SDG

labour market indicators

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Workshop on Reporting Labour Statistics to the ILO for better SDG monitoring in Arab States and Northern Africa
February 2019 – Amman, Jordan
Contents

Relevance, sources, methodology, disaggregation, interpretation and limitations of the main SDG labour market indicators:

1.1.1; 1.3.1; 5.5.2; 8.2.1; 8.3.1; 8.5.1; 8.5.2; 8.6.1; 8.7.1; 8.8.1; 10.4.1

(and very briefly tier III or formerly tier III indicators)
SDG indicator 1.1.1
Working poverty rate
1.1.1 Proportion of population below the international poverty line, by sex, age, employment status and geographical location (urban/rural)

Tier I / Custodian: World Bank

**Working poverty rate** = Proportion of employed persons living on less than US$1.90 per day

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

- Captured by combining poverty status (household income or consumption data) with employment status (individual labour force variables)
- Preferred source is a household survey with both sets of variables (HIES, LSMS with employment modules, LFS that collect information on household income, etc.)
Working poverty rate (percentage of employed living below US$1.90 PPP), 2017

SDG indicator 1.3.1
Social protection coverage
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 / Custodian: ILO

Indicator with many components: proportion of eligible population covered by each social protection benefit

- Main source: Administrative records (records of the Ministry of Labour, records of Social Security Institutions, Insurance records, etc.) → challenge of consistency across records
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

Social protection systems coverage rate

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

= \frac{\text{Number of persons receiving cash benefits}}{\text{Total population}} \times 100

Proportion of women giving birth covered by maternity benefits

Number of women receiving maternity benefits

= \frac{\text{Number of women receiving maternity benefits}}{\text{Total number of women giving birth}} \times 100

Proportion of persons with disabilities receiving benefits

Number of persons receiving disability benefits

= \frac{\text{Number of persons receiving disability benefits}}{\text{Total number of persons with severe disabilities}} \times 100

Proportion of children covered by social protection benefits

Number of children n/households receiving children benefits

= \frac{\text{Number of children n/households receiving children benefits}}{\text{Total number of children n/households with children}} \times 100

Proportion of older persons receiving a pension

Number of persons above statutory retirement age receiving an old age 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
Population covered by at least one social protection benefit, 2016

SDG indicator 5.5.2
Female share in management
5.5.2 Proportion of women in managerial positions

Tier I / Custodian: ILO

Female share in the employment in senior and middle management

- Based on the International Standard Classification of Occupations:
  
  Senior and middle management =

  Major group 1 – category 14 (ISCO-08)

\[
\text{Female share in management} = \frac{\text{Women employed in submajor groups 11, 12 and 13 of ISCO 08}}{\text{Persons employed in submajor groups 11, 12 and 13 of ISCO 08}} \times 100
\]

- Preferred source: Labour force survey
Female share in management and in total employment, 2018

Source: ILO modelled estimates, November 2018.
SDG indicator 8.2.1
Labour productivity growth
8.2.1 Annual growth rate of real GDP per employed person

Tier I / Custodian: ILO

Labour productivity growth rate

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

Annual growth rate of real GDP per employed person = \( \frac{\text{LP}_{\text{year } n} - \text{LP}_{\text{year } n-1}}{\text{LP}_{\text{year } n-1}} \times 100 \)

- Preferred source for GDP is the National Accounts, and for employment, a LFS (if not available, establishment survey or administrative records)
Annual growth rate of output per worker
(measured as GDP in constant 2011 international $ in PPP)

SDG indicator 8.3.1
Share of informal employment
8.3.1 Proportion of informal employment in non-agriculture employment, by sex

Informal employment

\[ \text{Informal employment} = \text{all workers in the informal sector} + \text{workers holding informal jobs in the formal sector} \]

\[ = \text{own-account workers, employers and members of producers’ cooperatives in the informal sector} + \text{own-account workers producing for own final use} + \text{all contributing family workers (formal and informal sectors)} + \text{employees with informal jobs} \]

● Preferred source: LFS
8.3.1 Proportion of informal employment in non-agriculture employment, by sex

Two components (and 2 statistical units):

- Employment in informal sector enterprises (Informal sector employment)
- Employment in informal jobs (Informal employment)

-> different aspects which should be kept separate as often require different policies

Employment in the Informal Economy:
= Informal sector employment + informal employment outside of Informal Sector
8.3.1 Proportion of informal employment in non-agriculture employment, by sex

**Informal sector**

- Private unincorporated enterprises (SNA: household unincorporated enterprises)
  - Owned by individual household members, several members of the same household, or members of different households
  - Not constituted as separate legal entities independently of their owners, and no separate/ no complete sets of accounts available

- Establishment size in terms of employment below a certain threshold (based on national practices; Delhi Group: less than 5 employees, for international reporting)

- AND/OR enterprise not registered.
8.3.1 Proportion of informal employment in non-agriculture employment, by sex

**Informal jobs**

Operational definition depends on status in employment and characteristics of the job (benefits).

- **Self-employed**: Employers, own-account workers & members of producers’ cooperatives
  - Formal/ informal nature of job depends on characteristics of their enterprise (informal jobs if their enterprises are part of the informal sector)

- **Contributing family members**
  - Employment usually not subject to labour legislation, no contractual relationship -> all informal jobs
8.3.1 Proportion of informal employment in non-agriculture employment, by sex

Informal jobs

- Employees
  - Have informal jobs if their employment relationship is, in law or in practice, not subject to national labour legislation, income taxation, social protection or entitlement to certain employment benefits (advance notice of dismissal, severance pay, paid annual or sick leave, etc.)

- Criteria most commonly used:
  - Lack of contributions to social security system by employer
  - No paid annual leave
  - No paid sick leave
### Conceptual framework for informal employment \(^{(a)}\) (17\(^{th}\) ICLS guidelines)

<table>
<thead>
<tr>
<th>Production units by type</th>
<th>Jobs by status in employment</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Own-account workers</td>
<td>Employers</td>
<td>Contributing family workers</td>
<td>Employees</td>
<td>Members of producers’ cooperatives</td>
</tr>
<tr>
<td></td>
<td>Informal</td>
<td>Formal</td>
<td>Informal</td>
<td>Formal</td>
<td>Informal</td>
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<tr>
<td>Formal sector enterprises</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Informal sector enterprises(^{(b)})</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Households(^{(c)})</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes**

(a) Cells shaded in dark grey refer to jobs, which by definition do not exist in the type of production unit in question. Cells shaded in light grey refer to formal jobs. Unshaded cells represent the various types of informal jobs.

(b) As defined by the 15\(^{th}\) ICLS resolution (excluding households employing paid domestic workers).

(c) Households producing goods exclusively for their own final use and households employing paid domestic workers.

**Informal employment:** Cells 1 to 6 and 8 to 10.

**Employment in the informal sector:** Cells 3 to 8.

**Informal employment outside the informal sector:** Cells 1, 2, 9 and 10.
Proportion of females and males in informal employment in non-agriculture employment (latest year available)

Source: ILOSTAT.
Note: Refers to harmonized figures of informal employment calculated applying standard definitions and operational criteria.
SDG indicator 8.5.1
Average hourly earnings of female and male employees, by occupation, age and persons with disabilities
RATIONALE

- Earnings are a key factor of quality of employment: earnings quality determines to a great extent workers’ living conditions.
- Indication of workers’ purchasing power and living standards.
- Hourly earnings → information on earnings’ adequacy by removing the effect of working time.
- Disaggregated data on hourly earnings → pay gap (notably, gender pay gap)
  - useful for targeted policy making.
DEFINITION & CONCEPTS

- Earnings = 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.

- Excluding employers’ contributions in respect of their employees to social security and pension schemes and also the benefits received by employees under these schemes.

- Excluding severance and termination pay.
DEFINITION & CONCEPTS

- **Gross:** 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.

  (as opposed to **net**)

- **Hourly:** per hour.

- **Average (or mean):** arithmetic average of the hourly earnings of all employees.
DEFINITION & CONCEPTS

- **Currency / unit**: expressed in local currency.
- **Nominal**: current, unadjusted for inflation (as opposed to real or constant)
- **Employees**: persons employed holding paid employment jobs (jobs with a basic remuneration not directly dependent on the revenue of the economic unit).
  (as opposed to self-employment)
CALCULATION

Average hourly earnings

\[ \text{Average hourly earnings} = \frac{\sum \text{hourly earnings of all employees}}{\text{Number of employees}} \]

Average hourly earnings

\[ \text{Average hourly earnings} = \frac{\sum (\text{hourly earnings of each employee} \times \text{hours worked by each employee})}{\text{Total number of hours worked by all employees}} \]

Gender pay gap

\[ \text{Gender pay gap} = \frac{\text{Average hourly earnings}_{\text{Men}} - \text{Average hourly earnings}_{\text{Women}}}{\text{Average hourly earnings}_{\text{Men}}} \times 100 \]
DESIRE DISAGGREGATIONS

- Breakdowns by sex, occupation, age and persons with disabilities → to the extent possible, simultaneously
  - Age: important to at least identify youth/adults/seniors
  - Disability status: Washington Group Short Set of Questions on Disability
  - Occupation: using the International Standard Classification of Occupations (1-digit)

- Various other useful disaggregations
  - Country region, economic activity, etc.
DATA SOURCES

Variety of possible sources represents a challenge

- Establishment surveys ➔ preferred source given the high accuracy of data (provided directly by employer)
  - But often limited coverage (excluding informality)
- Labour force surveys
  - cover all employees regardless of their sector, the establishment they work in, etc.
  - Methodologies vary from country to country
  - Data quality dependent on respondents’ accuracy
- Administrative records
LIMITATIONS

● Numerous comparability issues linked to the variety of possible sources, differences in methods used, operational criteria used, definitions, reference periods, etc.

● Hourly earnings may refer to hourly pay rate or a calculation of hourly earnings based on monthly earnings and working time, hindering comparability

● Household survey data: quality depends on respondents’ accuracy

● The use of «average» earnings may mask very different realities
Gender pay gap by occupation, based on average hourly earnings of employees (latest year available)

Source: ILOSTAT
SDG indicator 8.5.2
The unemployment rate
RATIONALE

● Major headline labour market indicator, widely used and recognized among main labour market measures

● Insights into the underutilization of the labour supply

● Reflects the inability of an economy to generate employment for those who are available and looking for a job

● Indicator of the efficiency and effectiveness of an economy to absorb its labour force and of the performance of the labour market
DEFINITION & CONCEPTS

Working-age population by labour force status

- Employment
  - Time-related underemployment
- Unemployment
  - LU1
- Outside the Labour Force
  - Potential labour force

LU2

LU3

LU4
DEFINITION & CONCEPTS

● Unemployment: all persons of working-age who
  ○ Are not in employment
  ○ Are available for employment
  ○ Are actively looking for employment

● Employment: persons of working-age performing work for pay or profit and for use by others

● Labour force: Employment and unemployment

● Working-age population: 15+
Unemployment rate = \frac{\text{Total unemployment}}{\text{Labour Force}} \times 100

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

- Breakdowns by sex, age and persons with disabilities to the extent possible, simultaneously
  - Age: important to at least identify youth/adults/seniors
  - Disability status: Washington Group Short Set of Questions on Disability

- Various other useful disaggregations
  - Former sector, former occupation, duration of unemployment, country region, etc.
DATA SOURCES

Labour force surveys → preferred source

- Comprehensive coverage
- Accuracy thanks to specific questions on availability and job search activities
- Coherent measurement of the whole working-age population (employment, unemployment and outside the labour force)

Data available in ILOSTAT for over 220 countries and territories, as well as global and regional estimates
DATA SOURCES

Unemployment data can be derived from administrative records (such as employment office records or unemployment insurance records) but they refer to registered unemployment, and are not comparable to the three-criteria-unemployment.
Unemployment and registered unemployment rates in a set of European countries, 2015 (EUROSTAT)
LIMITATIONS

- Useful labour market indicator but insufficient measure of labour underutilization
- No information on quality of employment
- No information on the conditions of the unemployed
- Important to keep in mind the context and complement it with other indicators: the unemployment rate is not extremely relevant in all contexts
- Comparability issues linked to operational criteria used, sources, definitions, reference periods (seasonality), etc.
The unemployment rate has decreased

- how come? why?
- formerly unemployed found jobs? If so, decent jobs?
- new entrants to the labour market immediately employed?

- formerly unemployed quit the job search?
- how did the inactivity rate change?
- how did the employment-to-population ratio change?
Unemployment rates by sex and main age group for the world and by region (2017)

SDG indicator 8.6.1
The youth NEET rate
RATIONALE

Relevant to identify youth who are outside the educational system, not in training and not in employment

- measure of potential youth labour market entrants (broader than youth unemployment)
- measure of the lost potential for human resource development (better than the youth inactivity rate)

inform policymakers and labour market analysts on the youth not gaining professional experience in employment and not furthering their skills in education, thus at risk of labour market and social exclusion
DEFINITION & CONCEPTS

Proportion of youth not in education, employment or training:

- In education or training
- Outside the labour force
- Unemployed
- Not in education or training
  - Youth NEET

Youth
DEFINITION & CONCEPTS

- Youth: ages 15-24 inclusive
- Employment: work for pay or profit for use by others
- Education: organized and sustained communication designed to bring about learning.
  - Includes formal and non-formal education but excludes informal education.
- Training: non-academic learning activity to acquire specific skills intended for vocational or technical jobs.
Youth NEET rate =

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

Which can also be expressed as:

Youth NEET rate =

$$\frac{(\text{Unemployed youth} + \text{Youth OLF}) - (\text{Une youth in Ed or Tr} + \text{Youth OLF in Ed or Tr})}{\text{Youth population}} \times 100$$
DESIRED DISAGGREGATIONS

● No disaggregations specifically required

● Overarching principle of data disaggregation of the SDG Global Indicator Framework:
  SDG indicators should be disaggregated, where relevant, by income, sex, age, race, ethnicity, migratory status, disability and geographical location.

● Strongly advisable to have data at least by sex
DATA SOURCES

Information needed on:

● Age
● Labour market situation (employed or not)
● Education and training participation / enrolment

➢ Labour force surveys preferred source

Data available in ILOSTAT for over 140 countries
INTERPRETATION AND USE

Measure of youth labour underutilization

- Broader than youth unemployment
- Broader than youth inactivity
- Captures also the fact of not developing skills and qualifications (not in Ed or Tr)

- High NEET rate may suggest engagement in household chores, care activities, and/or strong institutional barriers to access employment

- NEET composed of two subgroups (unemployed and outside the labour force):
  - Important for interpretation
LIMITATIONS

● Comparability issues linked to operational criteria used, sources, definitions, etc.

● Youth refers to ages 15-24 but it may be relevant to study share of persons NEET in other age groups

● Youth NEET rate gives no information on its composition – prevalence of each subgroup (unemployed and outside the labour force)
Youth NEET rate, male and female (latest year available after 2008)

Source: ILOSTAT. Three-digit ISO country codes are used to identify countries.
SDG indicator 8.7.1
Child labour
8.7.1 Proportion and number of children aged 5-17 years engaged in child labour, by sex and age

Tier I / Custodian: ILO and UNICEF

**Child labour rate** = \( \frac{\text{Children in child labour}}{\text{Total number of children}} \times 100 \)

- Preferred source: specifically designed household survey – **Child labour survey**
  
  - Statistical standards on child labour recently revised to account for all forms of work, not just employment
    
    - Especially unpaid own-use production work
      
      (subsistence agriculture, household chores, ...)
Conceptual framework of the 2016 Global Estimates of Child Labour

Children in employment (5-17 years old)
ICLS Res., Para 12

In designated hazardous industries
ICLS Res., Para. 27

In designated hazardous occupations
ICLS Res., Para. 25-26

Long hours of work (45+ hrs)
ICLS Res., Para. 28-30

In other industries

In other occupations

Not long hours of work (<43 hrs)

Non-hazardous work conditions

Hazardous work by children
ICLS Res., Para. 21-30

5-11 yrs
ICLS Res., Para. 32

12-14 yrs

15-17 yrs

14+ hrs
ICLS Res., Para. 33-35

Light work (<14 hrs)

Hazardous unpaid household activities by children
ICLS Res., Para. 36-37

Child labour
ICLS Res., Para. 14-37

Not child labour

Source: Global estimates of child labour: Results and trends, 2012-2016.
Proportion of children in employment, labour and hazardous work, by region (2016)

Source: Global estimates of child labour: Results and trends, 2012-2016.
SDG indicator 8.8.1
Occupational injuries
8.8.1 Incidence rates of fatal and non-fatal occupational injuries, by sex and migrant status (or frequency rates)

Tier II / Custodian: ILO

**Fatal occupational injuries incidence rate**

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

**Non fatal occupational injuries incidence rate**

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

**Fatal occupational injuries frequency rate**

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

**Non fatal occupational injuries frequency rate**

\[
\text{Non fatal occupational injuries frequency rate} = \frac{\text{Number of new cases of non fatal occupational injuries during the reference period}}{\text{Total number of hours worked by workers in the reference group during the reference period}} \times 1'000'000
\]
8.8.1 Incidence rates of fatal and non-fatal occupational injuries, by sex and migrant status (or frequency rates)

Tier II / Custodian: ILO

- Possible sources: various types of administrative records (insurance records, labour inspectorate records), household surveys and establishment surveys
- Preferred source is the one the most comprehensive coverage and most robust time series
Distribution of the rate of occupational injuries per 100’000 workers for countries with available data (latest year available after 2009)

Source: ILOSTAT.

Note: 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.
SDG indicator 10.4.1
Labour income share
10.4.1 Labour share of GDP, comprising wages and social protection transfers

Tier II / Custodian: ILO

Total compensation of employees as a share of the output

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

- In case the self-employed are excluded. If possible to include them, their earnings have to be added to the numerator.

- Preferred source: National Accounts
Labour income share, as a percentage of GDP (2005 and 2015: left and 2015: right)

Source: ILOSTAT.
Other SDG labour market indicators
SDG Indicators for which ILO is not a custodian or partner agency, but still involved due to its mandate

Such as:

- **5.4.1** - proportion of time spent on unpaid domestic and care work, by sex, age and location (UNSD and UN Women custodianship)

- **9.2.2** - manufacturing employment as a proportion of total employment (UNIDO custodianship)
(former) Tier III indicators upgraded to Tier II

- **8.8.2** - Level of national compliance of labour rights (freedom of association and collective bargaining) based on ILO textual sources and national legislation, by sex and migrant status (ILO custodianship)

- **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 custodianship)

- **10.7.1** - Recruitment cost borne by employee as a proportion of yearly income earned in country of destination (ILO and WB custodianship)
CONSIDERATIONS & CONCLUDING REMARKS

The SDG labour market indicators cover many areas of decent work, including labour underutilization, quality of employment, legal frameworks, work that should be abolished, gender segregation, and situation of youth.

... but they are insufficient, and should be complemented with other indicators

Importance of local context and relevance of indicators at the national level: need to adapt the GIF by countries
REFERENCES


ieron ILOSTAT database ([www.ilo.org/ilostat](www.ilo.org/ilostat))


REFERENCES

Resolution concerning statistics of work, employment and labour underutilization

Labour Force Survey (LFS) Pilot Study Programme

Resolution concerning statistics of child labour

Resolution concerning statistics of occupational injuries (resulting from occupational accidents)
REFERENCES

- ILO manual Measuring informality: A statistical manual on the informal sector and informal employment
  (http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_222979.pdf)

- Global Estimates of Child Labour: Results and trends, 2012-2016

- Methodology for SDG indicator 8.8.2 adopted by the 20th ICLS

- Methodology for SDG indicator 8.b.1 adopted by the 20th ICLS
THANK YOU

www.ilo.org/ilostat