### Other sources

- ISSA Country Profiles (<http://www.issa.int/aiss/Observatory/Country-Profiles>); this information is consolidated: Social Security Programs Throughout the World (SSPTW) - <http://www.ssa.gov/policy/docs/progdesc/ssptw/>
- Mutual Information System on Social Protection (MISSOC) (31 countries): <http://ec.europa.eu/social/main.jsp?catId=858&langId=en>
- Mutual Information System on Social Protection of the Council of Europe (MISSCEO) (15 countries): <http://www.socialcohesion.coe.int/MISSCEO/>

## Legal Framework Indicator 17. Incapacity for work due to sickness / sick leave

### *Income replacement in case of sickness / sick leave*

#### Scope

Income replacement in case of sickness is part of the health and sickness social security which covers any benefits provided to maintain, improve or restore the health of the person protected as well as his/her ability to work and to attend to his/her needs. Paid sickness benefits are periodic cash benefits paid on a regular basis as income replacement as a result of temporary inability to work caused by illness and/or injury. They do not include other sickness cash benefits which are other cash payments such as allowances for intensive care, special bonuses, etc, or benefits in kind.

#### Selected ILS on sickness benefits

According to the Income Security Recommendation, 1944 (No. 67) "sickness benefit should be paid [in cases of] loss of earnings due to abstention from work necessitated on medical grounds by an acute condition, due to disease or injury, requiring medical treatment or supervision". The Social Security (Minimum Standards) Convention, 1952 (No. 102), Part III, provides for periodic payments corresponding to at least 45% of the reference wage. The Medical Care and Sickness Benefits Convention, 1969 (No. 130) provides for periodic payments, corresponding to at least 60% of the reference wage. A qualifying period may be imposed; a waiting period of 3 days may be imposed; benefits are granted throughout the illness/injury; possibility to limit the duration of benefits to 26 weeks (Convention No. 102) or 52 weeks (Convention No. 130) in each case of sickness.

#### Information provided on the indicator

<b>Law, policy or institutions:</b> Existence of national law providing for sickness benefits? Type of programme? Who is covered? Existence of national law providing for sick leave? Who is covered? Which is (are) the institution(s) responsible?
<b>Qualifying conditions:</b> Duration of contribution, or a period of employment, or a period of residence? Waiting period?
<b>Benefits (level and duration):</b> Legal replacement rate (cash benefits as percentage of previous earnings); duration; indexation?
<b>Financing:</b> How are the benefits financed? What are the contributions?
<b>Evidence of implementation effectiveness:</b> Comments of ILO supervisory bodies (if any).
<b>Coverage of workers in law:</b> Estimate of workforce covered by the law.
<b>Coverage of workers in practice:</b> Broad estimate of workers covered in practice (methodology TBD).
<b>Ratification of ILO Conventions:</b> The Social Security (Minimum Standards) Convention, 1952 (No. 102), Part III, and the Medical Care and Sickness Benefits Convention, 1969 (No. 130).

#### Additional sources of information

##### *ILO Sources*

- CEACR: General Survey concerning social security instruments in light of the 2008 Declaration on Social Justice for a Fair Globalization, ILC, 100th Session, 2011 (*not yet published*) and Article 19 Government report (if the C102/C130 have not been ratified);
- GESS: Country Profiles: <http://www.socialsecurityextension.org/gimi/gess/ShowCountryProfiles.do?aid=2>
- Social Protection Department (SOCPRO) database: <http://www.ilo.org/dyn/sesame/IFPSES.SocialDatabase>

##### *Other sources*

- ISSA Country Profiles: <http://www.issa.int/aiss/Observatory/Country-Profiles>; this information is consolidated: Social Security Programs Throughout the World (SSPTW) (<http://www.ssa.gov/policy/docs/progdesc/ssptw/>);
- Mutual Information System on Social Protection (MISSOC) (31 countries) <http://ec.europa.eu/social/main.jsp?catId=858&langId=en>
- Mutual Information System on Social Protection of the Council of Europe (MISSCEO) (15 countries) <http://www.socialcohesion.coe.int/MISSCEO/>

## Legal Framework Indicator 18. Incapacity for work due to invalidity

### *Income replacement in case of non-occupational invalidity*

#### Scope

Invalidity benefits cover any benefit arising from the partial or total inability of a protected person to participate in any gainful activity due to a non-occupational chronic condition resulting in a disease, injury, loss of a member or body function prior to attaining the standard retirement age. Invalidity benefits arise when the inability to engage in any gainful activity is likely to be permanent or persists after the period during which the beneficiary is entitled to benefit for temporary incapacity.

#### ILS on income replacement in case of invalidity

The Social Security (Minimum Standards) Convention, 1952 (No. 102) covers 9 branches of social security, including invalidity benefits. Part IX provides for periodic for periodical payments, corresponding to at least 40% of the reference wage (Old-Age and Survivors' Benefits Convention, 1967 (No. 128): 50 %); the rates of relevant benefits must be revised following substantial changes in the general level of earnings and/or in the cost of living. A qualifying period may be prescribed (full benefit: 15 years of contributions or 10 years of residence; reduced benefits: 5 years of contributions or employment); these benefits last until pension benefits are granted or until the death of the beneficiary. See also Invalidity, Old-Age and Survivors' Benefits Recommendation, 1967 (No. 131).

#### Information provided on the indicator

<b>Law, policy or institutions:</b> Is there a national law providing for invalidity benefits in case of non-occupational injury, condition or disease? Type of programme? Who is covered? Which is (are) the institution(s) responsible?
<b>Qualifying conditions:</b> Minimum level of incapacity? Period of contribution/work? Waiting period?
<b>Benefits (level):</b> Legal replacement rate (cash benefits as percentage of earnings) or lump sum? Duration? Indexation?
<b>Financing:</b> How are the benefits financed? What are the contributions?
<b>Evidence of implementation effectiveness:</b> Comments of ILO supervisory bodies, if any.
<b>Coverage of workers in law:</b> Estimate of workers covered by the law.
<b>Coverage of workers in practice:</b> Rough estimate if workers covered in practice (methodology TBD).
<b>Ratification of ILO Conventions:</b> The Social Security (Minimum Standards) Convention, 1952 (No. 102) (applicability of Part IX), and Old-Age and Survivors' Benefits Convention, 1967 (No. 128).

#### Additional sources of information

##### *ILO Sources*

- CEACR: General Survey concerning social security instruments in light of the 2008 Declaration on Social Justice for a Fair Globalization, ILC, 100th Session, 2011 (*not yet published*) and Article 19 Government report (if the C102/C128 have not been ratified)
- GESS: Country Profiles: <http://www.socialsecurityextension.org/gimi/gess/ShowCountryProfiles.do?aid=2>
- Social Protection Department (SOCPRO) database: <http://www.ilo.org/dyn/sesame/IFPSES.SocialDatabase>

##### *Other sources*

- ISSA Country Profiles: <http://www.issa.int/aiss/Observatory/Country-Profiles>; this information is consolidated: Social Security Programs Throughout the World (SSPTW): <http://www.ssa.gov/policy/docs/progdesc/ssptw/>
- Mutual Information System on Social Protection (MISSOC) (31 countries) <http://ec.europa.eu/social/main.jsp?catId=858&langId=en>
- Mutual Information System on Social Protection of the Council of Europe (MISSCEO) (15 countries) <http://www.socialcohesion.coe.int/MISSCEO/>

## Note on Legal Framework Indicators 16, 17 and 18

- The use of *flexibility clauses* may limit the scope of persons protected or the level and the method of calculating benefits provided under ILO Convention No. 102. According to Convention No. 102, the State has the responsibility for *proper administration* of social security. The *participation* of insured persons is provided for by the Convention.
- **Financing:** Convention No. 102 states that the cost of benefits that it envisages, and the cost of the administration of such benefits, must be borne collectively by way of insurance contributions or taxation, or both. The methods of financing must take into account the economic situation of the country and of the persons protected. In the particular case of contributory schemes, the total of the insurance contributions borne by the employees protected must not exceed 50 per cent of the total of the financial resources allocated for protection.
- Benefits may be suspended in certain circumstances (when the person concerned is absent from the territory of the State in which entitlement to the benefit has been acquired; situations in which the person concerned is maintained at public expense, or at the expense of a social security institution or service, or is in receipt of other benefits or indemnities; cases related to the personal conduct of the beneficiary).

## Chapter 10. Social dialogue, workers' and employers' representation

Social dialogue covers all types of negotiation, consultation and exchange of information between representatives of governments, employers and workers on issues of common interest. It covers both tripartite processes and institutions of social dialogue, such as social and economic councils; institutions, such as trade unions and employers' organizations; and processes, such as collective bargaining.

The main goal of social dialogue itself is to build consensus among actors in the world of work. Successful social dialogue structures and processes have the potential to resolve important economic and social issues, encourage good governance, advance social and industrial peace and stability, as well as to boost economic progress.

Hence, social dialogue plays a key role in achieving the ILO's objective of promoting opportunities for women and men to obtain decent and productive work in conditions of freedom, equality, security and human dignity. Social dialogue indicators are an important element in measuring progress of Decent Work. The extent to which the rights to social dialogue are exercised effectively is reflected in, among others, four statistical indicators (Table 10).

These statistical indicators are complemented by three legal framework indicators: Tripartite consultations, Collective bargaining right and Freedom of association and the right to organize (Table 10).

**Table 10: Overview of decent work indicators for social dialogue**

Statistical Decent Work Indicators	Concepts	Coverage	Preferred data source
DIAL-1. Trade union density rate - (M)	Trade union Employees Own-account workers Employment	Employed persons (Total employment)	LFS with data on union membership Administrative data Establishment surveys
DIAL-2. Employers' organization density rate- (M)	Employers' organization	Employers	Business registers Establishment surveys
DIAL-3. Collective bargaining coverage rate - (M)	Collective bargaining Collective bargaining agreement Own-account workers Employees Employment	Employed persons (Total employment)	LFS Administrative data Establishment surveys
DIAL-4. Days not worked due to strikes and lockouts - (A)	Strikes Lockouts	Employed persons	
Legal Framework Indicators			
L 19- Freedom of association and the right to organize			

Since many of the indicators share common concepts, this introduction provides some of the key concepts and definitions.

Persons of working age are classified as **employed** if, during a short reference period such as a day or a week, (i) they did some work (even for just one hour) for pay, profit or family gain, in cash or in kind; or (ii) they were attached to a job or had an enterprise from which they were ‘temporarily’ absent during this period (for such reasons as illness, maternity, parental leave, holiday, training, industrial dispute). Employed persons include those persons of working age who worked for at least one hour during the reference period as contributing family workers (formerly referred to as unpaid family workers) working in a family business.<sup>145</sup>

It should be noted that the concept of employment does not include household members engaged in the provision of unpaid services for own family use, such as cooking at home or caring for own children as well as volunteers providing services to households for own final use. These activities are not included within the production boundaries of the System of National Accounts.<sup>146</sup> However, persons engaged in the production of economic goods and services for own and household consumption should be considered as in self-employment if such production comprises an important contribution to the total consumption of the household (see Chapter 2).<sup>147</sup>

**Employees** refer to wage and salaried workers as defined by the International Classification of Status in Employment (ICSE-93). Employees are all those workers who hold "paid employment jobs". These are jobs where the incumbents hold explicit (written or oral) or implicit employment contracts which give them a basic remuneration that is not directly dependent upon the revenue of the unit for which they work (this unit can be a corporation, a non-profit institution, a government unit or a household). Some or all of the tools, capital equipment, information systems and/or premises used by the incumbents may be owned by others, and the incumbents may work under direct supervision of, or according to strict guidelines set by the owner(s) or persons in the owners' employment. Persons in "paid employment jobs" are typically remunerated by wages and salaries, but may be paid by commission from sales, by piece-rates, bonuses or in-kind payments, such as food, housing or training.<sup>148</sup>

**Own-account workers** are defined by the International Classification of Status in Employment (ICSE-93) as those workers who, working on their own account or with one or more partners, hold the type of job defined as "a self-employment job" and have not engaged on a continuous basis any employees to work for them during the reference period. It should be noted that during the reference period the

<sup>145</sup> ILO: *Resolution concerning statistics of the economically active population, employment, unemployment and underemployment*, adopted by the Thirteenth International Conference of Labour Statisticians (Geneva, October 1982). Available at: [http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS\\_087481/lang--en/index.htm](http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS_087481/lang--en/index.htm)

<sup>146</sup> UNSD: *System of National Accounts 2008* (New York, 2009). Available at: <http://unstats.un.org/unsd/nationalaccount/docs/SNA2008.pdf>

<sup>147</sup> ILO: Ibid.

<sup>148</sup> ILO: *Resolution concerning the International Classification of Status in Employment (ICSE)*, adopted by the Fifteenth International Conference of Labour Statisticians (Geneva, January 1993). Available at: [http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS\\_087562/lang--en/index.htm](http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS_087562/lang--en/index.htm)

members of this group may have engaged employees, provided that this is on a non-continuous basis.  
(The partners may or may not be members of the same family or household.)



## STATISTICAL INDICATORS

### DIAL-1. Trade union density rate – (TUD)- (M)

#### Measurement objective and rationale

The trade union density rate provides a proxy measure of workers' representation and the influence of trade unions. It gives some indication of the extent of the exercise of freedom of association and it can help in assessing and monitoring the development of industrial relations.

#### Method of computation

The indicator is computed as the percentage of workers in a given reference group who are trade union members. Depending on the type of data available for both nominator and denominator, the following three types of density rates may be calculated:

$$TUD\ EES = \frac{\text{Trade union members who are employees}}{\text{Total number of employees}} \times 100$$

$$\begin{aligned} TUD\ EES + OAW \\ = \frac{\text{Trade union members who are employees or own account workers}}{\text{Total number of employees and own account workers}} \times 100 \end{aligned}$$

$$TUD\ EMP = \frac{\text{Trade union members in employment}}{\text{Total number of employed persons}} \times 100$$

Every effort should be made to calculate a rate adjusted for the possibility that some workers do not enjoy the right of freedom of association. That is, calculate a set of rates using as a denominator the “total number of employees / employees and own account workers / employed persons who have the right to join a trade union”, excluding those who may not have the right to unionize (e.g. public sector or government services, domestic workers, etc.).

#### Concepts and definitions

For the purpose of this indicator, a trade union is defined as an independent workers' organization, constituted for the purpose of “furthering and defending the interests of workers”.<sup>149</sup>

A **workers' organization is independent** if it “ha[s] the right to draw up [its] constitution [...] and rules, to elect [its] representatives in full freedom, to organize [its] administration and activities and to formulate [its] programmes.” In other words, it is an independent organization which is free from government or other third-party interference in its internal affairs, and is able to carry out its economic and social mission irrespective of political changes in the country, – consistent with Art.3, Freedom of

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<sup>149</sup> ILO: *The Freedom of Association and the Right to Organise Convention, 1948 (No. 87)*. Available at: <http://www.ilo.org/ilolex/cgi-lex/convde.pl?C087>

Association and the Right to Organise Convention, 1948 (No. 87) and the ILO *Resolution Concerning the Independence of the Trade Union Movement*, 1952.

Ideally, the numerator should reflect the total number of trade union members in paid employment (employees) for the TUD EES rate, in paid employment or who are own-account workers for the TUD EES+OAW rate and in employment for the TUD EMP rate. In every case, it should exclude trade union members who are unemployed, students, retired, etc.

For a definition of **employed** and **employees**, see the introduction to this chapter.

### **Recommended data sources and metadata**

The preferred data sources for this indicator are labour force surveys with data on union membership, as they can provide both the numerator and the denominator required for the indicator. The numerator and denominator should have the same coverage.

The most commonly available data sources, however, are administrative records of unions or records maintained by government agencies. These are imperfect as sources of statistics because there are often problems related to updating, as well as a risk of double counting of union members who may belong to more than one union. Data reported from individual trade unions may suffer from the differences that may exist in the coverage and in the identification of trade unions. Administrative, financial and political interference could also lead to under-reporting or over-reporting of membership. Household-based surveys could provide a useful check with regard to the reliability of these reported numbers.

Alternatively, surveys of enterprises or establishments could also be a source of information on the numbers of workers belonging to a trade union. While a good source of statistics, these surveys tend to be limited to non-agricultural formal sector establishments or to establishments above a certain size.

When using LFS or administrative records as a source of statistics, a distinction should be made between trade union members who are employees, self-employed, unemployed and retired.

Since union membership tends to vary significantly across branches of economic activity and institutional sectors, it is important to compute density rates by at least institutional sectors (public and private) and if data are available, by economic activity (ISIC) as well. Disaggregation by sex is also important, and highly recommended if the data availability permits.

### **Interpretation guidelines**

When interpreting trade union density rates, the coverage of statistics (e.g. coverage of the informal sector, public sector, agriculture, self-employed, etc.) should be taken into account.

As there are no internationally agreed guidelines for the collection of trade union statistics at the country level, there is a high degree of methodological variation across countries and over time. This and the scarcity of reliable and comprehensive data sources make the analysis of the level and the trends of the rates very difficult. Observable changes in levels and rates may only be reflecting changes in definitions and coverage of trade unions and members over time and space.

When this indicator is computed using the total number of employees as the denominator, the share of employees in the employed population should be kept in mind.

While the trade union density rate gives some indication as to the extent of the exercise of freedom of association, it needs to be analysed within the national context (e.g. whether or not workers are free to organize strikes, etc.) and thus should be interpreted within the legal framework. Furthermore, the union density rate should not be used as the sole indicator of the bargaining power of unions. Countries with low density rates may have a very high coverage of workers through collective agreements; countries with high density rates may have very poor social dialogue. However, high density rates do not necessarily reflect a situation where the majority of employed persons may exercise freedom of association, such as would allow them to potentially benefit from trade union membership.

## DIAL-2. Employers' organization density rate (ED) - (M)

### Measurement objective and rationale

This indicator gives the share of employees working in enterprises belonging to an employers' organization. The indicator thus aims to provide information on the coverage and representativeness of employers' organizations which are a key partner in social dialogue.

### Method of computation

The indicator is computed as follows:

$$\text{Employers' organization density rate (\%)} = \frac{\text{Number of employees working in enterprises belonging to an employers' organization}}{\text{Total number of employees}} \times 100$$

### Concepts and definitions

**Employers' organizations** are institutions that are set up to organize and advance the collective interests of employers. Given that the range and content of such collective interests vary from one country to another, the structure, membership basis and functions of employers' organizations differ widely between countries.

Employers' organizations fulfil a variety of functions. The issues of membership growth, income generation and improvement of relations with members are important for all employers' organizations. The historic *raison d'être* for many employers' organizations is their direct role in the collective bargaining process. However, employers' organizations are also involved in influencing labour market and industrial relations environments in other ways, for example through participation in statutory bodies, consultations on labour market issues, as well as lobbying activities on behalf of their members.

### Recommended data sources and metadata

The underlying data for this indicator may come from business registers and employers' organizations such as tax records, etc. In countries where regular establishment surveys are carried out, these data can be used to compute the employers' organization density rate, provided that the questionnaire is designed appropriately. Establishment surveys may allow the update of membership status more frequently and hence may be more reliable. However, since the sample frame would be based on the existing business register, the shortcomings of the business register would also be reflected in the establishment survey data, for example, the exclusion of informal enterprises.

### Interpretation guidelines

In order for an enterprise to be a member of an employers' organization, it may be required to register with an authority such as the tax administration. In this case, the numerator will refer solely to formal establishments and will disregard informal own-account workers' or employers' enterprises. Since the denominator is also derived from data sources based on business registers, its coverage is also limited to formal enterprises.

It is highly recommended to consider data on the relative size of the informal sector, provided they are available, in the analysis of the employers' organization density, so as to inform on the overall representativeness of these organizations.

## DIAL-3. Collective bargaining coverage rate –(CBCR) - (M)

### Measurement objective and rationale

This indicator indicates the proportion of workers in employment whose pay and conditions of employment are directly or indirectly (e.g. through extension clauses) determined by one or more collective agreement(s). This indicator thus provides a measure of the reach of collective bargaining agreements and, as such, can help in assessing and monitoring the development of industrial relations.

### Method of computation

The collective bargaining coverage rate (CBCR) is the percentage of workers in employment whose pay and conditions of employment are determined by one or more collective agreement (s). Three types of rates should be calculated here, as follows:

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$$\begin{aligned} & \text{CBCR EES} \\ &= \frac{\text{Number of employees whose pay and conditions are determined by collective agreement}}{\text{Total number of employees}} \\ & \times 100 \end{aligned}$$

$$\begin{aligned} & \text{CBCR EES + OAW} \\ &= \frac{\text{Number of employees and own – account workers whose pay and conditions are determined by collective agreement}}{\text{Total number of employees and own – account workers}} \\ & \times 100 \end{aligned}$$

$$\begin{aligned} & \text{CBCR EMP} \\ &= \frac{\text{Number of employed persons whose pay and conditions are determined by collective agreement}}{\text{Total number of employed persons}} \\ & \times 100 \end{aligned}$$

Every effort should be made to calculate a rate adjusted for the possibility that some workers do not enjoy the right to collective bargaining. That is, calculate a set of rates using as a denominator the “total number of employees / employees and own-account workers / employed persons who have the legal right to collectively bargain”, excluding those who may not have the right to bargain (e.g. certain public sector employees, agricultural workers, domestic workers, etc.).

### Concepts and definitions

A **collective bargaining agreement** refers to “all agreements in writing regarding working conditions and terms of employment concluded between an employer, a group of employers or one or more employers' organizations, on the one hand, and one or more representative workers' organizations, on the other”.<sup>150</sup>

**Collective bargaining** refers to “all negotiations which take place between an employer, a group of employers or one or more employers' organizations, on the one hand, and one or more workers' organizations, on the other, for (a) determining working conditions and terms of employment; and/or

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<sup>150</sup> ILO: Collective Agreements Recommendation, 1951 (No.91). Available at: <http://www.ilo.org/ilolex/cgi-lex/convde.pl?R091>

(b) regulating relations between employers and workers; and/or (c) regulating relations between employers or their organizations and a workers' organization or workers' organizations".<sup>151</sup>

According to the C154, collective bargaining encompasses "negotiations which take place between an employer, a group of employers or one or more employers' organizations, [...] and one or more workers' organizations, [...] for determining working conditions and terms of employment."<sup>152</sup>

For a definition of **employed** and **employees**, see the introduction to this chapter.

### **Recommended data sources and metadata**

The most common sources for statistics on collective bargaining coverage are administrative records (maintained by unions or government agencies). The numerator and denominator should have the same coverage.

The reliability of the data collected from administrative records depends on whether the registration of collective agreements is obligatory. Since the duration of collective agreements may vary, care should be taken to also capture the coverage of agreements which have been registered in previous year(s) but are still valid.

Possible double counting of workers covered by agreements that are reached at different levels (in the case of multilevel bargaining structures) should be avoided. Also, as registered agreements possibly have no expiry date, there may be some element of under- or over-representation especially since information will only have been recorded when the agreement registration was first negotiated.

Labour force surveys have an advantage in terms of coverage as they include all types of workers and work situations. The data can also be cross-tabulated with other variables of interest, for example, variables related to employment conditions. However, the possible drawback of using labour force surveys to collect this type of data is that workers may not know their coverage status.

Establishment surveys can be used as an alternative and would deliver higher quality data. However, their coverage is often limited to large formal sector establishments only.

The indicator should be disaggregated by institutional sector (i.e. private and public sector) and by economic activity in order to identify those segments of the labour market in which collective bargaining has higher coverage. It should also be disaggregated by sex if data are available.

### **Interpretation guidelines**

While this indicator gives some indication as to the exercise of collective bargaining rights, it does not necessarily reflect the direct outcome of negotiations. It does, however, reflect the particularity of the industrial relations system and type of labour regulation to which a country subscribes. This includes the number of collective agreements reached, the bargaining structure, as well as the interaction between the collective bargaining process, administrative regulations and labour law.

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<sup>151</sup> ILO: *The Promotion of Collective Bargaining Convention*, 1981 (No. 154). Available at: <http://www.ilo.org/ilolex/cgi-lex/convde.pl?C154>

<sup>152</sup> ILO: *Idem*.

Centralized collective bargaining structures tend to be associated with high coverage rates. In countries with extension mechanisms, coverage is increased to include enterprises and workers who may not have participated in actual collective bargaining negotiations.

When this indicator is computed using the total number of employees as the denominator, the share of employees in the employed population should be kept in mind. A high collective bargaining coverage rate may not necessarily reflect that the majority of employed persons have access to the benefits of collective bargaining.

The collective bargaining coverage rate should be analysed within the national context and should be interpreted within the appropriate legal framework.



## DIAL-4. Days not worked due to strikes and lockouts – (A)

### Measurement objective and rationale

Days not worked due to strikes and lockouts inform on the direct impact of labour disputes on production and can provide indirect information on the effectiveness of social dialogue in a country.

### Method of computation

Days not worked due to strikes and lockouts are normalized to a standard unit “per 1,000 workers” in order to facilitate analysis across time and economic activities.

The indicator is calculated by dividing the total number of days not worked by workers involved, by the total number of workers covered by the statistics, and multiplying by 1,000. The numerator and denominator should have the same coverage.

$$\begin{aligned} & \text{Days not worked due to strikes and lockouts per 1,000 workers} \\ &= \frac{\text{Time not worked by workers involved}}{\text{Total number of workers}} \times 1,000 \end{aligned}$$

### Concepts and definitions<sup>153</sup>

A **strike** is a temporary work stoppage carried out by one or more groups of workers with a view to enforcing or resisting demands or expressing grievances, or supporting other workers in their demands or grievances.

A **lockout** is a total or partial temporary closure of one or more places of employment, or the hindering of the normal work activities of employees, by one or more employers with a view to enforcing or resisting demands or expressing grievances, or supporting other employers in their demands or grievances.

The concept of days not worked as a result of strikes and lockouts refers to the total number of working days during which work would normally have been carried out by each worker involved had there been no stoppage.

The concept of workers involved in a strike or a lockout covers those directly or indirectly involved at any time during a strike or lockout, whether the involvement was for the full duration of the strike or lockout, or only part of it. Workers who are unable to work as a result of the secondary effects of strikes or lockouts should not be included. Workers directly involved in a strike are those who have participated in the stoppage of the work whereas workers indirectly involved in a strike are those who were unable to work due to a strike. In the case of lockouts, workers directly and indirectly involved refer respectively to the “employees of establishments involved who were directly concerned by the labour dispute and who were prevented from working by the lockout” and “employees of the

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<sup>153</sup> ILO: *Resolution concerning statistics of strikes, lockouts and other action due to labour disputes*, adopted by the Fifteenth International Conference of Labour Statisticians (Geneva, January 1993). Available at: [http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS\\_087544/lang-en/index.htm](http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS_087544/lang-en/index.htm)

establishments involved who were not directly concerned by the labour dispute but who were prevented from working by the lockout”.<sup>154</sup>

### **Recommended data sources and metadata**

The most common data sources for statistics on strikes and lock outs are administrative records (such as records of employers’ or workers’ organizations and/or labour relations records). Establishment surveys, as well as household based sample surveys, could also be used as a source of information.

The statistics should be published at least once a year, as rapidly as possible after the end of each reference period.

The metadata should indicate (i) the branches of economic activity and sectors covered; (ii) the forms of action and reasons for labour disputes covered; (iii) any lower limits fixed for the coverage of the action, in terms of the number of workers involved, duration, amount of time not worked or any combination thereof.

When possible, it is recommended to provide separate statistics for those workers who are directly and indirectly involved.

As concerns the rates that are calculated, the numerator and the denominator should have the same coverage in terms of economic activities, status in employment, etc.

Disaggregation by economic activity is highly recommended in order to identify the distribution of loss of working time due to strikes and lockouts across sectors.

### **Interpretation guidelines**

Further information that is of interest for assessing the importance of strikes and lockouts includes: the number of strikes and lockouts; *number of establishments involved*; number of workers involved; total number of days lost; average number of workers involved per strike or lockout; average amount of time not worked per strike or lockout; average amount of time not worked per worker involved; and, the average duration of actions and causes for labour disputes. It is essential to analyse these indicators within the economic and social context (especially with reference to indicators of economic growth and labour productivity), and in relation to changes in employment opportunities/earnings and in legal provisions, for example, as concerns social security, termination of employment and the right to strike, etc.

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<sup>154</sup> ILO: Ibid.

## Legal Framework Indicator 19. Freedom of association and the right to organise

### Scope

Freedom of association refers to the right to form and join workers' or employers' organisations to defend their members' interests. It includes the right of these organisations to conduct their internal administration in full freedom. It also comprises the promotion of collective bargaining between workers and employers and the right to strike.

### Selected ILS on freedom of association

The Freedom of Association and Protection of the Right to Organise Convention, 1948 (No. 87) is a fundamental convention which sets forth the right for all workers and employers to establish and join organisations of their own choosing without previous authorisation. It includes the right of these organisations to conduct their internal administration in full freedom without dissolution or suspension by administrative authority and the right to establish and join federations and confederations, which may in turn affiliate with international organisations of workers and employers. The Right to Organise and Collective Bargaining Convention, 1949 (No. 98) sets forth the right of workers to enjoy adequate protection against acts of anti-union discrimination and the right of workers' and employers' organisations to enjoy adequate protection against any acts of interference by each other. The right to collective bargaining is also guaranteed. Freedom of association and the right to collective bargaining are inseparable.

### Information provided in the indicator

<b>Law, policy or institutions:</b> Is there a national law guaranteeing the right to join and form organisations for the protection of workplace interests (for employers and workers)? Is an authorisation required to establish an organisation? Minimum number of workers? Which workers are excluded from the law?
<b>Evidence of implementation effectiveness:</b> Comments from ILO supervisory bodies, if any. Information on Committee on Freedom of Association (CFA) cases: How many active cases are before the Committee on Freedom of Association? How many cases has the Committee requested to be kept informed of regarding developments? What issues are the allegations related to? Comments from ILO supervisory bodies (CEACR and CCAS), if any. Information on CFA cases: How many active cases are before the CFA? How many cases has the CFA requested to be kept informed of regarding developments? What issues are the allegations related to?
<b>Coverage of workers and employers in law:</b> Estimate of workers covered by the law .
<b>Coverage of workers and employers in practice:</b> Estimate of workers covered in practice (methodology TBD).
<b>Ratification of ILO conventions:</b> The Freedom of Association and Protection of the Right to Organise Convention, 1948 (No. 87) and the Right to Organise and Collective Bargaining Convention, 1949 (No. 98).

### Additional sources of information

#### ILO sources

- LibSynd Database: <http://webfusion.ilo.org/public/db/standards/normes/libsynd/index.cfm?hdroff=1>  
*Freedom of association in practice: Lessons learned*, Global report under the follow-up to the ILO Declaration on Fundamental Principles and Rights at Work, ILC, 97th Session, 2008 -  
[http://www.ilo.org/wcmsp5/groups/public/---ed\\_norm/---relconf/documents/meetingdocument/wcms\\_091396.pdf](http://www.ilo.org/wcmsp5/groups/public/---ed_norm/---relconf/documents/meetingdocument/wcms_091396.pdf)  
-Country baselines under the ILO Declaration Annual Review (2000-2010): Freedom of Association and the Effective Recognition of the Right to Collective Bargaining (FACB): [http://www.ilo.org/wcmsp5/groups/public/---ed\\_norm/---declaration/documents/publication/wcms\\_091262.pdf](http://www.ilo.org/wcmsp5/groups/public/---ed_norm/---declaration/documents/publication/wcms_091262.pdf)

## Legal Framework Indicator 20. Collective bargaining right

### Scope

Collective bargaining involves the negotiation and conclusion of collective agreements to determine terms and conditions of employment.

### Selected ILS on collective bargaining

The Freedom of Association and Protection of the Right to Organise Convention, 1948 (No. 87) is a fundamental convention which sets forth the right for all workers and employers to establish and join organisations of their own choosing without previous authorisation. It includes the right of these organisations to conduct their internal administration in full freedom without dissolution or suspension by administrative authority. The right to establish and join federations and confederations, which may in turn affiliate with international organisations of workers and employers, is also guaranteed. The Right to Organise and Collective Bargaining Convention, 1949 (No. 98) sets forth the right of workers to enjoy adequate protection against acts of anti-union discrimination and the right of workers' and employers' organisations to enjoy adequate protection against any acts of interference from one another. The right to collective bargaining is also guaranteed. Freedom of association and the right to collective bargaining are inseparable.

### Information provided on the indicator

**Law, policy or institutions:** At what level may collective bargaining take place (enterprise, sector, national)? What does it cover? What institutions have been established to support collective bargaining? Are any occupations or sectors not allowed to bargain collectively? Is anti-union discrimination prohibited by the law? Is the right to strike recognized by law? May compulsory arbitration be imposed to halt strikes? Under what conditions? Are collective bargaining agreements extended by law to workers who are not union members? Are collective bargaining agreements extended by law to enterprises not covered directly by the agreement? Is there a national mechanism to promote or protect this right? Does the mechanism have enforcement or advisory powers? Is there a right of complaint? Who are the members of this mechanism?

**Evidence of implementation effectiveness:** Comments of ILO supervisory bodies (if any).

**Coverage of workers in law:** Estimate of workers covered by the law.

**Coverage of workers in practice:** Broad estimate of workers covered in practice (methodology TBD).

**Ratification of ILO conventions:** The Freedom of Association and Protection of the Right to Organise Convention, 1948 (No. 87) and the Right to Organise and Collective Bargaining Convention, 1949 (No. 98).

### Additional sources of information

#### ILO sources

-LibSynd Database: <http://webfusion.ilo.org/public/db/standards/normes/libsynd/index.cfm?hdroff=1>

*Freedom of association in practice: Lessons learned*, Global report under the follow-up to the ILO Declaration on Fundamental Principles and Rights at Work, ILC, 97th Session, 2008-  
[http://www.ilo.org/wcmsp5/groups/public/---ed\\_norm/---relconf/documents/meetingdocument/wcms\\_091396.pdf](http://www.ilo.org/wcmsp5/groups/public/---ed_norm/---relconf/documents/meetingdocument/wcms_091396.pdf)

-Country baselines under the ILO Declaration Annual Review (2000-2010): Freedom of Association and the Effective Recognition of the Right to Collective Bargaining (FACB): [http://www.ilo.org/wcmsp5/groups/public/---ed\\_norm/---declaration/documents/publication/wcms\\_091262.pdf](http://www.ilo.org/wcmsp5/groups/public/---ed_norm/---declaration/documents/publication/wcms_091262.pdf)

## Legal Framework Indicator 21. Tripartite consultations

### Scope

Tripartism entails dialogue and cooperation between governments, employers, and workers in the formulation of standards and policies dealing with labour issues. International labour standards are created and supervised through a tripartite structure which ensures that they have broad support from all ILO constituents.

### Selected ILS on tripartite consultations

The governance convention on Tripartite Consultation (International Labour Standards), 1976 (No. 144) requires ratifying states to operate procedures which ensure effective consultations between representatives of the government, of employers and of workers on matters regarding the ILO (items on the agenda of the International Labour Conference, submissions to parliament of newly adopted ILO standards, re-examination of unratified conventions and recommendations, reports on ratified conventions, and proposals for denunciations of conventions). Consultations with employers and workers, represented on an equal footing, shall take place at least once every year.

### Information provided in the indicator

<b>Law policy or institutions:</b> Existence of a national law or stated Government policy establishing tripartite consultation mechanism on matters regarding the ILO; brief description of this mechanism and its members. Did any national tripartite body meet recently? What are its functions?
<b>Evidence of implementation effectiveness:</b> ILO supervisory bodies comments if any.
<b>Ratification of ILO Conventions:</b> The Tripartite Consultation (International Labour Standards) Convention 1976 (No. 144).

### Additional sources of information

#### *ILO sources*

DIALOGUE website : <http://www.ilo.org/public/english/dialogue/ifpdial>

## Chapter 11. Economic and social context for decent work

The economic and social context for decent work is essential in order to analyse decent work indicators in the national context. It comprises indicators which are considered important for helping to interpret the decent work indicators classified under the ten substantive elements.

The eleven statistical indicators introduced in this section can give a broad picture of the economic and social context for decent work.

One of these indicators is also a Millennium Development Goal (MDG) indicator, namely labour productivity. While the MDG indicators were conceived as part of a broad development agenda targeting developing countries during the period 2000-2015, the inclusion of labour productivity here among economic and social context for decent work indicators is intended to allow countries at all levels of development to monitor labour productivity levels and growth rate.

The legal framework indicator corresponds to Labour Administration.

**Table 1: Overview of decent work indicators for the economic and social context for decent work**

Statistical Decent Work Indicator	Concepts	Coverage	Preferred data source
CONT-1. Children not in school (% by age) (S)	Level of education and age bands	Children by age groups	Administrative data Population census surveys
CONT-2. Estimated % of working age population who are HIV positive	HIV prevalence and working age population	Working- age population	Administrative data Demographic health surveys
CONT-3. Labour productivity (GDP per employed person, level and growth rate) - MDG indicator <sup>155</sup>	GDP and employed persons	All employed persons	National accounts LFS, household surveys with employment module
CONT-4. Income inequality (90:10 ratio)	Income, percentile	All households	Household budget surveys or other surveys covering income and expenditure
CONT-5. Inflation rate (CPI) <sup>156</sup>	Price index	n/a	National accounts
CONT-6. Employment by branch of economic activity	Employment and ISIC	All employed persons	LFS, household surveys, Establishment surveys, Census
CONT-7. Education of adult population (adult literacy rate, adult secondary-school graduation rate) (S)	Adult literacy Secondary school graduation	Adult population	Population census Household surveys Administrative records
CONT-8. Labour share in Gross Value Added (GVA)	Compensation of employees and GVA	All employees	National accounts

<sup>155</sup> This indicator serves as one of five employment-related Millennium Development Goal (MDG) indicators.

<sup>156</sup> ILO: *Resolution concerning consumer price indices*, adopted by the Seventeenth International Conference of Labour Statisticians (Geneva, 2003). Available at: [http://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/normativeinstrument/wcms\\_087521.pdf](http://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/normativeinstrument/wcms_087521.pdf)

CONT-9. (additional) – Real GDP per capita in PPP\$ (level and growth rate)	GDP per capita in PPP terms	n/a	National accounts
CONT-10. (additional) – Female share of employment by industry (ISIC tabulation category)	Employment and ISIC	All female employed persons	LFS, household surveys, Establishment surveys
CONT-11. (additional) – Earnings inequality (90:10 ratio)	Earnings and employees	All employees	Household income and expenditure surveys
CONT-12. (additional) – Poverty measures	Income, poverty line	All population	Household budget surveys, Population census
<b>Legal framework indicator:</b> L1- Labour Administration			

Since many of the indicators share common concepts and definitions (see Table 1) this introduction provides some of the key concepts and definitions.

**Gross Domestic Product (GDP):** according to the System of National Accounts (SNA), “GDP is the sum of gross value added of all resident producer units plus that part (possibly the total) of taxes on products, less subsidies on products, that is not included in the valuation of output...GDP is also equal to the sum of the final uses of goods and services (all uses except intermediate consumption) measured at purchasers’ prices, less the value of imports of goods and services... GDP is also equal to the sum of primary incomes distributed by resident producer units.”<sup>157</sup> GDP is the main measure of national output for a given country’s economy. It is the total value of all final goods and services produced in a particular economy; the dollar value of all goods and services produced within a country’s borders in a given year. According to the 2008 SNA, transactions are valued at the actual price agreed upon by the transactors; market prices are thus the basic reference for valuation in the SNA.<sup>158</sup> GDP can be measured using the expenditure or the income approach:

GDP = Consumption + Gross Investment + Government Spending + (Exports-Imports)

or

GDP = Compensation of employees + Rent + Interest + Proprietor’s Income + Corporate Profits + Indirect business taxes + Depreciation + Net foreign factor income

**GDP at constant prices** refers to the volume level of GDP. Constant price estimates of GDP are calculated by expressing values in terms of a base period. In theory, the price and quantity components of a value are identified and the price in the base period is substituted for that in the current period.<sup>159</sup>

Two main methods are adopted in practice to derive GDP at constant prices. The first method, known as "quantity revaluation", is based on a methodology which multiplies the current period quantity by the base period price. The second method, widely known as "price deflation", involves dividing price indexes into the observed values to obtain the volume estimate. The price indexes used are built up from the prices of the major items contributing to each value.<sup>160</sup>

<sup>157</sup> UNSD: *System of National Accounts 2008* (New York, 2009). Available at: <http://unstats.un.org/unsd/nationalaccount/docs/SNA2008.pdf>

<sup>158</sup> Ibid, p. 22, paragraph 2.59.

<sup>159</sup> UNSD: *System of National Accounts Main Aggregates Database, Glossary of Terms*. Available at: <http://unstats.un.org/unsd/snaama/glossresults.asp?gID=6>

<sup>160</sup> Ibid.

**Employed persons:** persons of working age are classified as employed if, during a short reference period such as a day or a week, (i) they did some work (even for just one hour) for pay, profit or family gain, in cash or in kind; or (ii) they were attached to a job or had an enterprise from which they were 'temporarily' absent during this period (for such reasons as illness, maternity, parental leave, holiday, training, industrial dispute). Employed persons include those persons of working age who worked for at least one hour during the reference period as contributing family workers (formerly referred to as unpaid family workers) working in a family business.<sup>161</sup>

It should be noted that the concept of employment does not include household members engaged in the provision of unpaid services for their own family use such as cooking at home or caring for their own children as well as volunteers providing services to households for their own final use. These activities are not included within the production boundaries of the SNA.<sup>162</sup> However, persons engaged in the production of economic goods and services for their own and household consumption should be considered as in self-employment if such production comprises an important contribution to the total consumption of the household.<sup>163</sup>

**Employees** are all those workers who hold 'paid employment jobs'. These are jobs where the incumbents hold explicit (written or oral) or implicit employment contracts which give them a basic remuneration that is not directly dependent upon the revenue of the unit for which they work (this unit can be a corporation, a non-profit institution, a government unit or a household). Some or all of the tools, capital equipment, information systems and/or premises used by the incumbents may be owned by others, and the incumbents may work under direct supervision of, or according to strict guidelines set by the owner(s) or persons in the owners' employment. Persons in 'paid employment jobs' are typically remunerated by wages and salaries, but may be paid by commission from sales, by piece-rates, bonuses or in-kind payments such as food, housing or training.<sup>164</sup>

In practice, the status in employment to be attributed to a person may not always be clear. For instance, if the owner or a shareholder of a corporation works for the corporation for paid remuneration, s/he would be considered as an employee according to the SNA whereas they may be self-employed according to labour statistics. Outworkers may be considered as self-employed or as an employee depending on their specific situation, particularly based on their remuneration. The remuneration of the self-employed is considered as mixed income by the SNA.

**Working time concepts.** The preferred concept of working time used in this chapter is hours actually worked. The concept of **hours actually worked** is defined as the time spent in a job for the performance of activities that contribute to the production of goods and/or services during a specified short or long reference period. It applies to all types of jobs and is not linked to administrative or legal concepts of working time. For purposes of the labour productivity indicator (definition 2) presented in this chapter, it refers to time spent on productive activities defined within the SNA production

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<sup>161</sup> ILO: *Resolution concerning statistics of the economically active population, employment, unemployment and underemployment*, adopted by the Thirteenth International Conference of Labour Statisticians (Geneva, October 1982). Available at: [http://www.ilo.org/wcmsp5/groups/public/---dgreports/---integration/---stat/documents/normativeinstrument/wcms\\_087481.pdf](http://www.ilo.org/wcmsp5/groups/public/---dgreports/---integration/---stat/documents/normativeinstrument/wcms_087481.pdf)

<sup>162</sup> UNSD: Ibid.

<sup>163</sup> ILO: Ibid.

<sup>164</sup> ILO: *Resolution concerning the International Classification of Status in Employment (ICSE)*, adopted by the Fifteenth International Conference of Labour Statisticians (Geneva, January 1993). Available at: [http://www.ilo.org/wcmsp5/groups/public/---dgreports/---integration/---stat/documents/normativeinstrument/wcms\\_087562.pdf](http://www.ilo.org/wcmsp5/groups/public/---dgreports/---integration/---stat/documents/normativeinstrument/wcms_087562.pdf)



boundary. It covers time spent directly on and in relation to productive activities, as well as down time and resting time. Hours actually worked excludes time not worked, e.g. annual and sick leave, public holidays, parental leave, commuting time, educational activities and longer pauses, e.g. lunch breaks.<sup>165</sup>

Should hours actually worked not be adequately captured by data collection instruments, as a secondary option countries may consider using the concept of hours paid for.<sup>166</sup> For a paid-employment job, **hours paid for** refers to the time for which employees have received payment from their employer (at normal or premium rates, in cash or in kind) during a specified reference period, regardless of whether the hours were actually worked or not. It includes time paid but not worked such as paid annual leave, paid public holidays and certain absences such as paid sick leave, and excludes time worked but not paid by the employer, such as unpaid overtime, and absences that are not paid by the employer, such as unpaid educational leave or maternity leave.<sup>167</sup>

Data on working time reported should reflect the hours worked in different types of working time arrangements (e.g. full-time and part-time) and include the hours worked in all jobs of employed persons (if the data are derived from a labour force survey).

***For information on The International Standard Industrial Classification of All Economic Activities (ISIC), please refer to the Annex on classifications.***

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<sup>165</sup> ILO: Resolution concerning the measurement of working time, adopted by the Eighteenth International Conference of Labour Statisticians: [http://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/normativeinstrument/wcms\\_112455.pdf](http://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/normativeinstrument/wcms_112455.pdf)

<sup>166</sup> Unlike the concept of hours actually worked, the concept “hours paid for” covers the working time of covered employees only and thus excludes the hours worked of self-employed workers, a category which may be particularly important in developing countries.

<sup>167</sup> Idem.

## STATISTICAL INDICATORS

### CONT-1. Children not in school (percentage by age)

#### Measurement objective and rationale

This indicator is designed to give information on school-age children who are not attending school. Provision of education at primary and secondary levels is an important foundation for building skills and providing a pathway to decent work.

Children not in school is related to Millennium Development Goals (MDG) 2 and 3 as follows: the Net enrolment ratio in primary education, which is MDG indicator 2.1 for monitoring progress towards achieving Target 2.A.: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling under Goal 2: Achieve universal primary education; and MDG indicator 3.1: Ratios of girls to boys in primary, secondary and tertiary education for monitoring progress towards Target 3.A.: Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015 under Goal 3: Promote gender equality and empower women.

#### Method of computation

The Gross enrolment ratio (GER) shows total enrolment in a specific level of education, regardless of age, expressed as a percentage of the population in the official age group corresponding to this level of education.<sup>168</sup>

$$GER (\%) = \frac{\text{Number of children enrolled in a given level of education}}{\text{Total number of children of official age group for the level of education}} \times 100$$

In order to reach the percentage of children not in school GER is subtracted from 100 for each level of education.

#### Concepts and definitions

The age bands for school education vary from country to country. However, the indicator covers three categories with usual age groups as defined by UNESCO:<sup>169</sup>

- Children in primary education – usually from age 5 or 6 to 11 or 12
- Children in lower secondary education – usually from age 11 or 12 to age 14 or 15
- Children in upper secondary education – usually to 17 or 18

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<sup>168</sup> The GER is preferred to the net enrolment ratio as net enrolment is restricted to the official age group.

<sup>169</sup> UNESCO: *International Standard Classification of Education (ISCED) 1997* (Paris, 2006). Available at: <http://www.uis.unesco.org/Library/Documents/isced97-en.pdf>

## Recommended data sources and metadata

Enrolment data are usually available from administrative records maintained by the ministry of education. They can also be obtained from surveys and censuses which include questions on schooling. Population censuses and/or vital statistics registers provide information on the population in different age cohorts.

Internationally comparable data on school participation are maintained by the UNESCO Institute of Statistics and are also available in the Millennium Development Goals Indicators Database of the United Nations.

This indicator should be disaggregated by sex, location (urban/rural), economic activity and if possible by geographical area and social/ethnic groups in order to portray any differences in enrolment rates of children from different backgrounds.

## Interpretation guidelines

Enrolment is not equivalent to attendance or completion rates. Hence, it would be informative to analyse this indicator together with data on completion of primary and secondary education, if available.

GER data are usually available separately for primary, lower and upper secondary levels.

Some GERs exceed 100 per cent as a result of late school entry and/or grade repetition. If NER data are available it is preferable to use this measure; however, NER may overestimate the percentage of children out of school, as they may be enrolled at other levels of education.

Concern for the provision of basic education is reflected in the ILO's child labour Conventions. The Minimum age Convention, 1978 (No. 138) states that the minimum age "...shall not be less than the age of completion of compulsory schooling..." and that any permitted light work should not be "...such as to prejudice their attendance at school".<sup>170</sup> The Worst Forms of Child Labour Convention, 1999 (No. 182) also refers to the importance of free basic education.<sup>171</sup>

Significant positive changes can be an indication that countries are taking seriously their commitment to ensure of children's access to education. This can have a highly significant influence on tackling the elimination of child labour and promoting development by increasing human capital. In order to assess the impact of changes in this indicator on child labour, it is important to analyse the trends together with those of child labour indicators (ABOL-1, ABOL-2 and ABOL-3).

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<sup>170</sup> ILO: *The Minimum age Convention, 1978 (No. 138)* (Geneva, 1978). Available at: <http://www.ilo.org/ilolex/cgi-lex/convde.pl?C138>

<sup>171</sup> ILO: *The Worst Forms of Child Labour Convention, 1999 (No. 182)* (Geneva, 1999). Available at: <http://www.ilo.org/ilolex/cgi-lex/convde.pl?C182>

## CONT-2. Estimated percentage of working-age population who are HIV-positive

### Measurement objective and rationale

This indicator gives the HIV prevalence rate among the working-age population. It sheds light on a contextual factor that has an impact on the world of work in a number of ways, for example: labour/skills shortages, direct costs for enterprises, discrimination and job losses for workers, increasing child labour and worsening poverty.

This decent work indicator partially corresponds to the MDG indicator 6.1: HIV prevalence among population aged 15-24 years, used for monitoring progress towards Target 6.A.: Have halted by 2015 and begun to reverse the spread of HIV/AIDS under Goal 6: Combat HIV/AIDS, malaria and other diseases.

### Method of computation

$$\begin{aligned} & \text{HIV prevalence (working – age population)(\%)} \\ &= \frac{\text{Number of working – age persons tested HIV positive}}{\text{Total working – age population}} \times 100 \end{aligned}$$

### Concepts and definitions

While no international standard on age limits exists, for purposes of statistical measurement the working-age population is commonly defined as persons aged 15 years and older, but this may vary from country to country. Some countries also impose an upper limit, for example, Finland defines its working-age population as persons aged 15–74. The working-age limits should correspond to those defined in the source of data collection.

HIV prevalence refers to the percentage of persons living with HIV in a given population, as defined by age, sex, ethnicity, etc.

### Recommended data sources and metadata

Administrative data at the national level are available from ministries of health (reported cases, data from antenatal clinics, mortality data) and national AIDS commissions. “In countries with a **generalized epidemic**, national estimates of HIV prevalence are based on data generated by surveillance systems that focus on pregnant women who attend a selected number of sentinel antenatal clinics, and in an increasing number of countries on nationally representative serosurveys.”<sup>172</sup>

Based on earlier validation exercises, sentinel surveillance of antenatal clinics) provide estimations that approximate HIV prevalence among adult population (women and men); however, the coverage

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<sup>172</sup> UNAIDS: *Methods and assumptions for estimates*. Available at : [http://www.unaids.org/en/media/unaids/contentassets/documents/dataanalysis/Epi\\_MethodsAssumptionsEstimates\\_en.pdf](http://www.unaids.org/en/media/unaids/contentassets/documents/dataanalysis/Epi_MethodsAssumptionsEstimates_en.pdf)

is limited to pregnant, hence sexually active, women aged 15 to 49. Furthermore, the geographical coverage of such clinics may not be representative, as they are often in urban areas.<sup>173</sup>

National population-based household surveys, such as the Demographic Health Survey, AIDS Indicator Survey, Multiple Indicator Cluster Survey or other representative survey, cover wider age groups and both urban and rural areas; however, they exclude high-risk sub-populations such as military personnel and are subject to non-response errors. Especially when blood tests are involved, household surveys are complex and costly; hence data collection is not frequent.<sup>174</sup>

Case reporting, on the other hand, focuses on specific high-risk populations, for example, injecting drug users and does not cover newly-infected persons. Sentinel surveillance of high-risk groups, such as sex workers, may bias the estimates upwards, as they cover persons who are seeking treatment in sexually transmitted disease clinics, etc.<sup>175</sup> The most widely available data sources are the regular reports from UNAIDS and WHO. The nearest equivalent to working age in these reports is adults aged 15 to 49, and for many countries this is likely to be the only data source. At the international level, UNAIDS and WHO publish the “Report on the global AIDS epidemic”<sup>176</sup> every two years, supplemented by an “AIDS epidemic update” every year (except 2008).<sup>177</sup> The UN Population Division data give estimates and projections of populations by age and sex, with and without HIV/AIDS.

### Interpretation guidelines

The main drawback of limiting the coverage to the 15–49 age group is the exclusion of older working adults. Although the HIV epidemic is often concentrated in the younger adult age group, especially 25 years and under, a substantial share of people living with HIV are over 50 years of age and they are likely to become more numerous as the availability of antiretroviral treatment extends life expectancy. Recognizing this limitation, UNAIDS has recommended changing the reporting to all ages, but this will take time to implement. At older ages, changes in HIV prevalence are slow to reflect changes in the rate of new infections, while at younger ages, trends in HIV prevalence are a better indication of recent trends in HIV incidence and risk behaviour.<sup>178</sup>

This indicator does not capture elements such as HIV costs for enterprises/ employers, cost-benefits of workplace programmes, or legal-policy responses nor the ability of persons, especially women to negotiate. It is much too broad to give any indication of the impact of workplace policies and programmes.

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<sup>173</sup> UNAIDS: *Q&A on HIV/AIDS estimates* (Geneva, July 2008). Available at:  
[http://data.unaids.org/pub/InformationNote/2008/070608\\_epi\\_background\\_on\\_methodology\\_en.pdf](http://data.unaids.org/pub/InformationNote/2008/070608_epi_background_on_methodology_en.pdf)

<sup>174</sup> UNAIDS: *Q&A on HIV/AIDS estimates* (Geneva, July 2008). Available at:  
[http://data.unaids.org/pub/InformationNote/2008/070608\\_epi\\_background\\_on\\_methodology\\_en.pdf](http://data.unaids.org/pub/InformationNote/2008/070608_epi_background_on_methodology_en.pdf)

<sup>175</sup> UNAIDS: Ibid. <http://data.unaids.org>

<sup>176</sup> UNAIDS and WHO: *Report on the global AIDS epidemic, 2008* (Geneva, 2008). Available at:  
<http://www.unaids.org/en/dataanalysis/epidemiology/2008reportontheGLOBALAIDSEpidemic/>

<sup>177</sup> UNAIDS and WHO: *Aids Epidemic Update* (Geneva, 2009). Available at:  
[http://www.unaids.org/en/media/unaids/contentassets/dataimport/pub/report/2009/jc1700\\_epi\\_update\\_2009\\_en.pdf](http://www.unaids.org/en/media/unaids/contentassets/dataimport/pub/report/2009/jc1700_epi_update_2009_en.pdf)

<sup>178</sup> UNAIDS: United Nations General Assembly Special Session on HIV/AIDS. *Monitoring the Declaration of Commitment on HIV/AIDS, Guidelines on construction of core indicators 2010 Reporting* (Geneva, 2009). Available at:  
[http://data.unaids.org/pub/manual/2009/jc1676\\_core\\_indicators\\_2009\\_en.pdf](http://data.unaids.org/pub/manual/2009/jc1676_core_indicators_2009_en.pdf)

## CONT-3. Labour productivity (GDP per employed person, level and growth rate)

### Measurement objective and rationale

Labour productivity is an important economic indicator that is closely linked to economic growth, competitiveness, and living standards within an economy. Labour productivity represents the total volume of output (measured in terms of Gross Domestic Product, GDP) produced per unit of labour (measured in terms of the number of employed persons) during a given time reference period. The indicator allows data users to assess GDP-to-labour input levels and growth rates over time, thus providing general information about the efficiency and quality of human capital in the production process for a given economic and social context, including other complementary inputs and innovations used in production.

### Method of computation

The labour productivity level is measured as real GDP (i.e. GDP calculated at constant market prices) in local currency per employed person and can be calculated in either of two ways as shown below:

1. *Labour productivity (employed)* =  $\frac{\text{GDP at constant prices}}{\text{Number of employed persons}}$  , where the numerator and denominator refer to the same time reference period (e.g., the same year or quarter).
2. *Labour productivity (hours)* =  $\frac{\text{GDP at constant prices}}{\text{Number of hours worked in all jobs}}$  , where the numerator and denominator refer to the same time reference period (e.g., the same year or quarter).

The labour productivity growth rate is measured as the annual change in labour productivity. It can be calculated as:

$$\begin{aligned} &\text{Labour productivity growth rate} \\ &= \frac{\text{labour productivity}_{\text{year } N} - \text{labour productivity}_{\text{year } N-1}}{\text{labour productivity}_{\text{year } N-1}} \times 100 \end{aligned}$$

### Concepts and definitions

For the definition of **GDP**, **GDP at constant prices**, **employment** and **working time concepts (i.e., hours worked)** see the introduction to this chapter.

It is recommended to use the ratio “GDP per person employed” (that is, formula (1) above) to measure labour productivity in those countries that do not collect data on hours worked. Moreover, for all countries, this measure is preferred *for purposes of international comparisons*, since some countries don’t collect or publish statistics on hours worked.

However, it is important to note that the System of National Accounts (SNA) 2008 recommends computing GDP per hours worked (that is, formula (2) above) as the most appropriate measure of labour productivity.<sup>179</sup> If data on hours worked are available, this definition is preferable for purposes of national monitoring and policy since it is a more accurate measure that takes into account the wide range of hours worked per observation period by employed persons given different working time arrangements (e.g., part-time hours, full-time hours, overtime hours, etc.) This measure reflects changes in average working time and, if working time is measured through a household survey (such as a labour force survey) it can include the total hours of persons who are multiple job holders as well as the hours of self-employed persons.

The variables used to construct labour productivity are subject to different factors of seasonality and volatility.<sup>180</sup> Whenever short-term data (such as quarterly estimates) are used, it is recommended that they be seasonally adjusted to allow for an analysis of underlying trends.

### **Recommended data sources and metadata**

In the numerator, output measures are best obtained from the production side of national accounts and represent, as much as possible, GDP at market prices for the aggregate economy. It is recommended that GDP be adjusted for inflation and presented in local currency in constant prices. The data source used should be reported in the metadata. It is recommended that GDP data be adjusted for inflation and presented in local currency in constant prices.<sup>181</sup> The type of price data used, currency and whether constant prices (preferred) or current prices are presented should be published with the data.

In the denominator, employment data used in formula (1) above may be obtained from labour force or other household surveys that have an employment module. In the absence of a household survey, establishment surveys, administrative records or official estimates based on reliable sources can be used as well as population censuses. Note that employment data from establishment surveys will capture the number of jobs and not the number of persons employed as preferred for the denominator. Establishment surveys in many cases capture employment information from the formal sector only and typically exclude self-employed workers and agricultural sector workers.

If employment data are used to calculate labour productivity, it is recommended that at minimum metadata on the data source, data reference period, population coverage and geographic coverage be made easily available to data users.

Hours data used in formula (2) above can also be obtained from labour force surveys (LFS) that have an employment module that includes the estimation of working time variables. Note that the LFS has the best coverage of employed persons (including self-employed workers and workers in the agricultural sector and informal sector) and will thus permit better worker coverage for working time

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<sup>179</sup> UNSD: *System of National Accounts 2008* (New York, 2009). Available at: <http://unstats.un.org/unsd/nationalaccount/docs/SNA2008.pdf>

<sup>180</sup> Australian Bureau of Statistics: Ibid.

<sup>181</sup> If data will be used for international comparisons, it is recommended that they be converted to US dollar-based Purchasing Price Parities (PPPs).

estimation. In the absence of a household survey, establishment surveys or other estimates based on reliable sources can be used.

If hours data are used to calculate the indicator, it is recommended that at a minimum metadata on the data source, data reference period, population coverage, job coverage (main job or all jobs if data are collected from a labour force survey), and geographic coverage be made easily available to data users.

When calculating the productivity estimates, it is important to ensure that the coverage of the employment data is consistent with that of the national accounts. Any differences in scope of the data sources for the numerator and denominator should be indicated to data users, for example differences in geographic coverage (e.g. total national coverage versus total urban coverage) or economic activity coverage.

It is recommended that estimates on labour productivity be disaggregated by economic activity in addition to the total, preferably based on the International Standard Industrial Classification of All Economic Activities, Revision 4.

### **Interpretation guidelines**

Growth in an economy or a sector is a function of a number of factors including increased employment, higher labour productivity and other increased inputs (e.g., capital or land) and higher productivity of these other inputs. Labour productivity growth, which refers to the volume of output rising faster than the volume of labour input<sup>182</sup>, is thus a key driver of economic growth.

Labour productivity is one of the most important mechanisms for the transfer of economic growth to wellbeing given its relationship to wages and income and as such, it has major social implications. Cross-sectional data for a large set of countries has shown the negative relationship between the level of output per worker and poverty indices, suggesting that as labour productivity rises across different economies, poverty declines, although clearly labour productivity is not the only factor related to an economy's poverty level.<sup>183</sup>

Labour productivity estimates can serve to develop and monitor the effects of labour market policies. For example, high labour productivity in particular industries is often associated with high levels or particular types of human capital, indicating priorities for specific education and training policies. Labour productivity estimates, particularly at the industry group level, may allow data users to evaluate to what degree negotiated wage agreements compensate workers for their labour productivity gains.

The increase of productivity can benefit both workers and employers, provided it is based on efficiency and quality inherent to the modern concept of productivity. Given that the link between wages and labour productivity has important implications for social and economic outcomes, it is highly recommended that labour productivity growth and average real wage growth be analysed jointly at

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<sup>182</sup> Australian Bureau of Statistics: *Feature Article, A Spotlight on Quarterly Labour Productivity*. Australian Economic Indicators (November 2008). Available at: <http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/1350.0Feature+Article1Nov+2008>

<sup>183</sup> See Juan Chacaltana, "Raising Labour Productivity in the Region: the Challenge of Growth and Wellbeing", *2004 Labour Overview*. ILO Regional Office for Latin America and the Caribbean available at: <http://www.ilo.org/americas/publicaciones/panorama-laboral/lang-es/index.htm>.



the national economy level and at the economic activity level to help understand to what extent total employees (some of whom may not benefit from negotiated wage agreements) are sharing in the benefits of higher labour productivity. Such analysis can contribute to the understanding of how labour market performance affects living standards.<sup>184</sup>

Labour productivity is considered an important reference indicator for discussions on minimum wage setting within a country. It is also widely accepted by both workers' organisations and employers' organisations as a key reference indicator for collective bargaining negotiations.

It is important to note that labour productivity depends on many factors and partially reflects the productivity of workers in terms of their skills and intensity of their effort. This is because labour productivity changes reflect the joint influence of changes in capital, intermediate inputs, as well as technical, organisational and efficiency change within and between firms, the influence of economies of scale, capacity utilisation, to name the key factors.<sup>185</sup> The degree to which these other factors influence labour productivity growth versus the effect of "worker attributes" depends on the organization of production at the establishment level.

Labour productivity and competitiveness are closely related topics and may be studied jointly. To analyse the competitiveness of labour, the concept of unit labour cost is commonly used, defined as the ratio of labour cost to output per employed person (labour productivity). The inverse of unit labour cost is recognized as an indicator of labour competitiveness. It is a very intuitive indicator: if labour productivity is high, labour costs can also be high without affecting the labour competitiveness of a country.<sup>186</sup>

The strategies countries use to increase their competitiveness do not always rely on reducing labour costs. While reducing costs is an alternative that can produce short-term results, a more sustainable option for the long term is product differentiation and different forms of production. In order to follow this strategy, firms must have access to a quality labour force, as well as methods of work organization that promote creativity and an economic and social environment that fosters innovation. All of these factors contribute to enhanced labour productivity generally.<sup>187</sup>

Productivity ultimately originates at the establishment level, and it is there that several of its key determinants are found. The driving forces behind improvements in labour productivity commonly cited are the accumulation of machinery and equipment, improvements in organisation as well as physical and institutional infrastructures, improved health and skills of workers ("human capital") and the generation of new technology.

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<sup>184</sup> Key Indicators of the Labour Market (KILM): 2001-2002, International Labour Organisation, Geneva, 2002.

<sup>185</sup> See: *OECD: Measuring Productivity. Measurement of aggregate and industry-level productivity growth, OECD Manual. 2001.*

<sup>186</sup> See Juan Chacaltana, "Raising Labour Productivity in the Region: the Challenge of Growth and Wellbeing", *2004 Labour Overview*. ILO Regional Office for Latin America and the Caribbean available at: <http://www.ilo.org/americas/publicaciones/panorama-laboral/lang-es/index.htm>.

<sup>187</sup> Ibid.

## CONT-4. Income inequality (90:10 ratio)

### Measurement objective and rationale

The purpose of this indicator is to give a measure of inequality in total income between households at the top end of the income distribution (that is, those with incomes in the top tenth of the income distribution) and those at the low end of the distribution (that is, those with incomes in the bottom tenth of the income distribution).

### Method of computation

Income inequality refers to the log ratio of the total disposable income of households in the top decile to that of households in the bottom decile of the household disposable income distribution. It is calculated as:

$$\begin{aligned} \text{Income inequality (90: 10 ratio)} \\ = \log \frac{\text{Total annual household disposable income in the top decile}}{\text{Total annual household disposable income in the bottom decile}} \end{aligned}$$

### Concepts and definitions

**Household income**<sup>188</sup> consists of all receipts whether monetary or in kind (goods and services) that are received by households and their individual members at annual or more frequent intervals. Household income arises from employment (both employee and self-employed), property income (interests, dividends, rents received, royalties), income from the production of household services for own consumption (owner-occupied housing), current transfers received from governments, non-profit institutions and other households.

**Disposable income**, the concept which is recommended to be used to calculate the household income for defining income inequality, is defined as total income less direct taxes (net of refunds), compulsory fees and fines, social security contributions as well as compulsory and quasi-compulsory inter-household transfers paid.

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<sup>188</sup> For more detailed information, please refer to the Resolution concerning household income and expenditure statistics, adopted by the Seventeenth International Conference of Labour Statisticians (November-December 2003), available at: [http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS\\_087503/lang--en/index.htm](http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS_087503/lang--en/index.htm)

While household disposable income data are preferred, ***total household income*** data may also be used to calculate the indicator.

***Household disposable income deciles*** are calculated by sorting and listing households in the order of the amount of their total annual household disposable income. The list of households is then split into 10 equal groups. The sum of the total annual household disposable income in the top income group or decile is used in the numerator, while the sum of the total annual household disposable income in the bottom income group or decile is used in the denominator. Data on total annual household disposable income per decile should be provided in local currency.

### **Recommended data sources and metadata**

Data on household income are generally collected through household income and expenditure surveys or other surveys covering household budgets.

When estimates for this indicator are reported, detailed information on the coverage (including population coverage and geographic coverage), as well as the definitions of household income (preferably disposable household income) used should be given as well as the data reference period.

As households headed by women may be concentrated in the bottom decile, disaggregation of the household income distribution (by deciles) by the sex of the household head is recommended. However, this relationship should be carefully studied to take into account national circumstances and the definition of head of household as adopted in the data collection, which may not necessarily be related to the chief source of economic support. Whether households are headed by women or men, gender relations – especially the situation of women in society, including their participation in paid employment – as well as relations of power between women and men, affect intra-household resource allocation and use.

Disaggregation of the household income distribution (by deciles) by geographic area (urban/rural), and household size may be useful for informing policymakers.

### **Interpretation guidelines**

An income inequality ratio summarizes the relative distance between two points on the household income distribution and is a relative measure of inequality. The top of the distribution is the 90<sup>th</sup> percentile and the bottom is the 10<sup>th</sup> percentile. This gives an indication about the size of the income gap between the richest and the poorest households in each country: the higher this ratio, the greater the level of inequality. The main shortcoming is that it does not provide information on the distribution of income within the deciles or in the middle of the income distribution but this information can readily be obtained when producing the estimates to construct the indicator.

A common situation where a data log transformation may be applied is when a value of interest ranges over several [orders of magnitude](#) such as found in many social phenomena, including total disposable household income. The logarithm transformation has a useful effect on ratios such as the household income ratio used in the construction of this indicator. If the numerator is greater than the

denominator, the ratio can assume a value from one and above, where the log ratio of one corresponds to household income equality and values increasingly greater than one represent higher household income inequality.

As it will be valuable to understand the characteristics of the households in the bottom and top deciles particularly when high or growing inequality exists, it is recommended to analyse the household structure and composition (i.e., number of adults and children, employed persons, by sex) as well as geographic area related to the households in these groups.

The indicator should be analysed jointly with earnings inequality of full-time employees where employees comprise a large share of the employed population to understand the correlation between the two indicators. It should also be analysed with GDP growth estimates, to analyse changes in the indicator throughout the business cycle.

The decile dispersion ratio could remain the same if the incomes of the 90<sup>th</sup> and 10<sup>th</sup> percentile change by the same amount in the same direction. In other words, it satisfies the “mean independence” criterion of inequality measures.<sup>189</sup> This indicator may not reflect changes in inequality when it is due to transfers between deciles other than the 90<sup>th</sup> and 10<sup>th</sup> percentile.

Other indicators that can be used to measure inequality are the Gini coefficient and the Share of poorest quintile in national consumption. The Gini coefficient is a summary indicator of the degree of inequality. It lies between 0 and 1, with values closer to 0 representing a higher degree of equality, and values closer to 1 representing greater inequality. In most countries, the value of the Gini coefficient is between 0.2 and 0.4. The poorest quintile’s percentage share of national income or consumption is the share that accrues to the bottom fifth (quintile) of the population. Generalized entropy measures and Atkinson’s inequality measures are more complicated to compute but satisfy all criteria of indicators of inequality.<sup>190</sup>

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<sup>189</sup> The other criteria desirable for inequality measures are: population size independence, symmetry, Pigou-Dalton Transfer sensitivity, decomposability and statistical testability. See J. Haughton and S. R. Khandker: *Handbook on poverty and inequality*, The International Bank of Reconstruction and Development/The World Bank (Washington, D.C. 2009).

<sup>190</sup> J. Haughton, and S. R. Khandker: op.cit.

## CONT-5. Inflation rate (Consumer Price Index, CPI)

### Measurement objective and rationale

The consumer price index (CPI) is a summary indicator “designed to measure changes over time in the general level of prices of goods and services that a reference population acquires, uses or pays for”. The CPI has multiple uses, the two main ones being:

- (i) Adjusting of wages and benefits to take into account changes in the cost of living and consumer prices; and
- (ii) Indicating average price inflation.<sup>191</sup>

### Method of computation

The CPI is constructed as a weighted average of a large number of elementary aggregate indices. Each of the elementary aggregate indices is estimated using a sample of prices for a defined set of goods and services obtained in, or by residents of, a specific region from a given set of outlets or other sources of consumption goods and services. Given the multiple uses of the CPI, there are various ways of constructing it.<sup>192</sup>

### Concepts and definitions

The CPI can be constructed as a fixed-basket price index where the change in the price of a basket of goods and services, representative of a household’s consumption pattern for a reference period, is monitored. The CPI can also take the form of a cost-of-living-index (COLI) where the “effects of price changes on the cost of achieving a constant standard of living (i.e. level of utility or welfare)” are measured.<sup>193</sup>

As the prices of different goods and services do not all change at the same rate, a price index is designed to reflect their average movements. A price index is typically assigned a value of 100 in a selected index base period, and the values of the index for other periods of time are intended to provide an estimate of the average percentage change in prices compared with the base period.

### Recommended data sources and metadata

In addition to the index level showing the change from the index reference period, it is also useful to present derived indices, such as the one that shows changes in the major aggregates between: (i) the current month and the previous month; (ii) the current month and the same month of the previous year; and (iii) the average of the latest 12 months and the average of the previous 12 months. The indices should be presented in both seasonally adjusted and unadjusted terms.<sup>194</sup> As significant

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<sup>191</sup> ILO: *Resolution concerning consumer price indices*, adopted by the Seventeenth International Conference of Labour Statisticians (Geneva, 24 November-3 December 2003). Available at: [http://www.ilo.org/wcmsp5/groups/public/---dgreports/---integration/---stat/documents/normativeinstrument/wcms\\_087521.pdf](http://www.ilo.org/wcmsp5/groups/public/---dgreports/---integration/---stat/documents/normativeinstrument/wcms_087521.pdf)

<sup>192</sup> See ILO, IMF, OECD, Eurostat, UN, and WB: *Consumer price index manual. Theory and practice* (Geneva, 2004); and United Nations: *Practical Guide to Producing Consumer Price Indices* (New York and Geneva, 2009). Available at: [http://live.unecce.org/fileadmin/DAM/stats/publications/Practical\\_Guide\\_to\\_Producing\\_CPI.pdf](http://live.unecce.org/fileadmin/DAM/stats/publications/Practical_Guide_to_Producing_CPI.pdf)

<sup>193</sup> ILO: Ibid.

<sup>194</sup> ILO, IMF, OECD, Eurostat, UN, and WB: Ibid; and United Nations: Ibid.

differences in the expenditure patterns and/or price movements between specific population groups or regions may exist, especially in the developing countries, separate indices for these population groups or regions may be computed.

### **Interpretation guidelines**

The CPI measures price movements (i.e. relative changes) and not absolute price levels.

The CPI is not a complete measure reflecting all price changes in an economy.

The CPI does reflect the development of the prices of the items that particular individuals or households buy during the same period, as it is designed to represent the average experience of all private households. Variations from one individual/household to another can be important relative to this average.

It does not measure the “cost of living” as understood with reference to economic theory on consumers’ behaviour.

Regional CPIs cannot be used to compare differences in price levels or living costs between one place and another, they measure only the changes that take place in each place over time.

In addition to the standard sub-indices published alongside the all-items CPI, special indices can be computed to suit user requirements; for example, separate indices for goods and for services, all-items index excluding seasonal products or excluding energy and petrol, etc.

An analysis of the contributions of various products or group of products to the overall change and an explanation of any unusual factors affecting the price changes of the major contributors to the overall change provide a powerful analytical tool for understanding movements in the CPI.

## CONT-6. Employment by branch of economic activity

### Measurement objective and rationale

This indicator provides information about the share of employment engaged in a given economic activity, as defined by the International Standard Industrial Classification of all Economic Activities (ISIC).<sup>195</sup> It provides information on the relative importance of different economic activities with regard to employment.

### Method of computation

The following formula is applied to all economic activities at the required level of disaggregation.

$$\text{Employment in economic activity}_i (\%) = \frac{\text{Number of employed in economic activity}_i}{\text{Total number of employed}} \times 100$$

### Concepts and definitions

See the introduction to this chapter for a definition of **employed persons**. For information on the **International Standard Industrial Classification of All Economic Activities** which defines the economic sectors, please refer to the Annex.

### Recommended data sources and metadata

Labour force surveys constitute the preferred primary source of information, since they are the only source that can provide information about all employed persons including those employed in the informal sector and the agricultural sector. Should this source not be available, estimates may be obtained from other sources such as establishment surveys and censuses, other household surveys with an employment module, administrative records of establishments, to name some of the key sources. Note that establishment surveys produce estimates on the total number of jobs and not the total number of employed persons as preferred to calculate the indicator.

The metadata should indicate the source of the data, concept definitions, data coverage and industry classification used.

The breakdown of the indicator by sex allows for the analysis of gender segregation of employment by economic activity.<sup>196</sup> It is possible to see to what extent men and women are equally distributed across the different economic activities, and whether, for instance, females are concentrated in services and in labour-intensive industries where wage rates are generally below those in the industry. Disaggregation by occupation group and age band would facilitate detailed analysis.

### Interpretation guidelines

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<sup>195</sup> UNSD: *International Standard Industrial Classification of All Economic Activities (ISIC) Rev. 4* (New York, 2008). Available at: <http://unstats.un.org/unsd/cr/registry/regcst.asp?Cl=27>

<sup>196</sup> Note that such a breakdown is not the equivalent of the indicator “Female share of employment by industry”, an Additional context indicator included in this chapter. A breakdown of the present indicator would involve a disaggregation of both the numerator and denominator by women (or men), while the additional context indicator is the share of women employed expressed as a percentage of *total employment* in a given economic activity

Information on the distribution of employment by economic activity is particularly useful for identifying broad structural shifts in employment in line with a changing economic structure. The changes in the distribution of employment by economic activity over time indicate labour flows from one sector for example, agriculture and other labour-intensive activities to other(s) such as manufacturing and services.

In developing countries with an important but diminishing employment share in agriculture, employment by branch of economic activity may be interpreted in combination with indicators on urban-rural migration as the labour flows may coincide with such migration. The indicator can be analysed together with the CONT-10 Female share of employment by industry (ISIC tabulation category).

In countries where employees make up a large share of total employment, it is recommended to analyse the indicator jointly with estimates of average real wages by industry, as well as hours paid for by economic activity to understand changing patterns in employee wages and working time across industries together with the volume of employment by industry.

The indicator can inform policymaking in various ways. For instance, by studying trends over time, it is possible to identify individual manufacturing industries and services where employment is growing, declining or remaining unchanged. Combined with information on job vacancies by economic activity, it can indicate where demand for labour is focused, and thus could guide policymakers responsible for designing skills and training programmes to develop coherent national and sectoral human resources development plans, including training and re-training. This information is essential to mitigate labour mismatch and to create employment.



## **CONT-7. Education of adult population (adult literacy rate, adult secondary school graduation rate)**

### **Measurement objective and rationale**

Education of adult population can be measured through two indicators: adult literacy rate and adult secondary graduation rate. The adult literacy rate gives a snapshot of the basic level of education and the capability to access written information in a given country. The adult graduation rate from secondary school shows the proportion of adults who have had formal schooling.

There is no specific literacy goal or target in the Millennium Development Goals, although Goal 2: Achieve universal primary education by 2015 is closely associated with it. In particular, MDG indicator 2.3: Literacy rate of 15-24 year-olds, women and men used to monitor progress towards Target A: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling is directly linked with CONT-7.

### **Method of computation**

Education of adult population refers to two indicators.

- a. The adult literacy rate gives the proportion of the literate adults. It is calculated as:

$$\text{Adult literacy rate} = \frac{\text{Total number of literate adults}}{\text{Total number of adults}}$$

- b. Adult secondary level graduation rate refers to the ratio of the number of adults who have graduated from secondary school to the number of adults who should have graduated. It can be calculated as:

$$\begin{aligned} &\text{Adult secondary school graduation rate} \\ &= \frac{\text{Total number of adults who have graduated from secondary school}}{\text{Total number of adults who should have graduated from secondary school}} \end{aligned}$$

### **Concepts and definitions**

The Recommendation concerning the International Standardization of Educational Statistics (ISES) adopted by UNESCO's General Conference in 1958 concluded that "a person is literate who can with understanding both read and write a short simple statement on his (her) everyday life." National definitions tend to vary slightly from the standard definition.

UNESCO distinguishes between "adults" aged 15 years and over and "mature adults" aged 25 years and over. Coverage of persons aged 15 and above may facilitate the analysis of the indicator together with other Decent Work indicators covering the working-age population.

The secondary school graduation rate should represent the number of students who graduated from secondary level education, as a percentage of those who should have graduated. The rate may not be easy to capture because students do not all go through the same steps to obtain a diploma.

## Recommended data sources and metadata

Literacy statistics reported by the UNESCO Institute of Statistics (UIS) are most often based on self-reported data from population censuses and reports through household surveys of the respondent's own literacy status and those of other household members. Another source of information is through direct literary assessments.

Information on graduation rates comes from administrative records. The age coverage of this indicator could vary from country to country based on the length of the secondary school education. For instance, the entry to lower secondary education is indicated as "some 6 years after primary education" whereas the end would be "after some 9 years of schooling since the beginning of primary school education". The entry age to upper secondary education is indicated as usually 15–16 years in ISCED 1997.<sup>197</sup>

Disaggregation by sex and, if possible, by ethnicity is recommended for both indicators in order to analyse any gender/ethnic discrepancies in terms of access to education and participation in socio-economic life.

## Interpretation guidelines

Literate people are better able to access other education and employment opportunities; and, collectively, literate societies are better geared to meet development challenges.<sup>198</sup> Illiteracy, on the other hand, brings with it a loss of human potential and economic capacity. It tends to prevail in low-income countries where severe poverty is widespread.

Some research provides evidence of economic benefits to the raising of the literacy level of the population and shows that literacy is among the variables with a positive effect on GDP per capita growth (Naudé, 2004).<sup>199</sup> The sparse evidence indicates that the returns to investment in adult literacy programmes generally compare favourably with those from investments in primary education.<sup>200</sup>

UNESCO advises against drawing strict comparison of the extent of illiteracy between countries. However, following the course of progress within each country over several decades, can offer some useful lessons.

Graduation rates indicate whether the nation's public school system is doing what it is intended to do: enrol, engage, and educate youth to be productive members of society. Low graduation rates, particularly among poor and minority students, reflect high costs in terms of lost potential to both the early school-leaver and to society at large.

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<sup>197</sup> United Nations Educational, Scientific and Cultural Organization (UNESCO): *International Standard Classification of Education (ISCED-97)* (1997). Available at: [http://www.uis.unesco.org/TEMPLATE/pdf/isced/ISCED\\_A.pdf](http://www.uis.unesco.org/TEMPLATE/pdf/isced/ISCED_A.pdf)

<sup>198</sup> UNESCO Institute of Statistics: *International Literacy Statistics: A Review of Concepts, Methodology and Current Data* (Montreal, 2008). Available at: <http://www.uis.unesco.org/template/pdf/Literacy/LiteracyReport2008.pdf>

<sup>199</sup> W. A. Naudé: "The effects of policy, institutions and geography on economic growth in Africa: An econometric study based on cross-section and panel data". *Journal of International Development* (2004), Vol. 16, pp. 821-49.

<sup>200</sup> UNESCO Institute of Statistics: Ibid.

## CONT-8. Labour share of Gross Value Added (GVA)

### Measurement objective and rationale

Labour share of Gross Value Added (GVA) (also referred to as labour income share in GVA) is the total compensation of employees given as a percent of gross value added (a measure of total output). It provides information about the relative share of output which is paid as compensation to employees as compared with the share paid to capital in the production process for a given reference period.

### Method of computation

Both the numerator and the denominator should be provided in the same unit, for example, the nominal national currency.

$$\text{Labour share of Gross Value Added} = \frac{\text{Total compensation of employees}}{\text{Gross Value Added}}$$

**Concepts and definitions** *Compensation of employees* is the total in-cash or in-kind remuneration payable to the employee by the enterprise for the work performed by the employee during the accounting period. Compensation of employees includes: (i) wages and salaries (in cash or in kind) and (ii) social insurance contributions payable by employers (including actual social contributions (pension and non-pension) and imputed social contributions (pension and non-pension))

This concept views compensation of employees as a cost to employer, thus compensation equals zero for unpaid work undertaken voluntarily. Moreover, it does not include taxes payable by employers on the wage and salary bill e.g. payroll tax. It is recorded on an accrual basis and may be paid in advance, simultaneously or in arrears of the period in which work is done.

For further details on the components of compensation of employees, please see the *System of National Accounts 2008*.<sup>201</sup>

The indicator should be produced using data that cover all employees and all economic activities. **Gross Value Added** represents the contribution of labour and capital to the production process in an economy. Gross value added is defined as the value of output less the value of intermediate consumption.

For a definition of *employed persons* and of *employees*, see the introduction to this chapter.

### Recommended data sources and metadata

The preferred primary data sources for this indicator are the national accounts estimates of compensation of employees and Gross Value Added. The periodicity of this indicator will hence depend on the national accounts data produced in the given country, for instance, quarterly and/or annually.

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<sup>201</sup> UNSD: *System of National Accounts 2008* (New York, 2009). Available at: <http://unstats.un.org/unsd/nationalaccount/docs/SNA2008.pdf>

The source of the data should be presented when providing estimates of the indicator. Moreover, the System of National Accounts revision should be provided to data users (preferably the SNA 2008), and also the types of prices used to estimate the GVA (i.e., basic prices, producer prices or factor cost). The concept definition of compensation of employees that is used should be provided, or alternatively, if another wage or labour income concept is used, this should be provided to data users.

### **Interpretation guidelines**

Labour share of Gross Value Added (GVA) seeks to inform about the relative share of GVA which accrues to employees as compared with the share which accrues to capital in a given reference period. In general, labour share in Gross Value Added will underestimate the proportion of gross value added accrued to total employment, as it covers only the compensation of employees and does not include the labour income of the self-employed. Thus the indicator may be less relevant in countries where a large proportion of employment is in self-employment. However, an adjusted labour share may be estimated to take into account the labour income of self-employed workers.

In order to interpret this indicator effectively, it is important to consider it together with economic growth trends. The share of labour compensation in national output can highlight the extent to which economic growth translates into higher incomes for employees over time. In periods of economic recession, the wage share provides an indication of the extent to which falling output reduces labour incomes relative to profits. If labour incomes fall at a greater rate than profits, the wage share will be expected to fall. By contrast, if there is a sharper decline in profits than in labour incomes, the wage share will rise. For any given level of value added and profits, the wage share can fall as a result of falling wage employment, falling wages or a combination of both.<sup>202</sup>

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<sup>202</sup> See the ILO article “The Wage Share”, from the report entitled *Global Wage Report 2010/11: Wage policies in times of crisis*, available at: [http://www.ilo.org/global/publications/books/WCMS\\_145265/lang--en/index.htm](http://www.ilo.org/global/publications/books/WCMS_145265/lang--en/index.htm)

## CONT-9. Real GDP per capita (level and growth rate)

### Measurement objective and rationale

The Gross Domestic Product (GDP) is one of the most widely used measures of output (mainly market production) for a given national economy. GDP per capita indicates the average output per person and has often been used to indicate a country's standard of living. In recent years, however, there have been increasing doubts raised regarding the appropriateness of using GDP and derived indicators for purposes of measuring a country's standard of living.<sup>203</sup>

### Method of computation

Two indicators may be calculated, one which provides a real value (that is, nominal GDP adjusted for inflation, also known as GDP at constant prices) using local currency (designated in the formula as  $_{loc}$ ) and another in which nominal GDP is converted to international dollars using purchasing power parity rates (designated in the formula as PPP\$) as follows:

$$1. \text{ Real GDP per capita}_{loc} = \frac{\text{Real mean GDP}_{loc}}{\text{Mean population}}$$

where the numerator and denominator are measured during a common reference period (for example, a given year).

The associated growth rate is calculated as:

$$\begin{aligned} & \text{Real GDP per capita}_{loc} \text{ growth rate} \\ &= \frac{\text{Real GDP per capita}_{loc \text{ year } N} - \text{Real GDP per capita}_{loc \text{ year } N-1}}{\text{Real GDP per capita}_{loc \text{ year } N-1}} \\ & \times 100 \end{aligned}$$

$$2. \text{ GDP per capita in PPP\$} = \frac{\text{Mean GDP in PPP\$}}{\text{Mean population}}$$

where the numerator and denominator are measured during a common reference period (for example, a given year).

The associated growth rate is calculated as:

$$\begin{aligned} & \text{GDP per capita in PPP\$ growth rate} \\ &= \frac{\text{GDP per capita in PPP\$}_{\text{year } N} - \text{GDP per capita in PPP\$}_{\text{year } N-1}}{\text{GDP per capita in PPP\$}_{\text{year } N-1}} \\ & \times 100 \end{aligned}$$

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<sup>203</sup> See the *Report by the Commission on the Measurement of Economic Performance and Social Progress*, September 2009, available at: <http://www.stiglitz-sen-fitoussi.fr/en/index.htm>

## Concepts and definitions

For a definition of **GDP and GDP at constant prices**, see the introduction to this chapter.

**Purchasing Price Parity (PPP)** was developed to answer the question of how much money would be needed to purchase the same goods and services in two countries, and uses that information to calculate an implicit foreign exchange rate. Using that PPP rate, an amount of money thus has the same purchasing power in the different countries.<sup>204</sup>

PPPs may be used to convert GDP and related indicators (such as GDP per capita) into a common international currency for purposes of international comparisons. “Purchasing power parities (PPPs) are used in producing a reliable set of estimates of the levels of activity between countries, expressed in a common currency. Purchasing power parity (PPP) is defined as the number of units of country B’s currency that are needed in B to purchase the same quantity of individual goods or services as one unit of country A’s currency will purchase in A. Typically, PPP is expressed in terms of the currency of a base country, with the US dollar commonly being used. PPPs are thus weighted averages of the relative prices, quoted in national currency, of comparable items between countries. Used as deflators, they enable cross-country comparisons of GDP and its expenditure components”.<sup>205</sup>

In order to compute the real GDP per capita in PPP terms, the growth rates of GDP per capita (i.e., volume growth rates at constant prices) are applied to the nominal GDP per capita in PPP\$ for a given base year.

The **population** comprises persons of all ages who were usual residents living in the country during the reference period, regardless of legal residency status or citizenship. The concept of usual residence is recommended, as set out in international standards for the collection of population statistics.

## Recommended data sources and metadata

The recommended primary data sources for the numerator of this indicator are the national accounts estimates of GDP. The periodicity of this indicator will hence depend on the national accounts data produced in the given country, for example quarterly and/or annually.

To obtain GDP at constant prices, an appropriate national GDP price deflator should be applied. The UNDATA database conversion factors may be applied to adjust the GDP in local currency to PPP in international dollars.<sup>206</sup>

The recommended primary data source for the denominator is a household-based survey or population census that produces estimates on the number of usual residents of all ages. The data reference period should be the same as that for the numerator.

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<sup>204</sup> See: [http://en.wikipedia.org/wiki/Purchasing\\_power\\_parity](http://en.wikipedia.org/wiki/Purchasing_power_parity)

<sup>205</sup> UNSD: *System of National Accounts 2008* (New York, 2009). Available at: <http://unstats.un.org/unsd/nationalaccount/docs/SNA2008.pdf>

<sup>206</sup> The PPP conversion factors are available from the UNDATA database at: <http://data.un.org/Data.aspx?d=MDG&f=seriesRowID:699>

## Interpretation guidelines

Real GDP per capita shows the extent to which the total production of a country can be shared by its population. The growth in real GDP per capita indicates the pace of output growth per head in the population.

Increased production and GDP often lead to improved living standards of individuals in the economy, but this will depend on the distribution of real income and public policy among other factors. Thus for example, if income inequality rises enough relative to the increase in average GDP per capita, most people may be worse off even though there is an increasing trend in average income.<sup>207</sup> This outcome may be mitigated for example if fiscal policy interventions provide for a more equitable redistribution of income and thus greater shared benefit of a rising standard of living.

If there is a large number of non-resident border or seasonal workers or inflows and outflows of property income such that the value of production differs from the income of residents, there may be a situation of over or understating the living standards of residents.<sup>208</sup> GDP may exclude or underreport activities that are difficult to measure, such as transactions in the informal sector or in illegal markets, etc. thus understating the GDP. Moreover, GDP does not account for the social and environmental costs of production, and is therefore is not a good measure of the level of over-all wellbeing.<sup>209</sup> Also, in some economies and sectors, increasing output is more a reflection of an increase in the quality of goods produced than an increase in the quantity, but measuring quality change of output is very challenging.<sup>210</sup>

Finally, GDP primarily measures market production, but has often been treated as if it were a measure of economic well-being. Equating the two will lead to misinterpretations about people's material living standards which in fact are more closely linked to measures such as net national income, real household income and consumption.<sup>211</sup> Output can increase while income declines or vice versa when depreciation, cross-border income flows, and price differentials between output prices and consumer prices are considered.<sup>212</sup>

Given the above arguments, it is recommended that this context indicator be analysed jointly with income inequality, net national income, real household income and consumption to understand better the material living standards of the population.

Changes in GDP per capita are related to changes in the share of the working-age population, in the employment-to-population ratio, hours worked per capita and GDP per hours worked, i.e. labour

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<sup>207</sup> See the *Report by the Commission on the Measurement of Economic Performance and Social Progress*, September 2009, available at: <http://www.stiglitz-sen-fitoussi.fr/en/index.htm>

<sup>208</sup> OECD, *National Accounts at a Glance 2009*, available at <http://www.oecd-ilibrary.org/sites/9789264067981-en/01/03/index.html?itemId=/content/chapter/9789264075108-5-en>

<sup>209</sup> Statistics Division, United Nations Department of Economic and Social Affairs (DESA), Gross domestic product per capita, indicator sheet.

<sup>210</sup> See the *Report by the Commission on the Measurement of Economic Performance and Social Progress*, September 2009, available at: <http://www.stiglitz-sen-fitoussi.fr/en/index.htm>

<sup>211</sup> Ibid.

<sup>212</sup> Ibid.

productivity. The linkages between these indicators can be explained through the identity below, where hours worked refer to total hours actually worked:

$$\frac{GDP}{Total\ population} \equiv \frac{GDP}{Hours} \times \frac{Hours}{Total\ employed} \times \frac{Total\ employed}{Working\ age\ population} \times \frac{Working\ age\ population}{Total\ population}$$

Note that the second, third and fourth terms on the right hand side can be combined to give hours per capita.<sup>213</sup> Hence, it is recommended to analyse this indicator together with labour productivity (CONT-3) and the employment-to population ratio (EMPL-1).

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<sup>213</sup> For a comparative analysis of these indicators across provinces in Canada see J.R. Baldwin, M. Brown and J. P. Maynard: *Interprovincial Differences in GDP per Capita, Labour Productivity and Work Intensity: 1990-2003* (Statistics Canada, Ottawa, 2005). Available at: <http://dsp-psd.pwgsc.gc.ca/Collection/Statcan/11-624-M/11-624-MIE2005011.pdf>



## CONT-10. Female share of employment by economic activity (ISIC tabulation category)

### Measurement objective and rationale

Female share of employment by economic activity informs about the percentage of women employed in a given industry group, and thus gives an indication of the extent to which women have equal access to employment in different economic activities.

### Method of computation

This indicator is computed as the number of women employed in a given economic activity expressed as a percentage of total employment in the economic activity. The following formula is applied to all economic activities at the required level of disaggregation. It is recommended to present the share of employment in agriculture, industry and services.

$$\begin{aligned} & \text{Share of women in employment in economic activity}_i (\%) \\ &= \frac{\text{Number of women employed in economic activity}_i}{\text{Total number of employed in economic activity}_i} \times 100 \end{aligned}$$

### Concepts and definitions

For a definition of **employed persons**, see the introduction to this chapter. For information on the **International Standard Industrial Classification of All Economic Activities** which defines the economic sectors, please refer to the Annex.

### Recommended data sources and metadata

Labour force surveys constitute the preferred primary source of information, since they are the only source that can provide information about all employed persons including those employed in the informal sector and the agricultural sector. Should this source not be available, estimates may be obtained from other sources such as establishment surveys and censuses, other household surveys with an employment module, administrative records of establishments, to name some of the key sources. Note that establishment surveys produce estimates on the total number of jobs and not the total number of employed persons as preferred to calculate the indicator.

The metadata should indicate the source of the data, concept definitions, data coverage and industry classification used.

Further disaggregation, for example, by age, geographic location (urban/rural), etc. can be useful for in-depth analysis. Disaggregation of data should assist policy makers in monitoring the progress achieved, creating enabling environments that promote decent, productive work for both women and men, as well as implementing specifically targeted policies and programmes.

### **Interpretation guidelines**

This indicator provides information about the relative concentration of employed women within each industry. If women comprise a small share of total employed, this can be observed by summing the indicator across all industries. In economies where women represent a small share of total employment, it is nonetheless possible for women to be concentrated in some key industries, and may therefore nonetheless reveal high percentages in some women-dominated sectors.

This indicator supports the analysis of segregation by sex in employment by economic activity. It is possible to see to what extent employed men and women are equally distributed across different economic activities, and to check whether women are concentrated in certain services and labour-intensive industries where wage rates are generally lower.

It may be valuable to analyse this indicator jointly with indicators of equal opportunity and treatment in employment in order to more broadly assess and monitor the employment situation of women. This can support policy that seeks to allow women to reach their full potential and rid the labour market of discriminatory practices in hiring, promotion, and remuneration.

## CONT-11. Earnings inequality (90:10 ratio)

### Measurement objective and rationale

The purpose of this indicator is to give a measure of inequality in total earnings between the full-time employees at the top end of the earnings distribution (that is, those with earnings in the top tenth of the earnings distribution) and those at the low end of the distribution (that is, those with earnings in the bottom tenth of the earnings distribution). It is deemed important to target full-time employees (or convert part-time employees to full-time equivalents) in order to appropriately compare workers with similar working-time arrangements in the bottom and top earnings groups.

### Method of computation

This indicator refers to the log ratio of the total earnings of full-time employees in the top decile to that of full-time employees in the bottom decile of the earnings distribution. It is calculated as:

1. For full-time employees:

$$\begin{aligned} & \text{Earnings inequality (90:10 ratio)} \\ &= \log \frac{\text{Gross total monthly earnings of full-time employees in the top decile}}{\text{Gross total monthly earnings of full-time employees in the bottom decile}} \end{aligned}$$

2. For full-time men employees:

3. *Men's earnings inequality (90:10 ratio)* =  
$$\log \frac{\text{Gross total monthly earnings of full-time men employees in the top decile}}{\text{Gross total monthly earnings of full-time men employees in the bottom decile}}$$
 For full-time women employees:

$$\begin{aligned} & \text{Women's earnings inequality (90:10 ratio)} \\ &= \log \frac{\text{Gross total monthly earnings of full-time women employees in the top decile}}{\text{Gross total monthly earnings of full-time women employees in the bottom decile}} \end{aligned}$$

### Concepts and definitions

For a definition of **employed persons and employees**, see the introduction to this chapter.

The concept of “**full time**” should be defined according to customary national circumstances of working time among employees taking into consideration average weekly working time hours.

**Earnings:** The concept of earnings, as applied in wages statistics, relates to gross remuneration in cash and in kind paid to employees, as a rule at regular intervals, for time worked or work done together with remuneration for time not worked, such as annual vacation, other types of paid leave or holidays. *Gross remuneration* implies the total before any deductions are made by the employer in respect of taxes, contributions of employees to social security and pension schemes, life insurance premiums,

union dues and other obligations of employees. Earnings should **include**: direct wages and salaries, remuneration for time not worked (excluding severance and termination pay), bonuses and gratuities and housing and family allowances paid by the employer directly to this employee. Earnings **exclude** employers' contributions in respect of their employees paid to social security and pension schemes and also the benefits received by employees under these schemes. They also exclude severance and termination pay.<sup>214</sup>

**Earnings deciles** are calculated by sorting and listing full-time employees (or jobs if an establishment survey is used) in the order of the amount of their total gross monthly earnings. The list of employees is then split into 10 equal groups. The sum of the total gross monthly earnings of full-time employees in the top earnings group or decile is used in the numerator, while the sum of the total gross monthly earnings of full-time employees in the bottom earnings group or decile is used in the denominator. Data on total gross monthly earnings per decile should be provided in local currency.

### Recommended data sources and metadata

In order to be able to obtain earnings data on all employee jobs, labour force surveys or other household surveys that include an employment module may be used. Sample surveys of establishments, such as wage and hours surveys, also provide data on the distribution of employee earnings and hours of work. Note that when the data source is an establishment survey, earnings estimates for specific employee jobs rather than total employee earnings will be obtained and the data coverage is likely to be limited to formal sector establishments. This may give a partial view of the situation, especially in developing countries where the informal sector is a major source of employment and earnings for informal sector employees.

The breakdown of the ELPR by sex and geographic area (urban/rural), and full-time versus part-time employees is recommended. Further breakdowns by age group, occupation group, economic activity group, educational attainment level, and migration status can help to identify key characteristics of low-paid employees, which can serve as a basis for policy interventions such as minimum-wage setting. It may also be of interest to disaggregate the data according to employees in the formal versus informal sector (using the concept of informal sector<sup>215</sup>, an enterprise-based concept) or by informal employees versus formal employees (using the concept of informal employment<sup>216</sup>).

When figures for this indicator are reported, detailed information on the coverage (including age and population coverage in household surveys and establishment coverage in establishment surveys and worker coverage), as well as the definitions of employee and earnings used should be given.

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<sup>214</sup> ILO: *Resolution concerning an integrated system of wage statistics*, adopted by the Twelfth International Conference of Labour Statisticians (Geneva, October 1973). Available at : [http://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/normativeinstrument/wcms\\_087496.pdf](http://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/normativeinstrument/wcms_087496.pdf)

<sup>215</sup> See the Resolution concerning statistics of employment in the informal sector, Adopted by the Fifteenth International Conference of Labour Statisticians (January 1993, available at: [http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS\\_087484/lang--en/index.htm](http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS_087484/lang--en/index.htm)

<sup>216</sup> Guidelines concerning a statistical definition of informal employment endorsed by the Seventeenth International Conference of Labour Statisticians (ICLS), available at: [http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/guidelines-adopted-by-international-conferences-of-labour-statisticians/WCMS\\_087622/lang--en/index.htm](http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/guidelines-adopted-by-international-conferences-of-labour-statisticians/WCMS_087622/lang--en/index.htm)

Disaggregation of the indicator by sex is highly recommended and may be calculated as indicated above under method of computations. Other breakdowns by geographic area (urban/rural), educational attainment may be useful for policymaking.

### **Interpretation guidelines**

This decile dispersion ratio gives a measure of inequality based on employees' earnings only. In economies where employees represent a small fraction of total employment, the indicator will have limited relevance. Earnings do not cover the total income or consumption capacity of an individual employee. Hence, this indicator should not be taken as a measure of relative well-being per se, but understood as contributing to overall income inequality.

Earnings deciles are a simple way to measure earnings inequality. They show how earnings are distributed, in this case, among full-time employees. They indicate how much of the total earnings of full-time workers in a country is earned by lower wage earning groups and how much of the total is earned by higher wage earning groups. If the people in the extreme top and bottom decile groups earn the same proportion of the earnings, then there is earnings equality. If the top group earns a much higher percent of the total earnings, while employees in the bottom group earn a much lower percent of the total income, then there is earnings inequality.

A common situation where a data log transformation may be applied is when a value of interest ranges over several orders of magnitude such as found in many social phenomena, including total monthly earnings. The logarithm transformation has a useful effect on ratios such as the earnings ratio used in the construction of this indicator. If the numerator is greater than the denominator, the ratio can assume a value from one and above, where the log ratio of one corresponds to equality and values increasingly greater than one represent higher earnings inequality.

An increase in the indicator over time indicates a growing earnings inequality between the two extreme earnings decile groups of full-time employees which may also be reflected in growing income inequality, particularly if earnings are the key component of income. Growing earnings inequality may suggest the possibility of a growing disparity in the labour productivity of different segments of employees in the economy (if working time remains constant) and/or may suggest the need to evaluate raising the minimum wage to support employees at the bottom end of the earnings distribution. It may be valuable to analyse the educational attainment, occupational composition and other characteristics of employees by earnings deciles to inform policy that seeks to enhance labour productivity and earnings among particular groups of employees.

The decile dispersion ratio may remain the same although a proportional upward or a downward shift may occur in the total monthly earnings of the two decile groups of full-time employees. It is important to consider underlying changes in working time of the two decile groups, as well as compositional changes in the labour market such as industry and occupational structure which may be having an impact on earnings inequality.

It is recommended to analyse the indicator together with mean monthly earnings of full-time employees for a better joint understanding of how average earnings are changing with respect to earnings inequality. It should also be analysed with GDP growth to capture changes throughout the business cycle. The indicator may also be calculated separately for part-time employees as such information may also be important for policy needs.

## CONT-12. Poverty measures

### Measurement objective and rationale

Poverty is measured among the decent work context indicators using two indicators: the Poverty incidence (headcount ratio) and the Poverty Gap Index. The indicators give information on the well-being of the population by indicating the poverty status and the severity of poverty, respectively.

### Method of computation

The Poverty incidence (headcount ratio) is computed as the percentage share of the population living in households with income<sup>217</sup> below the national poverty line:

$$\begin{aligned} & \text{Poverty incidence (headcount ratio)}(\%) \\ &= \frac{\text{Number of persons living in households with incomes below the poverty line}}{\text{Total population}} \times 100 \end{aligned}$$

The Poverty Gap Index, on the other hand, indicates the magnitude of poverty measured as the mean income (or expenditure) shortfall from the poverty line as a proportion of that line (with non-poor having zero shortfall). It is calculated as:

$$\text{Poverty Gap Index} = \frac{1}{N} \sum \frac{G_i}{z}$$

where  $N$  is the total population,  $G_i$  is the poverty gap (that is, poverty line minus the household income<sup>218</sup> or  $(z - y_i)$ ), where  $y_i$  is the income and  $z$  is the poverty line.

Note that while the poverty incidence is calculated as a percentage, the poverty gap index is given as a proportion whose value may be converted into a percentage by multiplying by 100.

### Concepts and definitions

**Household income** consists of all receipts whether monetary or in kind (goods and services) that are received by households and their individual members at annual or more frequent intervals. Household income arises from employment (both employee and self-employed), property income (interests, dividends, rents received, royalties), income from the production of household services for own consumption (owner-occupied housing), current transfers received from governments, non-profit institutions and other households.

**Disposable income**, the concept which is recommended to be used to calculate the household income for defining poverty status, is defined as total income less direct taxes (net of refunds), compulsory fees and fines, social security contributions as well as compulsory and quasi-compulsory inter-household transfers paid.

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<sup>217</sup> Note that if household income data are not considered reliable, household expenditure data may be used as a substitute.

<sup>218</sup> Here too, if household income data are not considered reliable, household expenditure data may be used as a substitute.

While disposable income data are preferred, **total income** data may also be used to define poverty status of households. Whenever household income statistics are not available or are unreliable, **household expenditure statistics** may be used as a substitute. The expenditures could be based on household consumption expenditure, household expenditure, or actual final consumption.

**Household consumption expenditure** is the value of consumer goods and services acquired, used or paid for by a household through direct monetary purchases, own-account production, barter or as income in-kind for the satisfaction of the needs and wants of its members.

**Household expenditure** is defined as the sum of household consumption expenditure and the non-consumption expenditures of the household. The latter are those expenditures incurred by a household as transfers made to government, non-profit institutions and other households, without acquiring any goods or services in return for the satisfaction of the needs of its members. Household expenditure represents the total outlay that a household has to make to satisfy its needs and meet its “legal” commitments.

The **actual final consumption** of a household is the sum of its household consumption expenditure and the value of consumer goods and services acquired or used by the household through transfers from government, non-profit institutions or other households.

For more detailed information on household income and expenditure concepts and definitions, please refer to the *Resolution concerning household income and expenditure statistics*, adopted by the Seventeenth International Conference of Labour Statisticians (November-December 2003), available at: [http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS\\_087503/lang--en/index.htm](http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS_087503/lang--en/index.htm)

**Poverty Line:** the poverty line is defined as the threshold below which individuals in the total reference population are considered poor and above which they are considered non-poor. The threshold is generally defined as the per-capita monetary requirements an individual needs to afford the purchase of a basic bundle of goods and services. It is recommended that poverty line data be calculated, whenever possible, in terms of an absolute poverty line in real (that is, deflated) monetary terms in local currency.

The poverty line calculation should be regularly updated to take into account any changes in the minimal living standards and effects of inflation on welfare.

Note: Although for purposes of this Manual it is recommended to use an absolute poverty line, there is no internationally recognized statistical recommendation on the best approach to measure a national poverty line. Three common methods are: an absolute poverty line, a relative poverty line and the unmet basic needs method, described below.

An **absolute poverty line** is a fixed poverty threshold which defines the minimum cost of a reference living standard which can include minimal standards of food, clothing, health care and shelter. Many developing countries have adopted absolute national poverty lines while more developed countries often prefer to use a **relative poverty line**, for example, setting the threshold at 60 percent of the median disposable income or consumption expenditure.

Some countries calculate the poverty line or threshold using the *unmet basic needs (UBN) method*. The UBN approach focuses on a set of primary goods that are basic elements of well-being and considered necessary to live a good life. In country contexts where household surveys are not commonly found and income and consumption are difficult to measure, the census-based UBN measures can serve as alternative poverty analysis tools. The UBN approach often combines population census information on the condition of households (for example, construction material and number of people per room), access to sanitary services, children attending school and education and economic capacity of household members (generally the household head).<sup>219</sup>

**Household in poverty:** Households are defined as poor if their disposable income or consumption expenditure is below the poverty line taking into account the number of household members and composition (e.g., number of adults and children).<sup>220</sup>

Note that ideally the observation period for household disposable income (or consumption expenditure) should be over a *long observation period* (for example, one year) in order to take into account seasonal variations in household income (or expenditure).

### Recommended data sources and metadata

Calculation of the indicators depends on the availability of household survey data which permit the reliable estimation of household income (or alternatively, household consumption expenditures) to establish household poverty for a given reference period. Such estimates are best produced from household income and expenditure surveys (HIES), living standards measurement surveys (LSMS), or other household surveys that collect information on household income or expenditures.. For countries that do not have household surveys, good practices exist using population census data to calculate poverty measures using the basic needs approach as described below.

It is recommended to document metadata including the source, concept definitions, population coverage, geographic coverage, observation period, and poverty line calculation method.

Disaggregation by sex and geographic area (urban/rural) is highly recommended. Other informative breakdowns include household size and composition (presence of adults and children and their labour force status). Countries may wish to differentiate between households where members are unrelated individuals from those whose members are related, and by households with children headed by women versus households with children headed by men.

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<sup>219</sup> For a discussion of the use of the Basic Needs Approach, see Maria Emma Santos, Maria Ana Lugo, Luis Felipe Lopez-Calva, Guillermo Cruces and Diego Battiston, *Refining the Basic Needs Approach: A multidimensional analysis of poverty in Latin America*, ECLAC, Santiago de Chile, 2010.

<sup>220</sup> For a discussion of measures of welfare see A. Deaton: *The analysis of household surveys: A microeconomic approach* (The Johns Hopkins University Press, Baltimore, 1997); and J. Haughton and S. R. Khandker: *Handbook on Poverty and Inequality* (The World Bank, Washington, D.C., 2009).



## Interpretation guidelines

Data users are advised to review the method used to construct the poverty line, as different approaches can provide very different results for the indicators.

Poverty incidence (headcount ratio) provides information about the human size dimension of poverty in percentage terms. The advantage of using it as a poverty measure is that it is simple to construct and relatively straightforward to interpret. However, it does not take into account the intensity of poverty (how poor the poor are) or intra-household allocation (whether different members of a household enjoy different levels of well-being in terms of different member allocations of income or expenditures). The Poverty Gap Index, on the other hand, can be interpreted as the cost of eliminating poverty, expressed in relative terms to the poverty line. In an ideal world where 100 per cent targeted and efficient transfers are feasible, the Poverty Gap Index gives the sum of all transfers needed to bring every poor household to the poverty line where the Poverty Gap Index equals 0. Another way to interpret the Poverty Gap Index is as “the ratio of the minimum cost of eliminating poverty with perfect targeting (that is  $G_i$ ) to the maximum cost with no targeting (that is  $z...$ )”.<sup>221</sup>

The poverty gap measure is an important complement of the incidence of poverty. It is possible in a given economy that some groups have a high poverty incidence but a low poverty gap (when numerous members are just below the poverty line), while other groups have a low poverty incidence but a high poverty gap for those who are poor (when relatively few members are below the poverty line, but with extremely low levels of consumption or income).<sup>222</sup>

The poverty gap may be especially important for the evaluation of poverty reduction programmes and policies. Such a programme might be very effective at reducing the number of poor (and thus, lowering the incidence of poverty) but might do so only by lifting those who were closest to the poverty line out of poverty, and thus have a low impact on the poverty gap. Other policy interventions might be better at improving the situation of the very poor but be less effective in terms of the overall incidence of poverty (if it brings the very poor closer to the poverty line but not above it).<sup>223</sup>

It should be noted that these poverty measures are intended to provide information only on monetary well-being. However, poverty is associated not only to insufficient income (or consumption), but also to inadequate outcomes as regards other important aspects of well-being including health, nutrition, literacy, insecurity, and powerlessness.<sup>224</sup> These indicators thus provide valuable yet limited information regarding poverty in a society.

## Legal Framework Indicator

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<sup>221</sup> J. Haughton and S. R. Khandker: *op.cit.*

<sup>222</sup> See World Bank, “Measuring Poverty”, available at: <http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTPOVERTY/EXTPA/0,,contentMDK:20238988~menuPK:435055~pagePK:148956~piPK:216618~theSitePK:430367~isCURL:Y~isCURL:Y~isCURL:Y,00.html>

<sup>223</sup> World Bank, *op.cit.*

<sup>224</sup> World Bank, *op.cit.*

## Labour Administration

### Scope

Labour administration is defined as "public administration activities in the field of national labour policy". These activities include policy *shaping*, *formulation* and *implementation* via a labour administration system. It requires an institutional framework for coordination, in addition to one for consultation with and participation by social partners.

### Selected ILS on labour administration

The Labour Administration Convention, 1978 (No. 150), and Recommendation No. 158, require ratifying countries to ensure the organisation and effective operation of a system of labour administration and to secure consultation, co-operation and negotiations between the public authorities and the most representative organisations of employers and workers. The labour administration system is responsible for, or contributes to, the preparation, administration, coordination, checking and review of national labour policy and is responsible for preparation and implementation of laws and regulations to give effect to this policy. Further ILO instruments of reference, dealing with partial aspects of labour administration are the Tripartite Consultation (International Labour Standards) Convention, 1976 (No. 144), the Employment Policy Convention, 1964 (No. 122), the Labour Inspection Conventions (No. 81 and No. 129) and the Employment Service Convention, 1948 (No. 88).

### Information provided on the indicator

**Law, policy and institutions:** Existence of a national labour policy/sectoral labour policies (e.g. employment policy, social security, vocational training and education, industrial relations, labour protection including OSH, etc)? Which workers are included within the scope of labour administration? Is there a coordination system within the labour administration system for the implementation of national labour policy? Is there an institutional and/or legislative framework which integrates the Labour administration system with its essential functions (labour standards, industrial relations, employment, information and research)? Are there services which deliver technical advice and other services? Is there an institutional framework which allows for the involvement of social partners in labour administration functions? What are the resources (e.g. budget share) allocated to the Ministry entrusted with labour administration functions?

**Evidence of implementation effectiveness:** Comments from ILO supervisory bodies, if any.

**Ratification of ILO Conventions:** The Labour Administration Convention, 1978 (No. 150).

### Additional sources of information

#### ILO sources

- Lab/Admin website: <http://www.ilo.org/labadmin>;
- Labour administration audit reports, if any;

*Additional information to be provided:* the share of budget (compared to overall governmental budget) allocated to ministries in the field of labour administration; development of the budget allocated to the Ministry of Labour (MOL) or other ministries in the field of labour administration over a period of ten years; resource situation (human and material) in general.

## ANNEX

## **Annex 1. Types of sources for statistical decent work indicators**

### **Population census**

A population census is the official procedure of systematically acquiring and recording demographic, economic and social information about the members of the population in a country or in a well delimited part of a country, normally at regular, long-term intervals (e.g. every 10 years). The population census is a primary source of these basic benchmark data, covering not only the settled population but also homeless persons and nomadic groups. Data from population censuses should allow presentation and analysis in terms of statistics on persons and households and for a wide variety of geographical units, ranging from the country as a whole to individual small localities or city blocks. This source provides benchmark data on the economically active population.

### **Labour force survey**

A labour force survey (LFS) is a household-based sample survey focused on the labour force status of the working age population and related statistics. Survey respondents are members of sampled households. The LFS seeks to provide reliable, coherent information from a socio-economic perspective about the total working age population and its components, in particular the labour force. Such surveys often allow disaggregations of the labour force by personal characteristics such as sex, age, educational attainment, and in some cases, by migrant status and ethnicity as well as information about the jobs held by employed persons (e.g. occupation and type of contract). The LFS, which is most often conducted at least once a year (in many cases on a quarterly, monthly or even continual basis), constitutes the main data collection instrument for statistics on employment and unemployment worldwide. The concept of employment in household surveys refers to employed persons, including self-employed workers, rather than to jobs, since a person may have several jobs and work in different establishments. Some labour force surveys allow breakdowns of employed persons according to multiple jobholding characteristics.

### **Household income and expenditure survey**

A household income and expenditure survey (HIES) collects information about the expenditure, income and household characteristics of a sample of resident households. The general objectives for conducting the HIES are to identify the net levels and patterns of expenditure of private households on a comprehensive range of goods and services purchased for private use and determine how these levels and patterns vary according to income levels and other characteristics of households, such as size and composition, location and principal sources of cash income. Such surveys may be used to estimate poverty and income distribution variables.

### **Other household survey**

Other household survey refers to any other household-based survey sources apart from labour force surveys (LFS) and household income and expenditure surveys (HIES) from which

periodic information is collected for the purpose of generating labour statistics. So-called multipurpose household surveys fall into this category.

### **Economic or establishment census**

An economic/establishment census is a procedure of systematically acquiring and recording information on the full set of economic units belonging to a given population or universe. It is the complete enumeration of a population or groups at a point in time with respect to well defined characteristics. The partial enumeration resulting from a failure to cover the whole population may be referred to as an “incomplete census”. An economic census is a valuable source of benchmark information on total employment and size of establishments, employment by economic activity, hours of work, and earnings, among others. Employment is measured as the number of jobs held by employees, not the number of employed persons. The units of observation are establishments or enterprises.

### **Labour-related establishment survey**

A labour-related establishment survey is a survey of a sample of establishments or enterprises which represent worksites for employees. Information about the jobs held by self-employed workers is typically excluded from such surveys. They are conducted from a production perspective and seek to describe labour as an input to production in establishments. Such surveys collect information on jobs rather than on persons employed, thus persons who have jobs in more than one establishment will be counted more than once. Moreover, they often only cover a subset of all establishments in an industry, normally those above a certain size limit, and typically sample only formal sector establishments. The agricultural sector is commonly excluded and sometimes such surveys are limited in scope to a key sector of the economy such as manufacturing. Such a survey is often conducted in order to provide estimates on employment, hours, and earnings of employees on nonfarm payrolls by industry. They may also provide information on variables such as employment or wages by occupation, labour cost, basic data for productivity, or employee benefits.

### **Other establishment survey**

All other establishment surveys refer to those sample-based surveys whose units of observation are enterprises or establishments and whose main purpose is not to collect labour-related data but from which nonetheless employment-related estimates may be derived.

### **Official estimates**

Official estimates refers to information provided by national official entities which is derived from different sources and computed following certain assumptions that one should analyse cautiously prior to any interpretation. Official estimates are used in the absence of official surveys, census-based data or administrative records.

### **Insurance records**

Insurance records are administrative records related to contributions made by and/or benefits received by employers, employees and the unemployed that are used to obtain information on occupational injuries, unemployment insurance and occupational safety and health.

### **Employment office records**

Employment office records are administrative data gathered by employment offices through the declaration of registered employers, employees and unemployed persons from which labour-related data on topics such as job vacancies and unemployed jobseekers are made available.

### **Collective bargaining agreements**

Collective bargaining agreements (CBA) are written agreements regarding working conditions and terms of employment concluded between one or more employers or employers' organizations, on the one hand, and one or more representative workers' organizations or duly elected and authorised representatives of the workers (according to national laws and regulations), on the other. Ministries of Labour often maintain administrative records on CBA, including information on collective bargaining coverage, content and duration of the agreements.

### **Labour inspectorate records**

Labour inspectorate records are administrative records about the workplace inspections carried out by public officials or other authorities who are responsible for key labour inspection activities to secure the enforcement of the legal provisions relating to conditions of work and the protection of workers while engaged in their work. Information may include total number of work places which could be selected for inspection, number of labour inspectors, and number of labour inspection visits, among others.

### **Population register**

A population register is a mechanism for the continuous recording of selected information pertaining to each member of the resident population of a country or area, making it possible to determine up-to-date information about the size and characteristics of the population at selected points in time. Because of the nature of a population register, its organization, as well as its operation, should have a legal basis. Population registers start with a base consisting of an inventory of the inhabitants of an area and their characteristics, such as date of birth, sex, marital status, place of birth, place of residence, citizenship and language.

### **Establishment or business register**

An establishment or business register is a mechanism for recording selected information pertaining to establishments or businesses in a country or area. National business registers are often maintained by a public entity in accordance with national legislation. The business register contains current information on the number of registered businesses and may include key information about the business such as its legal form, headquarters, capital, and legal representatives. Business registers differ from one another in terms of their content, updating

frequency, legal checks, legal value of the registered information, and the ability to access documents. They can provide a sampling frame for the selection of establishments, for example, for employment-based establishment surveys.

### **Other administrative records and related sources**

Other administrative records and related sources refers to any administrative source of data *excluding* insurance records, employment office records, collective bargaining agreements, labour inspectorate records, population register, and establishment or business register.

Administrative records are systematic registers related to administrative procedures maintained by various institutions of the public sector. They allow carrying out the administration or implementation of government programmes. They are intended to control, verify and monitor compliance with legal and/or administrative obligations. Data from administrative records are thus usually by-products of administrative processes and can be a very economic source of data. They are often based on continuous operations, and can therefore be a useful source of flow statistics and other longitudinal data.

### **Consumer price surveys**

Consumer price surveys are designed to collect information for the consumer price index (CPI). A CPI is an estimate based on a sample of households to estimate weights, and a sample of zones within regions, a sample of outlets, a sample of goods and services and a sample of time periods for price observation. The sample size and sample selection methods for both outlets and the goods and services for which price movements over time are to be observed should ensure that the prices collected are representative and sufficient to meet the requirements for the accuracy of the index, but also that the collection process is cost-effective. The sample of prices should reflect the importance, in terms of relative expenditures, of the goods and services available for purchase by consumers in the reference period, the number, types and geographic spread of outlets that are relevant for each good and service, and the dispersion of prices and price changes across outlets.

### **National Accounts**

National accounts, based on the internationally recommended System of National Accounts (SNA), are a coherent, consistent and integrated set of macroeconomic accounts, balance sheets and tables based on a set of internationally agreed concepts, definitions, classifications and accounting rules. National accounts provide a comprehensive accounting framework within which economic data can be compiled and presented in a format that is designed for purposes of economic analysis, decision-taking and policy-making. There are a number of aggregate measures in the national accounts, most notably gross domestic product (GDP) which is the most widely used measure of aggregate economic activity in a period.

### **Other official sources**

Other official sources refers to any official sources other than those mentioned above that provide data on topics related to employment, decent work or the economic or social context. For example, it covers surveys of educational or training institutions conducted by official entities and which are outside the scope of household or establishment surveys.

## Annex 2. Classifications used to disaggregate statistical indicator data

The guidelines in this Manual present recommendations on disaggregations of statistical indicators to allow for analysis by component groups, for example, by sex. As already indicated, most of the indicators should be disaggregated by sex, that is, for men and women separately in addition to the total. The following classifications could be valuable to disaggregate and analyse the statistical indicators and are given only as examples judged to be useful:

**1. By age group.** Depending on the indicator, the age band classification recommended may be either (1) five-year age bands, that is: 10-14 (only for those countries where the lower limit of working age population is under fifteen), 15-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65-69, 70-74 and 75 years and over or (2) a broader age band classification, that is: 15-24, 25-34, 35-54, 55-64 and 65 and over.

**2. By geographical coverage.** Data by geographical coverage entail a disaggregation by rural and urban areas. The differentiation between these geographic areas should be made according to national statistical definitions.

**3. By educational attainment group.** It is recommended that data by level of education be calculated according to the highest level of education completed, classified according to the International Standard Classification of Education (ISCED). The latest revision of ISCED was in 2011. For more information, please see: <http://www.uis.unesco.org/Education/Pages/international-standard-classification-of-education.aspx>

**4. By status in employment.** Jobs can be classified with respect to the type of explicit or implicit contract of employment the person has with other persons or organizations. The basic criteria used to define the groups of the classification are the type of economic risk and the type of authority over establishments and other workers which the job incumbents have or will have. Topics disaggregated by status in employment should be provided according to the latest version of the International Standard Classification of Status in Employment (ICSE-93). For several indicators, figures for both total employment and employees (paid employment) may be necessary. For more information, please see Resolution concerning the International Classification of Status in Employment (ICSE)

Adopted by the Fifteenth International Conference of Labour Statisticians (January 1993):

[http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS\\_087562/lang--en/index.htm](http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS_087562/lang--en/index.htm)

**5. By economic activity group.** This type of classification refers to the main activity of the establishment in which a person worked during the reference period, or last worked if unemployed. The branch of economic activity of a person does not depend on the specific duties or functions of the person's job, but on the characteristics of the economic unit in which this person works. It is recommended that indicators disaggregated by economic activity be tabulated according to the latest version of the International Standard Industrial Classification of All Economic Activities (ISIC-



Rev. 4) as well as by the national industrial classification system if such a national classification exists in order to facilitate international comparability of the data. For more information on ISIC-Rev. 4, please see: <http://unstats.un.org/unsd/cr/registry/isic-4.asp> . (Note that the System of National Accounts and the Resolutions of the International Conference of Labour Statisticians (ICLS) are consistent as regards the definition of economic activity.)

**6. By occupation group.** Information on occupation provides a description of the set of tasks and duties which are carried out by, or can be assigned to, one person. Persons are classified by occupations through their relationship to a present job, for employed persons, or a past job, for persons who are unemployed. It is recommended that indicators disaggregated by occupation group be provided according to the latest version of the International Standard Classification of Occupations (ISCO-08) as well as by the national occupational classification system if such a national classification exists in order to facilitate international comparability of the data. For more information on ISCO-08, please see: <http://www.ilo.org/public/english/bureau/stat/isco/isco08/>

**7. By institutional sector.** Data by institutional sector refers to disaggregations by public and private sector employment. Public sector employment covers employment in the government sector plus employment in publicly-owned resident enterprises and companies, operating at central, state (or regional) and local levels of government. It covers all persons employed directly by those institutions, regardless of the particular type of employment contract. Private sector employment comprises employment in all resident units operated by private enterprises, that is, it excludes enterprises controlled or operated by the government sector.

**8. By weekly hours actually worked.** This classification is used to collect data on the distribution of all employed persons according to their weekly hours actually worked. It is recommended that data be tabulated according to the number of employed persons who fall in the standardized hour bands as follows: (1) no hours actually worked (0 hours), (2) 1-14 hours, (3) 15-29 hours, (4) 30-34 hours, (5) 35-39 hours, (6) 40-48 hours, (7) 49 hours or more, and (8) Total (all weekly hours band categories).

**9. By type of incapacity.** It is recommended that data on occupational injuries be disaggregated by type of incapacity, reflecting (1) cases of permanent incapacity for work (where the persons injured were never again able to perform the normal duties of work in the job or post occupied at the time of the occupational accident causing the injury) and (2) cases of temporary incapacity (where the workers injured were unable to work from the day after the day of the accident, but were again able to perform the normal duties of work in the job or post occupied at the time of the occupational accident causing the injury within a period of one year from the day of the accident).

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