

Decent Work and the Sustainable Development Goals

A Guidebook on SDG Labour Market Indicators



International
Labour
Organization



Department
of Statistics

INTERNATIONAL LABOUR ORGANIZATION

**Decent Work and the Sustainable Development Goals:
A Guidebook on SDG Labour Market Indicators**

INTERNATIONAL LABOUR OFFICE GENEVA

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Preface

The world achieved great progress under the Millennium Development Goals (better known as the MDGs). However, by the time they expired in 2015, some MDGs had not yet been accomplished and many new challenges had emerged in the world. The Sustainable Development Goals, or the SDGs, successors of the MDGs, take on the unfinished aspects of the MDG agenda as well as numerous new goals pertaining to complex, modern issues. The 2030 Agenda is an encompassing, ambitious and integral agenda for sustainable development, applicable to all countries regardless of their stage of development. Indeed, one of the key principles of the SDGs is leaving no one behind.

The quest for decent work for all men and women, for productive, high-quality employment and for inclusive labour markets is encompassed in the 2030 Agenda under Goal 8, but it is also seen as a cross-cutting topic, underlying other goals as well and intertwined with many targets across the 2030 Agenda.

In order to monitor progress made under the SDGs, it is necessary to have a set of appropriate indicators, agreed on at the international level both by data users and data producers. Given the increased complexity of the SDGs compared to the MDGs, the list of SDG indicators is much longer and covers a wider variety of topics. In many instances, the new challenges included in the 2030 Agenda require designing indicators specifically for this purpose. Thus, the SDG indicators range across different levels of methodological development and data availability.

While the 60 indicators under the MDGs were mostly based on existing indicators and data sources with limited disaggregation, the SDGs have more than 230 accompanying indicators, many of which are conceptually complex and include a multitude of requested disaggregations.

The SDG indicators pertaining to the labour market are numerous and cover a wide range of labour-related topics, referring to both the quantity and the quality of employment, as well as to the national context, along with other issues. The SDG labour market indicators include indicators with an established, internationally agreed methodology and data regularly produced by the majority of countries around the world, as well as indicators that still need methodological development before getting to the data compilation stages. Most of the SDG labour market indicators pertain to Goal 8, but some refer to other goals, such as Goals 1, 5 and 10.

This Guidebook provides a detailed overview of the SDG labour market indicators. It presents a review of the standards and methods used for the compilation, calculation and dissemination of the SDG labour market indicators, and it includes an update on the methodological development plans for those indicators that do not yet have an agreed methodology. It is intended to serve as a manual of best practices for the compilation, dissemination and interpretation of SDG labour market indicators, with a view to monitoring progress made at the national and international levels towards the achievement of the SDGs.

Contents

	<i>Page</i>
Acknowledgements	iii
Preface	v
1. Introduction.....	1
1.1. The 2030 Agenda and the quest for Decent Work	1
1.2. From the MDGs to the SDGs.....	3
1.3. SDG indicators	4
1.4. Role and mandate of custodian agencies	6
1.5. Tier classification of SDG indicators	7
2. Labour market indicators with an established methodology (tiers I and II)	9
2.1. Indicators under the ILO’s custodianship of Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all	11
2.1.1. Labour productivity	11
2.1.2. Informal employment	16
2.1.3. Hourly earnings and pay gap.....	20
2.1.4. Unemployment rate	26
2.1.5. Youth NEET rate.....	31
2.1.6. Child labour.....	36
2.1.7. Occupational injuries.....	40
2.2. Indicators under the ILO’s custodianship of other Goals	45
2.2.1. Social protection coverage	46
2.2.2. Female share in management	50
2.2.3. Labour share of GDP.....	54
2.3. Other indicators with ILO’s involvement	58
2.3.1. Working poverty.....	58
2.3.2. Participation in education and training.....	61
3. Labour market indicators requiring methodological development (tier III)	63
3.1. Compliance with labour rights	64
3.2. National strategies for youth employment	64
3.3. Recruitment cost	66

3.4. Law of the sea	67
3.5. Verified cases of killings and kidnapping	67
4. Labour market indicators for which the ILO is not custodian or a partner agency (but is involved)	69
5. Cross-cutting nature of the SDG labour market indicators	70
5.1. Links and interdependencies among the SDG labour market indicators	70
5.2. SDG labour market indicators underlying (non-labour market) targets and goals	71
6. Data disaggregation.....	72
6.1. Considerations on the disaggregation of labour statistics	72
6.2. Widely available disaggregations at the international level.....	73
6.2.1. Sex.....	73
6.2.2. Age	73
6.2.3. Education.....	73
6.2.4. Occupation.....	73
6.2.5. Economic activity	74
6.2.6. Status in employment	74
6.3. Challenging (but necessary) disaggregations	74
6.3.1. Urban/rural areas	74
6.3.2. Migrant status	74
6.3.3. Disability status	75
7. Considerations on data sources	76
7.1. Population census.....	76
7.2. Household surveys	76
7.3. Establishment census and surveys.....	77
7.4. Administrative records	77
7.5. National accounts	78
7.6. Official estimates	78
7.7. Big data	78
8. Concluding remarks	80
References	81

1. Introduction

1.1. The 2030 Agenda and the quest for Decent Work

The Millennium Development Goals (MDGs) were the eight international development goals established following the Millennium Summit of the United Nations (UN) in 2000, where the United Nations Millennium Declaration¹ was adopted. The MDGs were meant to be achieved by 2015 and provided a global and overarching framework for economic development, including poverty reduction, improved health and education outcomes and other priority areas across developing countries.²

While global progress towards achieving the MDGs was very successful in many areas, progress was uneven in terms of both regions and goals. By their deadline in 2015, some of the goals remained unachieved and many new challenges had emerged in the world.

Thus, the international community decided to take on both the unfinished aspects of the MDG agenda and the new global challenges in a more encompassing, integral manner, not only seeking to achieve development across all regions and goals but also ensuring the sustainability of this progress. Sustainable development is defined in the 1987 Report of the World Commission on Environment and Development³ as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”. Sustainable development associates three key elements, which are interlinked and interdependent: economic growth, social inclusion and environmental protection. Based on this, world leaders adopted a set of 17 Sustainable Development Goals (SDGs) during the United Nations Sustainable Development Summit in September 2015. These goals constitute the core of the Agenda for Sustainable Development to be accomplished by 2030. The 17 SDGs listed in table 1, also known as the “Global Goals”, came into force on 1 January 2016.⁴

¹ United Nations Millennium Declaration, General Assembly resolution 55/2 (September 2000), available at <http://www.un.org/millennium/declaration/ares552e.pdf>.

² For more information on the Millennium Development Goals indicators, please visit <http://mdgs.un.org/unsd/mdg/>.

³ The Report of the World Commission on Environment and Development: Our Common Future, transmitted to the UN General Assembly in document A/42/427, is available at <http://www.un-documents.net/wced-ocf.htm>.

⁴ For more detailed information on the 2030 Agenda for Sustainable Development, see <http://www.un.org/sustainabledevelopment/development-agenda/> or see General Assembly resolution 70/1 of 25 September 2015 at http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E.

Table 1. List of Sustainable Development Goals

Goal 1	End poverty in all its forms everywhere
Goal 2	End hunger, achieve food security and improved nutrition and promote sustainable agriculture
Goal 3	Ensure healthy lives and promote well-being for all at all ages
Goal 4	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
Goal 5	Achieve gender equality and empower all women and girls
Goal 6	Ensure availability and sustainable management of water and sanitation for all
Goal 7	Ensure access to affordable, reliable, sustainable and modern energy for all
Goal 8	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
Goal 9	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
Goal 10	Reduce inequality within and among countries
Goal 11	Make cities and human settlements inclusive, safe, resilient and sustainable
Goal 12	Ensure sustainable consumption and production patterns
Goal 13	Take urgent action to combat climate change and its impacts
Goal 14	Conserve and sustainably use the oceans, seas and marine resources for sustainable development
Goal 15	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
Goal 16	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
Goal 17	Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development

These 17 SDGs build on the MDGs but aim to go further, striving to end all forms of poverty and ensure sustainable development everywhere. They are universal, that is, they apply to countries in all stages of development and take into account differences in national contexts, capacities and priorities. They bring together efforts by various actors, including governments, international organizations, civil society and the private sector, although governments are expected to take ownership and design national frameworks for the realization of the 2030 Agenda. The Goals promote prosperity while protecting the planet, putting forward the idea that ending poverty must be aligned with strategies for economic growth and addressing at the same time social needs and environmental concerns. The 17 Goals are interconnected and include many cross-cutting elements, such as gender equality. It is also worth noting that the 2030 Agenda specifically presents the means of implementation to achieve these goals by their deadline.

In this context, the quest for decent work for all has gained importance in the SDGs in comparison with the MDGs. The central role of decent work in promoting economic development was already recognized in the MDGs, but the SDGs further highlighted its relevance and increased its prominence.

Within the MDG framework, decent work was enshrined in Goal 1 (Eradicate extreme poverty and hunger) and more precisely in Target 1.B (Achieve full and productive employment and decent work for all, including women and young people). For monitoring progress made towards the accomplishment of this target, four indicators were selected: the growth rate of gross domestic product (GDP) per person employed, the employment-to-population ratio, the proportion of employed people living with their families on less than US\$1.25 (at purchasing power parity (PPP)) per person per day and the proportion of own-account and contributing family workers in total employment (also known as the vulnerable employment rate). Decent work was also represented under Goal 3 (Promote gender equality and empower women), which included a labour market

indicator to measure progress made towards gender equality (the share of women in wage employment in the non-agricultural sector).⁵

The SDG framework emphasizes decent work and Goal 8 is dedicated to it (Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all), taking the form of 12 targets covering a range of topics, such as per capita GDP growth, labour productivity, the formalization of the economy and labour market, the protection of migrant workers, the situation of youth in the labour market and the eradication of forced labour and the worst forms of child labour.⁶ There are 17 indicators under Goal 8.⁷

In addition to being clearly included as a separate goal, decent work is also a cross-cutting topic in the SDG framework, with a strong presence in many other goals, such as Goal 1 (End poverty), Goal 4 (Ensure quality education), Goal 5 (Achieve gender equality), Goal 10 (Reduce inequality), Goal 14 (Conserve marine resources), and Goal 16 (Promote justice and institutions).

1.2. From the MDGs to the SDGs

The SDGs take on the unfinished aspects of the MDGs, in addition to tackling many new challenges. Thus, the SDGs are broader in scope, given that they cover the three dimensions of sustainable development: economic growth, social inclusion and environmental protection. They are ambitious and far-reaching, attempting to address social, economic and environmental concerns. Due to their wider scope, the SDGs are also considerably more numerous than the MDGs (the MDGs consisted of eight Goals and 21 targets, whereas the SDGs consist of 17 Goals and 169 targets). Also, while the MDGs focused mainly on developing countries, the SDGs are universal and apply to countries at all stages of development.

The greater complexity of the SDGs vis-à-vis the MDGs also implies a higher complexity for the measurement of progress made towards the achievement of the goals. In this regard, the list of SDG indicators approved by the United Nations General Assembly in July 2017 includes more than 230 indicators, many of which do not yet have an internationally agreed methodology, compared to the 60 indicators used to monitor progress under the MDGs, which were all relatively simple and widely available.

It is important to note the emphasis placed on the implementation of the SDGs, including the mobilization of financial resources, capacity building and technology, as well as the need for reliable and timely data for monitoring and robust institutions to follow up the 2030 Agenda. It is also worth highlighting the greater emphasis on data disaggregation, justified by the need to ensure that no one is left behind in the global development agenda.

Table 2 compares the main features of the MDGs and the SDGs.

⁵ For more information on the Millennium Development Goals indicators, please visit <http://mdgs.un.org/unsd/mdg/>.

⁶ For the complete list of Sustainable Development Goals and targets, visit <http://www.un.org/sustainabledevelopment/sustainable-development-goals/>. For targets under Goal 8 specifically, visit <http://www.un.org/sustainabledevelopment/economic-growth/>.

⁷ For the complete list of global Sustainable Development Goal indicators, visit <https://unstats.un.org/sdgs/indicators/indicators-list/>.

Table 2. Key features of the MDGs and the SDGs compared

	MDGs	SDGs
Scope	Address extreme poverty in its many dimensions	Promote sustainable development through economic growth, social inclusion and environmental protection
Coverage	Focus on developing countries, mainly low-income countries	Applicable to all countries
Actors involved	Governments and relevant international organizations	Governments, relevant international organizations, civil society and the private sector
Composition	Eight Goals and 21 targets	17 Goals and 169 targets
Monitoring and measurement	60 indicators: <ul style="list-style-type: none"> – All relatively simple indicators. – Homogeneous set of indicators in terms of data availability and methodological development. – Data widely available for most indicators. – Limited data disaggregations requested. 	232 different indicators: ¹ <ul style="list-style-type: none"> – Many complex indicators, sometimes with several dimensions or sub-indicators. – Considerable variability across indicators in terms of data availability and methodological development. ² – Considerable variability in data availability across regions and countries for indicators with an established methodology; no data available for indicators without an established methodology. – Many disaggregations requested, including some complex and still undefined classifications. ³
New features introduced in the SDGs		<p>SDG global indicator framework approved by the General Assembly in its resolution 71/313 of 6 July 2017, signalling the increased importance of, and political commitment to, SDG monitoring</p> <p>Increased importance given to the integrated nature of the SDGs</p> <p>Strong focus on the actual implementation of the 2030 Agenda</p> <p>Monitoring not only by means of statistical indicators but also by following up policy formulation and implementation</p> <p>More actors involved as drivers of progress, including civil society and the private sector</p> <p>Explicit promotion of peaceful and inclusive societies with accountable institutions (Goal 16)</p> <p>Concrete measures to tackle climate change</p>

¹ The total number of indicators in the list of global SDG indicators (July 2017) is 244, but because some indicators repeat under different targets the actual number of unique indicators is 232.

² See description of tier classification of SDG global indicators in section 1.5.

³ See review of disaggregations requested for SDG global indicators pertaining to decent work in section 5.

1.3. SDG indicators

In order to monitor progress made towards the achievement of the global Goals and the corresponding targets, identify areas of concern and inform policy formulation, it is necessary to have a set of valid and reliable indicators. At the national level, to assess to what extent the 2030 Agenda is implemented within countries, governments can prioritize

the indicators that best serve national needs, taking into account the national context and statistical development. However, at the global level, in order to measure progress from a wider point of view, it is crucial to have a set of indicators that can be produced in a regular, timely, reliable and comparable manner, within a framework agreed upon at the international level. This global indicator framework was developed by the Inter-Agency and Expert Group on Sustainable Development Goal Indicators⁸ and agreed upon at the forty-eighth session of the UN Statistical Commission, held in March 2017. It was later adopted by the UN General Assembly in July 2017.⁹

Each global SDG indicator is assigned to one or more custodian agencies (see section 1.4 below), which are responsible for reporting on the corresponding indicator at the global level. Sometimes other partner agencies beyond the custodian agencies are also identified as having valuable expertise for the indicator in question. Each global SDG indicator is also given a tier, based on its methodological development and data availability (see section 1.5).

The International Labour Organization (ILO) is the sole custodian of 11 global SDG indicators, is joint custodian with other agencies for 3 indicators and is involved as a partner agency for 3 indicators; table 3 lists those 17 indicators as well as 1 indicator that is still under discussion. On the basis of its mandate and expertise, the ILO is also involved in the methodological development and other statistical aspects of some indicators for which it is neither custodian nor a partner agency. This is the case, for instance, of indicator 5.4.1 on the proportion of time spent on unpaid domestic and care work.

Table 3. Global SDG indicators for which the ILO is the custodian or partner agency

Indicator number	Indicator title	Custodian agency/ies	Partner agency/ies	Tier
1.1.1	Proportion of population below the international poverty line, by sex, age, employment status and geographical location (urban/rural)	World Bank	ILO	I
1.3.1	Proportion of population covered by social protection floors/systems by sex, distinguishing children, unemployed persons, older persons, persons with disabilities, pregnant women, newborns, work-injury victims and the poor and the vulnerable	ILO	World Bank	II
1.a.2	Proportion of total government spending on essential services (education, health and social protection)	<i>Under discussion (ILO, UNESCO-UIS, WHO)</i>		II
4.3.1	Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex	UNESCO-UIS	OECD, EUROSTAT, ILO	II
5.5.2	Proportion of women in managerial positions	ILO		I
8.2.1	Annual growth rate of real GDP per employed person	ILO	World Bank, UNSD	I
8.3.1	Proportion of informal employment in non-agriculture employment, by sex	ILO		II
8.5.1	Average hourly earnings of female and male employees, by occupation, age and persons with disabilities	ILO		II
8.5.2	Unemployment rate, by sex, age and persons with disabilities	ILO		I

⁸ For more information on the Inter-Agency and Expert Group, its membership, mandate and activities, see <https://unstats.un.org/sdgs/iaeg-sdgs/>.

⁹ The list of global SDG indicators available at <https://unstats.un.org/sdgs/indicators/indicators-list/>.

Indicator number	Indicator title	Custodian agency/ies	Partner agency/ies	Tier
8.6.1	Proportion of youth (aged 15–24 years) not in education, employment or training	ILO		I
8.7.1	Proportion and number of children aged 5–17 years engaged in child labour, by sex and age	ILO and UNICEF		II
8.8.1	Frequency rates of fatal and non-fatal occupational injuries, by sex and migrant status	ILO		II
8.8.2	Level of national compliance of labour rights (freedom of association and collective bargaining) based on International Labour Organization (ILO) textual sources and national legislation, by sex and migrant status	ILO		III
8.b.1	Existence of a developed and operationalized national strategy for youth employment, as a distinct strategy or as part of a national employment strategy	ILO	World Bank, OECD	III
10.4.1	Labour share of GDP, comprising wages and social protection transfers	ILO	IMF	II
10.7.1	Recruitment cost borne by employee as a proportion of yearly income earned in country of destination	ILO and World Bank		III
14.c.1	Number of countries making progress in ratifying, accepting and implementing through legal, policy and institutional frameworks, ocean-related instruments that implement international law, as reflected in the United Nation Convention on the Law of the Sea, for the conservation and sustainable use of the oceans and their resources	UN-DOALOS, FAO, UNEP, ILO, UN-Oceans		III
16.10.1	Number of verified cases of killing, kidnapping, enforced disappearance, arbitrary detention and torture of journalists, associated media personnel, trade unionists and human rights advocates in the previous 12 months	OHCHR	ILO, UNESCO-UIS	III

1.4. Role and mandate of custodian agencies

The process of global SDG monitoring and reporting (reporting data on all the global SDG indicators, including country-level data and global and regional estimates) involves many actors, as described below.

National agencies (national statistical offices, line ministries, etc.) collect and compile national data and make it widely accessible to the public along with the relevant metadata, or provide it specifically for global reporting to the relevant international agencies.

Each global SDG indicator is assigned one or several custodian agencies. These custodian agencies are specialized international agencies with statistical, methodological and analytical expertise in a given domain and are mandated to coordinate related statistical and methodological work. They use their expertise to compile the country-level data produced by national agencies and build cross-country datasets for the indicators under their custodianship. They ensure the robustness and comparability of the country-level statistics by verifying that the concepts, definitions, classifications and methodologies used to produce the data follow international guidelines. They also document factors that adversely affect comparability and make adjustments to improve international comparability, where necessary and feasible. When country data are missing, agencies try to fill in the gaps, to the extent possible, by resorting to other sources or by utilizing imputation or estimation methods. They are also responsible for calculating global and regional aggregates. International agencies then provide the country-level, global and

regional statistics, along with the relevant metadata, to the United Nations Statistics Division (UNSD), which has overall responsibility for disseminating all of the data across all indicators. Where two or more international agencies are joint custodians of a given indicator, they work in close collaboration to provide a single consolidated dataset to UNSD. Sometimes, in addition to the custodian agency/ies, there are other partner agencies with valuable knowledge related to the corresponding domain; these can be consulted and can provide useful statistical or analytical inputs or comments.¹⁰

For indicators with no internationally agreed methodology (tier III indicators; see section 3 below), custodian agencies are in charge of leading methodological development efforts, which entails the coordination of inputs and proposals by various experts, the development of statistical standards and seeking support for their adoption at the national level.

Custodian agencies are also responsible for ensuring that the corresponding indicators are produced by all countries in line with relevant international standards. This includes providing technical but also, where possible, financial support, where needed, to national statistical systems and developing capacity-building tools.

UNSD makes available all the internationally comparable country-level data received from custodian agencies on each of the indicators, as well as the global and regional aggregates and all the relevant metadata, in its SDG Indicators global database.¹¹

Regional agencies, including regional offices of international organizations such as the United Nations regional commissions and regional statistical offices such as Eurostat, may contribute to the data reporting process by acting as intermediaries, facilitating data flows from countries to custodian agencies. In some cases, they may also collect and compile country-level data in the countries they cover and may even adapt international standards to their specific regional context.

1.5. Tier classification of SDG indicators

With a view to organizing the work involving the global SDG indicators, a decision was taken by the Inter-Agency and Expert Group on Sustainable Development Goal Indicators to classify indicators into three tiers, according to whether or not there is already an internationally agreed methodology for them and also according to their data availability. Tier I consists of global SDG indicators that already have a well-established methodology, agreed upon at the international level and for which data is regularly produced and widely available for at least half of the countries and half the population of the relevant regions. Tier II consists of global SDG indicators that already have a clearly defined and internationally agreed methodology but for which data is available for a more limited number of countries or not for all regions and is not regularly produced. Tier III

¹⁰ As the implementation of the 2030 Agenda progresses and we see the emergence of national reporting platforms (NRPs), mechanisms through which countries will report voluntarily on SDG indicators and select items at the national level, the role of custodian agencies may evolve.

¹¹ The SDG Indicators global database is available at <https://unstats.un.org/sdgs/indicators/database/>.

consists of global SDG indicators that still do not have a methodology in place, including clear definitions, concepts and classifications.¹²

In the most recent tier classification of global SDG indicators,¹³ approximately 40 per cent of the indicators are tier I, while 31 per cent are tier II and 27 per cent are tier III, with 2 per cent having multiple tiers (due to differences in indicator components). Thus, more than a quarter of the indicators still require substantial methodological work before moving onto the data compilation stages. Notably, of the 14 indicators for which the ILO is custodian (solely or jointly with other agencies), only four indicators are tier III.

¹² For detailed information on the tier classification, see <https://unstats.un.org/sdgs/iaeg-sdgs/tier-classification/>.

¹³ The classification as of 11 May 2018 is available at <https://unstats.un.org/sdgs/iaeg-sdgs/tier-classification/>.

2. Labour market indicators with an established methodology (tiers I and II)

In the list of global SDG indicators, indicators that are conceptually clear and have an internationally agreed methodology based on international standards, whether with data regularly available for at least half of the countries and representing at least half of the population of each region (tier I indicators) or whether with more limited data availability (tier II indicators), are the indicators that have been used for monitoring and reporting on the SDGs since their inception. The ILO is the sole custodian agency for nine tier I and tier II indicators and joint custodian for one additional indicator. Most of the tier I and tier II indicators under ILO custodianship refer to Goal 8 (one indicators) but some refer to Goals 1, 5 and 10 (one indicator each). Detailed methodological information on each of these indicators, along with examples of data visualization and analytical conclusions, are provided in the following sections.

For many of the indicators described below, the basic underlying concepts were established by the resolution concerning statistics of work, employment and labour underutilization adopted by the 19th International Conference of Labour Statisticians (ICLS) in October 2013.¹⁴ These standards replaced those adopted in 1982, which had been widely used by countries as a reference for producing national labour force statistics. The updated standards introduced a number of revisions, as described in box 1, which have important implications for some of the basic concepts relating to employment and unemployment.

The adoption of new standards on statistics of work, employment and labour underutilization by countries is under way. As with any revision, the transition to the new standards may lead to a break in the series of key labour market and related SDG indicators. This is expected particularly in countries where a part of the population is engaged exclusively in producing goods mainly intended for own final use, such as subsistence agriculture and fishing. The impact will nevertheless depend on the extent to which such activities were previously included in national employment statistics.

¹⁴ The full text of the resolution concerning statistics of work, employment and labour underutilization adopted by the 19th International Conference of Labour Statisticians, 2–11 October 2013, is available at http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS_230304/lang--en/index.htm.

Box 1

Main features of the resolution concerning statistics of work, employment and labour underutilization adopted by the 19th International Conference of Labour Statisticians in 2013

The new standards adopted by the 19th ICLS in 2013 have greatly expanded the scope of labour statistics by recognizing the need to produce statistics on different forms of work, paid and unpaid, on a regular basis and by providing a common conceptual framework for this purpose.

Major features in the new standards are the inclusion of the first internationally agreed statistical definition of “work” aligned with the general production boundary, and a framework that distinguishes different forms of work to support the separate production of statistics on each as needed to inform a wide range of economic, labour market and social policies. The forms of work framework classifies all productive activities into different forms of work based on the main intended destination of the production and the type of transaction. Five distinct forms of work are specified: employment work, own-use production work (including production of goods and services for own final use), volunteer work, unpaid trainee work and a residual category covering other forms of work such as unpaid compulsory work. While these five forms of work are mutually exclusive, persons may be engaged in one or several forms of work over a particular reference period. As a result, unlike with the previous standards, it is possible to comprehensively capture the participation, contributions and working conditions of persons in employment, in own-use production work and in volunteer work, as well as to examine their interactions.

Employment in the new standards is more narrowly defined as “work for pay or profit.” Compared to the previous standards, this excludes activities to produce goods intended mainly for own-final use by the household or family, organization-based volunteering, some types of direct volunteering, and unpaid trainee work, which now form part of the new concepts of own-use production work, volunteer work and unpaid trainee work, respectively. Employment, as more narrowly defined, continues to be the reference to classify persons of working age by their labour force status and to produce the body of statistics on the labour force. This revision will allow more targeted monitoring of access to employment opportunities that generate an income and inform policies directed at employment creation.

The unemployment definition remains unchanged. However, a number of revisions to its measurement were introduced such as removing the option to exclude the job-search criterion in certain contexts and expanding the reference period for availability.

Most importantly, unemployment is now integrated as one of several measures of labour underutilization that also include time-related underemployment and the potential labour force. The latter is a newly defined group that captures persons not employed who express interest in the labour market but who do not fully meet the criteria to be classified as unemployed. This includes, for example, discouraged job seekers and others who may face a variety of personal, social or economic barriers that limit their labour market access. For dissemination purposes, a new set of measures of labour underutilization, indicators LU1–LU4, are provided to promote more comprehensive monitoring of changes in labour markets than the unemployment rate alone can, and to better capture differences between urban and rural areas, women and men, youth and adults and other groups of policy priority.

To support full measurement of unpaid forms of work, the standards introduced new statistical definitions, basic measurement guidance and headline indicators for: own-use production work, volunteer work and unpaid trainee work.

Source: Report of the International Labour Organization on recent developments in work and employment statistics, Statistical Commission, forty-ninth session, document E/CN.3/2018/18.

2.1. Indicators under the ILO’s custodianship of Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Sustainable Development Goal 8, which advances the promotion of inclusive and sustainable economic growth, employment and decent work, deals with issues at the core of the ILO’s mandate. Goal 8 covers a variety of topics, including those for which there are tier I and tier II indicators, such as labour productivity, informal employment, earnings (including the gender pay gap), unemployment, youth not in education, employment or training, child labour and occupational injuries. Table 4 lists these indicators.

Table 4. List of tier I and II indicators for which the ILO is the sole custodian agency or one of the custodian agencies under Goal 8

Indicator number	Indicator title	Custodian agency/ies	Partner agency/ies	Tier
8.2.1	Annual growth rate of real GDP per employed person	ILO	World Bank, UNSD	I
8.3.1	Proportion of informal employment in non-agriculture employment, by sex	ILO		II
8.5.1	Average hourly earnings of female and male employees, by occupation, age and persons with disabilities	ILO		II
8.5.2	Unemployment rate, by sex, age and persons with disabilities	ILO		I
8.6.1	Proportion of youth (aged 15–24 years) not in education, employment or training	ILO		I
8.7.1	Proportion and number of children aged 5–17 years engaged in child labour, by sex and age	ILO and UNICEF		II
8.8.1	Frequency rates of fatal and non-fatal occupational injuries, by sex and migrant status	ILO		II

2.1.1. Labour productivity

Labour productivity represents the output produced per unit of labour in a given economy and is hence closely linked to economic growth, competitiveness and living standards. Statistics on labour productivity provide useful information on the efficiency and quality of human capital in the production process.¹⁵

Its use as a global framework indicator is not new, as it was one of the MDG indicators under Goal 1 (Eradicate poverty and hunger).

Indicator number and title: 8.2.1 Annual growth rate of real GDP per employed person

Tier: I

¹⁵ For more information, see the ILOSTAT indicator description of labour productivity at http://www.ilo.org/ilostat-files/Documents/description_PRODY_EN.pdf or the metadata sheet for indicator 8.2.1 on the SDG Indicators metadata repository at <https://unstats.un.org/sdgs/metadata/>.

Concepts and definitions

Productivity refers to the volume of output per unit of labour input. Output is measured in terms of GDP expressed in constant prices.¹⁶

GDP represents the monetary value of goods and services within the System of National Accounts (SNA)¹⁷ production boundary produced within a country over a specified period of time. It can be calculated using three different approaches: production, expenditure and income. The SNA establishes that GDP is the sum of gross value added of all resident producer units, including taxes on products not comprised in the valuation of output and excluding subsidies on products (production approach). GDP also corresponds to the sum of the final uses of goods and services (as opposed to intermediate consumption) measured at purchasers' prices, less the value of imports of goods and services (expenditure approach). GDP is also equal to the sum of primary incomes distributed by resident producer units, that is, all wages, rents, interest and profits (income approach).

Real GDP corresponds to GDP at constant prices, that is, the volume of GDP after removing the effect of inflation. This facilitates comparisons across countries and over time since it brings to light fluctuations in quantities beyond price changes.

Labour input is generally measured in terms of persons employed (where a unit of labour corresponds to one person employed). Employment comprises all persons of working age who, during a short reference period (one week), were engaged in any activity to produce goods or provide services for pay or profit.¹⁸

However, labour input more widely refers to all persons who contribute to the production of goods and services within the SNA production boundary, not only the employed. In fact, according to the new standards laid out in the 2013 ICLS resolution concerning statistics of work, employment and labour underutilization, the labour input contributing to the GDP comprises not only employment (work done for use by others for pay or profit) but also own-use production of goods, unpaid trainee work and some forms of volunteer work as well. However, the extent to which forms of work other than employment are measured and accounted for in GDP depends on the national context. Most countries limit their measurement of labour input to employment. With the adoption

¹⁶ Purchasing power parity conveys what each country's prices would be if there was international parity, by taking into account the impact of exchange rates; that is, it shows what each country's prices would be if the corresponding goods or services were sold in one common reference market (for instance, the United States).

¹⁷ For more detailed information on the United Nations System of National Accounts, visit <https://unstats.un.org/unsd/nationalaccount/sna.asp>.

¹⁸ Resolution concerning statistics of work, employment and labour underutilization adopted by the 19th International Conference of Labour Statisticians, Geneva, 2–11 October 2013, available at http://ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS_230304/lang--en/index.htm. It is noteworthy that although this is the employment definition included in the latest international standards of labour statistics, it is not yet widely implemented in practice in national data compilations. Thus, currently available national employment statistics may refer to the former definition of employment, which included persons engaged in the production of economic goods and services for own and household consumption (resolution concerning statistics of the economically active population, employment, unemployment and underemployment, adopted by the Thirteenth International Conference of Labour Statisticians in 1982). The new standards define own-use production work as a separate form of work, thus excluding it from employment.

of the 19th ICLS standards, countries where a part of the population engages in own-use production of goods, particularly subsistence farming and fishing, will need to ensure continued inclusion of this group of workers in their calculations of labour input and labour productivity.

The annual growth rate of labour productivity refers to the percentage change in labour productivity from one year to the next.

Calculation

$$\text{Real GDP per employed person} = \frac{\text{GDP at constant prices}}{\text{Total number of employed persons}}$$

(where the numerator and denominator refer to the same reference period and geographical area).

If we call the real GDP per employed person “LP”, then:

$$\text{Annual growth rate of real GDP per employed person} = \frac{LP_{\text{year } n} - LP_{\text{year } n-1}}{LP_{\text{year } n-1}} \times 100$$

Sources of data at national and international levels

At the national level, the statistics used in the numerator of the labour productivity indicator (GDP), are best derived from national accounts. This is the most reliable and comprehensive source of information on each country’s GDP.

Regarding the employment statistics used in the denominator of the labour productivity indicator, labour force surveys are typically the preferred source at the national level. The employment figures derived from labour force surveys are highly reliable given that these surveys are designed specifically for that purpose. They can potentially cover the entire non-institutional population of a given country, all branches of economic activity, all sectors of the economy and all categories of workers, including the self-employed, contributing family workers, casual workers and multiple jobholders, which makes them a comprehensive source of information. In addition, labour force surveys can be easily extended to capture participation in own-use production of goods for a more complete accounting of labour input, as countries align their national practices with the 19th ICLS standards. It is important for the source of the employment (and eventually, other types of labour input) statistics used to have a comprehensive coverage in order to ensure consistency with the GDP figures, which typically refer to the whole national economy. This implies covering participation and time-spent in employment and, depending on their relevance in the national context, in own-use production of goods, unpaid trainee work and some forms of volunteer work,

In the absence of a labour force survey, data on employment (or all types of labour input) can be derived from other types of household surveys (such as household income and expenditure surveys) and population censuses. However, information from these sources may be less reliable since it does not typically allow detailed probing of the labour market activities of respondents. Statistics on employment can also be derived from administrative records for certain groups of workers.

At the international level, the ILO's central online labour statistics database, ILOSTAT,¹⁹ is the main source for cross-country labour productivity statistics and for global and regional estimates.²⁰

Interpretation and use

A country's economic growth, that is, the per capita growth in the value of the goods and services it produces, can arise from a limited number of factors: the introduction of more efficient resources, technological improvements, an increase in employment or more efficient work by the employed. This last factor is measured by statistics on labour productivity, which is a key measure of economic performance. Understanding the driving forces behind labour productivity, in particular the accumulation of machinery and equipment, improvements in organization as well as physical and institutional infrastructure, improved health and skills of workers (human capital) and the adoption of new technology, is important for formulating policies to support economic growth. Such policies may focus on industry and trade regulations, institutional innovation or government investment programmes in infrastructure, as well as human capital, technology or any combination of these different factors.

Labour productivity estimates can support the formulation of labour market policies and monitor their effects. For example, high labour productivity is often associated with high levels of human capital, indicating priorities for specific education and training policies. Likewise, trends in productivity estimates can be used to understand the effects of wage policies and trends on rates of inflation or to ensure that wage-related agreements adequately compensate workers for their gains in productivity. Finally, productivity measures can contribute to the understanding of how labour market performance affects living standards.

Limitations

The main limitations of the use of labour productivity as a global indicator arise from problems in the international comparability of data, more specifically from methodological differences across countries. Even though national output measures, in particular GDP estimates, are derived mainly from national accounts which should be based on internationally-agreed principles consolidated in the United Nations SNA, there are still significant obstacles to the international consistency of national accounts estimates. These range from differences in the treatment of the output of service sectors to adjustments for price changes and variations in the coverage of informal activities and the underground economy.

Employment or labour input figures also suffer from comparability issues, especially in terms of differences in age coverage, the definition of employment, geographical and

¹⁹ ILOSTAT is accessible at www.ilo.org/ilostat.

²⁰ Global and regional estimates of labour productivity are part of the ILO Labour Force Estimates and Projections series, which are analysed in the *World Employment and Social Outlook* reports and are available at <http://www.ilo.org/global/research/global-reports/weso/2017/lang--en/index.htm>; for more detailed information on ILO estimates and projections of labour market indicators, see http://www.ilo.org/empelm/projects/WCMS_114246/lang--en/index.htm.

institutional coverage, the treatment of special groups²¹ and the coverage of informal employment.

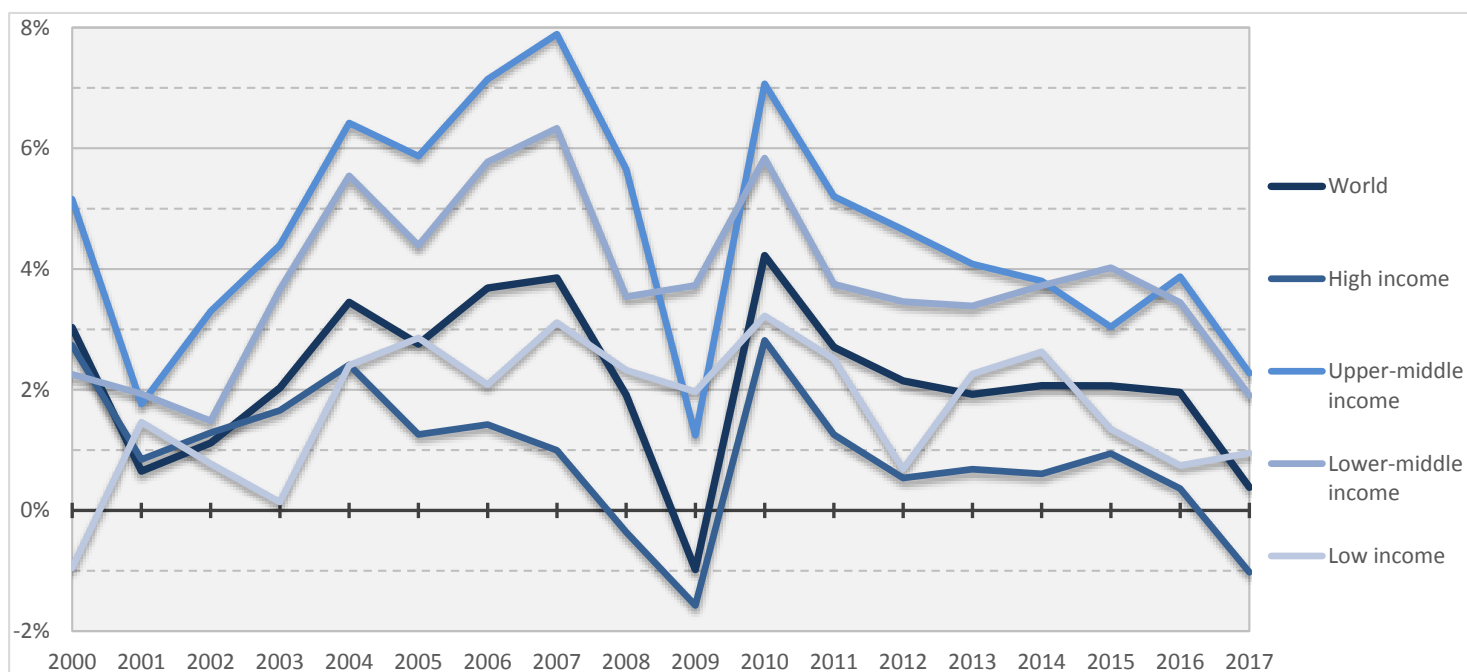
In cases where the contribution to GDP of forms of work other than employment are expected to be significant, such as in the case of own-use production of goods (subsistence agriculture and fishing) or volunteer work, the exclusion of participation and time-spent in these productive activities can be an important source of bias in the resulting indicators.

It is worth mentioning that statistics on labour productivity cannot be disaggregated by sex or age or any other characteristics of individual workers since the numerator of the indicator (real GDP) refers to the country as a whole and not to individuals. However, data on labour productivity can be disaggregated by economic activity, which may be very useful for further analysis.

Data visualization and analysis

As shown in figure 1, labour productivity since 2001 has consistently grown faster in middle-income economies than in high-income economies. Growth of labour productivity accelerated in low-income economies beginning around 2004. This means that countries with lower levels of income, which typically also have lower levels of labour productivity, are gradually narrowing the productivity gap. Figure 1 also illustrates the effect of the global economic crisis that started in 2008 and resulted in a sudden drop in global labour productivity growth in 2009. The crisis affected productivity in high-income and upper-middle income countries more deeply.

Figure 1. Evolution of the annual growth rate of output per worker (GDP, PPP, constant 2011 international \$) in the world, developed and developing regions (2000–17)



Source: ILO modelled estimates, May 2018. Based on the World Bank country classification by income level.

²¹ This refers to specificities in the operational definitions used, such as whether persons temporarily absent from work for specific reasons, persons on temporary layoff without pay or paid apprentices and trainees are included in employment figures.

2.1.2. Informal employment

In many countries, informal employment represents a significant part of the economy and labour market and thus plays a major role in production, employment creation and income generation. In the context of fragmented labour markets or where there are no adequate social safety nets (such as unemployment insurance, other social protection benefits or family support) or where wages and/or working hours in formal jobs are low, workers may resort to informal employment for income. In these situations, headline labour market indicators such as the unemployment rate and time-related underemployment fail to convey a complete picture of the labour market.

Statistics on informal employment provide valuable information on the quality of employment and are crucial to a comprehensive understanding of the labour market. They are highly relevant for both developing and developed countries.²²

Indicator number and title: 8.3.1 Proportion of informal employment in non-agriculture employment, by sex
Tier: II

Concepts and definitions

Employment comprises all persons of working age who, during a short reference period (one week), were engaged in any activity to produce goods or provide services for pay or profit.²³

Informal employment comprises persons who in their main or secondary jobs were in one of the following categories:

- Own-account workers, employers and members of producers' cooperatives employed in their own informal sector enterprises (the characteristics of the enterprise determine the informal nature of their jobs);
- Contributing family workers, regardless of whether they work in formal or informal sector enterprises (they usually do not have explicit, written contracts of employment and are not subject to labour legislation, social security regulations, collective agreements, etc., which determines the informal nature of their jobs);
- Employees holding informal jobs, whether employed by formal sector enterprises, informal sector enterprises, or as paid domestic workers by households (employees are considered to have informal jobs if their employment relationship is, in law or in

²² For more information, see the ILOSTAT indicator description of informal employment at http://www.ilo.org/ilostat-files/Documents/description_IFL_EN.pdf or the metadata sheet for indicator 8.3.1 on the SDG Indicators metadata repository at <https://unstats.un.org/sdgs/metadata/>.

²³ Resolution concerning statistics of work, employment and labour underutilization adopted by the 19th International Conference of Labour Statisticians, Geneva, 2–11 October 2013, available at http://ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS_230304/lang-en/index.htm.

practice, not subject to national labour legislation, income taxation, social protection or entitlement to certain employment benefits);²⁴

- Producers of goods exclusively for own final use by their household (e.g. subsistence farming,²⁵ fetching water, collecting firewood, etc.).

An enterprise belongs to the informal sector if it fulfils the three following conditions:

- It is an unincorporated enterprise (it is not constituted as a legal entity separate from its owners, and it is owned and controlled by one or more members of one or more households, and it is not a quasi-corporation: it does not have a complete set of accounts, including balance sheets);
- It is a market enterprise (it sells at least some of the goods or services it produces);
- The enterprise is not registered or the employees of the enterprise are not registered or the number of persons engaged on a continuous basis is below a threshold determined by the country.²⁶

The distinction between agricultural and non-agricultural employment is made on the basis of the categorization of economic activities established in the latest version of the International Standard Industrial Classification of All Economic Activities (ISIC, Rev.4).²⁷

Calculation

$$\begin{aligned} & \text{Proportion of informal employment in non-agricultural employment} \\ &= \frac{\text{Informal employment in non-agricultural activities}}{\text{Total employment in non-agricultural activities}} \times 100 \end{aligned}$$

²⁴ Operational criteria used by countries to define informal jobs of employees include lack of coverage by the social security system, lack of entitlement to paid annual or sick leave and lack of a written employment contract.

²⁵ Even though SDG indicator 8.3.1 refers only to informal employment in non-agriculture employment, the measurement of informal employment covers the whole economy, including agriculture, and the definition of informal employment is applicable to the whole economy.

²⁶ For more detailed information on informality definitions, please refer to the resolution concerning statistics of employment in the informal sector adopted by the Fifteenth International Conference of Labour Statisticians, 19–28 January 1993, available at http://ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS_087484/lang--en/index.htm; the Guidelines concerning a statistical definition of informal employment, adopted by the Seventieth International Conference of Labour Statisticians, 24 November–3 December 2003, available at http://ilo.org/global/statistics-and-databases/standards-and-guidelines/guidelines-adopted-by-international-conferences-of-labour-statisticians/WCMS_087622/lang--en/index.htm; and the ILO manual Measuring informality: A statistical manual on the informal sector and informal employment, available at http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_222979.pdf.

²⁷ For more information on the International Standard Industrial Classification of All Economic Activities (ISIC, Rev.4) see <https://unstats.un.org/unsd/publications/catalogue?selectID=396>.

Disaggregations desired and classifications used for them

It is recommended that this indicator be calculated by sex in order to assess differences between men and women in terms of the incidence of informality.

In order to calculate the proportion of informal employment in non-agricultural employment, it is necessary to have reliable employment statistics by economic activity so as to use statistics on non-agricultural employment. Usually, statistics on employment by economic activity are based on the categories established by the latest version of the ISIC (ISIC, Rev.4).

Sources of data at national and international levels

At the national level, labour force surveys are the preferred source of information on informal employment. However, to be able to provide the necessary information, labour force surveys need to include questions specifically designed to capture informal employment. Labour force surveys have the advantage of comprehensive coverage (they can potentially cover the entire non-institutional population, all branches of economic activity, all sectors of the economy and all categories of workers, including the self-employed, contributing family workers, casual workers and multiple jobholders). In addition, they measure the employed, the unemployed and persons outside the labour force in a mutually exclusive manner, providing a coherent framework for the measurement of the working-age population as a whole.

In the absence of a labour force survey, other types of household surveys with an appropriate module on informal employment can serve as a source of informal employment statistics.

At the international level, the ILO's central online labour statistics database, ILOSTAT,²⁸ is the primary source for cross-country informal employment statistics. In 2018, the ILO launched *Women and men in the informal economy: A statistical picture*, an in-depth report on informal employment and employment in the informal sector that includes global and regional estimates.²⁹

Interpretation and use

Workers in informal employment are, by definition, more vulnerable in many ways than workers in formal employment, such as not being covered by labour legislation or social security systems. This vulnerability has a negative impact on working and living conditions. It can also affect a country's level of productivity, economic growth and poverty since informal employment tends to be less productive and less well remunerated.

Thus, statistics on informal employment are crucial to inform policy-makers seeking to improve labour market access and working conditions. They also provide valuable information on the characteristics of those excluded from the formal sector and formal jobs.

²⁸ ILOSTAT is accessible at www.ilo.org/ilostat.

²⁹ ILO: *Women and men in the informal economy: A statistical picture*, third edition (Geneva, 2018) is available at http://www.ilo.org/global/publications/books/WCMS_626831/lang--en/index.htm.

Limitations

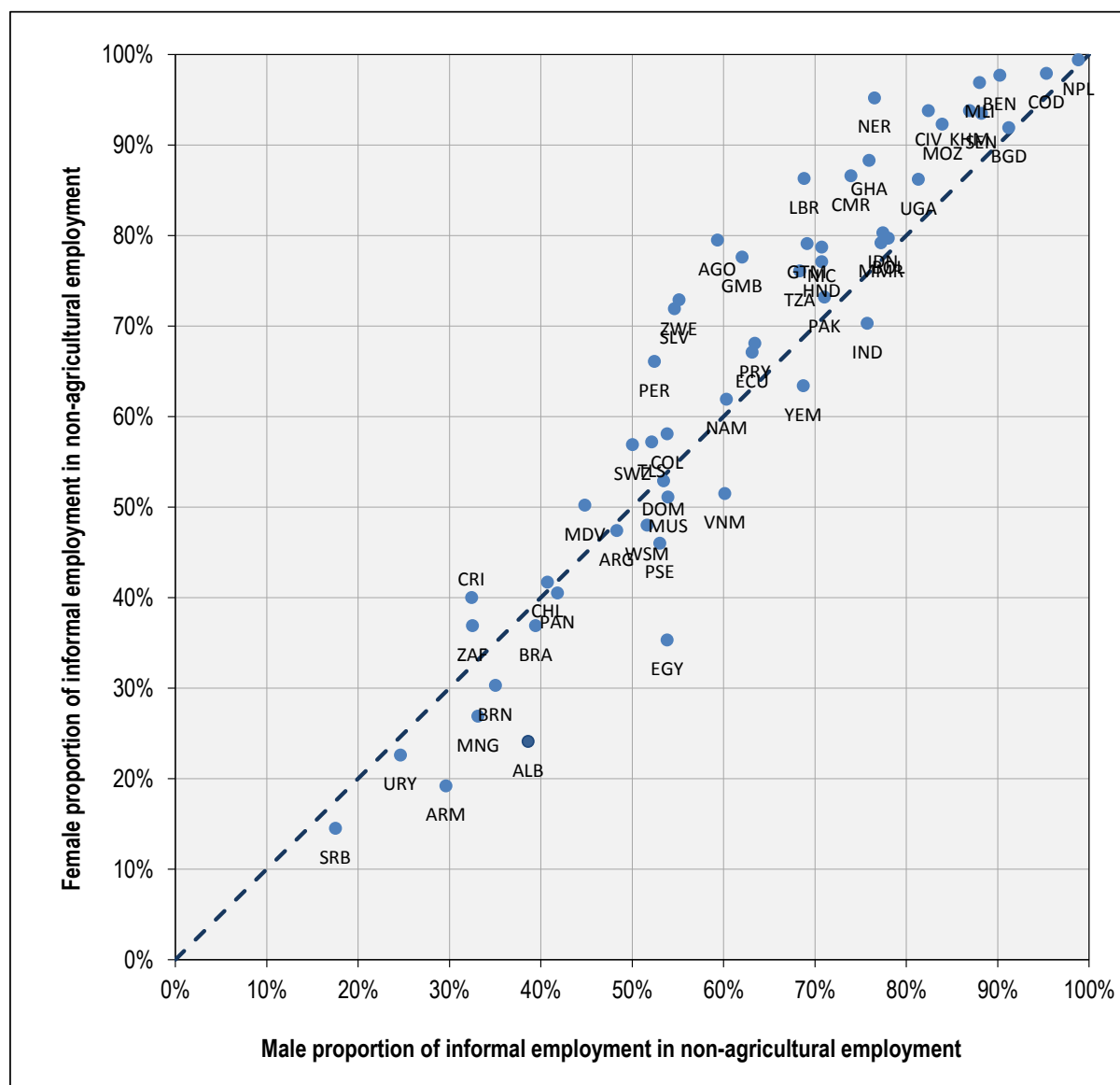
Although some international standards do exist for the compilation of informal employment statistics, the relevant concepts and definitions have been left relatively flexible so as to accommodate national contexts and needs. This means that, in practice, the operational criteria used by countries to compile data at the national level vary significantly from country to country, hindering the international comparability of statistics. The comparability of informal employment statistics is also highly sensitive to differences in the geographical areas covered, the economic activities covered and the treatment of special groups of workers.

It is also important to note that even though SDG indicator 8.3.1 refers to the proportion of informal employment in non-agricultural employment, the incidence of informality in agriculture is high in some countries. Thus, in order to have a comprehensive picture of workers' conditions and the overall extent of informality, indicator 8.3.1 should ideally be supplemented by other measures of informality covering employment and own-use production work, the whole economy (agriculture and non-agriculture) and the whole national territory (urban and rural areas). It is also informative to analyse differences in patterns of informality between economic activities and geographical areas so as to identify the groups of workers who are most vulnerable to informal employment.

Data visualization and analysis

In 69 per cent of countries with available data, the incidence of informal employment in agricultural activities is higher for women than for men, suggesting that women tend to be disproportionately engaged in informal employment and thus more likely to be in a more vulnerable situation in the labour market. However, both the incidence of informal employment in non-agriculture and the differences between the male and female proportions of informal employment in non-agriculture vary considerably across countries (figure 2). Also, in 76 per cent of countries with available data, more than half of the persons employed in non-agricultural activities are in informal employment, which indicates the wide extent of informal employment and the associated concerns regarding poor working conditions and insufficient social protection.

Figure 2. Proportion of females and males in informal employment in non-agriculture employment (latest year available)



Source: ILOSTAT. Harmonized figures of informal employment are calculated by applying standard definitions and operational criteria. Three-digit ISO country codes are used to identify countries.

2.1.3. Hourly earnings and pay gap

Information on the earnings that employees receive in exchange for their work is crucial to provide an indication of their purchasing power and living standards. Earnings are a key element of the quality of employment and give an insight into employees' working conditions. Hourly earnings, in particular, convey valuable information about the adequacy of employees' employment-related income since hourly data remove the effect of the number of hours worked. In addition, statistics on hourly earnings disaggregated by sex allow the calculation of the gender pay gap, an indicator that shows the relative difference between the average hourly earnings of men and women. Data on the

remuneration of employees in specific occupations is also extremely useful for targeted policy-making.³⁰

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

Tier: II

Concepts and definitions

The concept of earnings, as applied in wage 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 type of paid leave or holidays. 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. Earnings also exclude severance and termination pay. For international comparability purposes, statistics of earnings should relate to employees' gross remuneration, i.e. 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.³¹

As stated in the indicator title, data on earnings should be presented on the basis of the arithmetic average of the hourly earnings of all employees.

Calculation

The method of calculation used to obtain the average hourly earnings of employees depends on the source of data used and the type of information it provides: for instance, where there is information available on each worker's hourly earnings and hours worked, the average is a weighted average calculated by summing up the product of each worker's hourly earnings times the hours worked and dividing it by the total number of hours worked by all workers.

As mentioned above, statistics on average hourly earnings by sex can be used to calculate the gender pay gap, as follows:

$$\text{Gender pay gap} = \frac{\text{Average hourly earnings}_{\text{Men}} - \text{Average hourly earnings}_{\text{Women}}}{\text{Average hourly earnings}_{\text{Men}}} \times 100$$

³⁰ For more information, see ILOSTAT's indicator description on earnings and labour cost, at http://www.ilo.org/ilostat-files/Documents/description_EAR_EN.pdf or the metadata sheet for indicator 8.5.1 on the SDG Indicators metadata repository at <https://unstats.un.org/sdgs/metadata/>.

³¹ Resolution concerning an integrated system of wages statistics, adopted by the Twelfth International Conference of Labour Statisticians, Geneva, 16–26 October 1973, available at http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS_087496/lang--en/index.htm.

Disaggregations desired and classifications used for them

It is recommended to have statistics on hourly earnings by sex, age, occupation and disability status. To the extent possible (and especially as much as statistical reliability permits), it would be desirable to have these disaggregations simultaneously to allow cross-tabulations. This is crucial to assess differences in hourly earnings for a given occupation on the basis of gender, age group or being disabled.

The age groups used to disaggregate statistics by age can vary (5-year or 10-year age bands, for instance) but they should always at the very least ensure a distinction between youth (ages 15 to 24) and adults (ages 25 and over).

Statistics by occupation are usually presented according to the latest version of the International Standard Classification of Occupations (ISCO-08).³²

Statistics presented by disability status should be based on the World Health Organization (WHO) International Classification of Functioning, Disability and Health (ICF),³³ according to which disability covers impairments (problems in body function or structure such as a significant deviation or loss), activity limitations (difficulties in executing activities) and participation restrictions (problems in involvement in life situations). For measurement purposes, the ICF defines a person with disability as a person who is limited in the kind or amount of activities that he or she can do because of ongoing difficulties due to a long-term physical condition, mental condition or health problem.

Sources of data at national and international levels

Statistics on earnings can come from a variety of sources, each of them presenting advantages and disadvantages.

Perhaps the most common source is establishment surveys, which collect information on workers directly from their employers (establishments that employ workers). In their payroll or records, establishments usually have accurate data on all wages paid and the corresponding working hours, which means that establishment surveys are a very reliable source of earnings data. However, establishment surveys tend to exclude from their sample certain types of establishments and economic activities, rarely covering very small establishments and informal sector establishments. Hence, the earnings statistics derived from establishment surveys may not be comprehensive or representative of all workers.

Household surveys such as labour force surveys can also serve as sources of data on earnings. They are a good alternative in that they cover all employees, regardless of their status in employment, economic activity and formal/informal sector. Nevertheless, methodologies for the measurement of earnings vary more across countries for household surveys than for establishment surveys, which hinders international comparability. Also, the reliability of earnings statistics from household surveys depends heavily on the accuracy of the respondent.

³² For more detailed information on the latest version of the International Standard Classification of Occupations (ISCO-08), see <http://www.ilo.org/public/english/bureau/stat/isco/isco08/>.

³³ For more information on the WHO International Classification of Functioning, Disability and Health, see <http://www.who.int/classifications/icf/en/>.

In the absence of establishment or household surveys, administrative records such as social security records can provide earnings data as well. It is also possible to combine several primary sources to produce a consolidated earnings series, or to resort to national accounts for the desired earnings statistics (when compensation of employees is disaggregated into its two major components – wages and social contributions made by employers).

Interpretation and use

Statistics on earnings provide crucial information on the level of employment-related income and purchasing power of employees. They represent a valuable indicator of the quality of employment and workers' standard of living. The study of trends in employees' earnings brings to light the extent to which working conditions have improved or deteriorated over time.

Although there is not a standard recommended ratio between minimum wages and average wages, statistics on average earnings can inform policy-makers in the process of setting or revising minimum wages. Also, collective bargaining conducted between workers' organizations and the corresponding employer or employers' organizations needs reliable earnings statistics to support negotiations.

Earnings statistics should be interpreted along with other labour market and macroeconomic indicators, such as employment, productivity, economic growth and consumption, to build a comprehensive picture of workers' situation in the economy. The joint analysis of these different indicators can illustrate the extent to which economic growth and labour productivity translates into gains for workers. As workers use their earnings either for the consumption of goods and services or to increase their savings, earnings are an important determinant of aggregate demand.

It is also particularly interesting to analyse earnings statistics disaggregated by all classifications available and to interpret the differences observed in order to understand whether some population groups (based on their gender, age or disability status, for instance) are receiving significantly higher or lower earnings. For such analysis, it is important to have reliable statistics on hourly earnings by occupation, so as to compare earnings of different population groups for the same occupation and working time, making the comparison more accurate and revealing.

Limitations

Earnings statistics present a number of complications in terms of their international comparability, most of which arise from the variety of possible sources of data. The various sources available mentioned above (establishment surveys, household surveys and administrative records) differ in their methods, objectives and scope, which influences the results obtained. The coverage of the source may vary in terms of the geographical areas covered, the workers covered (for example, part-time workers or informal workers may be excluded) and the establishments covered (for example, establishments below a certain size or of a certain sector may be excluded). In cases where the earnings of workers excluded from the coverage of the source are significantly different than those of workers included, the statistics would not be representative of the country as a whole and would not be strictly comparable to those of countries using a more comprehensive source.

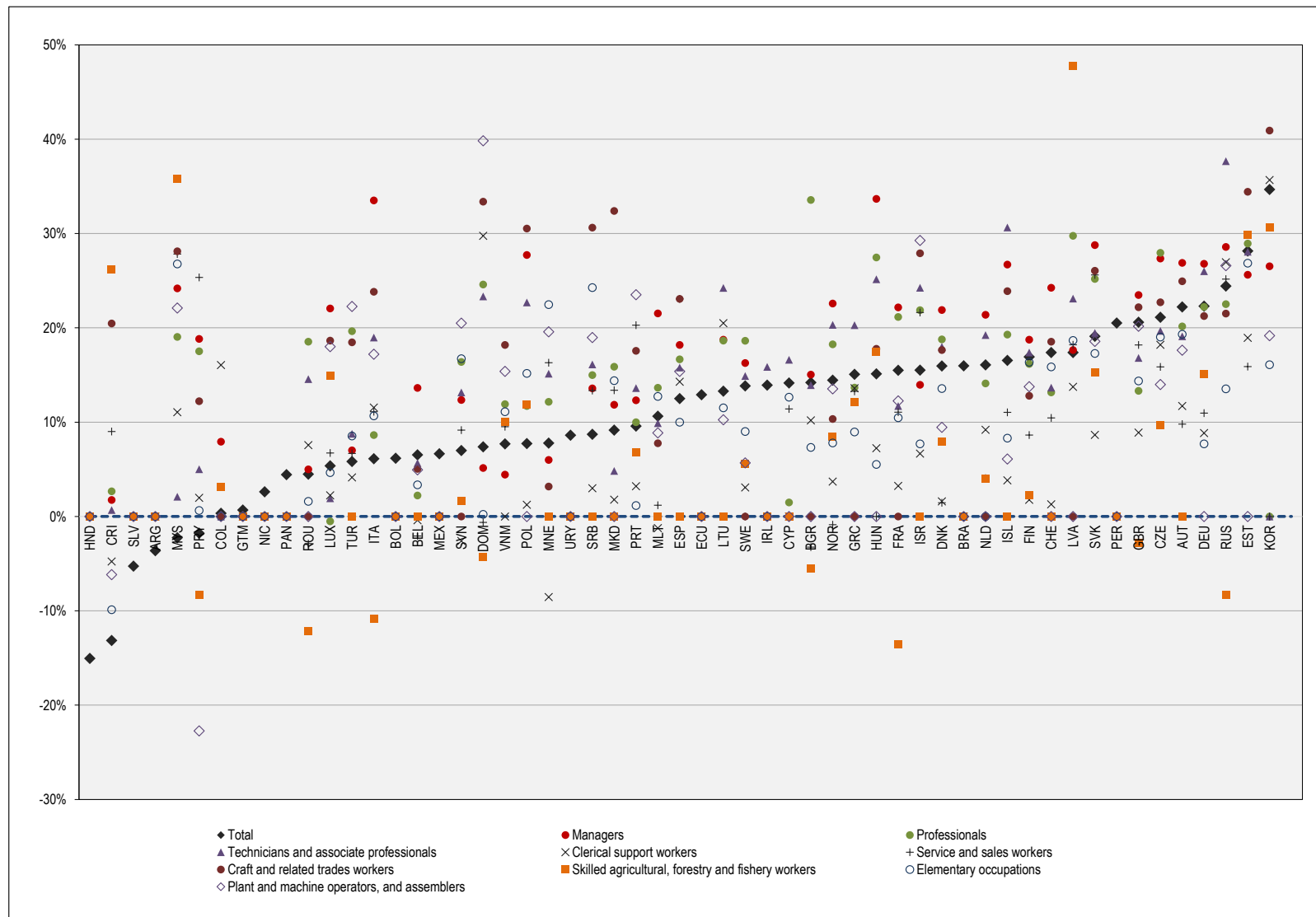
When using household surveys as a source of earnings statistics, there are a number of issues related to the accuracy of the earnings information reported by the respondents. They may over declare or under declare their earnings for various reasons, or they may

report gross or net wages while including or excluding bonuses and benefits, without distinction. This naturally affects the reliability of the results.

Data visualization and analysis

Figure 3 presents the gender pay gap (the relative difference between male and female employees' earnings, expressed as the percentage of male employees' earnings) by occupation, based on the categories established in the ISCO-08. We observe that in only 11 per cent of countries with available data, female hourly earnings are on average higher than male hourly earnings. When looking at the differences by occupation, we see that the patterns of the gender pay gap are not the same for all occupations. In fact, in 85 per cent of countries with available data, the gender pay gap is higher for managers than for all occupations together. Comparing the gender pay gap for all workers irrespective of their occupation, in 77 per cent of countries with available data the gender pay gap is higher for craft and related trades workers, in 73 per cent it is higher for professionals and for technicians and associate professionals, in 49 per cent it is higher for service and sales workers, in 48 per cent it is higher for plant and machine operators and assemblers, in 33 per cent it is higher for elementary occupations, in 31 per cent it is higher for skilled agricultural, forestry and fishery workers and only in 27 per cent it is higher for clerical support workers. This means that, on average, in most countries studied, women are remunerated less than men per hour worked (leaving aside the differences in working time of men and women). This difference in hourly earnings is greater for occupations requiring a high skill level (managers, professionals and technicians and associate professionals) and for craft and related trade occupations. The relative working conditions of women are thus particularly poor in these occupations, where they are remunerated, on average, less than their male colleagues, to an extent exceeding the earnings differences suffered by the female workforce on average.

Figure 3. Gender pay gap by occupation, based on average hourly earnings of employees (latest year available)



Source: ILOSTAT. Three-digit ISO country codes are used to identify countries.

2.1.4. Unemployment rate

The unemployment rate is a major headline labour market indicator, widely used and recognized as one of the main labour market measures. It conveys information on the proportion of the labour force that is unemployed, providing insights into the underutilization of the labour supply. Yet, it is important to note that the unemployment rate alone does not convey a full picture of labour underutilization, which can also be found among the employed (time-related underemployment) and among persons outside the labour force (the potential labour force). The unemployment rate reflects the inability of an economy to generate employment for those who are looking for a job but cannot find one despite being available to take up work. It is thus an indicator of the efficiency and effectiveness of an economy to absorb its labour force and of the performance of the labour market.³⁴

Indicator number and title: 8.5.2 Unemployment rate, by sex, age and persons with disabilities

Tier: I

Concepts and definitions

The unemployment rate is calculated as the proportion of persons in the labour force who are unemployed.

Unemployment comprises all persons of working age who were not in employment during a short reference period, had carried out activities to seek employment during a specified recent period and were currently available to take up employment if a job opportunity presented itself. Unemployment also includes future starters (persons not in employment and currently available who did not seek employment because they had already made arrangements to start a job within a short subsequent period); participants in skills training or retraining schemes within employment promotion programmes, who on that basis were not in employment, not currently available and did not seek employment because they had a job offer to start within a short subsequent period; and persons not in employment who carried out activities to migrate abroad in order to work for pay or profit but who were still waiting for the opportunity to leave.

Employment comprises all persons of working age who, during a short reference period (one week), were engaged in any activity to produce goods or provide services for pay or profit.

The labour force corresponds to the sum of all persons employed and all persons unemployed.³⁵

³⁴ For more information, see the ILOSTAT indicator description of the unemployment rate, at http://www.ilo.org/ilostat-files/Documents/description_UR_EN.pdf or the metadata sheet for indicator 8.5.2 on the SDG Indicators metadata repository, at <https://unstats.un.org/sdgs/metadata/>.

³⁵ Resolution concerning statistics of work, employment and labour underutilization adopted by the 19th International Conference of Labour Statisticians, Geneva, 2–11 October 2013, available at http://ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS_230304/lang--en/index.htm.

Calculation

$$\text{Unemployment rate} = \frac{\text{Total unemployment}}{\text{Labour force}} \times 100$$

$$\text{Unemployment rate} = \frac{\text{Total unemployment}}{\text{Total employment} + \text{total unemployment}} \times 100$$

Disaggregations desired and classifications used for them

It is recommended that this indicator be calculated by sex, age and persons with disability. As much as possible, these disaggregations should be simultaneous, that is, allowing cross-tabulations to assess the cumulative effect of differences by gender, age and disability status.

The age groups used to disaggregate the statistics by age can vary (5-year or 10-year age bands, for instance) but they should always at the very least allow a distinction between youth (ages 15 to 24) and adults (ages 25 and over).

Statistics presented by disability status should be based on the WHO International Classification of Functioning, Disability and Health (ICF) ³⁶ according to which disability covers impairments (problems in body function or structure such as a significant deviation or loss), activity limitations (difficulties in executing activities) and participation restrictions (problems in involvement in life situations). For measurement purposes, the ICF defines a person with disability as a person who is limited in the kind or amount of activities that he or she can do because of ongoing difficulties due to a long-term physical condition, mental condition or health problem.

Sources of data at national and international levels

At the national level, labour force surveys are the preferred source of data on unemployment. They have a comprehensive coverage, potentially covering the entire non-institutional population, and allow the reliable identification of unemployed persons thanks to specific questions on job search and availability. In addition to this, they measure the employed, the unemployed and persons outside the labour force simultaneously, providing a coherent framework for the measurement of the working-age population as a whole.

In the absence of a labour force survey, other types of household surveys or even population censuses can be used as sources of data on unemployment. However, unemployment data from such sources tends to be less reliable since the questionnaires used as collection instruments include fewer and less detailed questions for the identification of the unemployed.

It is important to note that, even though statistics on unemployment can be derived from administrative records (most notably employment office records or unemployment insurance records), these refer to registered unemployment or beneficiaries of unemployment insurance and are in no way comparable to statistics based on the three criteria described above (persons not in employment, seeking employment and available for employment). Even where such records do ensure that persons counted as unemployed are not in employment, available for employment and actively seeking employment, the requirements

³⁶ For more information on the WHO International Classification of Functioning, Disability and Health, see <http://www.who.int/classifications/icf/en/>.

for those persons to enrol in or benefit from the insurance scheme lead to a bias in the reference population.

At the international level, the ILO's central online labour statistics database, ILOSTAT,³⁷ is the main source for cross-country statistics on unemployment, as well as for global and regional estimates.³⁸

Interpretation and use

The unemployment rate is a well-known and widely used labour market indicator that serves as a measure of the unutilized labour supply and labour market pressure, providing an indication of an economy's ability to generate jobs for those persons who are not in employment but are available and actively seeking employment. It is an indicator of the efficiency and effectiveness of an economy to absorb its labour force and of the performance of the labour market.

The labour force is made up of employment and unemployment, so the share of unemployment in the labour force (the unemployment rate) provides some indication of the economy's ability to generate enough jobs for all persons of working age (actively) seeking employment and the inclusiveness of the labour market.

Unemployment rates for specific population groups (by sex, age or disability status, for instance) are of particular interest to identify particular areas of concern and the groups that are most vulnerable to joblessness. The unemployment rate is also a useful measure to track business cycles.

It is important to note that, although the unemployment rate is a useful labour market indicator, it is an insufficient measure of labour underutilization and therefore should always be analysed together with other labour underutilization indicators (such as the time-related underemployment rate and the potential labour force)³⁹ and indicators of the quality of employment (such as the share of informal employment and earnings). Otherwise, when interpreted alone, the unemployment rate may provide a distorted view of the labour market.

Limitations

In most developed economies, the unemployment rate remains a highly useful and revealing indicator of labour market performance and a reliable measure of labour underutilization. However, in other contexts, particularly in many developing countries, its usefulness can be questioned. In the absence of unemployment insurance systems or social safety nets, persons of working age must avoid unemployment, resorting to any type of work or employment even if it is inadequate. Moreover, without proper networks or systems in

³⁷ ILOSTAT is accessible at www.ilo.org/ilostat.

³⁸ Global and regional estimates of unemployment are part of the ILO Labour Force Estimates and Projections series, which are analysed in *the World Employment and Social Outlook* reports and are available at <http://www.ilo.org/global/research/global-reports/weso/2017/lang--en/index.htm>. For more detailed information on ILO estimates and projections of labour market indicators, see http://www.ilo.org/empelm/projects/WCMS_114246/lang--en/index.htm.

³⁹ The 2013 ICLS resolution concerning statistics of work, employment and labour underutilization advocates for the use of four labour underutilization indicators: the unemployment rate (LU1), the combined rate of time-related underemployment and unemployment (LU2), the combined rate of unemployment and potential labour force (LU3) and the composite measure of labour underutilization (LU4).

place to advertise vacancies and facilitate the job search, the unemployed can become discouraged and quit looking for employment, thus exiting the labour force and joining persons outside the labour force. In such contexts, it is necessary to supplement the unemployment rate with other measures of labour underutilization, such as time-related underemployment and potential labour force indicators, in order to assess labour underutilization in a more comprehensive manner. The 19th ICLS resolution on work statistics has recommended that more than one headline labour underutilization indicator be used to better reflect better labour underutilization in different economic contexts.

It is important to understand that the unemployment rate, despite being a useful labour market indicator, simply reflects the share of the labour force that does not have a job but is available and actively seeking, and does not by itself convey any information on the economic resources or living conditions of the unemployed. In addition, even though it provides some information on labour underutilization, it is an insufficient measure if the objective is to assess overall labour underutilization. Particularly in contexts where there are no social safety nets (unemployment insurance, family support, etc.), it often happens that individuals cannot afford to be unemployed and are thus obliged to resort to any type of work even if it is informal employment, part-time employment or a job with inadequate earnings. In such cases, low unemployment rates may be hiding other forms of labour underutilization (for instance, time-related underemployment, low-income employment, low productivity and working poverty) and should thus be interpreted alongside other labour market indicators to ensure a comprehensive picture of the labour market situation.⁴⁰

Regarding the international comparability of unemployment rates, there are a number of issues that adversely affect comparability. Differences in the questionnaires used in the household surveys as the basic measurement tool may entail differences in specific definitions of employment and unemployment, differences in the treatment of specific groups or differences in the operational criteria used to determine the individual's labour force status.

The unemployment rate is, in some contexts, very sensitive to seasonality, so that the number of observations available each year can have an impact on the results and their comparability. The unemployment rate is also dependent on the geographical coverage of the survey since urban and rural areas tend to have significant differences in the incidence of unemployment. It is important to note that unemployment indicators do not convey any information on the characteristics of the unemployed (their education level, ethnic origin, socio-economic background, work experience, duration of unemployment, etc.), which is crucial to cast light on labour market failures.

The unemployment rate can also refer to either cyclical, short-term unemployment or structural, long-term unemployment, but this distinction is not reflected in the aggregate measure. This information is crucial for policy-makers to bear in mind in formulating appropriate policy responses.

Data visualization and analysis

As figure 4 shows, the global unemployment rate experienced a slow but steady decline from the beginning of the 2000s for women and men, youth and adults alike. This decrease was abruptly interrupted in 2008, due to the global economic crisis, when unemployment

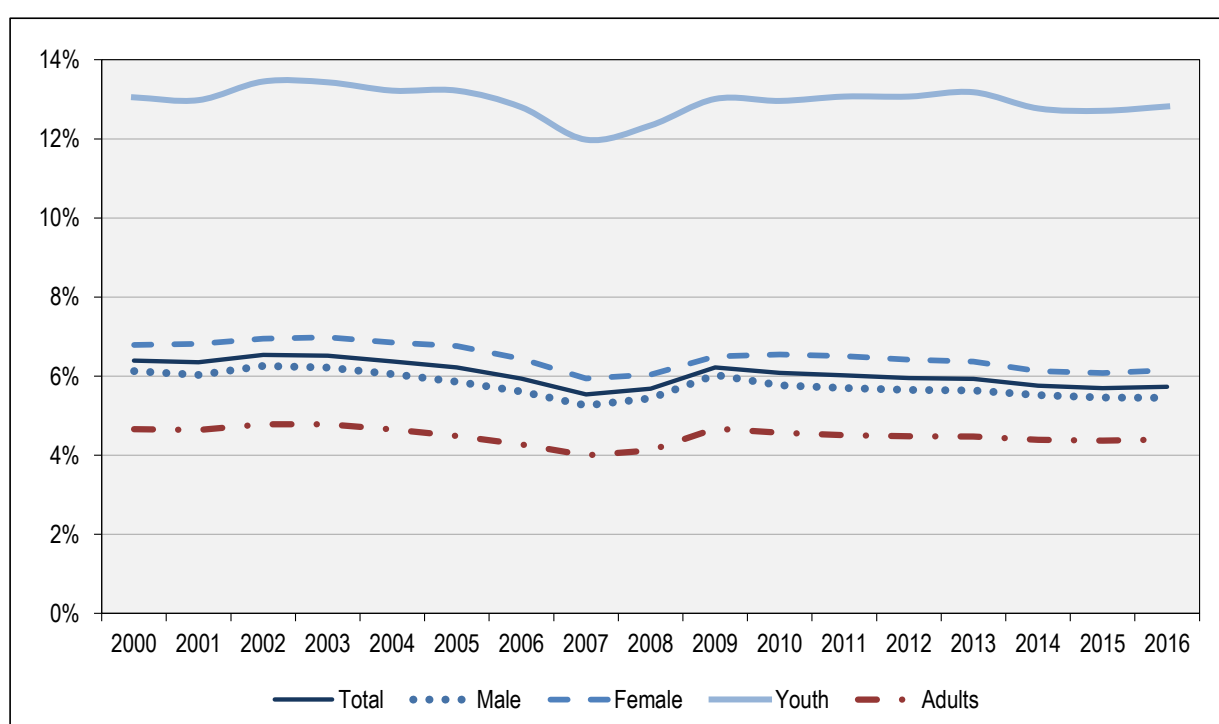
⁴⁰ For more information on labour underutilization, refer to ILO: *Beyond unemployment: Measurement of other forms of labour underutilization*, 18th International Conference of Labour Statisticians, Geneva, 24 November–5 December 2008, room document 13; available at http://www.ilo.org/global/statistics-and-databases/meetings-and-events/international-conference-of-labour-statisticians/WCMS_100652/lang--en/index.htm.

rates across all major demographic groups suddenly and significantly increased until around 2010. In that year, a gradual recovery commenced at the global level, reflected in slightly declining trends in total, male, female, youth and adult unemployment rates. Since 2015, the unemployment rate has changed little overall, with a modest upward trend observed among youth.

Women in the labour force are more likely to be unemployed than their male counterparts in all regions, since the female unemployment rate was higher than the male unemployment rate in 2017 in all regions (figure 5).

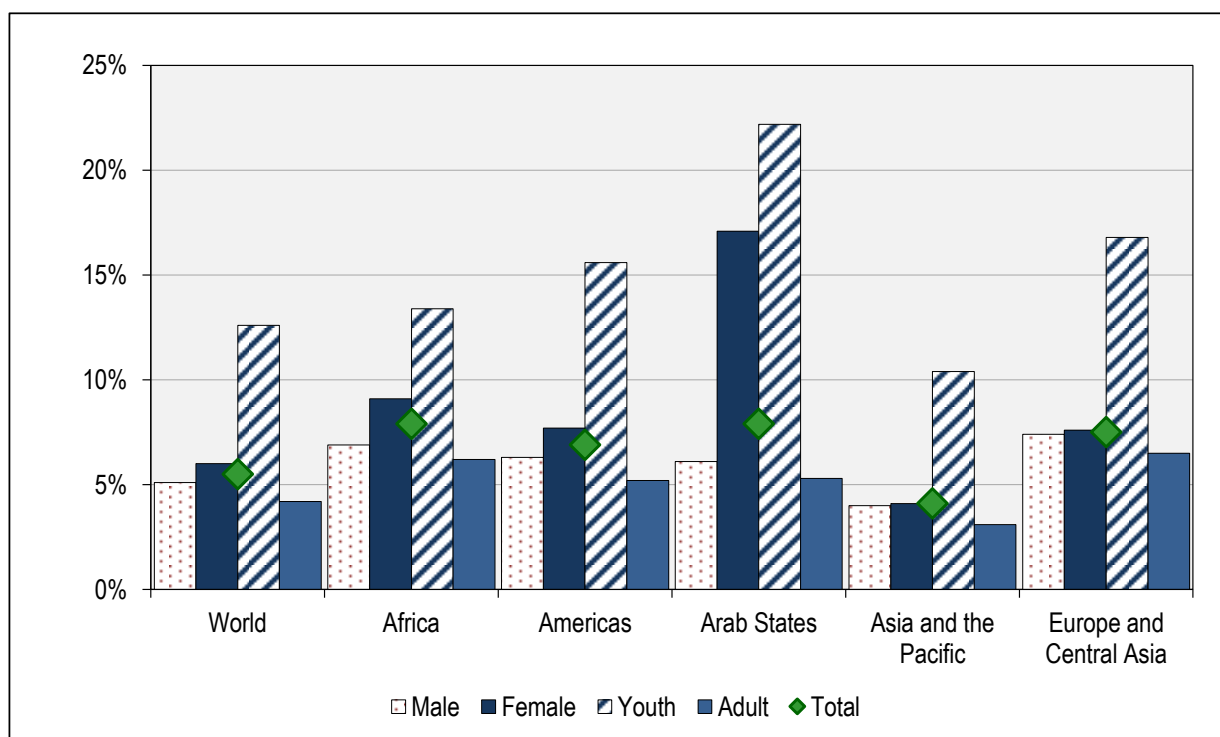
The situation of youth in the labour market is particularly alarming because the global youth unemployment rate is persistently about three times higher than that of adults. In all regions, the youth unemployment rate is more than twice the adult unemployment rate. The difference is the most striking in the Arab States, where youth are more than four times as likely to be unemployed than adults (figure 5).

Figure 4. Global unemployment rates by sex and main age groups (2000–16)



Source: ILO modelled estimates, May 2018.

Figure 5. Unemployment rates by sex and main age groups for the world, developed and developing regions (2017)



Source: ILO modelled estimates, May 2018. Based on ILO regional classification.

2.1.5. Youth NEET rate

The proportion of young people not in education, employment or training (also known as “the youth NEET rate”) indicator conveys the number of young persons who are not in education, employment or training as a percentage of the total youth population. It provides a measure of youth who are outside the educational system, not in training and not in employment, and in so doing serves as a broader measure of potential youth labour market entrants than youth unemployment. It is also a better measure of the lost potential for human resource development than the youth inactivity rate, because the latter includes youth who are not in the labour force and are in education and are therefore still acquiring or furthering skills. In short, the youth NEET rate refers to all young persons who are either unemployed or outside the labour force and who are not in education or training, thus excluding young persons who are employed (whether in education or training or not) or unemployed or outside the labour force but in education or training ⁴¹

Indicator number and title: 8.6.1 Proportion of youth (aged 15–24 years) not in education, employment or training
Tier: I

⁴¹ For more information, see the ILOSTAT indicator description of the youth NEET rate at http://www.ilo.org/ilostat-files/Documents/description_NEET_EN.pdf or the metadata sheet for indicator 8.6.1 on the SDG Indicators metadata repository at <https://unstats.un.org/sdgs/metadata/>.

Concepts and definitions

For the purpose of this indicator, youth is defined as all persons aged from 15 to 24 (inclusive).

According to the International Standard Classification of Education (ISCED),⁴² education is defined as organized and sustained communication designed to bring about learning. Formal education is defined in ISCED as education that is institutionalized, intentional, and planned through public organizations and recognized private bodies and, in its totality, makes 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 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. For the purposes of this indicator, persons will be considered in education if they are in formal or non-formal education, as described above, but not if they are in informal learning alone.

Employment comprises all persons of working age who, during a short reference period (one week), were engaged in any activity to produce goods or provide services for pay or profit.⁴³

Persons are considered to be in training if they are in a non-academic learning activity through which they 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.

Calculation

The youth NEET rate is calculated as follows:

$$\text{NEET rate} = \frac{\text{Youth} - \text{Youth in employment} - \text{Youth not in employment but in Ed or Tr}}{\text{Youth}} \times 100$$

⁴² For more information on the latest version of the International Standard Classification of Education (ISCED-2011), see <http://uis.unesco.org/sites/default/files/documents/international-standard-classification-of-education-isced-2011-en.pdf>.

⁴³ Resolution concerning statistics of work, employment and labour underutilization adopted by the 19th International Conference of Labour Statisticians, Geneva, 2–11 October 2013, available at http://ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS_230304/lang--en/index.htm.

It is crucial to highlight that youth who are in both employment and education or training simultaneously should not be double-counted when subtracted from the total number of youth.

An alternative way of calculating the youth NEET rate is as follows:

$$\text{NEET rate} = \frac{(\text{Unemployed youth} + \text{Youth OLF}) - (\text{Unemployed youth in Ed or Tr} + \text{Youth OLF in Ed or Tr})}{\text{Youth}} \times 100$$

(where “Ed” means education, “Tr” training and “OLF” outside the labour force)

Disaggregations desired and classifications used for them

There are no disaggregations specifically required for this indicator. However, it is strongly advisable to provide information disaggregated by sex.

It is important to note that, although the indicator title does not specifically call for disaggregation, the overarching principle of data disaggregation of the global indicator framework implies that SDG indicators should be disaggregated, where relevant, by income, sex, age, race, ethnicity, migratory status, disability and geographical location, or other characteristics, in accordance with the Fundamental Principles of Official Statistics.⁴⁴

Sources of data at national and international levels

At the national level, labour force surveys are the preferred source of statistics on the proportion of youth not in employment, education or training, since they allow information to be gathered simultaneously on both the labour market situation of individuals and their participation in education or training programmes. Such surveys can be designed to cover virtually the entire non-institutional population of a given country, all branches of economic activity, all sectors of the economy and all categories of workers, including the self-employed, contributing family workers, casual workers and multiple jobholders. In addition, such surveys generally provide an opportunity for the simultaneous measurement of the employed, the unemployed and persons outside the labour force (i.e., the working-age population) in a coherent framework. This means that both the numerator and the denominator of the youth NEET rate can be derived from a labour force survey, ensuring consistency between the two measures. It is worth noting that for the above to be true, the questionnaires used for data collection in the labour force survey must include sufficiently detailed questions to determine youth’s enrolment in education and participation in training.

In the absence of a labour force survey, other types of household surveys and population censuses can also serve as sources of information on the youth NEET rate. Nevertheless, the information obtained from such sources may be less reliable since they do not typically allow detailed probing into the labour market activities of respondents or their participation in education or training.

At the international level, the ILO’s central online labour statistics database, ILOSTAT,⁴⁵ is the main source for cross-country statistics on the youth NEET rate.

⁴⁴ <https://unstats.un.org/unsd/dnss/gp/fundprinciples.aspx>.

⁴⁵ ILOSTAT is accessible at www.ilo.org/ilostat.

Unfortunately, no global or regional estimates of the youth NEET rate are available at this stage.

Interpretation and use

The youth NEET rate is a broad measure of the underutilization of youth who could potentially contribute to national development and growth through their work or by furthering their qualifications in education. The youth NEET group is neither improving their future employability through investment in skills nor gaining experience through employment, so it is particularly at risk of both labour market and social exclusion. This is all the more worrying given the long-lasting effects that the first years of employment have on the rest of an individual's career.

In view of the fact that the youth NEET group includes unemployed youth as well as youth outside the labour force, the youth NEET rate provides important complementary information to labour force participation rates and unemployment rates. For example, if youth participation rates decrease during an economic downturn due to discouragement, this may be reflected in an upward movement in the youth NEET rate. More generally, a high youth NEET rate and a low youth unemployment rate may indicate significant discouragement of young people. A high youth NEET rate for young women may also suggest their engagement in household chores, child-rearing, and/or the presence of strong institutional barriers limiting female participation in labour markets.

In terms of analysis, in order to avoid misinterpretation it is important to bear in mind that this indicator is composed of two different subgroups: unemployed youth who are not in education or training; and youth outside the labour force who are not in education or training. The prevalence and composition of each subgroup has policy implications that should also be considered when analysing the youth NEET rate.

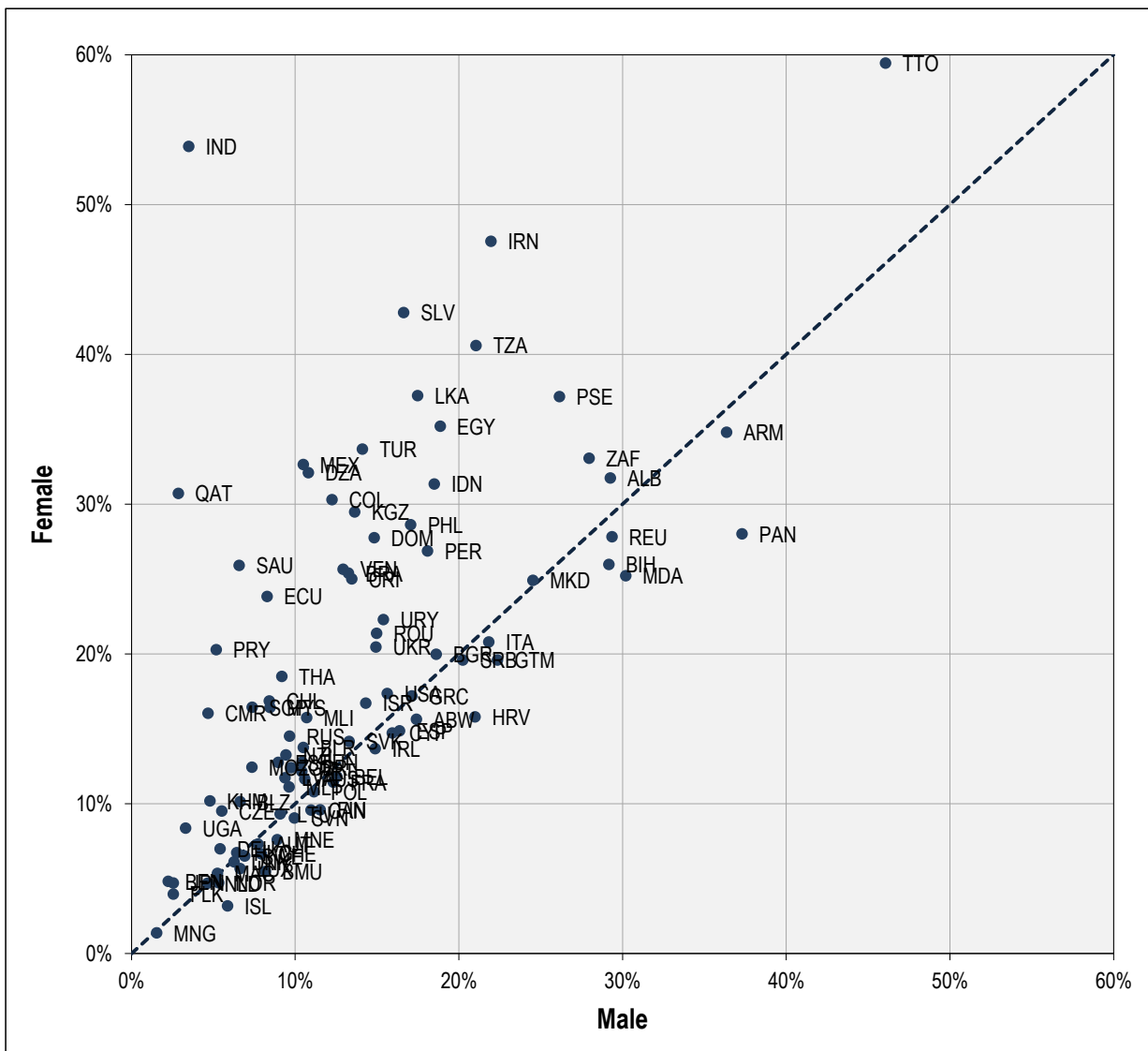
Limitations

A number of factors can limit the comparability of statistics on the youth NEET rate across countries or over time. When they differ from international standards, the operational criteria used to define employment and participation in education or training will naturally affect the comparability of the resulting statistics, as will the coverage of the source of statistics (geographical coverage, population coverage, age coverage, etc.).

As mentioned previously, youth NEET rates are preferably calculated for youth defined as persons aged 15 to 24, but it is important to keep in mind, when studying these rates, that not all persons complete their education by the age of 24. Hence, depending on the context, it may also be crucial to compile and analyse data on the youth NEET rates of persons aged 25 to 29 in order to have a fuller picture of the situation of all youth in the labour market.

Although it can provide a useful indication of youth labour market and education exclusion, the youth NEET rate conveys no information on the relative importance of the two subgroups it includes. Thus, policy-makers basing their policy formulations on data on the youth NEET rate should complement it with information that allows them to determine whether the problem is that youth not in education or training are struggling to find jobs or whether the problem is that they remain outside the labour force.

Figure 7. Proportion of youth not in education, employment or training for males and females, ages 15 to 24 (latest year available after 2008)



number and proportion of children subject to the hardships of child labour is crucial to understand the scope of the issue, to inform policy formulation and to assess the results of policies implemented.⁴⁸

Indicator number and title: 8.7.1 Proportion and number of children aged 5-17 years engaged in child labour, by sex and age

Tier: II

Concepts and definitions

All the relevant definitions pertaining to the statistical measurement of child labour presented below are taken from the resolution concerning statistics of child labour, adopted by the 18th International Conference of Labour Statisticians in 2008.⁴⁹

Children are defined as all persons under the age of 18. However, for the purposes of international comparability and measurement of this indicator, children are restricted to all persons of ages 5 to 17 (inclusive).

Broadly speaking, children can potentially be involved in different types of productive activities and under various working conditions. Children in productive activities refer to all the children participating in some way in the production of goods or services within the general production boundary as defined in the SNA.⁵⁰ Children in productive activities comprise children in employment and children in other productive activities.

Children in employment include all those children who are engaged in any activity falling within the SNA production boundary for at least one hour during the reference period. This represents three different groups of children: (a) children in child labour within the SNA production boundary; (b) children aged 12 to 14 years in permissible light work; and (c) persons aged 15 to 17 engaged in work not designated as one of the worst forms of child labour.

Child labour comprises all children engaged in prohibited work or types of work that should be eliminated given that they are injurious, negative or socially or morally undesirable according to national and international standards. Child labour also comprises all children engaged in hazardous work, all children engaged in the worst forms of child labour other than hazardous work and all children in employment below the minimum working age, excluding, where applicable, light work performed by children over the age of 13 (or 12 for countries defining the working age population as persons aged 14 and above instead of the commonly used 15 and above). Where productive activities are measured based on the general production boundary instead of the SNA production boundary, child

⁴⁸ For more information see the metadata sheet for indicator 8.7.1 on the SDG Indicators metadata repository, at <https://unstats.un.org/sdgs/metadata/> or *Decent Work Indicators: Guidelines for producers and users of statistical and legal framework indicators: ILO Manual*, available at http://www.ilo.org/wcmsp5/groups/public/---dgreports/---integration/documents/publication/wcms_229374.pdf.

⁴⁹ For more information on the statistical definitions used to measure child labour refer to the resolution concerning statistics of child labour, at http://ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS_112458/lang--en/index.htm.

⁵⁰ For more detailed information on the United Nations System of National Accounts, visit <https://unstats.un.org/unsd/nationalaccount/sna.asp>.

labour also includes children engaged in hazardous unpaid household services (this should however be duly noted in the metadata and in the indicator denomination). For measurement purposes, the number of children in child labour corresponds to the number of children reported to be in child labour during the reference period.

The worst forms of child labour comprise: (a) all forms of slavery or practices similar to slavery, such as the sale and trafficking of children, debt bondage and serfdom, as well as forced or compulsory labour, including forced or compulsory recruitment of children for use in armed conflict; (b) the use, procuring or offering of a child for prostitution, for the production of pornography or for pornographic performances; (c) the use, procuring or offering of a child for illicit activities, in particular for the production and trafficking of drugs as defined in relevant international treaties; and (d) work which, by its nature or the circumstances in which it is carried out, is likely to harm the health, safety or morals of children. The latter category is referred to as hazardous work.

Hazardous work comprises: (a) work which exposes children to physical, psychological or sexual abuse; (b) work underground, under water, at dangerous heights or in confined spaces; (c) work with dangerous machinery, equipment and tools, or which involves the manual handling or transport of heavy loads; (d) work in an unhealthy environment which may, for example, expose children to hazardous substances, agents or processes, or to temperatures, noise levels or vibrations damaging to their health; and (e) work under particularly difficult conditions, such as work for long hours or during the night or work where the child is unreasonably confined to the premises of the employer.⁵¹

Based on these definitions established in the resolution concerning statistics of child labour, the methodology underlying the ILO global estimates on child labour classifies child labour into the following three categories: (a) children aged 5 to 11 carrying out at least one hour of economic activity per week; children aged 12 to 14 carrying out at least 14 hours of economic activity per week in all forms of economic activity except for permissible light work (defined for operational purposes as economic activity of 14 hours a week or less and that is not hazardous in nature); and persons aged 15 to 17 engaged in work in designated hazardous industries or occupations or for long hours (defined for operational purposes as 43 or more hours during the reference week).

Calculation

The proportion of children in child labour is calculated as follows:

$$\begin{aligned} & \text{Proportion of children in child labour} \\ &= \frac{\text{Number of children reported to be in child labour}}{\text{Total number of children}} \times 100 \end{aligned}$$

⁵¹ For more information on the legal framework and legal definitions guiding the statistical definitions of child labour, refer to the ILO Minimum Age Convention, 1973 (No. 138) and the ILO Worst Forms of Child Labour Convention, 1999 (No. 182), both available at <https://www.ilo.org/dyn/normlex/en/f?p=1000:12000::NO>; and the United Nations Convention on the Rights of the Child, available at <https://www.ohchr.org/en/professionalinterest/pages/crc.aspx>.

Disaggregations desired and classifications used for them

The number and proportion of children in child labour should be available disaggregated by sex, and also separately for the different age subgroups making up the child-age band (for instance, using the two age sub-bands 5 to 14 and 15 to 17).

Sources of data at national and international levels

The main sources of data on child labour are household surveys with a child labour module, such as labour force surveys, multipurpose household surveys, United Nations Children's Fund (UNICEF)-supported Multiple Indicator Cluster Surveys (MICS), demographic and health surveys, the ILO-supported Statistical Information and Monitoring Programme on Child Labour (SIMPOC) and World Bank Living Standard Measurement Surveys (LSMS).

Interpretation and use

Having reliable measures of child labour is crucial to assess its incidence, distribution and characteristics. This information serves to inform policy formulation and to monitor the results obtained. Timely statistics on child labour, by indicating the need for appropriate legal or regulatory frameworks, allow governments and policy-makers to set priorities and guide their actions accordingly. Since every child counts, it is recommended for this indicator to produce both proportions and numbers; in some countries, proportions may be low even if there are still significant numbers of children in child labour.

Limitations

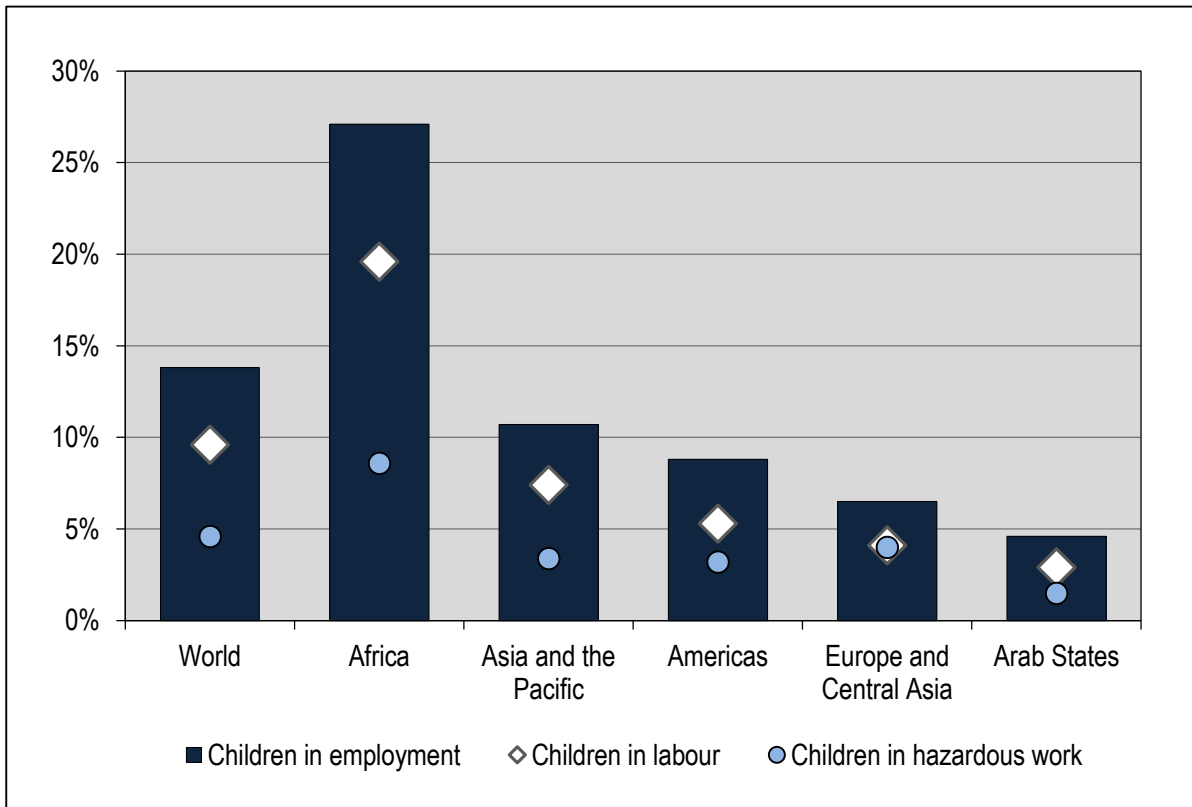
Since the concept of child labour is much more a legal concept than a statistical one, it is highly dependent on each country's national legal framework. Even though for the statistical measurement of child labour some international statistical standards have been set, the underlying basis of any child labour estimates remains national legislation, regulations and priorities, which affects the international comparability of the data.

In addition, even when using the standard definitions agreed at the international level, countries may choose different operational criteria in their measurement instruments, which further hinders data comparability.

Data visualization and analysis

In 2016, almost 14 per cent of all children in the world were in employment. More specifically, almost 10 per cent of all children were engaged in child labour and about 5 per cent were engaged in hazardous work. This means that, on average in the world, 1 child out of 10 is suffering the hardships of child labour. The situation is particularly alarming in Africa, where almost 20 per cent of children are in labour and almost 9 per cent are in hazardous work. It is also striking that in Europe and Central Asia, 4.1 per cent of children are in labour and 4 per cent are in hazardous work, the smallest gap observed between the child labour share and the child hazardous work share. In other words, in Europe and Central Asia, nearly all children who are engaged in labour are engaged in hazardous work (figure 8).

Figure 8. Proportion of children in employment, labour and hazardous work, by region (2016)



Source: ILO: *Global Estimates of Child Labour: Results and Trends, 2012-2016* (Geneva, 2017).

2.1.7. Occupational injuries

Working conditions are an important determinant of overall living standards, both for workers and their families. Working conditions cover a wide range of factors related to work and employment, including working time, remuneration and the work environment, among others. A safe and sound work environment ensuring occupational safety and health at work is at the core of decent work. In this context, it is crucial to have reliable statistics on occupational injuries in order to assess the extent to which workers are protected from (or exposed to) work-related hazards and risks.⁵²

Indicator number and title: 8.8.1 Frequency rates of fatal and non-fatal occupational injuries, by sex and migrant status

Tier: II

Concepts and definitions

An occupational injury is defined as any personal injury, disease or death resulting from an occupational accident. An occupational injury is therefore distinct from an occupational

⁵² For more information see ILOSTAT's indicator description on occupational injuries, at http://www.ilo.org/ilostat-files/Documents/description_INJ_EN.pdf or the metadata sheet for indicator 8.8.1 on the SDG Indicators metadata repository, at <https://unstats.un.org/sdgs/metadata/>.

disease, which is a disease contracted as a result of exposure over a period of time to risk factors arising from work activity.

An occupational accident is 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.

A case of occupational injury is the case of one worker incurring an occupational injury as a result of an occupational accident. An occupational injury could be fatal (as a result of occupational accidents and where death occurred within one year of the day of the accident) or non-fatal with lost work time.

Statistics on fatal and non-fatal occupational injuries should always be presented, treated and interpreted separately, since they tend to come from different sources, often having different coverage and following different methodologies.

It is in general difficult and not particularly informative to analyse the number of fatal or non-fatal occupational injuries in absolute terms since it does not convey any information beyond the numerical magnitude of the phenomenon. Based solely on the total number of fatal or non-fatal occupational injuries incurred, it is hard to tell how frequent these occurrences are, the extent of the workers' exposure to risk and the likelihood of incidents recurring in the future. With a view to drawing more helpful conclusions from the statistics and in order to favour comparisons (over time, across countries and even across economic activities or occupations), it is recommended to put figures into perspective by calculating a rate or ratio. The main rates of occupational injuries used in labour statistics are incidence rates (number of occupational injuries during the reference period for a given number of workers in the reference group) and frequency rates (number of occupational injuries during the reference period for a given number of hours worked by the workers in the reference group). Although the indicator title of SDG global framework indicator 8.8.1 calls for the compilation of frequency rates, national practices point towards a more widespread use of incidence rates.

The incidence rates of fatal and non-fatal occupational injuries cast light on the extent to which workers in the reference group are exposed to work-related risks, by presenting the average number of fatal or non-fatal occupational injuries per worker in the reference group (or per given number of workers in the reference group). This refers to the personal likelihood of the workers in the reference group suffering from work-related injuries.

Similarly, the frequency rates of fatal and non-fatal occupational injuries provide information on the likelihood that workers in the reference group will incur occupational injuries given the amount of hours they worked. In other words, they present the average number of fatal or non-fatal occupational injuries per hour worked by workers in the reference group (or per given number of hours worked by workers in the reference group).

The workers in the particular group under consideration and covered by the source of the statistics of occupational injuries are known as the workers in the reference group. In the case of a notification system, it is the number of workers in, for example, the establishments or selected economic activities covered by the system as set out in the relevant legislation or regulations.⁵³

⁵³ For more detailed information, please refer to the resolution concerning statistics of occupational injuries (resulting from occupational accidents), adopted by the 16th International Conference of Labour Statisticians (October 1998); http://ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS_087528/lang--en/index.htm.

Calculation

The incidence rates, which are the rates most widely used by countries in terms of occupational injuries, are calculated as follows:

$$\text{Fatal occupational injuries incidence rate} = \frac{\text{Number of new cases of fatal occupational injuries during the reference period}}{\text{Number of workers in the reference group}} \times 100'000$$

$$\text{Non fatal occupational injuries incidence rate} = \frac{\text{Number of new cases of non fatal occupational injuries during the reference period}}{\text{Number of workers in the reference group}} \times 100'000$$

Alternatively, frequency rates may be used at the national level instead of incidence rates, calculated as follows:

$$\text{Fatal occupational injuries frequency rate} = \frac{\text{Number of new cases of fatal occupational injuries during the reference period}}{\text{Total number of hours worked by workers in the reference group during the reference period}} \times 1'000'000$$

$$\text{Non fatal occupational injuries frequency rate} = \frac{\text{Number of new cases of non fatal occupational injuries during the reference period}}{\text{Total number of hours worked by workers in the reference group during the reference period}} \times 1'000'000$$

Disaggregations desired and classifications used for them

It is recommended that data for this indicator be disaggregated by sex and migrant status. It is important to have information on nationals and migrants separately in order to assess differences in the extent to which these two population groups are exposed to work-related risks and thereby to determine the need for targeted campaigns or policies.

It is also enlightening, where feasible, to have statistics on fatal and non-fatal occupational injuries by economic activity, by occupation and, at the national level, by region within the country. This casts light on the particular areas that policy-makers should focus on in terms of improving safety measures at the workplace, by providing specific information on economic activities, occupations or regions more prone to occupational accidents.

Sources of data at national and international levels

Statistics on occupational injuries come from a variety of sources, including various types of administrative records (insurance records, labour inspection records, records kept by the labour ministry or the relevant social security institution, etc.), establishment surveys and household surveys.

The recommended data sources for statistics on occupational injuries are records from the corresponding national system of notification or compensation of occupational injuries. Notification records include labour inspection records and records kept by ministries of labour and refer to the notification of occupational accidents, the workers involved in them and the resulting occupational injuries that are provided by employers, workers or labour inspectors to the competent authority. In many countries, employers are required by law to notify all occupational accidents occurring in their workplace. Compensation records (such as insurance records) refer to claims made by workers for benefits or compensation, after incurring an occupational injury, to the competent authority (social insurance, labour ministry, etc.).

The coverage of all these types of records may not be fully comprehensive, due to underreported issues (undernotification of occupational accidents) and/or some workers not having access to compensation schemes (informal workers may be excluded). Thus, wherever possible, it is advisable to supplement administrative data by data derived from household surveys and/or establishment surveys. This allows more exhaustive coverage of all workers and economic activities.

It is worth noting that the agencies notified about fatal occupational injuries tend to be different from the agencies notified about non-fatal occupational injuries. Thus, when deriving statistics from administrative records, information on fatal and non-fatal occupational injuries is very likely to be derived from different sources. This means that the sources may have different coverage, so that fatal and non-fatal occupational injuries, although very complementary, may not be strictly comparable.

At the international level, the ILO's central online labour statistics database, ILOSTAT,⁵⁴ is the main source for cross-country statistics on occupational injuries. Unfortunately, no global or regional estimates are available for occupational injuries at this stage.

Interpretation and use

Data on occupational injuries are essential for planning preventive measures because they signal areas of particular concern. With a view to designing more targeted prevention mechanisms and related policies, it is recommended to disaggregate and analyse this indicator by sex and migrant status (and if possible by economic activity, occupation and region within the country). Disaggregation brings to light the groups of workers, economic activities or occupations with the highest risk of work-related accidents, which can then be targeted more effectively for inspection visits and the development of regulations and procedures, as well as for safety campaigns.

There may be problems of underreporting of fatal and non-fatal occupational injuries, therefore proper systems should be put in place to ensure the best possible reporting and to maximize overall data quality. In contexts where there are strong reasons to believe that underreporting is significant, figures should be interpreted with care, taking that limitation into account.

The analysis of trends in occupational injury rates provides information on the progress or deterioration in occupational safety and health, revealing the effectiveness of prevention measures and the eventual need for further regulation. Indicators on occupational injuries are volatile, however, since unexpected but significant accidents or national calamities bring about strong annual fluctuations. It is important to study the underlying reasons behind such sharp changes.

Limitations

The variety of possible sources of data on occupational injuries (administrative records, establishment surveys and household surveys) hinders the comparability of data across countries since each type of source provides information on different specific concepts. Data derived from administrative records are not strictly comparable since they include numerous types of records that follow different rules and are maintained by different agencies. Two main sources of data are records of notifications by employers to the competent authority and insurance records of the authority compensating the victims. These two would clearly

⁵⁴ ILOSTAT is accessible at www.ilo.org/ilostat.

yield different results, since it is possible that not all injuries that were compensated to workers were reported by the employer and vice versa. It is also possible that these records have a different geographical coverage or that they cover different economic activities. Ideally, all records pertaining to the same topic kept by different agencies should be linked and/or consolidated (using unique unit identifiers, for example). This would facilitate the expansion of the coverage of the statistics, contributing to a more comprehensive and representative dataset by linking together records covering different regions of the country or economic activities. When statistics come from an establishment survey, the results would be closer to those from records of notifications made by employers since it is also the employer who provides the establishment survey information. However, establishment surveys tend not to cover the informal sector, establishments of a very small size and sometimes the agricultural sector. When statistics come from a household survey (such as a labour force survey), their reliability depends heavily on the accuracy of the respondents, who may be subjective in the information given. However, if enough questions are used about accidents and injuries to ensure the accuracy of the information, household surveys can provide data cross-tabulated by various disaggregations and in this way can provide more detailed and comprehensive information related to the injuries.⁵⁵

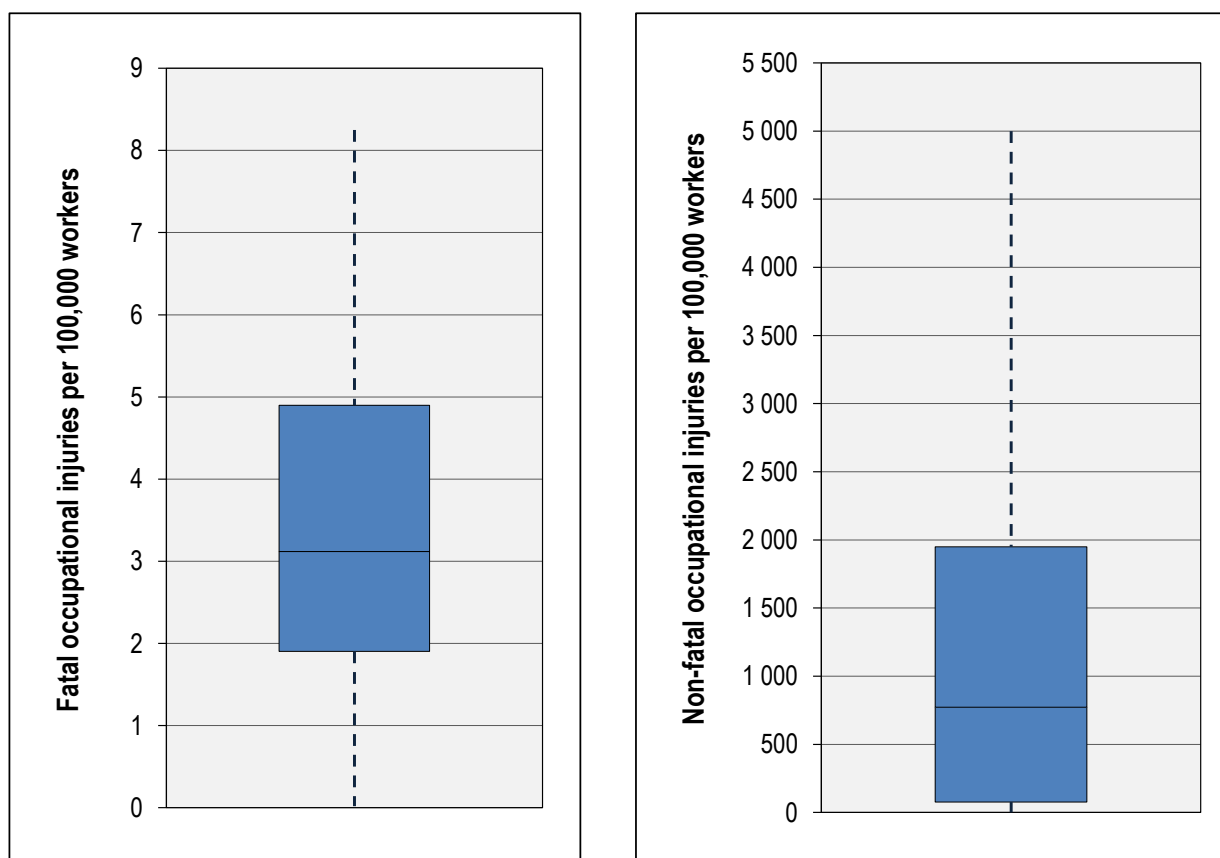
It is important to note that there may be a difference in units used from source to source: insurance records and notifications records will most likely give the number of cases of injuries (if one worker had suffered from several injuries throughout the year, he/she would appear as many times as the number of injuries suffered), whereas information derived from household surveys would refer to the number of persons having suffered from at least one injury (unless the survey reliably collects information on how many injuries each person suffered and the results are aggregated).

Data visualization and analysis

The trends and patterns of the incidence rates of fatal and non-fatal occupational injuries vary considerably from one country to the other and the differences in the levels of incidence rates among countries are just as significant, so that no clear conclusion can be drawn about the overall situation in terms of occupational safety and health around the world based on these figures alone (figure 9). Fortunately (and as expected), fatal occupational injuries happen far less frequently in all countries with available data. In both cases, the distribution of countries with available data is rather scattered and more concentrated towards lower values (differences between countries with lower occupational injuries incidence rates are smaller than those between countries with higher incidence rates). The median value for fatal occupational injuries incidence rates is 3.1, which means that in 21 of the 43 countries with available data for 2010 or afterwards, there were less than 3.1 fatal occupational injuries per 100,000 workers in the reference year, while in 21 countries there were more than 3.1 fatal occupational injuries per 100,000. In half of the 52 countries with available data for 2010 or afterwards, there were less than 772 non-fatal occupational injuries per 100,000 workers in the reference year.

⁵⁵ For more information on deriving statistics on occupational injuries from household and establishment surveys, see *Occupational injuries statistics from household surveys and establishment surveys: An ILO manual on methods* (Geneva, 2008), available at http://www.ilo.org/stat/Publications/WCMS_173153/lang--en/index.htm.

Figure 9. Distribution of the rate of occupational injuries per 100,000 workers for countries with available data (latest year available after 2009)



Source: ILOSTAT. Boxplots based on data for 43 countries for fatal occupational injuries and on data for 52 countries for non-fatal occupational injuries. Data across countries may not be strictly comparable due to differences in the type of occupational injuries covered (compensated or reported injuries), the type of workers considered for the reference group (all workers, employees only or persons insured only) and the operational criteria used to define occupational injuries.

2.2. Indicators under the ILO’s custodianship of other Goals

The need to achieve decent work for all men and women is clearly laid out in Goal 8 but it also underlies many other Goals. The importance of building sound, inclusive labour markets is strongly related to other areas of human life and well-being and many of these are reflected throughout the 2030 Agenda. This is why the ILO is also the custodian agency for some indicators under goals other than Goal 8, including the three indicators with an already established and internationally agreed methodology that are presented in the following sections.

Table 5. List of tier I and II indicators for which the ILO is the sole custodian agency or one of the custodian agencies for goals other than Goal 8

Indicator number	Indicator title	Custodian agency/ies	Partner agency/ies	Tier
1.3.1	Proportion of population covered by social protection floors/systems, by sex, distinguishing children, unemployed persons, older persons, persons with disabilities, pregnant women, newborns, work-injury victims and the poor and the vulnerable	ILO	World Bank	II
5.5.2	Proportion of women in managerial positions	ILO		I

Indicator number	Indicator title	Custodian agency/ies	Partner agency/ies	Tier
10.4.1	Labour share of GDP, comprising wages and social protection transfers	ILO	IMF	II

2.2.1. Social protection coverage

Access to at least a basic level of social security throughout the life cycle is a human right, fundamental to ensuring individuals' health and dignity.⁵⁶ Social protection systems are at the core of efforts to ensure decent living conditions for the whole population throughout their lives. The proportion of the population covered by social protection floors provides an indication of the extent to which the ideal of the universality of social protection is accomplished and therefore of how secure the population's health and living conditions are. It is therefore a key indicator that conveys information on how protected the population is from the various contingencies potentially faced in life. This indicator is all the more revealing as it is disaggregated by type of contingency.⁵⁷

Indicator number and title: 1.3.1 Proportion of population covered by social protection floors/systems, by sex, distinguishing children, unemployed persons, older persons, persons with disabilities, pregnant women, newborns, work-injury victims and the poor and the vulnerable
Tier: II

Concepts and definitions

SDG indicator 1.3.1 reflects the proportion of persons effectively covered by a social protection system, including social protection floors, as well as the main components of social protection: child and maternity benefits, support for persons without a job, persons with disabilities, victims of work injuries and older persons.

Effective coverage of social protection is measured by the number of people who are actually receiving benefits of contributory and non-contributory social protection programmes plus the number of persons actively contributing to social insurance schemes.

Social protection systems include contributory and non-contributory schemes for children, pregnant women and newborns, people of active age, older persons, victims of work injuries and persons with disabilities. Social protection floors provide at least a basic level in all main contingencies along the life cycle, as defined in the ILO Social Protection Floors Recommendation, which was adopted in 2012.⁵⁸ Measurements of effective coverage should reflect how in reality legal provisions are implemented.

⁵⁶ See ILO Social Protection Floors Recommendation, 2012 (No.202), available at: http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:R202.

⁵⁷ For more information see the metadata sheet for indicator 1.3.1 on the SDG Indicators metadata repository, at <https://unstats.un.org/sdgs/metadata/>.

⁵⁸ The ILO Social Protection Floors Recommendation, 2012 (No. 202) is available at http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:R202.

Calculation

The proportion of the population covered by social protection systems, including social protection floors, is calculated as follows:

$$\text{Social protection systems coverage rate} = \frac{\text{Number of persons receiving cash benefits under at least one of the contingencies (contributory or non contributory benefit) or actively contributing to at least one social security scheme}}{\text{Total population}} \times 100$$

SDG global indicator 1.3.1 also calls for the separate calculation of several sub-indicators to distinguish between the coverage rates of the various components of social protection systems for each contingency. These separate indicators express the share of the corresponding population covered for each contingency and are calculated as follows:

$$\begin{aligned} &\text{Proportion of older persons receiving a pension} \\ &= \frac{\text{Number of persons above statutory retirement age receiving an old age pension}}{\text{Total number of persons above statutory retirement age}} \times 100 \end{aligned}$$

$$\begin{aligned} &\text{Proportion of persons with disabilities receiving benefits} \\ &= \frac{\text{Number of persons receiving disability benefits}}{\text{Total number of persons with severe disabilities}^{59}} \times 100 \end{aligned}$$

$$\begin{aligned} &\text{Proportion of women giving birth covered by maternity benefits} \\ &= \frac{\text{Number of women receiving maternity benefits}}{\text{Total number of women giving birth}} \times 100 \end{aligned}$$

$$\begin{aligned} &\text{Proportion of children covered by social protection benefits} \\ &= \frac{\text{Number of children/households receiving children benefits}}{\text{Total number of children/households with children}} \times 100 \end{aligned}$$

$$\begin{aligned} &\text{Proportion of unemployed receiving benefits} \\ &= \frac{\text{Number of recipients of unemployment benefits}}{\text{Total number of unemployed persons}} \times 100 \end{aligned}$$

$$\begin{aligned} &\text{Proportion of workers covered in case of occupational injury} \\ &= \frac{\text{Number of workers protected by injury insurance}}{\text{Total employment}} \times 100 \end{aligned}$$

$$\begin{aligned} &\text{Proportion of vulnerable persons}^{60} \text{ receiving benefits} \\ &= \frac{\text{Number of persons receiving social assistance}}{\text{Total number of vulnerable persons}} \times 100 \end{aligned}$$

⁵⁹ Calculated for each country as the product of the country's prevalence of disability ratio (published for each country group by WHO) and the country's population.

⁶⁰ Vulnerable persons are defined here as all children plus adults not covered by contributory benefits and persons above retirement age not receiving contributory benefits (pensions).

Disaggregations desired and classifications used for them

As explained above, the main indicator for the coverage rate of social protection systems should be presented, along with information on the coverage of each specific contingency, expressed as a percentage of the respective population.

In addition, the statistics under this indicator should be disaggregated by sex and, if data availability permits, by age (using broad age bands).

Sources of data at national and international levels

At the national level, administrative records are typically the most reliable, timely and comprehensive source of statistics on social protection coverage. The types of administrative records used as a source of statistics on social protection include insurance records, social security records, records of the labour ministries and records of health ministries, among others.

In the absence of reliable administrative records or if statistics are not produced from the available records, household surveys (household budget surveys or labour force surveys) can serve as a source of statistics on social protection coverage. Data from a household survey may also be used to estimate the denominator of the indicator and its disaggregations.

At the international level, the ILO provides an important source of cross-country statistics on social protection, available in the ILO's central online labour statistics database, ILOSTAT.⁶¹ The statistics disseminated by the ILO on social protection are compiled mainly through its Social Security Inquiry,⁶² the ILO Social Protection Department's annual collection of administrative data from national ministries of labour, social security, welfare, finance and others. The ILO also derives global and regional estimates of the proportion of the population covered by social protection systems and the corresponding sub-indicators.

Other international databases of social protection statistics include those of the World Bank,⁶³ UNICEF,⁶⁴ the United Nations Entity for Gender Equality and the Empowerment of Women (UN-Women),⁶⁵ HelpAge International,⁶⁶ the Organisation for Economic Co-operation and Development (OECD)⁶⁷ and the International Social Security Association (ISSA).⁶⁸

⁶¹ ILOSTAT is accessible at www.ilo.org/ilostat.

⁶² For more information on the Social Security Inquiry, visit http://www.ilo.org/dyn/ilossi/ssimain.home?p_lang=en.

⁶³ Available at [http://databank.worldbank.org/data/reports.aspx?source=the-atlas-of-social-protection:-indicators-of-resilience-and-equity-\(aspire\)](http://databank.worldbank.org/data/reports.aspx?source=the-atlas-of-social-protection:-indicators-of-resilience-and-equity-(aspire)).

⁶⁴ Available at <https://data.unicef.org/>.

⁶⁵ Available at <http://www.unwomen.org/en>.

⁶⁶ Available at <http://www.helpage.org/resources/ageing-data/>.

⁶⁷ Available at <https://data.oecd.org/social-exp/social-spending.htm>.

⁶⁸ Available at <https://www.issa.int/en>.

Interpretation and use

Statistics on the proportion of the population covered by social protection floors reveal essential information on the extent to which the population is protected against life's eventualities and how secure individuals' health and living conditions are. This indicator details the proportion of the population with access to basic social security guarantees that ensure essential health care and basic income security over the life cycle.

In order to assess how comprehensive and universal a social security system is, it is crucial to have data separately on the coverage of each contingency's social protection scheme, expressed as a proportion of the population potentially covered by that contingency (proportion of older persons receiving a pension, proportion of persons with disabilities receiving benefits, proportion of women giving birth covered by maternity benefits, proportion of children covered by social protection benefits, proportion of unemployed receiving benefits, proportion of workers covered in case of occupational injury and proportion of vulnerable persons receiving benefits).

Limitations

Statistics on the overall effective coverage of social protection systems may be hiding important distinctions between coverage by contributory social insurance, universal schemes covering all residents (or all residents in a given category) and means-tested schemes potentially covering all those who pass the required test of income and/or assets. Having detailed information on each of these (and their relative importance) is essential when assessing social protection coverage and gaps in coverage.

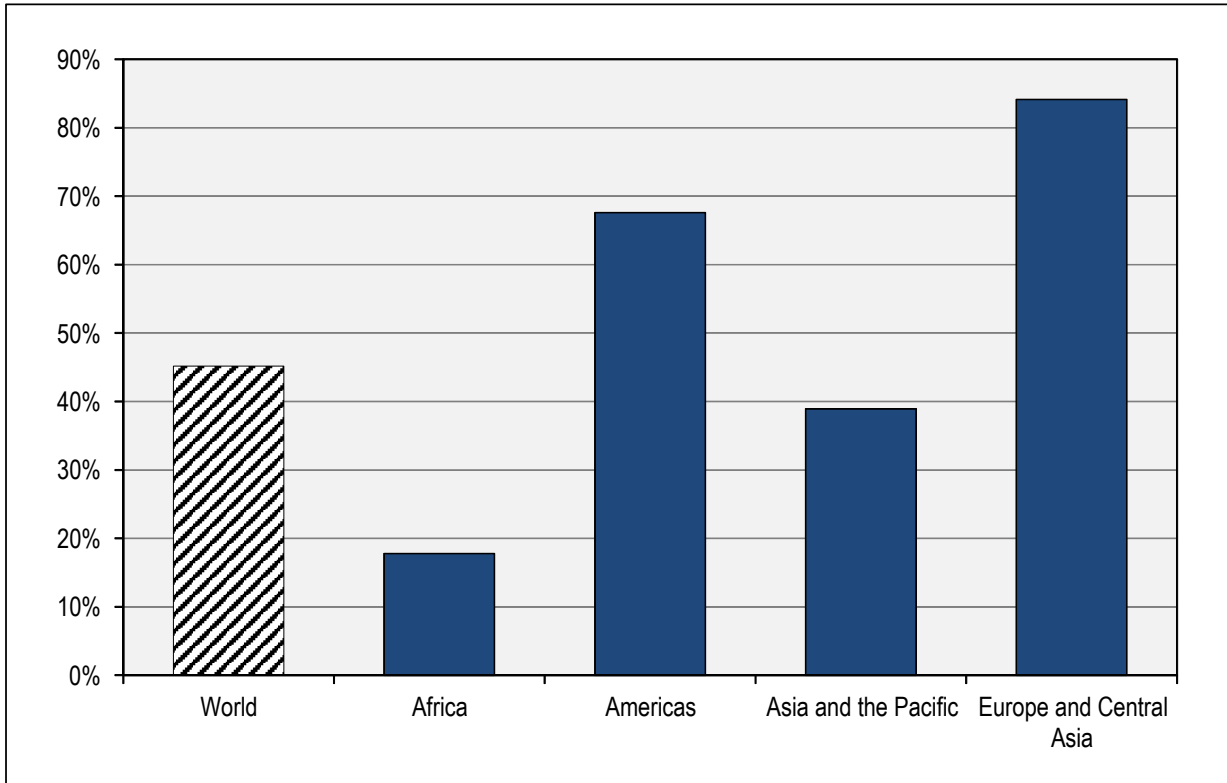
Also, for the purposes of this indicator, effective coverage of social protection is measured as the number of people who are actively contributing to a social insurance scheme or receiving benefits (contributory or non-contributory), which means that the indicator refers to the population involved in at least one social protection cash transfer. This provides a comprehensive headcount of social protection coverage but conveys no information on the amount of the cash transfers, the differences in amounts received by beneficiaries, how adequate the benefits are in relation to what they are supposed to guarantee and the overall quality of the social protection system.

Data visualization and analysis

ILO estimates reveal that in 2016, about 45 per cent of the world's population was covered by social protection systems, which means that less than half of the world's population either contributed to a social security scheme or received at least one type of benefit from a contributory or non-contributory social protection programme. The world's social protection coverage rate hides great discrepancies across regions: 84 per cent of the population were involved in at least one social protection cash transfer in Europe and Central Asia, whereas only 18 per cent of the population were covered by social protection in Africa (figure 10).

The overall social protection coverage rate may overlook notable differences in the quality and extent of each particular social protection scheme. It is therefore important to also assess the coverage rates of each of the individual schemes. The aggregate figure that refers to the whole population may also fail to convey differences in social protection coverage across stages of the life cycle. Thus, it is also important to produce data by age group (children, adults, seniors), where appropriate.

Figure 10. Share of the population covered by social protection systems, ⁶⁹ by region (2016)



Source: ILO: World Social Protection Report 2017–19: Universal social protection to achieve the Sustainable Development Goals (Geneva, 2017).

2.2.2. Female share in management

Information on the distribution of employment in each particular occupation by sex reveals important information about labour market segregation. In particular, statistics on the distribution of employment by sex and occupation with a high skill level, especially in management, cast light on extent to which women and men have equal access to decision-making and management roles in government, enterprises and institutions. The female share of employment in managerial positions is therefore an important indicator for providing insights into women’s power in decision-making and in the economy.⁷⁰

⁶⁹ Refers to the population effectively covered by at least one social protection cash transfer.

⁷⁰ For more information see metadata sheet for indicator 5.5.2 on the SDG Indicators metadata repository, at <https://unstats.un.org/sdgs/metadata/>.

Concepts and definitions

Employment comprises all persons of working age who, during a short reference period (one week), were engaged in any activity to produce goods or provide services for pay or profit.⁷¹

Employment in management is determined according to the categories of the latest version of the International Standard Classification of Occupations (ISCO-08),⁷² which organizes jobs into a clearly defined set of groups based on the tasks and duties undertaken in the job.

For the purposes of this indicator, it is preferable to refer to senior and middle manager only rather than to total management (including junior management). The share of women tends to be higher in junior management than in senior and middle management, so including junior management may introduce a bias in the indicator. Senior and middle management correspond to major group 1 in both ISCO-08 and ISCO-88, excluding category 14 in ISCO-08 (hospitality, retail and other services managers) and category 13 in ISCO-88 (general managers) since these comprise mainly managers of small enterprises. If statistics are not disaggregated at the submajor level, then major group 1 of ISCO-88 and ISCO-08 can be used as a proxy and the indicator would then refer to total management (including junior management).

Calculation

The proportion of women in managerial positions is calculated as follows:

$$\begin{aligned} & \text{Female share in management} \\ &= \frac{\text{Women employed in submajor groups 11, 12 and 13 of ISCO 08}}{\text{Persons employed in submajor groups 11, 12 and 13 of ISCO 08}} \times 100 \end{aligned}$$

Disaggregations desired and classifications used for them

This indicator does not require any disaggregation. However, in order to compute it, it is necessary to have statistics on employment disaggregated by economic activity, using the latest version of the International Standard Classification of Occupations (ISCO-08) and referring to the two-digit level of the classification, to the extent possible, and to the one-digit level of the classification when more detailed data is not available.

It is important to note that although the indicator title does not specifically call for disaggregation, the overarching principle of data disaggregation of the global indicator framework implies that SDG indicators should be disaggregated, where relevant, by income,

⁷¹ Resolution concerning statistics of work, employment and labour underutilization adopted by the 19th International Conference of Labour Statisticians, Geneva, 2–11 October 2013, available at http://ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS_230304/lang--en/index.htm.

⁷² For more detailed information on the latest version of the International Standard Classification of Occupations (ISCO-08), see <http://www.ilo.org/public/english/bureau/stat/isco/isco08/>.

sex, age, race, ethnicity, migratory status, disability and geographical location, or other characteristics, in accordance with the Fundamental Principles of Official Statistics.

Sources of data at national and international levels

At the national level, labour force surveys are the preferred source of statistics on the proportion of women in managerial positions. Such surveys provide comprehensive coverage of the employed population since they can be designed to cover virtually the entire non-institutional population of a given country, all branches of economic activity, all sectors of the economy and all categories of workers, including the self-employed, contributing family workers, casual workers and multiple jobholders. They also gather detailed information on the occupation of employed persons, typically allowing the production of statistics at the two-digit level of the ISCO. In addition, labour force surveys generally provide simultaneous measurement of the employed, unemployed and persons outside the labour force (i.e., the working-age population) in a coherent framework. This favours the interpretation of the female share in management along with other indicators of the labour market.

At the international level, the ILO's central online labour statistics database, ILOSTAT,⁷³ is the main source for cross-country statistics on the female share in senior and middle management. Unfortunately, no global or regional estimates are available at this stage.

Interpretation and use

This indicator provides information on the extent to which women have access to high-level decision-making positions and thus provides insights into women's role and influence on the economy and society. In order to obtain a comprehensive picture of women's position in the labour market, including their representation in high-level occupations, it is important to interpret this indicator along with other labour market indicators. In particular, it is crucial to keep in mind the distribution by sex of total employment when analysing the distribution by sex of employment in senior and middle management.

Limitations

The female share in senior and middle management reflects the gender distribution in high skill level positions but conveys no information on the actual levels of responsibility of women in these management positions or the importance of the enterprises and organizations in which they are employed. It also does not say anything about the levels of experience and qualification of men and women in these positions. In addition, the quality and reliability of statistics on the female share in senior and middle management are strictly dependent on the reliability of the employment statistics by occupation at the two-digit level of the ISCO.

Data visualization and analysis⁷⁴

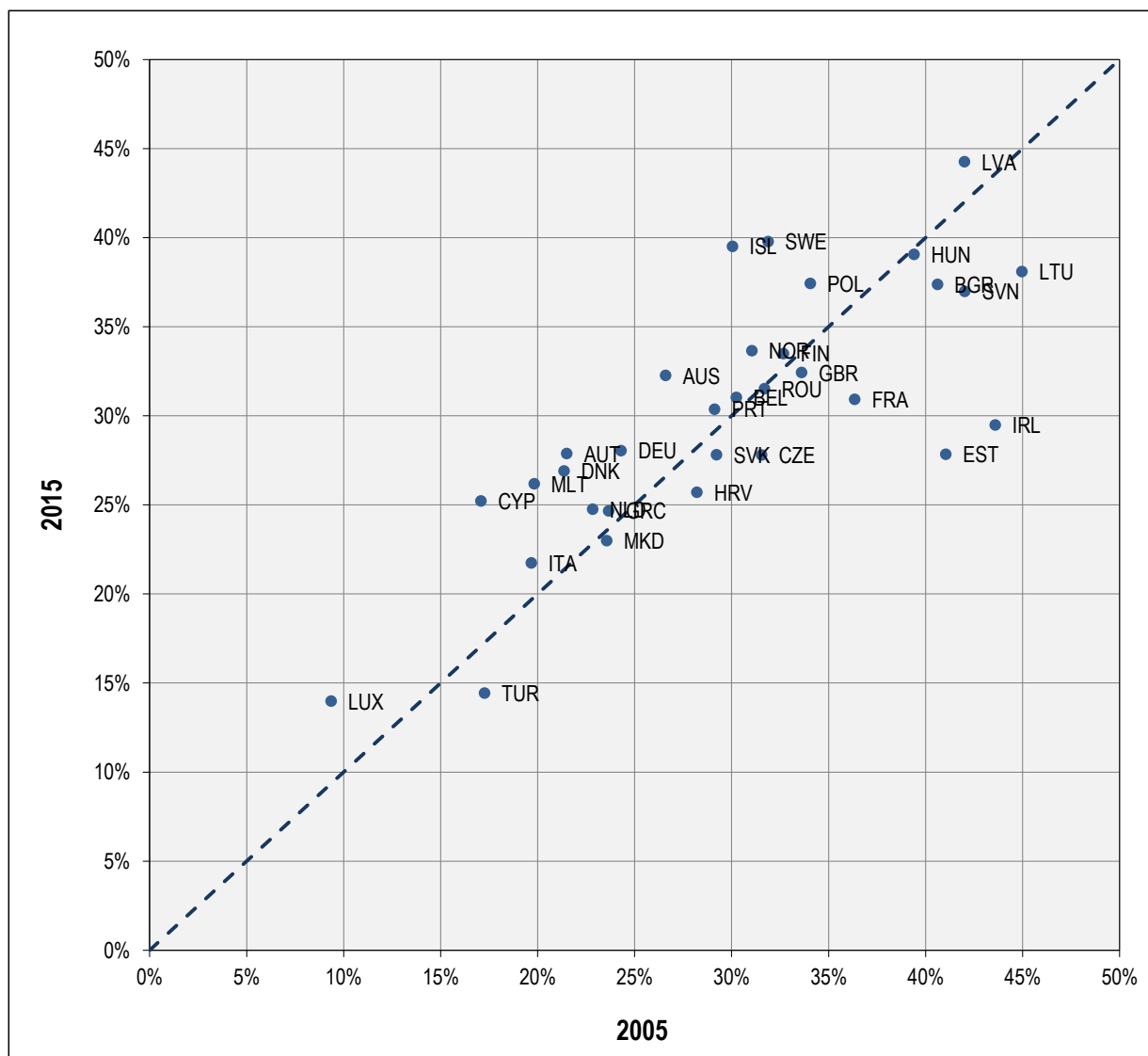
In the past decade, the share of women in senior and middle management increased in only 44 per cent of the countries with available data and remains significantly lower than the female share in total employment in all the countries studied. In more than 66 per cent of

⁷³ ILOSTAT is accessible at www.ilo.org/ilostat.

⁷⁴ Analytical paragraphs and graphs submitted by the ILO to UNSD as inputs for the 2017 SDG reports.

these countries, women comprised less than one third of employment in senior and middle management in 2015. The largest increases (of more than 6 percentage points) in the female share in senior and middle management in the last decade were observed in Iceland, Cyprus, Sweden, Austria and Malta (figure 11).

Figure 11. Female share in senior and middle management (2005 and 2015)



Source: ILOSTAT. Three-digit ISO country codes are used to identify countries.

When it comes to the female share in management, including junior management, in more than two thirds of countries with available data, this is higher than the female share in senior and middle management only. Thus, women are more represented in junior management than in senior and middle management, with glass ceilings thicker at top management echelons. This highlights the importance of disaggregation in the analysis of this indicator because the ability of women to reach high-level positions would be overestimated by focusing only on the female share in total management as opposed to the female share in senior and middle management (figure 12).

Concepts and definitions

The labour income share in gross domestic product (GDP) is the total compensation of employees expressed as a percentage of GDP for the total economy.

GDP represents the monetary value of goods and services within the SNA⁷⁶ production boundary produced within a country over a specified period of time. It can be calculated using three different approaches: production, expenditure and income. The SNA establishes that GDP is the sum of gross value added of all resident producer units, including taxes on products not comprised in the valuation of output and excluding subsidies on products (production approach). GDP also corresponds to the sum of the final uses of goods and services (as opposed to intermediate consumption) measured at purchasers' prices, less the value of imports of goods and services (expenditure approach). GDP is also equal to the sum of primary incomes distributed by resident producer units, that is, all wages, rents, interest and profits (income approach).

It is important to note that according to the new standards laid out in the 2013 ICLS resolution concerning statistics of work, employment and labour underutilization, the labour input contributing to the GDP comprises not only employment (work done for use by others for pay or profit) but unpaid trainee work, volunteer work, own-use production work and other work activities as well. However, the extent to which contributions to the GDP of forms of work other than employment are measured and accounted for depends on the national context. Most countries limit their measurement of the labour input to employment.

Compensation of employees refers to the total remuneration, in cash or in kind, payable by an enterprise to an employee in return for work done by the latter during the accounting period, as defined in the SNA. It has two main components: (a) wages and salaries payable in cash or in kind; and (b) social insurance contributions payable by employers, which include contributions to social security schemes, actual social contributions to other employment-related social insurance schemes and imputed social contributions to other employment-related social insurance schemes.

Calculation

The labour share in GDP is calculated as follows:

$$\text{Labour share of GDP} = \frac{\text{Total compensation of employees}}{\text{GDP}} \times 100$$

For the sake of consistency, reliability and comprehensiveness, the numerator and the denominator should be provided in the same unit (for example, in nominal national currency) and they should have the same coverage, which should be as exhaustive as possible (ideally, the whole economy, including all types of employees).

⁷⁶ For more detailed information on the United Nations System of National Accounts, visit <https://unstats.un.org/unsd/nationalaccount/sna.asp>.

Sources of data at national and international levels

The preferred and most common source of data for the two items needed to calculate this indicator (compensation of employees and GDP) are national accounts, which usually have an exhaustive coverage of the whole economy and allow the measurement of the various GDP components within a consistent framework. Alternatively, estimates of the labour share in GDP can be derived using statistics on the compensation of employees from establishment surveys.

At the international level, the ILO's central online labour statistics database, ILOSTAT,⁷⁷ disseminates cross-country statistics on the labour income share. Unfortunately, no global or regional estimates are available at this stage.

Interpretation and use

The labour share of GDP conveys the relative share of national output which is destined to employees as compared with the share that goes to the remuneration of capital during the reference period. With a view to sound interpretation of this indicator, it should be analysed along with statistics on economic growth trends, employment growth and labour productivity growth. The share of labour compensation in national output casts light on the extent to which workers are benefiting from economic growth. In times of recession, the labour share in GDP provides information on how falling output reduces employees' remuneration relative to profits. For any given level of GDP, the labour share can fall as a result of falling wage employment (employees), falling wages or a combination of both.⁷⁸

Limitations

The labour share of GDP underestimates the share of GDP that goes to the remuneration of employment because it covers only the compensation of employees, excluding the remuneration of the self-employed. The magnitude of this underestimation depends on the national context, in particular the share of paid employment (employees) in total employment. Consequently, the bias resulting from non-coverage of self-employed tends to be much more significant in developing countries, which tend to have much larger shares of self-employed than developed countries.

The labour income share should be interpreted along with other economic and labour market indicators since it does not by itself provide any information on growth, productivity, workers' conditions, workers' experience and qualifications and labour market segregation.

In cases where the contribution of forms of work other than employment to the GDP are measured and accounted for, it is necessary to resort to satellite accounts for the detailed data needed, which complicates data collection procedures and may introduce data consistency issues.

⁷⁷ ILOSTAT is accessible at www.ilo.org/ilostat.

⁷⁸ See ILO, "The wage share", in *Global Wage Report 2010/11: Wage policies in times of crisis* (Geneva, 2010), available at: http://www.ilo.org/global/publications/books/WCMS_145265/lang-en/index.htm.

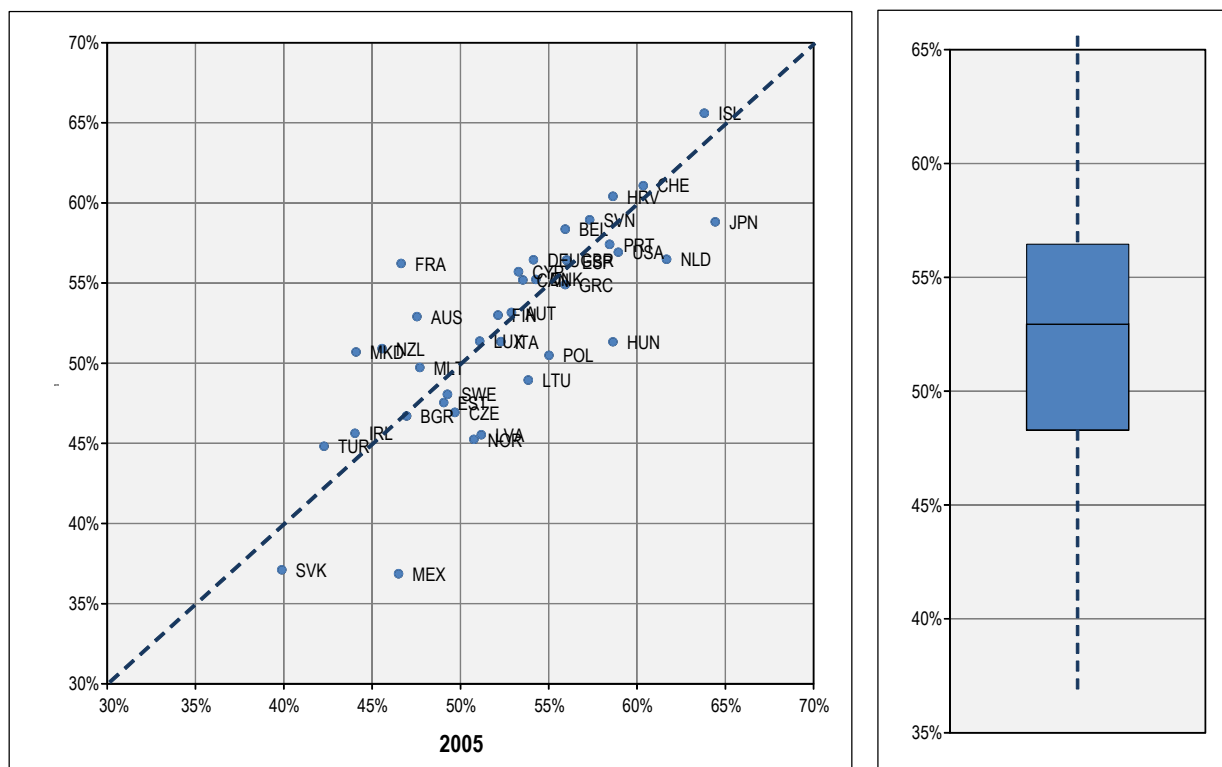
Data visualization and analysis ⁷⁹

There has not been a clear trend in the labour share of GDP in the past decade, which has increased in 55 per cent of countries with available data. The average labour share of GDP among countries with available data in 2015 was 52.3 per cent and the median share was 53 per cent, which means that in general, in the parts of the world represented by countries with available data, about half of total output is destined to remunerating labour and the other half goes to remunerating the holders of capital (figure 13).

The global economic crisis of 2007–08 had a severe impact on labour markets worldwide, giving rise to a subsequent jobs crisis. In countries where we observe a decline in the labour share of GDP, the slowdown in economic growth translated into reduced labour incomes relative to profits, that is, labour incomes fell at a greater rate than profits. This may be due to a decline in employment or a reduction of wages and labour-related income (or a combination of both).

Given that labour income provides workers with the means to consume and invest and thus is an important driver of economic growth, it is crucial to foster desirable levels of labour share of GDP.

Figure 13. Labour income share, as a percentage of GDP (2005 and 2015: left and 2015: right)



Source: ILOSTAT. Three-digit ISO country codes are used to identify countries.

⁷⁹ Analytical paragraphs and graphs submitted by the ILO to UNSD as inputs to the 2017 SDG reports.

2.3. Other indicators with ILO's involvement

In addition to being custodian (either solely or jointly with other agencies) of all the tier I and II indicators described in the preceding sections, the ILO is also involved as a partner agency in the promotion, compilation and dissemination of other indicators that already have an established methodology, as explained below.

Table 6. List of tier I and II indicators for which the ILO is a partner agency

Indicator number	Indicator title	Custodian agency/ies	Partner agency/ies	Tier
1.1.1	Proportion of population below the international poverty line, by sex, age, employment status and geographical location (urban/rural)	World Bank	ILO	I
4.3.1	Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex	UNESCO-UIS	OECD, EUROSTAT, ILO	II

2.3.1. Working poverty

The ILO's involvement in SDG global indicator 1.1.1 (proportion of population below the international poverty line, by sex, age, employment status and geographical location) is limited to the working poor, that is, the proportion of employed population living with their families below the poverty line (also known as the working poverty rate). The working poverty rate reveals the proportion of the employed population who live in poverty despite being employed, implying that their employment-related incomes are not sufficient to lift them and their families out of poverty and ensure decent living conditions.⁸⁰

Indicator number and title: 1.1.1 Proportion of population below the international poverty line, by sex, age, employment status and geographical location (urban/rural)

Tier: I

Concepts and definitions

The working poor are defined as employed persons who, despite being employed, live in households with per capita consumption or income that is below the poverty line. For the purposes of international comparability, the poverty line used for the measurement of this indicator refers to an absolute international poverty line of US\$1.90 per day at PPP.

Employment comprises all persons of working age who, during a short reference period (one week), were engaged in any activity to produce goods or provide services for pay or profit.⁸¹

⁸⁰ For more information see the metadata sheet for indicator 1.1.1 on the SDG Indicators Metadata repository at <https://unstats.un.org/sdgs/metadata/>.

⁸¹ Resolution concerning statistics of work, employment and labour underutilization adopted by the 19th International Conference of Labour Statisticians, Geneva, 2–11 October 2013, available at http://ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS_230304/lang--en/index.htm.

Calculation

The working poverty rate is calculated as follows:

$$\text{Working poverty rate} = \frac{\text{Number of employed persons living in poor households}}{\text{Total number of employed persons}} \times 100$$

Disaggregations desired and classifications used for them

It is recommended that this indicator be disaggregated by sex and geographical location (urban/rural) in order to allow the assessment of differences in the incidence of working poverty and the identification of particularly vulnerable population groups.

It is important to have information on the population living in poverty by employment status (thus distinguishing the working poor from the unemployed living in poverty and persons outside the labour force living in poverty) in order to be able to understand the underlying causes of poverty. In the case of the working poor, the most likely culprits of poverty are low incomes and, more generally, poor working conditions and low-quality employment. Conversely, in the case of the unemployed or persons outside the labour force who are poor, poverty may be driven by a lack of employment opportunities and insufficient social protection.

Sources of data at national and international levels

At the national level, the most reliable sources of statistics on working poverty are household surveys that include detailed questions for gathering information on both employment status and poverty status. It is important to note that employment status pertains to the individual and is determined at the individual level, whereas poverty status pertains to the household and is determined at the level of the household. The most common type of household surveys serving as a source of data on working poverty are household income and expenditure surveys and living standards measurement surveys with employment modules. Alternatively, labour force surveys that collect information on household income can also be used.

At the international level, the ILO's central online labour statistics database, ILOSTAT,⁸² is the main source for cross-country statistics on working poverty. The ILO's Trends Econometric Models⁸³ are used to derive comparable and consistent estimates of the working poverty rate for all countries, as well as global and regional estimates.⁸⁴

⁸² ILOSTAT is accessible at www.ilo.org/ilostat.

⁸³ Accessible at http://www.ilo.org/empelm/projects/WCMS_114246/lang--en/index.htm.

⁸⁴ The global and regional estimates of employment by economic class (including the working poor) are part of the ILO Labour Force Estimates and Projections series, which are analysed in the *World Employment and Social Outlook* reports and are available at <http://www.ilo.org/global/research/global-reports/weso/2017/lang--en/index.htm>. For more detailed information on the ILO's estimates and projections of working poverty, see http://www.ilo.org/wcmsp5/groups/public/---dgreports/---inst/documents/publication/wcms_216451.pdf.

Interpretation and use

The working poverty rate provides information on the link between employment and poverty. In order to inform effective policies and measures aimed at reducing poverty, it is crucial to analyse the nature and patterns of the link between employment and poverty.

Whether a worker is considered as working poor depends on his or her own employment-related income, but also on the employment-related income of other household members, the other types of income received and the total number of household members. Hence, in order to draw accurate conclusions on the characteristics and determinants of poverty, it is important to study the working poverty rate along with other labour market indicators and with information on household composition and structure.

Having statistics on the working poor disaggregated by status in employment, economic activity, occupation, or other types of characteristics of the employed may help identify the categories of workers most vulnerable to poverty, so that they can be targeted by relevant policies. Statistics on the working poor by the number of hours worked is also enlightening, in that this reveals whether the main issue is the low number of hours worked, possibly due to time-related underemployment work or insufficient earnings, despite long hours of work.

Limitations

Working poverty statistics are strictly dependent on the poverty line used to derive them and the choice of poverty line based on the context, priorities and expected uses of the statistics is often subject to debate. When doing cross-country analyses, even using the standard absolute international poverty line of US\$1.90 per day at PPP, it is hard to ascertain the full international comparability of the data since it could be questioned whether two people in two different countries, living on less than US\$1.90 a day, face the same degree of deprivation.

As already mentioned, poverty status is determined at the level of the household and not for each individual, based on the assumption that households pool their income. This assumption may not always be true, however, which could hinder the reliability of working poverty statistics.

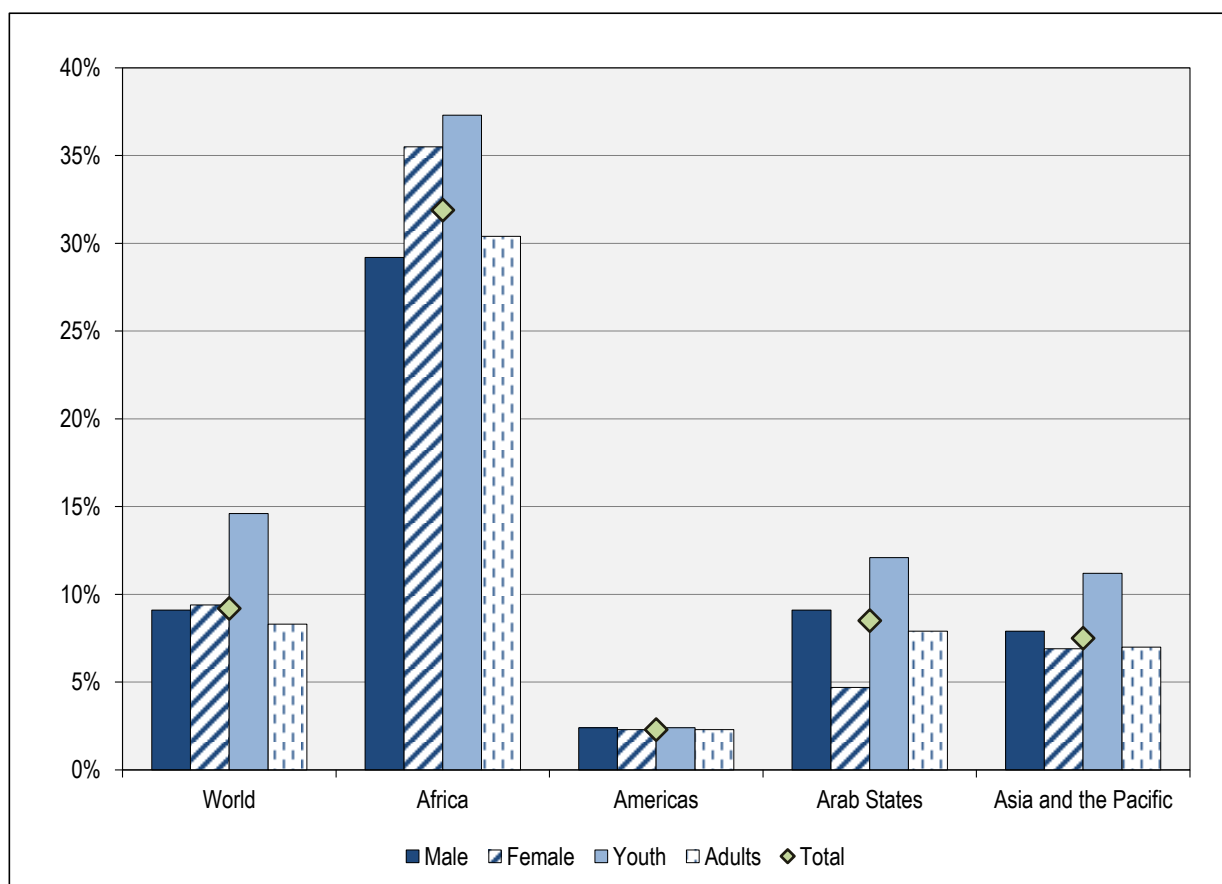
In addition, statistics on the working poverty rate provide an indication of the share of employed living in poverty but do not convey any information on the characteristics of the employed, their level of education and skills, their working time or the composition of their households. All of this is crucial to determine the reasons behind these workers' poverty (insufficient working time, insufficient wages, too many household members living on the wages of too few working household members, etc.).

Data visualization and analysis

In 2017, 9 per cent of persons employed around the world were living below the international poverty line of US\$1.90. There are no significant differences in the global working poverty rate for men and women but there are notable differences between working poverty rates among youth and adults: nearly 8 per cent of employed adults around the world were living in poverty in 2017, compared to 15 per cent of employed youth (figure 14).

The patterns and levels of the working poverty rate vary considerably across regions. The situation is particularly worrying in Africa, where nearly 32 of the employed are poor. Such high shares of working poverty reflect widespread problems related to working conditions, employment quality and low productivity.

Figure 14. Working poverty rates (percentage of employed living below US\$1.90 at PPP) for men, women, youth and adults, in the world and by region (2017)



Source: ILO modelled estimates, May 2018.

2.3.2. Participation in education and training

The ILO's involvement in the compilation of SDG global indicator 4.3.1 (participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex) is limited to providing comments and inputs, upon request, on the measurement of the participation of youth in training activities.⁸⁵ However, beyond the statistical measurement of this indicator, the ILO works closely with countries on skills development and vocational training.

Indicator number and title: 4.3.1 Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex

Tier: II

According to the International Standard Classification of Education (ISCED),⁸⁶ education is defined as organized and sustained communication designed to bring about

⁸⁵ For more information, see the metadata sheet for indicator 4.3.1 on the SDG Indicators metadata repository at <https://unstats.un.org/sdgs/metadata/>.

⁸⁶ For more information on the latest version of the International Standard Classification of Education (ISCED-2011), see <http://uis.unesco.org/en/topic/international-standard-classification-education-isced>.

learning. 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 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 workplace, in the local community, or on a self-directed, family-directed or socially-directed basis. The coverage of this indicator excludes persons in informal education.

Persons are considered to be in training if they are in a non-academic learning activity through which they 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.

Global SDG indicator 4.3.1 is a useful indicator not only of the status of education but also of the status of the labour market. The participation rates of youth in formal and non-formal education and training, interpreted alongside youth NEET rates and youth unemployment rates, provide an indication of the socio-economic situation of youth and the extent of their social and economic inclusion.

3. Labour market indicators requiring methodological development (tier III)

The SDG global indicator framework is forward-looking: it includes not only already indicators with an established methodology that are already widely used but also new indicators that are deemed necessary to measure emerging challenges, classified as tier III indicators. In some cases, these new indicators have a suggested draft methodology that has not yet been adopted at the international level; in other cases, they have only some vague methodological guidelines, or no methodology at all. Thus, the level of methodological development and work required varies across tier III indicators.⁸⁷

The ILO is the sole custodian agency of two tier III indicators (indicators 8.8.2 and 8.b.1). It is one of the custodian agencies for two other tier III indicators (indicators 10.7.1 and 14.c.1) and it is a partner agency for one tier III indicator (indicator 16.10.1). The methodological development plans for these indicators are briefly described in the following sections.

Table 7. List of tier III indicators for which the ILO is the sole custodian agency, one of the custodian agencies, or a partner agency

Indicator number	Indicator title	Custodian agency/ies	Partner agency/ies	Tier
8.8.2	Level of national compliance of labour rights (freedom of association and collective bargaining) based on International Labour Organization (ILO) textual sources and national legislation, by sex and migrant status	ILO		III
8.b.1	Existence of a developed and operationalized national strategy for youth employment, as a distinct strategy or as part of a national employment strategy	ILO	World Bank, OECD	III
10.7.1	Recruitment cost borne by employee as a proportion of yearly income earned in country of destination	ILO and World Bank		III
14.c.1	Number of countries making progress in ratifying, accepting and implementing through legal, policy and institutional frameworks, ocean-related instruments that implement international law, as reflected in the United Nation Convention on the Law of the Sea, for the conservation and sustainable use of the oceans and their resources	UN-DOALOS, FAO, UNEP, ILO, and other UN-Oceans agencies		III
16.10.1	Number of verified cases of killing, kidnapping, enforced disappearance, arbitrary detention and torture of journalists, associated media personnel, trade unionists and human rights advocates in the previous 12 months	OHCHR	ILO, UNESCO-UIS	III

⁸⁷ The workplans for tier III indicators as of July 2018 are available at <https://unstats.un.org/sdgs/files/meetings/iaeg-sdgs-meeting-04/Tier%20III%20Work%20Plans%2011.11.2016.pdf>.

3.1. Compliance with labour rights

Labour rights and their implementation in practice are part and parcel of decent work, and they are at the core of workers' well-being and human dignity. It is thus important to have a reliable measure for the monitoring of compliance with labour rights. In this regard, indicator 8.8.2 provides information on the status of freedom of association and collective bargaining rights in law and practice around the world, as well as information on improvements or deterioration in such compliance over time.

Indicator number and title: 8.8.2 Level of national compliance with labour rights (freedom of association and collective bargaining) based on International Labour Organization (ILO) textual sources and national legislation, by sex and migrant status

Tier: III

The indicator would be defined according to the principles contained in the ILO Conventions on 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), and related principles of application.⁸⁸

Freedom of association represents the right of workers and employers to form and join organizations of their own choosing, an integral part of a free and democratic society. In many cases, these organizations have played a significant role in their countries' political and economic development. 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.

This indicator constitutes a score of compliance with labour rights, with a scale ranging from zero to 10 (best and worst possible scores, respectively). The scores would be assigned based on the standardized coding of violations to freedom of association and collective bargaining rights found in ILO textual sources and national legislation according to the evaluation criteria. The evaluation criteria and their corresponding weights are intended to follow a robust methodology and are intended to be adopted at the international level before the indicator can be considered reliable.

The indicator would be defined according to the principles pertaining to freedom of association and collective bargaining rights, as defined by the ILO and the related body of comments of the ILO supervisory bodies.

The coding is based on violations reported in trustworthy ILO textual sources, excluding all other violations reported in external reports. Depending on national circumstances, this could also imply, in certain cases, a degree of underestimation of labour rights violations. In such cases, the indicator should be analysed alongside information related to the national context and the national legal framework.

The suggested methodology for this indicator is expected to be presented at the 20th International Conference of Labour Statisticians for discussion and potential adoption.

3.2. National strategies for youth employment

The situation of youth in the labour market is a major concern in many countries around the world. In many regions around the world, youth are particularly vulnerable to hardships

⁸⁸ Both Conventions are available at <https://www.ilo.org/dyn/normlex/en/f?p=1000:12000:::NO>.

related to the labour market and face specific difficulties in accessing the labour market, especially with high-quality employment. In this context, national strategies for youth employment play a key role in ensuring that youth are not left behind by contributing to their integration into the labour market and society. Indicator 8.b.1 aims to provide information on whether efforts have been made by governments to improve the situation of youth in the labour market.

Indicator number and title: 8.b.1 Existence of a developed and operationalized national strategy for youth employment, as a distinct strategy or as part of a national employment strategy

Tier: III

The purpose of indicator 8.b.1 is to provide information on the extent to which countries are focusing on youth employment issues, and the progress made in this regard.

This indicator is intended to be a binary indicator, with two possible values (1- yes or 0- no) to convey whether the country has a national strategy for youth employment and is acting on it or not.

International monitoring of youth employment policies was carried out over the period 2010–12 by the Youth Employment Network (YEN) – a partnership between the ILO, the United Nations and the World Bank – based on information compiled through a questionnaire sent to national authorities (mainly ministries of development, labour or planning). Subsequently, at the request of its constituents, the ILO established YouthPOL, a global repository of policies affecting youth employment,⁸⁹ which covers 65 countries as of its most recent update of August 2016. The ILO also maintains a dataset of broader national employment policies not strictly related to youth, which covers 117 countries as of its most recent update of December 2016.

For the purpose of this indicator, a “developed strategy” is expected to be defined as an officially-adopted document that articulates a set of measures and provisions aimed at promoting youth employment, usually within a defined timeframe. It may exist on its own or as part of a wider employment or development strategy. An “operationalized strategy” is expected to be defined as an action plan with resources earmarked and institutional responsibilities clarified.

The corresponding values for the indicator should be determined on the basis of information received from governments on officially adopted strategy documents. These strategy documents would then be analysed to establish whether or not they constitute a developed and operationalized national strategy. Information on whether the strategy is part of the national employment or development plan or whether it constitutes a separate document would also be recorded.

This indicator makes no attempt to assess the impact of a national strategy. Furthermore, some governments may have de facto national strategies for youth employment but lack an officially adopted de jure document. This indicator only assesses de jure strategies and could potentially convey a skewed image of countries’ efforts to improve the situation of youth in the labour market.

The suggested methodology for this indicator is planned to be presented at the 20th International Conference of Labour Statisticians, which will be held in Geneva in 2018, for discussion and potential adoption.

⁸⁹ YouthPOL is available online at <http://www.ilo.org/dyn/youthpol/en/f?p=30850:1001:0::NO:::>

3.3. Recruitment cost

More and more workers and their families are leaving their countries every day in the hopes of finding employment abroad with higher remuneration than what is available locally and with improved working and living conditions. Labour migration is driven by many different phenomena, including globalization, demographic shifts, conflicts, income inequalities and climate change. Migrant workers contribute to growth and development in their countries of destination, while countries of origin benefit greatly from their remittances and the skills acquired during their period of work abroad if they subsequently return to their country of origin.

Nevertheless, the migration process can be problematic in terms of governance, integration and migrant workers' protection and often entails significant costs for the migrant worker.⁹⁰ It is therefore important to have reliable measures to quantify the recruitment cost borne by the migrant employee, as an approximate estimation of the hardships of the migration process and the extent to which migration does indeed entail improved living conditions for the migrant worker. This is the aim of indicator 10.7.1.

Indicator number and title: 10.7.1 Recruitment cost borne by employee as a proportion of yearly income earned in country of destination

Tier: III

The preliminary work to develop this indicator was led by the Global Knowledge Partnership on Migration and Development (KNOMAD), on the basis of consultations involving numerous stakeholders, including the ILO and the World Bank.

The suggested methodology implies conducting small sample surveys in many countries (in collaboration with relevant ministries), interviewing workers to learn about their labour migration costs. The idea is to compile reliable information on the monetary and non-monetary migration costs incurred by migrants. The components of migration costs include recruitment costs (costs associated with recruitment agency fees, passports, visas, air transportation, medical examinations, etc.); wages foregone due to underpayment, late payment or non-payment of wages; and lack of compensation for work-related sickness or injuries. Expressing the recruitment costs as a percentage of yearly income earned in the country of destination provides an indication of the benefits of labour migration to workers compared to its costs; more precisely, it reveals what share of the expected income in the country of destination is needed to pay for migration costs rather than directly benefiting migrant workers through wages.

Drawing on the ILO/KNOMAD experience in conducting small-scale recruitment cost surveys, the ILO and World Bank have prepared an initial concept note on this indicator, including a conceptual framework and a draft measurement methodology that defines key items for data collection. The draft guidelines include details on objectives and uses, concepts and definitions, data collection methods and programmes, data collection items, and indicators and data dissemination, with a view to their endorsement by national statistical offices before the end of 2018. Moreover, these guidelines will be refined through a number of pilot tests planned by selected NSOs, so there will be room for revisions as data sources, data collection methods and methodologies improve.

⁹⁰ For further details on labour migration, refer to the webpage of the Labour Migration Branch of the ILO, at <http://www.ilo.org/global/topics/labour-migration/lang--en/index.htm>.

3.4. Law of the sea

Promoting the conservation and sustainable use of oceans and maritime resources is a key element of sustainable development. The ratification and implementation of the main international legal instruments pertaining to the law of the sea, the conservation of maritime resources and the conditions of maritime workers are at the core of the efforts to ensure the preservation of oceans, and this is what indicator 14.c.1 is intended to convey.

Indicator number and title: 14.c.1 Number of countries making progress in ratifying, accepting and implementing through legal, policy and institutional frameworks, ocean-related instruments that implement international law, as reflected in the United Nations Convention on the Law of the Sea, for the conservation and sustainable use of the oceans and their resources

Tier: III

The work to develop a sound methodology for indicator 14.c.1 is being led by the Division for Ocean Affairs and the Law of the Sea (UN-DOALOS) of the United Nations Secretariat. The ILO's involvement in this indicator is limited to the conditions of seafarers, in particular the ratification and implementation of the ILO Maritime Labour Convention of 2006.

The Maritime Labour Convention has a strong enforcement component. The ILO's supervisory mechanism monitors the effective compliance of countries which have ratified the Convention. The tripartite component of the ILO and its supervisory system legitimizes the process.

Information on the number of countries which have ratified the ILO Maritime Labour Convention is readily available in NORMLEX (the ILO's Information System on International Labour Standards) ⁹¹ and is continuously updated.

3.5. Verified cases of killings and kidnapping

Peaceful and inclusive societies are essential for sustainable development because they ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements. Goal 16, in particular Target 10, focuses on this area. Any occurrence of killing, kidnapping, forced disappearance, arbitrary detention or torture of journalists, associated media personnel, trade unionists or human rights advocates is a threat to development and human dignity. Thus, it is important to have reliable and quantifiable information on these atrocities so as to target them for elimination. This is what indicator 16.10.1 seeks to do.

Indicator number and title: 16.10.1 Number of verified cases of killing, kidnapping, enforced disappearance, arbitrary detention and torture of journalists, associated media personnel, trade unionists and human rights advocates in the previous 12 months

Tier: III

The work to develop a sound methodology for indicator 16.10.1 is being led by the indicator's sole custodian agency, the Office of the United Nations High Commissioner for

⁹¹ NORMLEX is available online and the ratifications for the Maritime Labour Convention can be seen at http://ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:11300:0::NO:11300:P11300_INSTRUMENT_ID:312331:NO.

Human Rights (OHCHR). The involvement of the ILO in this indicator is limited to the part dealing with trade unionists.

A working group (the Praia Group on Governance Statistics) was set up in March 2015 for the purposes of discussing and deciding on the standards and methods to be used to produce statistics on governance, peace and security (particularly for indicators under Goal 16).

Concerning indicator 16.10.1, the Praia Group involves national statistical offices in the development of the indicator's methodology as well as many other national stakeholders (human rights institutions, for instance). The development of the methodology for indicator 16.10.1 includes dealing with the lack of standard definitions, methodologies and practices, the lack of standard guidelines for data disaggregation by characteristics of victims, perpetrators and type of abuse and the need to ensure the protection of human rights in the data compilation and dissemination processes (data confidentiality issues, among others). It also implies determining ways to reconcile data from various sources (avoiding duplication of records) and to expand country coverage of the data so as to allow the production of reliable global estimates.

4. Labour market indicators for which the ILO is not custodian or a partner agency (but is involved)

On the basis of its mandate (mainly that of promoting decent work for all men and women around the world), the ILO is involved in statistical activities pertaining to various SDG indicators not listed in the sections above, that is, indicators for which it is not custodian or a partner agency, including participation in data compilation, metadata maintenance and methodological development work. Thanks to close inter-agency collaboration, the ILO shares its expertise on many SDG indicators, working in cooperation with the relevant custodian and partner agencies in each case.

This is the case, for example, of indicator 5.4.1 on the proportion of time spent on unpaid domestic and care work, by sex, age and location (for which UNSD and UN-Women are joint custodian agencies) and indicator 9.2.2 on manufacturing employment as a proportion of total employment (for which UNIDO is the custodian agency).

5. Cross-cutting nature of the SDG labour market indicators

An essential element of the 2030 Agenda is that many of the Goals and Targets are interrelated: as progress made towards the achievement of one specific Goal is likely to have an impact elsewhere in the Agenda. Many Goals and Targets are especially cross-cutting and underlie other Goals and Targets beyond those in which they are explicitly stated. Although it is very difficult to measure all these interrelationships among the Goals and Targets, it is important to keep them in mind when interpreting SDG indicators since they hold true for the indicators as well.

The following sections briefly discuss the interdependencies among SDG labour market indicators, as well as their links with other SDG (non-labour market) indicators.

5.1. Links and interdependencies among the SDG labour market indicators

The list of SDG labour market indicators (as described in the preceding sections) covers a wide range of indicators pertaining to employment, decent work and the economy. When analysed together, they provide a fairly comprehensive overview of the labour market situation. The indicators present valuable information on labour underutilization (indicator 8.5.2 on the unemployment rate) as well as on the quality of employment, including remuneration (indicator 8.5.1 on hourly earnings and 1.1.1. on working poverty), occupational safety and health (indicator 8.8.1 on occupational injuries), productivity (indicator 8.2.1 on labour productivity) and working conditions in general (indicator 8.3.1 on informal employment). The indicators also provide information on legal frameworks (indicator 8.8.2 on labour rights compliance), the national context of social security (indicator 1.3.1 on social protection coverage) and policy priorities (indicator 8.b.1 on youth employment strategies). The situation of youth can be studied more in depth through indicator 8.6.1 on the youth NEET rate, while the labour market segregation by gender can be assessed through indicator 5.5.2 on the share of women in managerial positions. Work that should be abolished can be analysed with indicator 8.7.1 on child labour.

Many of these indicators are intrinsically related to others, which is why it is important to interpret them as a coherent set so as to paint a comprehensive picture. In many cases, interpreting a given labour market indicator along with others sheds light on patterns and helps to avoid misinterpretations.

For instance, trends in labour productivity (indicator 8.2.1) should be interpreted alongside the labour income share (indicator 10.4.1), the unemployment rate (indicator 8.5.2) and hourly earnings (indicator 8.5.1) in order to understand if gains in labour productivity were due to an improvement in skills and human capital or to a decrease in employment for the same levels of GDP, and whether they benefitted the workers through increased wages and labour share.

Similarly, the information conveyed by indicator 5.5.2 on the share of women in managerial positions should be interpreted along with data disaggregated by sex on working

poverty (indicator 1.1.1), informal employment (indicator 8.3.1.), and hourly earnings (indicator 8.5.1), thereby creating a full picture of the extent of gender equality in the labour market in terms of equal opportunities and equal working conditions.

The situation of youth can be analysed from both a policy and labour market perspective by combining assessments of the national strategy for youth employment (indicator 8.b.1), youth unemployment (indicator 8.5.2), the youth NEET rate (indicator 8.6.1) and youth hourly earnings (indicator 8.5.1). Such joint analysis can help develop an understanding of whether youth labour market issues are the result of insufficient policies, a lack of suitable jobs, inadequate earnings, or a combination of these factors.

5.2. SDG labour market indicators underlying (non-labour market) targets and goals

The SDG global indicators framework is made up of a coherent, integrated set of indicators that, when analysed as a whole, provide a comprehensive picture of the progress made towards the achievement of sustainable development and its components. Sustainable development is seen as an indivisible objective and all areas of sustainable development must therefore be aligned. The quest for progress in each area should take into account the possible effects on all other areas.

These interdependencies can be seen in the relationships among SDG indicators. In particular, when it comes to the labour-related SDG global indicators, these have a clear impact on the Goals and Targets not strictly related to the labour market since decent work underlies many aspects of human life, growth and development. Similarly, developments measured by many other indicators that do not focus directly on decent work have an impact on the labour market. For example, trends measured by the indicators under Target 2.3 on doubling the agricultural productivity and incomes of small-scale food producers are closely linked to labour productivity and average hourly earnings.

Parity indices included in indicator 4.5.1 on education have a clear impact on the labour market and are particularly related to indicators on labour market segregation (such as the female share in senior and middle management). It is important to understand the extent to which parity in education translates into parity in the labour market.

Indicator 5.4.1 on the proportion of time spent on unpaid domestic and care work is also of great interest when analysing the whole spectrum of decent work. The unpaid care economy is a major concern for policy-makers seeking to build sound, inclusive labour markets, so that the analysis of this indicator together with the relevant labour market indicators may inform policy formulation in this regard.⁹²

The 2030 Agenda also deals in particular with some specific sectors of the economy or groups of workers, such as the health sector (indicator 3.c.1), tourism (indicator 8.9.2) and manufacturing (indicator 9.2.2). These clearly have an impact on the labour market as a whole and on the overall objective of decent work for all men and women. Thus, they should be interpreted alongside the other relevant labour market indicators listed in this Guide.

⁹² The ILO report *Care work and care jobs for the future of decent work* (Geneva, 2018) takes a comprehensive look at unpaid and paid care work. It is available at https://www.ilo.org/global/publications/books/WCMS_633135/lang--en/index.htm.

6. Data disaggregation

The call for data disaggregation is one of the new elements introduced in the SDG global indicator framework compared to the MDG indicator framework; the MDG indicators did not require any disaggregation, whereas the SDG indicators often have many disaggregations required within a given indicator. Indeed, data disaggregation is recognized as a core element of the SDG global indicator framework that ensures specific coverage of particular groups with a view to fulfilling the goal of leaving no one behind. The overarching principle of data disaggregation of the global indicator framework implies that SDG indicators should be disaggregated, where relevant, by income, sex, age, race, ethnicity, migratory status, disability and geographical location, or other characteristics, in accordance with the Fundamental Principles of Official Statistics (in addition to the specific disaggregations required for each indicator as noted in the indicator titles).⁹³ However, although data disaggregation conveys a wealth of useful information for policy-makers and stakeholders, excessive disaggregation may compromise the reliability and comparability of the statistics, so it is important to find a balance between the level of detail of the categories used, and the quality of the data. The following sections briefly present the basic disaggregations required for SDG labour market indicators as well as some of the more challenging ones.

6.1. Considerations on the disaggregation of labour statistics

The disaggregation of labour statistics using different classifications is crucial to identify issues and trends in labour markets concerning specific population groups and to inform the formulation of targeted policies on those grounds. It also enables the monitoring of progress made towards specific goals, including the reduction of inequalities and the eradication of discrimination.

However, for disaggregated data to be reliable and comparable, it is essential to utilize internationally-agreed classifications or national classifications that are easily adaptable to international standards, as well as internationally-agreed definitions of each category in the classification.

Many labour-related SDG indicators are derived mainly from household surveys, which means that data reliability issues may arise for disaggregated groups of the population, depending on the survey sample size and design. In this context, there is a trade-off between the reliability of the data produced and the level of detail of the categories used. There are also data quality issues pertaining to self-reporting by respondents of household surveys, which is particularly problematic for sensitive topics.

⁹³ See *Report of the Inter-Agency and Expert Group on Sustainable Development Goal Indicators*, document E/CN.3/2016/2, Statistical Commission, forty-seventh session, New York, 8–11 March 2016, available at <http://undocs.org/en/E/CN.3/2016/2>.

6.2. Widely available disaggregations at the international level

Many disaggregations are already widely recognized and used, with standard classifications and categories applied, resulting in the availability of reliable and comparable disaggregated data available for a large number of countries, as listed below.

6.2.1. Sex

The disaggregation of labour market indicators by sex is one of the most crucial disaggregations needed to understand basic patterns in labour markets. It is recommended for most indicators referring to persons and is already widely available for indicators compiled and collected at the national and international levels.

6.2.2. Age

The disaggregation of labour market indicators by age is also an essential disaggregation revealing a key aspect of labour markets: the extent to which youth, adults and seniors are integrated into them. The working-age population is widely recognized as persons aged 15 and above. Even though the specific age bands used for data disaggregation by age may vary, the youth age band is widely recognized as persons aged 15 to 24 (inclusive) and adults are widely recognized as persons aged 25 and over.

6.2.3. Education

For the disaggregation of data by level of education, the use of the latest version of the International Standard Classification of Education (ISCED-2011)⁹⁴ is recommended, although there may be complications in some cases in adapting national educational systems to the ISCED.

It is important to note that, even though the level of education should be determined on the basis of the highest successfully completed level, individuals interviewed for household surveys sometimes report on the level started or ongoing, hindering the comparability and accuracy of the results.

This disaggregation is not used as such for the indicators listed in this Guidebook but is used to determine the education status underlying some indicators (4.3.1. and 8.6.1.).

6.2.4. Occupation

For the disaggregation of data by occupation, the use of the latest version of the International Standard Classification of Occupations (ISCO-08)⁹⁵ is recommended. This

⁹⁴ For more information on the latest version of the International Standard Classification of Education (ISCED-2011), see <http://uis.unesco.org/en/topic/international-standard-classification-education-isced>.

⁹⁵ For more detailed information on the latest version of the International Standard Classification of Occupations (ISCO-08), see <http://www.ilo.org/public/english/bureau/stat/isco/isco08/>.

disaggregation is required for indicator 8.5.1 and it is needed for the calculation of indicator 5.5.2 (ideally using the two-digit level of the ISCO).

6.2.5. Economic activity

For the disaggregation of data by economic activity, the use of the latest version of the International Standard Industrial Classification of All Economic Activities (ISIC, Rev. 4)⁹⁶ is recommended, although for the purposes of the SDG indicators discussed in this Guidebook, the categories agriculture/non-agriculture are sufficient, which means that referring to the ISIC is not necessary.

6.2.6. Status in employment

Data disaggregated by status in employment should ideally be based on the latest version of the International Classification by Status in Employment (ICSE-1993).⁹⁷ This classification is expected to be revised by the 20th International Conference of Labour Statisticians in October 2018.

In the context of the indicators listed in this Guidebook, it is not specifically required to disaggregate data by status in employment. However, it is important to separately identify employees (as opposed to total employment) for indicator 8.5.1, for instance.

6.3. Challenging (but necessary) disaggregations

The list of SDG global indicators, in particular those pertaining to decent work and the labour market, includes some indicators requiring disaggregations that are very meaningful analytically but are methodologically challenging given the lack of standard international classifications and definitions of categories.

6.3.1. Urban/rural areas

Even though the disaggregation by geographical location, which distinguishes between rural and urban areas, is already commonly used by many countries in their own labour market information systems, definitions of rural and urban areas are defined at the national level and are highly dependent on the national context. This limits the international comparability of the data currently available by urban/rural areas.

6.3.2. Migrant status

According to the UN *Recommendations on Statistics of International Migration*, an international migrant is defined as any person who changes his or her country of usual

⁹⁶ For more information on the International Standard Industrial Classification of All Economic Activities (ISIC Rev.4) see <https://unstats.un.org/unsd/publications/catalogue?selectID=396>.

⁹⁷ For more detailed information on the International Classification of Status in Employment, refer to the Resolution concerning the International Classification of Status in Employment (ICSE), 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.

residence.⁹⁸ However, in practice, due to the difficulties of applying this definition for measurement, many countries choose to define individuals' migrant status based on their country of citizenship or their country of birth. The ILO is currently preparing proposals for definitions and classifications on labour migration statistics, to be submitted for discussion (and potential approval) to the 20th International Conference of Labour Statisticians in 2018, in accordance with the 2013 resolution concerning further work on labour migration statistics. Since migration, in particular labour migration, is a sensitive topic, this requires thorough development work that involves the analysis of the different types of sources available and ways of reliably reporting data. The disaggregation by migrant status is one of the disaggregations desired for SDG indicators in the global indicator framework as part of its overarching principle of data disaggregation. Concerning labour market SDG indicators in particular, this disaggregation is especially recommended for indicators 8.8.1 and 8.8.2.

6.3.3. Disability status

Even though at the national level there is a wide variety of classifications and categories used to classify persons according to their disability status, for the purposes of the SDG labour market indicators, the use of the Washington Group Short Set of Questions on Disability is recommended.⁹⁹ This disaggregation is required for indicators 8.5.1 and 8.5.2.

⁹⁸ United Nations: *Recommendations on Statistics of International Migration, Revision 1* (New York, 1998); available at https://unstats.un.org/unsd/publication/seriesm/seriesm_58rev1e.pdf.

⁹⁹ The Washington Group on Disability Statistics is a United Nations city group established by the United Nations Statistical Commission with a view to addressing the urgent need for internationally comparable disability statistics. The Washington Group Short Set is a set of six questions meant to be included in a census or survey questionnaire to identify people with disabilities and gather information on their disabilities. The short set of questions is available at: <http://www.washingtongroup-disability.com/wp-content/uploads/2016/01/The-Washington-Group-Short-Set-of-Questions-on-Disability.pdf>. For more information on the Washington Group refer to <http://www.washingtongroup-disability.com/>.

7. Considerations on data sources

The characteristics of the statistical sources used to obtain labour market indicators determine how reliable, comparable and representative the derived data are. Hence, when referring to labour statistics, it is crucial to understand the implications of the type of source used and to keep in mind its methodology and coverage (geographical, population, topics, etc.). The list of SDG labour market indicators involves the production of statistics from labour force surveys, along with a number of other sources.

The more traditional sources of statistics are population and establishment censuses and household and establishment surveys, because these collections are specifically designed to produce statistics. However, a wealth of valuable information can also be derived from sources not initially created for statistical purposes, such as administrative records and big data. The following sections briefly present the main advantages and disadvantages of each type of source.

7.1. Population census

The population census is a key source of information on the population, usually acting as the basis for a country's official statistics. It has universal coverage: all households in a country are covered in the data collection phase and information on all household members is gathered. Thanks to this, it can serve as sample frame later on for sample surveys. Its universal coverage and high representativeness allow for the study of small population groups and geographical areas. Nevertheless, because it is such an exhaustive collection, it is very costly and is thus usually conducted infrequently. Generally, countries conduct population censuses every ten years. Also, it collects general information only, not going into detail for specific topics such as labour, which affects the quality of labour statistics derived from population censuses.

No SDG labour market indicator calls for the specific use of population censuses as the source of data; however they can be used as an alternative source for many indicators usually derived from labour force surveys, in the absence of such surveys.

7.2. Household surveys

To overcome the high cost of population censuses and to be able to have longer questionnaires and therefore gather more in-depth information, a sample of the whole population measured through the census can be selected for a survey. Sample survey questionnaires are typically much more detailed than censuses and are designed specifically to collect data on the topics desired. By their nature, household surveys can cover any topic on which household members can provide information. They are less expensive than censuses and so they can be more frequent, allowing the study of short-term trends. Due to the fact that they cover all individuals in sampled households, regardless of their labour market status, their occupation or the type of establishment they work for, etc., household surveys provide a consistent framework to study employment, unemployment and persons outside the labour force simultaneously, also providing many important disaggregations.

However, the sample design might entail sampling errors, thereby hindering the quality of the results. In particular, estimates for small groups or areas might have limited reliability due to their low coverage in the sample. Moreover, the reliability of the results is highly dependent on the accuracy of the respondents, who might tend to overstate or understate some particular answers.

Labour force surveys are the main type of household surveys used to derive labour statistics and as such are the preferred source for many of the indicators described in this Guidebook (indicators 5.5.2, 8.3.1, 8.5.2, 8.6.1). Other types of household surveys, such as household income and expenditure surveys, can be used as well provided that they include the corresponding labour module, which is particularly useful to derive data on working poverty (indicator 1.1.1).

7.3. Establishment census and surveys

For population censuses and household surveys, the sampling unit is the household, but statistics can also be collected using the establishment as a sampling unit for topics on which the establishment or employer holds the information, in particular with regard to income, working time and the number of employees. In general, surveying establishments is less expensive than surveying households. Here too, there is the possibility of an exhaustive exercise covering all establishments in a country (establishment census) or of a collection focusing only on a representative sample of establishments (establishment survey). Naturally, establishment censuses are more costly and are typically conducted less frequently than establishment surveys but they are more representative.

It is crucial to note that informal sector establishments and small establishments are rarely covered in establishment censuses and surveys; depending on the national context, these might represent a considerable share of the labour market. Likewise, establishment censuses and surveys cover only employees, thus excluding the self-employed (own-account workers, contributing family workers, etc.).

Establishment surveys are a very accurate source of statistics on employees' earnings (indicator 8.5.1) and may also provide data on occupational injuries (indicator 8.8.1).

7.4. Administrative records

Administrative records, such as records of members, activities, staff, etc. of agencies or institutions, contain variables associated with units and unit identifiers created for administrative purposes. These are typically not designed for statistical purposes but do have much underlying statistical potential and can be used to produce statistics. They are particularly useful in contexts where there are no regular household or establishment surveys in place, where they may serve as an alternative data source. In any given country, the administrative records found are numerous and varied and cover a wide range of topics.

Administrative records are an inexpensive source of statistics since they are created and maintained by the corresponding agency and information is readily available, which means that no further collection effort is needed. By their nature, administrative records usually have exhaustive coverage of all units in their reference universe, at least in theory (in practice it is possible to observe less-than exhaustive coverage of administrative records in some cases).

However, given that the records were created for administrative purposes and not statistical ones, they typically have to undergo statistical processes for the data to actually become reliable statistics, including the study of definitions, concepts and classifications

used, editing of data to correct any inconsistencies found, coding variables and creating new ones if need be, and deciding on the imputation method to apply for the treatment of missing data. In addition, the topics covered and the units used depend on the administrative processes which gave rise to the creation of the record and not on the secondary statistical production.

Information on social protection coverage and social security benefits (indicator 1.3.1) and data on occupational injuries (indicator 8.8.1) can come from administrative records.

7.5. National accounts

National accounts are a complete, integrated set of accounts created for the purposes of measuring an economy's performance. They usually comprise production, income, expenditure accounts, capital accounts, financial accounts and balance sheets. They are a key source of statistics on macroeconomic indicators (indicators 8.2.1, 10.4.1).

7.6. Official estimates

In some cases, where there is no recent household or establishment survey and no production of reliable statistics from administrative records but there is still a need for labour statistics, other methods can be used to obtain estimated, imputed or modelled data. The quality and reliability of the statistics will depend on the estimation and methods used.

The ILO has a long history of deriving model-based estimates and projections of labour market indicators in order to cater for the data needs of policy-makers and researchers. These estimates and projections refer both to country-level data and regional and world aggregates and are obtained through the use of econometric models. Key ILO modelled estimates include estimates of the labour force and labour force participation rates, unemployment, employment-to-population ratios, status in employment, employment by sector, labour productivity, working poor and working poverty rates.¹⁰⁰

The ILO modelled estimates derived from econometric models provide data on many SDG labour market indicators, namely working poverty rates (indicator 1.1.1), labour productivity (indicator 8.2.1) and unemployment rates (indicator 8.5.2). The ILO has also developed models to derive global and regional estimates for other specific topics related to the labour market, such as social protection coverage (indicator 1.3.1) and child labour (indicator 8.7.1).

7.7. Big data

With the advent of technology, mobile devices and ubiquitous Internet access, data sets are growing exponentially, both in number and size, with practically every online transaction and search being recorded. These types of data are often referred to as “big data”, which refers to large data sets that may be used to analyse trends related to human interactions and behaviour and typically fall outside the scope of traditional data processing and statistical methods. Big data can potentially supply a wealth of information related to labour statistics, for instance on job searches, vacancies and skills. Even though there are still no

¹⁰⁰ For more detailed information on the ILO's estimates and projections of labour market indicators, see http://www.ilo.org/empelm/projects/WCMS_114246/lang--en/index.htm and http://www.ilo.org/wcmsp5/groups/public/---dgreports/---inst/documents/publication/wcms_216451.pdf.

internationally-agreed methodologies and guidelines on deriving labour statistics from big data, it is rapidly gaining ground as a statistical source.

Regarding the use of big data as a source of labour statistics, the main challenges include separating valid data from large amounts of data “noise”, establishing the appropriate concepts and definitions and the coverage of the statistics (restricted to persons with Internet access or having the means to carry out transactions online, etc.). The SDG global indicator framework does not currently foster the use of big data to derive labour market indicators.

8. Concluding remarks

The SDG global indicator framework is a consistent, coherent and integrated framework. It is indivisible in nature, meaning that indicators pertaining to the same subject and to interrelated subjects should always be analysed and interpreted together. It is also a forward-looking framework, aimed at being used at least until the target date of 2030. In this sense, it comprises not only indicators with an established methodology but also indicators in need of methodological development before they can start to be compiled.

The global indicator framework was built by pooling data potentially available from a wide variety of statistical sources, implicitly requiring the progressive development of integrated statistical systems at the national level. This is particularly true for the SDG labour market indicators, which include measures most reliably derived from household surveys, establishment surveys, national accounts and administrative records. In order to report on all the SDG labour market indicators in a timely manner and using comparable, accurate statistics, countries must have in place a robust labour market information system that consolidates all available statistical sources.

Given the numerous (and complex) interrelations and interdependencies between the different indicators, especially between the labour-related indicators, they should always be interpreted together because each indicator represents a different part of the same puzzle. Promoting a comprehensive, cross-cutting analysis of economic and labour market indicators is therefore essential to foster a greater understanding of relevant contexts and to provide an accurate representation of the failures and successes of labour markets.

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