

Part 4

Methods Summary and Data Tables

4.1 Interpreting the SDG Index and Dashboards results

The *Sustainable Development Report 2021* describes countries' progress towards achieving the SDGs and indicates areas requiring faster progress. The overall SDG Index score and scores for individual SDGs can be interpreted as a percentage of optimal performance. The difference between a country's score and 100 is therefore the distance, in percentage points, that needs to be overcome to reach optimum SDG performance. The same basket of indicators is used for all countries to generate the SDG Index score and rankings.

Substantial differences in rankings may be due to small differences in aggregate SDG Index scores. Differences of two or three places between countries should not be interpreted as "significant", whereas differences of 10 places or more can show a meaningful difference. For details, see the statistical audit by Papadimitriou et al. (2019) conducted on behalf of the Joint Research Centre (JRC) of the European Commission.

The SDG Dashboards provide a visual representation of each country's performance on the 17 goals. The "traffic light" color scheme (green, yellow, orange, and red) illustrates how far a country is from achieving a particular goal. As in previous years, the Dashboards and country profiles for OECD countries include additional metrics that are not available for non-OECD countries.

The SDG Trend Dashboards indicate whether a country is on track to achieve a particular goal by 2030, based on recent performance on a given indicator. Indicator trends are then aggregated at the goal level to give a trend indication of how the country is progressing towards that SDG.

This section provides a brief summary of the method used to compute the SDG Index and Dashboards. A detailed methodology paper is also accessible online (Lafortune et al., 2018). The European Commission Joint Research Centre (JRC) conducted an independent statistical audit of the report's methodology and results in 2019, appraising the conceptual and statistical coherence of the index structure. The detailed statistical audit report and additional data tables are available on our website: www.sdgindex.org

4.2 Changes to the 2021 edition and main limitations

Changes to the 2021 SDG Index and Dashboards

The 2021 SDG Index covers 165 countries, one fewer country than last year due to missing data on Comoros. Several new indicators have been introduced to address key data gaps (table 4.1). This table also identifies indicators that have been replaced or modified due to changes in the methodology and estimates produced by data providers. The data for this year's edition were extracted between February and April 2021.

Limitations and data gaps

Due to changes in the indicators and some refinements to the methodology, SDG Index rankings and scores cannot be compared with the results from previous years. Section 2 provides an assessment of trends over time, calculated retroactively using the data from the indicators included in this year's report.

Most global indicators are not yet available for 2020 due to time lags in data reporting. The impact that COVID-19 has had on the SDGs is therefore not fully captured in this year's SDG Index and Dashboards. Table 4.2 displays the list of indicators by percentage of 2020 data points for countries. For certain international indices, the date of publication may not represent the year of reference (the year when the data were collected).

Table 4.1

New indicators and modifications

| SDG | Indicator | New | Source |
|-----|--|--|-----------------------|
| 2 | Exports of hazardous pesticides (tonnes per million population) | New indicator | FAO |
| 8 | Fundamental labor rights are effectively guaranteed (worst 0–1 best) | New indicator | World Justice Project |
| 9 | Female share of graduates from STEM fields at the tertiary level (%) | Modification: Changed Data Source to WB for timeliness and panel data | World Bank |
| 10 | Palma ratio | Modification: extended from OECD countries only to all countries | OECD & UNDP |
| 11 | Proportion of urban population living in slums (%) | New indicator | UN Habitat |
| 13 | CO ₂ emissions from fossil fuel combustion and cement production (tCO ₂ /capita) | Modification: changed data source | Global Carbon Project |
| 13 | Carbon Pricing Score at EUR60/tCO ₂ (% , worst 0-100 best) | Modification: Indicator now measures the percentage of carbon emissions that are priced at EUR 60 per tonne or higher. | OECD |
| 14 | Fish caught by trawling or dredging (%) | Modification: now includes dredging | Sea Around Us |
| 14 | Fish caught that are then discarded (%) | New Indicator | Sea around Us |
| 16 | Access to and affordability of justice (worst 0–1 best) | New indicator | World Justice Project |
| 17 | Statistical Performance Index (worst 0-100 best) | New indicator | World Bank |

Source: Authors

Table 4.2

Indicators by percentage of 2020 data points

| SDG | Indicator | Percentage of 2020 Data Points | Source |
|-----|---|--------------------------------|---------------------------------|
| 1 | Poverty headcount ratio at \$1.90/day (%) | 100.0% | World Data Lab |
| 1 | Poverty headcount ratio at \$3.20/day (%) | 100.0% | World Data Lab |
| 8 | Unemployment rate (% of total labor force) | 100.0% | ILO |
| 14 | Ocean Health Index: Clean Waters score (worst 0–100 best) | 100.0% | Ocean Health Index |
| 15 | Red List Index of species survival (worst 0–1 best) | 100.0% | IUCN and Birdlife International |
| 16 | Property Rights (worst 1–7 best) | 100.0% | World Economic Forum |
| 16 | Corruption Perception Index (worst 0–100 best) | 100.0% | Transparency International |
| 16 | Press Freedom Index (best 0–100 worst) | 100.0% | Reporters Without Borders |
| 17 | Financial Secrecy Score (best 0–100 worst) | 100.0% | Tax Justice Network |
| 9 | The Times Higher Education Universities Ranking: Average score of top 3 universities (worst 0–100 best) | 99.5% | Times Higher Education |
| 5 | Seats held by women in national parliament (%) | 98.4% | IPU |
| 3 | Subjective well-being (average ladder score, worst 0–10 best) | 41.3% | Gallup |
| 11 | Satisfaction with public transport (%) | 41.3% | Gallup |
| 16 | Population who feel safe walking alone at night in the city or area where they live (%) | 40.9% | Gallup |
| 5 | Demand for family planning satisfied by modern methods (% of females aged 15 to 49) | 28.9% | UNDESA |
| 13 | CO ₂ emissions embodied in fossil fuel exports (kg/capita) | 23.4% | UN Comtrade |
| 4 | Net primary enrollment rate (%) | 2.2% | UNESCO |
| 4 | Participation rate in pre-primary organized learning (% of children aged 4 to 6) | 1.2% | UNESCO |
| 4 | Lower secondary completion rate (%) | 1.1% | UNESCO |

Source: Authors' analysis

Despite our best efforts to identify data for the SDGs, several indicator and data gaps persist at the international level (table 4.3). Governments and the international community must increase investments in SDG data and monitoring systems and build strong data partnerships to support informed SDG decisions and strategies.

To ensure maximum comparability, we only use data from internationally comparable sources. The providers of this data may adjust national figures to ensure international comparability. As a result, some data points presented in this report may differ from those of national statistical offices or other national sources. Moreover, the length of validation processes can lead to significant delays in publishing some data from international organizations. National statistical offices may therefore have more recent data for some indicators than presented in this report.

Table 4.3

Major indicator and data gaps for the SDGs

| SDG | Issue | Desired metrics |
|-----|--|---|
| 2 | Agriculture and nutrition | Food loss and food waste Greenhouse gas emissions from land use Global yield gaps statistics |
| 3 | Health | Health care system resilience and preparedness to face global health risks Internationally comparable survey data on unmet care needs |
| 4 | Education | Internationally comparable primary and secondary education outcomes Early childhood development (access and quality) |
| 5 | Women empowerment | Gender pay gap and other empowerment measures Violence against women |
| 6 | Water | Quality of drinking water and surface waters |
| 8 | Decent work | Decent work Child labor and modern slavery embodied into trade |
| 10 | Inequality | Wealth inequality Vertical mobility |
| 12 | Sustainable consumption and production | Environmental impact of material flows Recycling and re-use (circular economy) Chemicals Waste shipments International spillovers through physical flows (air, water) |
| 13 | Climate Action | Robust indicators of climate adaptation |
| 14 | Marine ecosystems | Maximum sustainable yields for fisheries Impact of high-sea and cross-border fishing Protected areas by level of protection |
| 15 | Terrestrial ecosystems | Leading indicators for ecosystem health Trade in endangered species Protected areas by level of protection |
| 16 | Peace and justice | Violence against children |
| 17 | Means of implementation | Climate finance Development impact of trade practices |

Source: Authors

4.3 Methodology (overview)

The *Sustainable Development Report 2021* (SDR2021) provides a comprehensive assessment of how close countries are to achieving the SDG targets based on the most up-to-date data available for all 193 UN Member States. This year's report includes 91 global indicators as well as 30 additional indicators for OECD countries, due to better data coverage.

Below is an overview of our methodology for indicator selection, normalization and aggregation and for generating indications on trends. Raw data, additional data tables, and sensitivity tests are available online.

A. Data selection

Where possible, the SDR2021 uses official SDG indicators endorsed by the UN Statistical Commission. Where insufficient data are available for an official indicator, or to close data gaps, we include other metrics from official and unofficial providers. Five criteria for indicator selection were used to determine suitable metrics for inclusion in the report:

1. Global relevance and applicability to a broad range of country settings.
2. Statistical adequacy: the indicators selected represent valid and reliable measures.
3. Timeliness: the indicators selected are up to date and published on a reasonably prompt schedule.
4. Coverage: data must be available for at least 80 percent of UN Member States with a population of more than a million people.¹
5. Capacity to measure distance to targets (optimal performance can be determined).

1. There are five exceptions to this rule: (i) Exports of hazardous pesticides; (ii) New HIV infections; (iii) Children involved in child labor; (iv) Fundamental labor rights are effectively guaranteed and (v) Access to and affordability of justice.

Data sources

The data included in the SDR2021 come from a mix of official and non-official data sources. Most of the data (around two thirds) is developed by international organizations (World Bank, OECD, WHO, FAO, ILO, UNICEF, other), which have extensive and rigorous data validation processes. Other less traditional statistical sources used (accounting for around a third of our data) include household surveys (Gallup World Poll), data from civil society organizations and networks (among others, Oxfam, Tax Justice Network, World Justice Project, Reporters without Borders) and peer-reviewed journals (to track international spillovers, for example). The full list of indicators and data sources is available online.

B. Missing data and imputations

The purpose of the SDR2021 is to guide countries in discussing their current SDG priorities based on available and robust data. To minimize biases from missing data, the SDG Index only includes countries that have data for at least 80 percent of the variables included in the global SDG Index. The list of countries not included in the SDG Index due to insufficient data availability is presented in table 4.4 below. We include all UN Member States in the SDG Dashboards and country profiles, which also indicates gaps in available SDG data for countries.

Considering that many SDG priorities lack widely accepted statistical models for imputing country-level data, we generally did not impute or model any missing data, apart from a few exceptional circumstances. The list of indicators where imputations are performed is available online.

Table 4.4

Countries excluded from the 2021 SDG Index due to insufficient data

| Country | Missing Values | Percentage of Missing Values |
|--------------------------------|----------------|------------------------------|
| Andorra | 44 | 51% |
| Antigua and Barbuda | 28 | 31% |
| Bahamas, The | 22 | 24% |
| Comoros | 20 | 22% |
| Dominica | 46 | 51% |
| Eritrea | 22 | 24% |
| Micronesia, Fed. Sts. | 41 | 45% |
| Guinea-Bissau | 21 | 23% |
| Equatorial Guinea | 31 | 34% |
| Grenada | 37 | 41% |
| Kiribati | 40 | 44% |
| St. Kitts and Nevis | 46 | 51% |
| Libya | 21 | 23% |
| St. Lucia | 25 | 27% |
| Liechtenstein | 53 | 62% |
| Monaco | 53 | 58% |
| Marshall Islands | 59 | 65% |
| Nauru | 51 | 56% |
| Palau | 50 | 55% |
| Korea, Dem. Rep. | 25 | 27% |
| Solomon Islands | 29 | 32% |
| San Marino | 52 | 57% |
| Seychelles | 24 | 26% |
| Timor-Leste | 23 | 25% |
| Tonga | 31 | 34% |
| Tuvalu | 49 | 54% |
| St. Vincent and the Grenadines | 33 | 36% |
| Samoa | 20 | 22% |

Source: Authors' analysis

C. Method for constructing the SDG Index and Dashboards

Calculating the SDG Index comprises three steps: (i) establish performance thresholds and censor extreme values from the distribution of each indicator; (ii) rescale the data to ensure comparability across indicators (normalization); (iii) aggregate the indicators within and across SDGs.

Establishing Performance thresholds

To make the data comparable across indicators, each variable was rescaled from 0 to 100, with 0 denoting worst possible performance and 100 describing optimum performance. Rescaling is usually very sensitive to the choice of limits and extreme values (outliers) at both tails of the distribution. The latter may become unintended thresholds and introduce spurious variability in the data. Consequently, the choice of upper and lower bounds can affect the relative ranking of countries in the index.

The upper bound for each indicator was determined using a five-step decision tree:

1. Use absolute quantitative thresholds in SDGs and targets: e.g., zero poverty, universal school completion, universal access to water and sanitation, full gender equality.
2. Where no explicit SDG target is available, apply the principle of “leave no one behind” to set the upper bound to universal access or zero deprivation.
3. Where science-based targets exist that must be achieved by 2030 or a later date, use these to set the 100 percent upper bound (e.g., zero greenhouse gas emissions from CO₂ as required by no later than 2050 to stay within the 1.5°C target, or 100 percent sustainable management of fisheries).
4. Where several countries already exceed an SDG target, use the average of the top 5 performers (e.g., child mortality).
5. For all other indicators, use the average of the top performers.

These principles interpret the SDGs as “stretch targets” and focus attention on the indicators on which a country is lagging behind. The lower bound was defined at the 2.5th percentile of the distribution. Each indicator distribution was censored, so that all values exceeding the upper bound scored 100, and values below the lower bound scored 0.

Normalization

After establishing the upper and lower bounds, variables were transformed linearly to a scale between 0 and 100 using the following rescaling formula for the range [0; 100]:

$$x' = \frac{x - \min(x)}{\max(x) - \min(x)} \times 100$$

where x is the raw data value; $\max(x)$ / $\min(x)$ denote the upper and lower bounds, respectively; and x' is the normalized value after rescaling.

The rescaling equation ensured that all rescaled variables were expressed as ascending variables (i.e., higher values denoted better performance). In this way, the rescaled data became easy to interpret and compare across all indicators: a country that scores 50 on a variable is half-way towards achieving the optimum value; a country with a score of 75 has covered three quarters of the distance from worst to best.

Weighting and Aggregation

Several rounds of expert consultations on earlier drafts of the SDG Index made it clear that there was no consensus across different epistemic communities on assigning higher weights to some SDGs over others. As a normative assumption, we therefore opted to give fixed, equal weight to every SDG, reflecting the commitment of policymakers to treat all SDGs equally as part of an integrated and indivisible set of goals. To improve their SDG Index score, countries need to place attention on all goals, albeit with a particular focus on those they are furthest from achieving and where incremental progress might be expected to be fastest.

To compute the SDG Index, we first estimate scores for each goal using the arithmetic mean of indicators for that goal. These goal scores are then averaged across all 17 SDGs to obtain the SDG Index score. Various sensitivity tests are made available online: including comparisons of arithmetic mean versus geometric mean, and Monte-Carlo simulations at the Index and Goal level. Monte-Carlo simulations call for prudence in interpreting small differences in the Index scores and rankings between countries, as those may be sensitive to the weighting scheme.

Dashboards

We introduced additional quantitative thresholds for each indicator to group countries in a “traffic light” table. Thresholds have been established using statistical techniques and through various rounds of consultations with experts conducted since 2016.

Averaging across all indicators for each SDG risks masking areas of policy concern if a country is performing well on most indicators for a goal but faces serious shortfalls on one or two of its metrics (often called the “substitutability” or “compensation” issue). This applies particularly to high-income and upper-middle-income countries that have made significant progress on many SDG dimensions but may face serious shortfalls in relation to individual variables. As a result, the SDG Dashboards focus exclusively on the two variables on which a country performs worst, with the added rule that a red rating is applied only where the country scores red on both of these worst-performing indicators. Similarly, to score green, both indicators must be green. More details on the construction of the Dashboards are accessible online.

SDG Trends

Using historic data, we estimate how fast a country has been progressing towards an SDG and determine whether – if extrapolated into the future – this pace will be sufficient to achieve the SDG by 2030. For each indicator, SDG achievement is defined by the green threshold set for the SDG Dashboards. The difference in percentage points between the green threshold and the

normalized country score denotes the gap that must be closed to meet that goal. To estimate trends at the indicator level, we calculated the linear annual growth rates (annual percentage improvements) needed to achieve the target by 2030 (from 2015–2030), which we compared to the average annual growth rate over the most recent period (usually 2015–2019). Progress towards achievement on a particular indicator is described using a 4-arrow system (figure 4.1). Figure 4.2 illustrates the methodology graphically.

Since projections are based on past growth rates, over several years, a country may have observed a decline in performance over the past year (for instance due to the impact of COVID-19) but still be considered as being on track. This methodology emphasizes long-term structural changes over time since the adoption of the SDGs in 2015, with less emphasis on annual changes that may be cyclical or temporary.

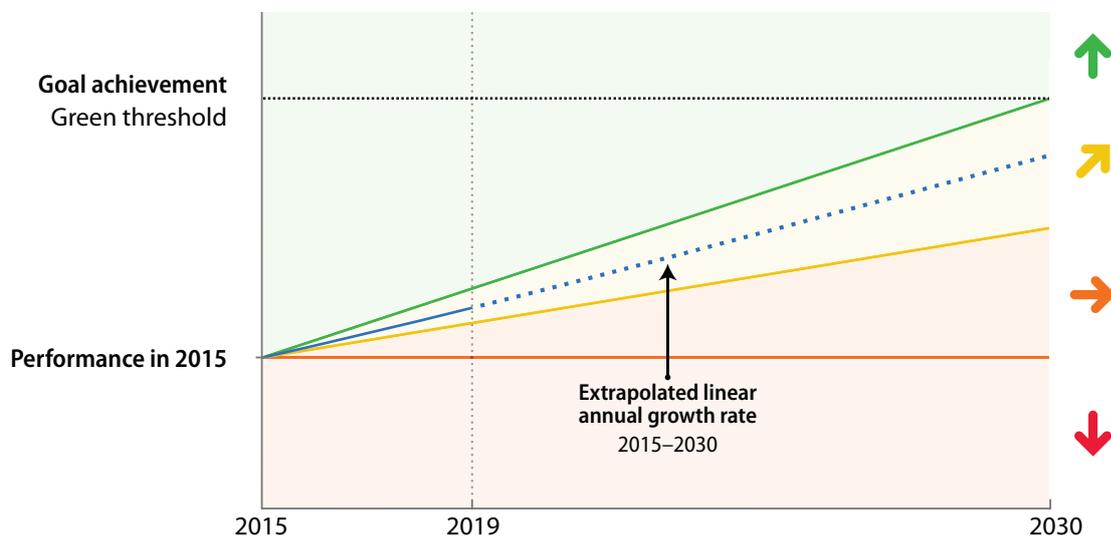
Figure 4.1

The Four-arrow system for denoting SDG trends



Figure 4.2

Graphic representation of the SDG trends methodology



Source: Authors' analysis

Table 4.5Indicators included in the *Sustainable Development Report 2021***Legend**

[a] denotes OECD-only indicators

[b] denotes indicators not used in OECD dashboard but that are used in the calculation of OECD countries' index scores.

| SDG Notes | Indicator | Reference Year | Source | Description |
|-----------|--|----------------|---------------------------|--|
| 1 | Poverty headcount ratio at \$1.90/day (%) | 2021 | World Data Lab | Estimated percentage of the population that is living under the poverty threshold of US\$1.90 a day. Estimated using historical estimates of the income distribution, projections of population changes by age and educational attainment, and GDP projections. |
| 1 | Poverty headcount ratio at \$3.20/day (%) | 2021 | World Data Lab | Estimated percentage of the population that is living under the poverty threshold of US\$3.20 a day. Estimated using historical estimates of the income distribution, projections of population changes by age and educational attainment, and GDP projections. |
| 1 | [a] Poverty rate after taxes and transfers (%) | 2018 | OECD | Relative poverty is measured as the share of the population whose incomes fall below half the median disposable income for the entire population. The income threshold for relative poverty changes over time with changes in median disposable income. |
| 2 | Prevalence of undernourishment (%) | 2018 | FAO | The percentage of the population whose food intake is insufficient to meet dietary energy requirements for a minimum of one year. Dietary energy requirements are defined as the amount of dietary energy required by an individual to maintain body functions, health and normal activity. FAO et al. (2015) report 14.7 million undernourished people in developed regions, which corresponds to an average prevalence of 1.17% in the developed regions. We assumed a 1.2% prevalence rate for each high-income country (World Bank, 2019) with missing data. |
| 2 | Prevalence of stunting in children under 5 years of age (%) | 2018 | UNICEF et al. | The percentage of children up to the age of 5 years that are stunted, measured as the percentage that fall below minus two standard deviations from the median height for their age, according to the WHO Child Growth Standards. UNICEF et al. (2016) report an average prevalence of wasting in high-income countries of 2.58%. We assumed this value for high-income countries with missing data. |
| 2 | Prevalence of wasting in children under 5 years of age (%) | 2018 | UNICEF et al. | The percentage of children up to the age of 5 years whose weight falls below minus two standard deviations from the median weight for their age, according to the WHO Child Growth Standards. UNICEF et al. (2016) report an average prevalence of wasting in high-income countries of 0.75%. We assumed this value for high-income countries with missing data. |
| 2 | Prevalence of obesity, BMI \geq 30 (% of adult population) | 2016 | WHO | The percentage of the adult population that has a body mass index (BMI) of 30kg/m ² or higher, based on measured height and weight. |
| 2 | Human Trophic Level (best 2-3 worst) | 2017 | Bonhommeau et al. (2013) | Trophic levels are a measure of the energy intensity of diet composition and reflect the relative amounts of plants as opposed to animals eaten in a given country. A higher trophic level represents a greater level of consumption of energy-intensive animals. |
| 2 | Cereal yield (tonnes per hectare of harvested land) | 2018 | FAO | Cereal yield, measured as tonnes per hectare of harvested land. Production data on cereals relate to crops harvested for dry grain only and excludes crops harvested for hay or green for food, feed, or silage and those used for grazing. |
| 2 | Sustainable Nitrogen Management Index (best 0-1.41 worst) | 2015 | Zhang and Davidson (2019) | The Sustainable Nitrogen Management Index (SNMI) is a one-dimensional ranking score that combines two efficiency measures in crop production: Nitrogen use efficiency (NUE) and land use efficiency (crop yield). |
| 2 | [a] Yield gap closure (% of potential yield) | 2015 | Global Yield Gap Atlas | A country's yield expressed as a percentage of its potential yield in the three annual crops using the most land area, weighted for the relative importance of each crop in terms of surface area. |

Table 4.5

(continued)

| SDG Notes | Indicator | Reference Year | Source | Description |
|-----------|--|----------------|----------------|---|
| 2 | Exports of hazardous pesticides (tonnes per million population) | 2018 | FAO | Exports of pesticides deemed hazardous to human health, standardized by population. Due to volatility, the calculation uses the average value over the last 5 years. |
| 3 | Maternal mortality rate (per 100,000 live births) | 2017 | WHO et al. | The estimated number of women, between the age of 15-49, who die from pregnancy-related causes while pregnant or within 42 days of termination of pregnancy, per 100,000 live births. |
| 3 | Neonatal mortality rate (per 1,000 live births) | 2019 | UNICEF et al. | The number of newborn infants (neonates) who die before reaching 28 days of age, per 1,000 live births. |
| 3 | Mortality rate, under-5 (per 1,000 live births) | 2019 | UNICEF et al. | The probability that a newborn baby will die before reaching age five, if subject to age-specific mortality rates of the specified year, per 1,000 live births. |
| 3 | Incidence of tuberculosis (per 100,000 population) | 2019 | WHO | The estimated rate of new and relapse cases of tuberculosis in a given year, expressed per 100,000 people. All forms of tuberculosis are included, including cases of people living with HIV. |
| 3 | New HIV infections (per 1,000 uninfected population) | 2019 | UNAIDS | Number of people newly infected with HIV per 1,000 uninfected population. |
| 3 | Age-standardized death rate due to cardiovascular disease, cancer, diabetes, or chronic respiratory disease in adults aged 30–70 years (%) | 2016 | WHO | The probability of dying between the ages of 30 and 70 years from cardiovascular diseases, cancer, diabetes or chronic respiratory diseases, defined as the percent of 30-year-old-people who would die before their 70 th birthday from these diseases, assuming current mortality rates at every age and that individuals would not die from any other cause of death (e.g. injuries or HIV/AIDS). |
| 3 | Age-standardized death rate attributable to household air pollution and ambient air pollution (per 100,000 population) | 2016 | WHO | Mortality rate that is attributable to the joint effects of fuels used for cooking indoors and ambient outdoor air pollution. |
| 3 | Traffic deaths (per 100,000 population) | 2019 | WHO | Estimated number of fatal road traffic injuries per 100,000 people. |
| 3 | Life expectancy at birth (years) | 2019 | WHO | The average number of years that a newborn could expect to live, if he or she were to pass through life exposed to the sex- and age-specific death rates prevailing at the time of his or her birth, for a specific year, in a given country, territory, or geographic area. |
| 3 | Adolescent fertility rate (births per 1,000 females aged 15 to 19) | 2018 | UNDESA | The number of births per 1,000 women between the age of 15 to 19. |
| 3 | Births attended by skilled health personnel (%) | 2017 | UNICEF | The percentage of births attended by personnel trained to give the necessary supervision, care, and advice to women during pregnancy, labor, and the postpartum period, to conduct deliveries on their own, and to care for newborns. |
| 3 | Surviving infants who received 2 WHO-recommended vaccines (%) | 2019 | WHO and UNICEF | Estimated national routine immunization coverage of infants, expressed as the percentage of surviving infants children under the age of 12 months who received two WHO-recommended vaccines (3rd dose of DTP and 1st dose of measles). Calculated as the minimum value between the percentage of infants who have received the 3rd dose of DTP and the percentage who have received the 1st dose of measles. |
| 3 | Universal health coverage (UHC) index of service coverage (worst 0–100 best) | 2017 | WHO | Coverage of essential health services (defined as the average coverage of essential services based on tracer interventions that include reproductive, maternal, newborn and child health, infectious diseases, non-communicable diseases and service capacity and access, among the general and the most disadvantaged population). The indicator is an index reported on a unitless scale of 0 to 100, which is computed as the geometric mean of 14 tracer indicators of health service coverage. |

Table 4.5

(continued)

| SDG Notes | Indicator | Reference Year | Source | Description |
|-----------|--|----------------|--------|---|
| 3 | Subjective well-being (average ladder score, worst 0–10 best) | 2020 | Gallup | Subjective self-evaluation of life, where respondents are asked to evaluate where they feel they stand on a ladder where 0 represents the worst possible life and 10 the best possible life. |
| 3 | [a] Gap in life expectancy at birth among regions (years) | 2016 | OECD | Difference between maximum and minimum regional life expectancy at birth among regions. |
| 3 | [a] Gap in self-reported health status by income (percentage points) | 2019 | OECD | Gap in percentage of people who perceive their health status as good or very good between the poorest 20% and the richest 20% of the population. |
| 3 | [a] Daily smokers (% of population aged 15 and over) | 2019 | OECD | The percentage of the population aged 15 years and older who are reported to smoke daily. |
| 4 | Net primary enrollment rate (%) | 2019 | UNESCO | The percentage of children of the official school age population who are enrolled in primary education. |
| 4 | Lower secondary completion rate (%) | 2019 | UNESCO | Lower secondary education completion rate measured as the gross intake ratio to the last grade of lower secondary education (general and pre-vocational). It is calculated as the number of new entrants in the last grade of lower secondary education, regardless of age, divided by the population at the entrance age for the last grade of lower secondary education. |
| 4 | Literacy rate (% of population aged 15 to 24) | 2018 | UNESCO | The percentage of youth, aged 15 to 24, who can both read and write a short simple statement on everyday life with understanding. |
| 4 | [a] Participation rate in pre-primary organized learning (% of children aged 4 to 6) | 2019 | UNESCO | Participation rate in organized learning one year before the official primary entry age. |
| 4 | [a] Tertiary educational attainment (% of population aged 25 to 34) | 2019 | OECD | The percentage of the population, aged 25 to 34, who have completed tertiary education. |
| 4 | [a] PISA score (worst 0–600 best) | 2018 | OECD | National scores in the Programme for International Student Assessment (PISA), an internationally standardized assessment that is administered to 15-year-olds in schools. It assesses how far students near the end of compulsory education have acquired some of the knowledge and skills that are essential for full participation in society. Country PISA scores for reading, mathematics, and science were averaged to obtain an overall PISA score. |
| 4 | [a] Variation in science performance explained by socio-economic status (%) | 2018 | OECD | Percentage of variation in science performance explained by students' socio-economic status. |
| 4 | [a] Underachievers in science (% of 15-year-olds) | 2018 | OECD | Percentage of students with a performance in science below level 2 (less than 409.54 score points). |
| 4 | [a] Resilient students in science (% of 15-year-olds) | 2018 | OECD | Percentage of students who are in the bottom quarter of the PISA index of economic, social and cultural status (ESCS) in the country/economy of assessment and are in the top quarter of science performers among all countries/economies, after accounting for socio-economic status. |
| 5 | Demand for family planning satisfied by modern methods (% of females aged 15 to 49) | 2020 | UNDESA | The percentage of women of reproductive age, whose demand for family planning has been met using modern methods of contraception. |
| 5 | Ratio of female-to-male mean years of education received (%) | 2019 | UNESCO | The mean years of education received by women aged 25 and older divided by the mean years of education received by men aged 25 and older. |
| 5 | Ratio of female-to-male labor force participation rate (%) | 2019 | ILO | Modeled estimate of the proportion of the female population aged 15 years and older that is economically active, divided by the same proportion for men. |

Table 4.5

(continued)

| SDG Notes | Indicator | Reference Year | Source | Description |
|-----------|--|----------------|----------------------|--|
| 5 | Seats held by women in national parliament (%) | 2020 | IPU | The number of seats held by women in single or lower chambers of national parliaments, expressed as a percentage of all occupied seats. Seats refer to the number of parliamentary mandates, or the number of members of parliament. |
| 5 | [a] Gender wage gap (% of male median wage) | 2019 | OECD | The difference between male and female median wages of full-time employees and those self-employed, divided by the male median wage. |
| 5 | [a] Gender gap in time spent doing unpaid work (minutes/day) | 2015 | OECD | The difference in time spent in unpaid work between men and women in minutes per day. Unpaid work includes work, such as childcare, meal preparation, and cleaning. |
| 6 | Population using at least basic drinking water services (%) | 2017 | JMP | The percentage of the population using at least a basic drinking water service, such as drinking water from an improved source, provided that the collection time is not more than 30 minutes for a round trip, including queuing. |
| 6 | Population using at least basic sanitation services (%) | 2017 | JMP | The percentage of the population using at least a basic sanitation service, such as an improved sanitation facility that is not shared with other households. |
| 6 | Freshwater withdrawal (% of available freshwater resources) | 2017 | FAO | The level of water stress: freshwater withdrawal as a proportion of available freshwater resources is the ratio between total freshwater withdrawn by all major sectors and total renewable freshwater resources, after taking into account environmental water requirements. Main sectors, as defined by ISIC standards, include agriculture, forestry and fishing, manufacturing, electricity industry, and services. This indicator is also known as water withdrawal intensity. |
| 6 | Anthropogenic wastewater that receives treatment (%) | 2018 | EPI | The percentage of collected, generated, or produced wastewater that is treated, normalized by the population connected to centralized wastewater treatment facilities. Scores were calculated by multiplying the wastewater treatment summary values, based on decadal averages, with the sewerage connection values to arrive at an overall total percentage of wastewater treated. |
| 6 | Scarce water consumption embodied in imports (m ³ /capita) | 2013 | Lenzen et al. (2013) | Water scarcity is measured as water consumption weighted by scarcity indices. In order to incorporate water scarcity into the virtual water flow calculus, a new satellite account was constructed where water use entries are weighted so that they reflect the scarcity of the water being used. The weight used is a measure of water withdrawals as a percentage of the existing local renewable freshwater resources. The Water Scarcity Index was used for converting total water use into scarce water use. |
| 6 | [a] Population using safely managed water services (%) | 2017 | JMP | The percentage of the population using a safely managed drinking water service. A safely managed drinking water service is one where people use an "improved" source meeting three criteria: it is accessible on premises, water is available when needed, and the water supplied is free from contamination. Improved sources are those that have the potential to deliver safe water by nature of their design and construction. |
| 6 | [a] Population using safely managed sanitation services (%) | 2017 | JMP | The percentage of the population using safely managed sanitation services. Safely managed sanitation services are "improved" sanitation facilities that are not shared with other households, and where the excreta produced should either be treated and disposed of in situ, stored temporarily and then emptied, transported and treated off-site, or transported through a sewer with wastewater and then treated off-site. Improved sanitation facilities are those designed to hygienically separate excreta from human contact. |
| 7 | Population with access to electricity (%) | 2018 | SE4All | The percentage of the population who has access to electricity. |
| 7 | Population with access to clean fuels and technology for cooking (%) | 2016 | SE4All | The percentage of the population primarily using clean cooking fuels and technologies for cooking. Under WHO guidelines, kerosene is excluded from clean cooking fuels. |
| 7 | CO ₂ emissions from fuel combustion for electricity and heating per total electricity output (MtCO ₂ /TWh) | 2019 | IEA | A measure of the carbon intensity of energy production, calculated by dividing CO ₂ emissions from the combustion of fuel by electricity output. |

Table 4.5

(continued)

| SDG Notes | Indicator | Reference Year | Source | Description |
|-----------|---|----------------|-----------------------------|---|
| 7 | [a] Share of renewable energy in total primary energy supply (%) | 2019 | OECD | The share of renewable energy in the total primary energy supply. Renewables include the primary energy equivalent of hydro (excluding pumped storage), geothermal, solar, wind, tide and wave sources. Energy derived from solid biofuels, biogasoline, biodiesels, other liquid biofuels, biogases and the renewable fraction of municipal waste are also included. |
| 8 | Adjusted GDP growth (%) | 2019 | World Bank | The growth rate of GDP adjusted to income levels (where rich countries are expected to grow less) and expressed relative to the US growth performance. GDP is the sum of gross value added by all resident producers in the economy, plus any product taxes and minus any subsidies not included in the value of the products. |
| 8 | Victims of modern slavery (per 1,000 population) | 2018 | Walk Free Foundation (2018) | Estimation of the number of people in modern slavery. Modern slavery is defined as people in forced labor or forced marriage. It is calculated based on standardized surveys and Multiple Systems Estimation (MSE). |
| 8 | Adults with an account at a bank or other financial institution or with a mobile-money-service provider (% of population aged 15 or over) | 2017 | Demirguc-Kunt et al. (2018) | The percentage of adults, 15 years and older, who report having an account (by themselves or with someone else) at a bank or another type of financial institution, or who have personally used a mobile money service within the past 12 months. |
| 8 | [b] Unemployment rate (% of total labor force) | 2020 | ILO | Modeled estimate of the share of the labor force that is without work but is available and actively seeking employment. The indicator reflects the inability of an economy to generate employment for people who want to work but are not doing so. |
| 8 | Fundamental labor rights are effectively guaranteed (worst 0–1 best) | 2020 | World Justice Project | Measures the effective enforcement of fundamental labor rights, including freedom of association and the right to collective bargaining, the absence of discrimination with respect to employment, and freedom from forced labor and child labor. |
| 8 | Fatal work-related accidents embodied in imports (per 100,000 population) | 2015 | Alsamawi et al. (2017) | The number of fatal work-related accidents associated with imported goods. Calculated using extensions to a multiregional input-output table. |
| 8 | [a] Employment-to-population ratio (%) | 2020 | OECD | The ratio of the employed to the working age population. Employed people are those aged 15 or older who were in paid employment or self-employed during a specified period. The working age population refers to people aged 15 to 64. |
| 8 | [a] Youth not in employment, education or training (NEET) (% of population aged 15 to 29) | 2019 | OECD | The percentage of young people who are not in employment, education or training (NEET). Education includes part-time or full-time education, but exclude those in non-formal education and in educational activities of very short duration. Employment is defined according to the ILO Guidelines and covers all those who have been in paid work for at least one hour in the reference week or were temporarily absent from such work. |
| 9 | Population using the internet (%) | 2019 | ITU | The percentage of the population who used the Internet from any location in the last three months. Access could be via a fixed or mobile network. |
| 9 | Mobile broadband subscriptions (per 100 population) | 2019 | ITU | The number of mobile broadband subscriptions per 100 population. Mobile broadband subscriptions refer to subscriptions to mobile cellular networks with access to data communications (e.g. the Internet) at broadband speeds, irrespective of the device used to access the internet. |
| 9 | Logistics Performance Index: Quality of trade and transport-related infrastructure (worst 1–5 best) | 2018 | World Bank | Survey-based average assessment of the quality of trade and transport related infrastructure, e.g. ports, roads, railroads and information technology, on a scale from 1 (worst) to 5 (best). |

Table 4.5

(continued)

| SDG Notes | Indicator | Reference Year | Source | Description |
|-----------|--|----------------|-----------------------------|---|
| 9 | The Times Higher Education Universities Ranking: Average score of top 3 universities (worst 0–100 best) | 2021 | Times Higher Education | The average score of the top three universities in each country that are listed in the global top 1,000 universities in the world. For countries with at least one university on the list, only the score of the ranked university was taken into account. When a university score was missing in the Times Higher Education World University Ranking, an indicator from the Global Innovation Index on the top 3 universities in Quacquarelli Symonds (QS) University Ranking was used as a source when available. |
| 9 | Scientific and technical journal articles (per 1,000 population) | 2018 | National Science Foundation | The number of scientific and technical journal articles published, that are covered by the Science Citation Index (SCI) or the Social Sciences Citation Index (SSCI). Articles are counted and assigned to a country based on the institutional address(es) listed in the article. |
| 9 | Expenditure on research and development (% of GDP) | 2018 | UNESCO | Gross domestic expenditure on scientific research and experimental development (R&D) expressed as a percentage of Gross Domestic Product (GDP). We assumed zero R&D expenditure for low-income countries that do not report any data. |
| 9 | [a] Researchers (per 1,000 employed population) | 2018 | OECD | The number of researchers per thousand employed people. Researchers are professionals engaged in the conception or creation of new knowledge, products, processes, methods and systems, as well as in the management of the projects concerned |
| 9 | [a] Triadic patent families filed (per million population) | 2018 | OECD | A triadic patent family is defined as a set of patents registered in various countries (i.e. patent offices) to protect the same invention. Triadic patent families are a set of patents filed at three of these major patent offices: the European Patent Office (EPO), the Japan Patent Office (JPO) and the United States Patent and Trademark Office (USPTO). The number of triadic patent families is "nowcast" for timeliness. |
| 9 | [a] Gap in internet access by income (percentage points) | 2019 | OECD | The difference in the percentage of household Internet access between the top and bottom income quartiles. |
| 9 | [a] Female share of graduates from STEM fields at the tertiary level (%) | 2018 | World Bank | Female share of graduates from Science, Technology, Engineering and Mathematics (STEM) programmes, tertiary (%) |
| 10 | Gini coefficient adjusted for top income | 2017 | Chandy and Seidel (2017) | The Gini coefficient adjusted for top revenues unaccounted for in household surveys. This indicator takes the average of the unadjusted Gini and the adjusted Gini. |
| 10 | Palma ratio | 2018 | OECD & UNDP | The share of all income received by the 10% people with highest disposable income divided by the share of all income received by the 40% people with the lowest disposable income. |
| 10 | [a] Elderly poverty rate (% of population aged 66 or over) | 2018 | OECD | The percentage of people of 66 years of age or more whose income falls below half the median household income of the total population. |
| 11 | Proportion of urban population living in slums (%) | 2018 | UN Habitat | Population living in slums is the proportion of the urban population living in slum households. A slum household is defined as a group of individuals living under the same roof lacking one or more of the following conditions: access to improved water, access to improved sanitation, sufficient living area, housing durability, and security of tenure |
| 11 | Annual mean concentration of particulate matter of less than 2.5 microns in diameter (PM _{2.5}) (µg/m ³) | 2019 | IHME | Air pollution measured as the population-weighted mean annual concentration of PM _{2.5} for the urban population in a country. PM _{2.5} is suspended particles measuring less than 2.5 microns in aerodynamic diameter, which are capable of penetrating deep into the respiratory tract and can cause severe health damage. |
| 11 | Access to improved water source, piped (% of urban population) | 2017 | WHO and UNICEF | The percentage of the urban population with access to improved drinking water piped on premises. An "improved" drinking-water source is one that, by the nature of its construction and when properly used, adequately protects the source from outside contamination, particularly fecal matter. |
| 11 | Satisfaction with public transport (%) | 2020 | Gallup | The percentage of the surveyed population that responded "satisfied" to the question "In the city or area where you live, are you satisfied or dissatisfied with the public transportation systems?". |

Table 4.5

(continued)

| SDG Notes | Indicator | Reference Year | Source | Description |
|-----------|--|----------------|-------------------------------|--|
| 11 | [a] Population with rent overburden (%) | 2019 | OECD | Percentage of the population living in households where the total housing costs represent more than 40 % of disposable income. |
| 12 | [b] Municipal solid waste (kg/capita/day) | 2016 | World Bank | The amount of waste collected by or on behalf of municipal authorities and disposed of through the waste management system. Waste from agriculture and from industries are not included. Urban population is used as the denominator. |
| 12 | Electronic waste (kg/capita) | 2019 | UNU-IAS | Waste from electrical and electronic equipment, estimated based on figures for domestic production, imports and exports of electronic products, as well as product lifespan data. |
| 12 | Production-based SO ₂ emissions (kg/capita) | 2012 | Lenzen et al. (2020) | SO ₂ emissions associated with the production of goods and services, which are then either exported or consumed domestically. |
| 12 | SO ₂ emissions embodied in imports (kg/capita) | 2012 | Lenzen et al. (2020) | Emissions of SO ₂ embodied in imported goods and services. SO ₂ emissions have severe health impacts and are a significant cause of premature mortality worldwide. |
| 12 | Production-based nitrogen emissions (kg/capita) | 2010 | Oita et al. (2016) | Reactive nitrogen emitted during the production of commodities, which are then either exported or consumed domestically. Reactive nitrogen corresponds to emissions of ammonia, nitrogen oxides and nitrous oxide to the atmosphere, and of reactive nitrogen potentially exportable to water bodies, all of which can be harmful to human health and the environment. |
| 12 | Nitrogen emissions embodied in imports (kg/capita) | 2010 | Oita et al. (2016) | Emissions of reactive nitrogen embodied in imported goods and services. Reactive nitrogen corresponds here to emissions of ammonia, nitrogen oxides and nitrous oxide to the atmosphere, and of reactive nitrogen potentially exportable to water bodies, all of which can be harmful to human health and the environment. |
| 12 | [a] Non-recycled municipal solid waste (kg/capita/day) | 2018 | OECD | The amount of municipal solid waste (MSW), including household waste, that is neither recycled nor composted. |
| 13 | CO ₂ emissions from fossil fuel combustion and cement production (tCO ₂ /capita) | 2019 | Global Carbon Project | Emissions from the combustion and oxidation of fossil fuels and from cement production. The indicator excludes emissions from fuels used for international aviation and maritime transport. |
| 13 | CO ₂ emissions embodied in imports (tCO ₂ /capita) | 2015 | Lenzen et al. (2020) | CO ₂ emissions embodied in imported goods and services. |
| 13 | CO ₂ emissions embodied in fossil fuel exports (kg/capita) | 2020 | UN Comtrade | CO ₂ emissions embodied in the exports of coal, gas, and oil. Calculated using a 5-year average of fossil fuel exports and converting exports into their equivalent CO ₂ emissions. Exports for each fossil fuel are capped at the country's level of production. |
| 13 | [a] Carbon Pricing Score at EUR60/tCO ₂ (% , worst 0–100 best) | 2018 | OECD | The Carbon Pricing Score (CPS) measures the extent to which countries have attained the goal of pricing all energy related carbon emissions at certain benchmark values for carbon costs. The more progress that a country has made towards a specified benchmark value, the higher the CPS. For example, a CPS of 100% against a EUR 60 per tonne of CO ₂ benchmark means that the country (or the group of countries) prices all carbon emissions in its (their) territory from energy use at EUR 60 or more. |
| 14 | Mean area that is protected in marine sites important to biodiversity (%) | 2019 | Birdlife International et al. | The mean percentage area of marine Key Biodiversity Areas (sites that are important for the global persistence of marine biodiversity) that are protected. |
| 14 | Ocean Health Index: Clean Waters score (worst 0–100 best) | 2020 | Ocean Health Index | The clean waters subgoal of the Ocean Health Index measures to what degree marine waters under national jurisdictions have been contaminated by chemicals, excessive nutrients (eutrophication), human pathogens, and trash. |
| 14 | Fish caught from overexploited or collapsed stocks (% of total catch) | 2014 | Sea around Us | The percentage of a country's total catch, within its exclusive economic zone (EEZ), that is comprised of species that are overexploited or collapsed, weighted by the quality of fish catch data. |
| 14 | Fish caught by trawling or dredging (%) | 2016 | Sea Around Us | The percentage of fish caught by trawling, a method of fishing in which industrial fishing vessels drag large nets (trawls) along the seabed. |

Table 4.5

(continued)

| SDG Notes | Indicator | Reference Year | Source | Description |
|-----------|--|----------------|---------------------------------|---|
| 14 | Fish caught that are then discarded (%) | 2016 | Sea around Us | The percentage of fish that are caught only to be later discarded. |
| 14 | Marine biodiversity threats embodied in imports (per million population) | 2018 | Lenzen et al. (2012) | Threats to marine species embodied in imports of goods and services. |
| 15 | Mean area that is protected in terrestrial sites important to biodiversity (%) | 2019 | Birdlife International et al. | The mean percentage area of terrestrial Key Biodiversity Areas (sites that are important for the global persistence of biodiversity) that are protected. |
| 15 | Mean area that is protected in freshwater sites important to biodiversity (%) | 2019 | Birdlife International et al. | The mean percentage area of freshwater Key Biodiversity Areas (sites that are important for the global persistence of biodiversity) that are protected. |
| 15 | Red List Index of species survival (worst 0–1 best) | 2020 | IUCN and Birdlife International | The change in aggregate extinction risk across groups of species. The index is based on genuine changes in the number of species in each category of extinction risk on The IUCN Red List of Threatened Species. |
| 15 | Permanent deforestation (% of forest area, 5-year average) | 2018 | Curtis et al. (2018) | The mean annual percentage of permanent deforestation over the period 2014 to 2018. Permanent deforestation refers to tree cover removal for urbanization, commodity production and certain types of small-scale agriculture. It does not include temporary forest loss due to the forestry sector or wildfires. |
| 15 | Terrestrial and freshwater biodiversity threats embodied in imports (per million population) | 2018 | Lenzen et al. (2012) | Threats to terrestrial and freshwater species embodied in imports of goods and services. |
| 16 | Homicides (per 100,000 population) | 2018 | UNODC | The number of intentional homicides per 100,000 people. Intentional homicides are estimates of unlawful homicides purposely inflicted as a result of domestic disputes, interpersonal violence, violent conflicts over land resources, intergang violence over turf or control, and predatory violence and killing by armed groups. Intentional homicide does not include all intentional killing, such as killing in armed conflict. |
| 16 | Unsentenced detainees (% of prison population) | 2018 | UNODC | Unsentenced prisoners as a percentage of overall prison population. Persons held unsentenced or pre-trial refers to persons held in prisons, penal institutions or correctional institutions who are untried, pre-trial or awaiting a first instance decision on their case from a competent authority regarding their conviction or acquittal. |
| 16 | Population who feel safe walking alone at night in the city or area where they live (%) | 2020 | Gallup | The percentage of the surveyed population that responded "Yes" to the question "Do you feel safe walking alone at night in the city or area where you live?" |
| 16 | Property Rights (worst 1–7 best) | 2020 | World Economic Forum | Survey-based assessment of protection of property rights, on a scale from 1 (worst) to 7 (best). The indicator reports respondents' qualitative assessment based on answers to several questions on the protection of property rights and intellectual property rights protection. |
| 16 | Birth registrations with civil authority (% of children under age 5) | 2019 | UNICEF | The percentage of children under the age of five whose births are reported as being registered with the relevant national civil authorities. |
| 16 | Corruption Perception Index (worst 0–100 best) | 2020 | Transparency International | The perceived levels of public sector corruption, on a scale from 0 (highest level of perceived corruption) to 100 (lowest level of perceived corruption). The CPI aggregates data from a number of different sources that provide perceptions of business people and country experts. |
| 16 | Children involved in child labor (% of population aged 5 to 14) | 2019 | UNICEF | The percentage of children, between the age of 5–14 years old, involved in child labor at the time of the survey. A child is considered to be involved in child labor under the following conditions: (a) children 5–11 years old who, during the reference week, did at least one hour of economic activity or at least 28 hours of household chores, or (b) children 12–14 years old who, during the reference week, did at least 14 hours of economic activity or at least 28 hours of household chores. We assumed 0% child labor for high-income countries for which no data was reported. |

Table 4.5

(continued)

| SDG Notes | Indicator | Reference Year | Source | Description |
|-----------|---|----------------|------------------------------------|---|
| 16 | Exports of major conventional weapons (TIV constant million USD per 100,000 population) | 2019 | Stockholm Peace Research Institute | Volume of major conventional weapons exported, expressed in constant 1990 US\$ millions (TIV) per 100,000 population. The trend-indicator value is based on the known unit production cost of a core set of weapons, and does not reflect the financial value of the exports. Small arms, light weapons, ammunition and other support material are not included. Values were calculated based on a 5-year rolling average. |
| 16 | Press Freedom Index (best 0–100 worst) | 2020 | Reporters without borders | Degree of freedom available to journalists in 180 countries and regions, determined by pooling the responses of experts to a questionnaire devised by RSF. |
| 16 | Access to and affordability of justice (worst 0–1 best) | 2020 | World Justice Project | Measures the accessibility and affordability of civil courts, including whether people are aware of available remedies; can access and afford legal advice and representation; and can access the court system without incurring unreasonable fees, encountering unreasonable procedural hurdles, or experiencing physical or linguistic barriers. |
| 16 | [a] Persons held in prison (per 100,000 population) | 2017 | UNODC | The prison population is composed of persons held in prisons, penal institutions, or correctional institutions. |
| 17 | Government spending on health and education (% of GDP) | 2018 | UNESCO | The sum of public expenditure on health from domestic sources and general government expenditure on education (current, capital, and transfers) expressed as a percentage of GDP. |
| 17 | For high-income and all OECD DAC countries: International concessional public finance, including official development assistance (% of GNI) | 2019 | OECD | The amount of official development assistance (ODA) as a share of gross national income (GNI). It includes grants, "soft" loans (where the grant element is at least 25% of the total) and the provision of technical assistance, and excludes grants and loans for military purposes. There is a break in the series because from 2018, the ODA grant-equivalent methodology is used whereby only the "grant portion" of the loan, i.e. the amount "given" by lending below market rates, counts as ODA. |
| 17 | Other countries: Government revenue excluding grants (% of GDP) | 2019 | IMF | Government revenue measured as cash receipts from taxes, social contributions, and other revenues such as fines, fees, rent, and income from property or sales. Grants are also considered as revenue but are excluded here. |
| 17 | Corporate Tax Haven Score (best 0–100 worst) | 2019 | Tax Justice Network | The Corporate Tax Haven Score measures a jurisdiction's potential to poach the tax base of others, as enshrined in its laws, regulations and documented administrative practices. For countries with multiple jurisdictions, the value of the worst-performing jurisdiction was retained. |
| 17 | [a] Financial Secrecy Score (best 0–100 worst) | 2020 | Tax Justice Network | The Index measures the contribution of each jurisdiction to financial secrecy, on a scale from 0 (best) to 100 (worst). It is calculated using qualitative data to prepare a secrecy score for each jurisdiction and quantitative data to create a global scale weighting for each jurisdiction according to its share of offshore financial services activity in the global total. For countries with multiple jurisdictions, the average score of the jurisdictions was used. |
| 17 | [a] Shifted profits of multinationals (US\$ billion) | 2017 | Zucman et al. (2019) | Estimation of how much profit is shifted into tax havens and how much non-haven countries lose in profits from such shifting. Based on macroeconomic data known as foreign affiliates statistics. Negative values indicate profit shifting. |
| 17 | Statistical Performance Index (worst 0-100 best) | 2019 | World Bank | The Statistical Performance Index is a weighted average of the statistical performance indicators that evaluate the performance of national statistical systems. It aggregates five pillars of statistical performance: data use, data services, data products, data sources, and data infrastructure. |

Source: Authors' analysis

Table 4.6

Indicator thresholds and justifications for optimal values

| SDG | Indicator | Optimum (value = 100) | Green | Yellow | Orange | Red | Lower bound | Justification for optimum |
|-----|--|--------------------------|-------|-----------------|-----------------|-------|-------------|---|
| 1 | Poverty headcount ratio at \$1.90/day (%) | 0 | ≤2 | 2 < x ≤ 7.5 | 7.5 < x ≤ 13 | >13 | 72.6 | SDG target |
| 1 | Poverty headcount ratio at \$3.20/day (%) | 0 | ≤2 | 2 < x ≤ 7.5 | 7.5 < x ≤ 13 | >13 | 51.5 | SDG target |
| 1 | Poverty rate after taxes and transfers (%) | 6.1 | ≤10 | 10 < x ≤ 12.5 | 12.5 < x ≤ 15 | >15 | 17.7 | Average of 3 best OECD performers |
| 2 | Prevalence of undernourishment (%) | 0 | ≤7.5 | 7.5 < x ≤ 11.25 | 11.25 < x ≤ 15 | >15 | 42.3 | SDG target |
| 2 | Prevalence of stunting in children under 5 years of age (%) | 0 | ≤7.5 | 7.5 < x ≤ 11.25 | 11.25 < x ≤ 15 | >15 | 50.2 | SDG target |
| 2 | Prevalence of wasting in children under 5 years of age (%) | 0 | ≤5 | 5 < x ≤ 7.5 | 7.5 < x ≤ 10 | >10 | 16.3 | SDG target |
| 2 | Prevalence of obesity, BMI ≥ 30 (% of adult population) | 2.8 | ≤10 | 10 < x ≤ 17.5 | 17.5 < x ≤ 25 | >25 | 35.1 | Average of 5 best performers |
| 2 | Human Trophic Level (best 2–3 worst) | 2.04 | ≤2.2 | 2.2 < x ≤ 2.3 | 2.3 < x ≤ 2.4 | >2.4 | 2.47 | Average of 5 best performers |
| 2 | Cereal yield (tonnes per hectare of harvested land) | 7 | ≥2.5 | 2.5 > x ≥ 2 | 2 > x ≥ 1.5 | >1.5 | 0.2 | Average of 5 best performers minus outliers |
| 2 | Sustainable Nitrogen Management Index (best 0–1.41 worst) | 0 | ≤0.3 | 0.3 < x ≤ 0.5 | 0.5 < x ≤ 0.7 | >0.7 | 1.2 | Technical optimum |
| 2 | Yield gap closure (% of potential yield) | 77 | ≥75 | 75 > x ≥ 62.5 | 62.5 > x ≥ 50 | >50 | 28 | Average of 5 best performers |
| 2 | Exports of hazardous pesticides (tonnes per million population) | 0 | ≤1 | 1 < x ≤ 25.5 | 25.5 < x ≤ 50 | >50 | 250 | Technical optimum |
| 3 | Maternal mortality rate (per 100,000 live births) | 3.4 | ≤70 | 70 < x ≤ 105 | 105 < x ≤ 140 | >140 | 814 | Average of 5 best performers |
| 3 | Neonatal mortality rate (per 1,000 live births) | 1.1 | ≤12 | 12 < x ≤ 15 | 15 < x ≤ 18 | >18 | 39.7 | Average of 5 best performers |
| 3 | Mortality rate, under-5 (per 1,000 live births) | 2.6 | ≤25 | 25 < x ≤ 37.5 | 37.5 < x ≤ 50 | >50 | 130.1 | Average of 5 best performers |
| 3 | Incidence of tuberculosis (per 100,000 population) | 0 | ≤10 | 10 < x ≤ 42.5 | 42.5 < x ≤ 75 | >75 | 561 | SDG target |
| 3 | New HIV infections (per 1,000 uninfected population) | 0 | ≤0.2 | 0.2 < x ≤ 0.6 | 0.6 < x ≤ 1 | >1 | 5.5 | SDG target |
| 3 | Age-standardized death rate due to cardiovascular disease, cancer, diabetes, or chronic respiratory disease in adults aged 30–70 years (%) | 9.3 | ≤15 | 15 < x ≤ 20 | 20 < x ≤ 25 | >25 | 31 | Average of 5 best performers |
| 3 | Age-standardized death rate attributable to household air pollution and ambient air pollution (per 100,000 population) | 0 | ≤18 | 18 < x ≤ 84 | 84 < x ≤ 150 | >150 | 368.8 | SDG target |
| 3 | Traffic deaths (per 100,000 population) | 3.2 | ≤8.4 | 8.4 < x ≤ 12.6 | 12.6 < x ≤ 16.8 | >16.8 | 33.7 | Average of 5 best performers |
| 3 | Life expectancy at birth (years) | 83 | ≥80 | 80 > x ≥ 75 | 75 > x ≥ 70 | >70 | 54 | Average of 5 best performers |
| 3 | Adolescent fertility rate (births per 1,000 females aged 15 to 19) | 2.5 | ≤25 | 25 < x ≤ 37.5 | 37.5 < x ≤ 50 | >50 | 139.6 | Average of 5 best performers |
| 3 | Births attended by skilled health personnel (%) | 100 | ≥98 | 98 > x ≥ 94 | 94 > x ≥ 90 | >90 | 23.1 | Leave no one behind |
| 3 | Surviving infants who received 2 WHO-recommended vaccines (%) | 100 | ≥90 | 90 > x ≥ 85 | 85 > x ≥ 80 | >80 | 41 | Leave no one behind |
| 3 | Universal health coverage (UHC) index of service coverage (worst 0–100 best) | 100 | ≥80 | 80 > x ≥ 70 | 70 > x ≥ 60 | >60 | 38.2 | Leave no one behind |
| 3 | Subjective well-being (average ladder score, worst 0–10 best) | 7.6 | ≥6 | 6 > x ≥ 5.5 | 5.5 > x ≥ 5 | >5 | 3.3 | Average of 5 best performers |

Table 4.6

(continued)

| SDG | Indicator | Optimum (value = 100) | Green | Yellow | Orange | Red | Lower bound | Justification for optimum |
|-----|--|--------------------------|-------|------------------|-----------------|------|-------------|-----------------------------------|
| 3 | Gap in life expectancy at birth among regions (years) | 0 | ≤3 | 3 < x ≤ 5 | 5 < x ≤ 7 | >7 | 11 | Leave no one behind |
| 3 | Gap in self-reported health status by income (percentage points) | 0 | ≤20 | 20 < x ≤ 30 | 30 < x ≤ 40 | >40 | 45 | Leave no one behind |
| 3 | Daily smokers (% of population aged 15 and over) | 10.1 | ≤18 | 18 < x ≤ 25 | 25 < x ≤ 32 | >32 | 35 | Average of 3 best OECD performers |
| 4 | Net primary enrollment rate (%) | 100 | ≥97 | 97 > x ≥ 88.5 | 88.5 > x ≥ 80 | >80 | 53.8 | SDG target |
| 4 | Lower secondary completion rate (%) | 100 | ≥90 | 90 > x ≥ 82.5 | 82.5 > x ≥ 75 | >75 | 18 | SDG target |
| 4 | Literacy rate (% of population aged 15 to 24) | 100 | ≥95 | 95 > x ≥ 90 | 90 > x ≥ 85 | >85 | 45.2 | Leave no one behind |
| 4 | Participation rate in pre-primary organized learning (% of children aged 4 to 6) | 100 | ≥90 | 90 > x ≥ 80 | 80 > x ≥ 70 | >70 | 35 | SDG target |
| 4 | Tertiary educational attainment (% of population aged 25 to 34) | 52.2 | ≥40 | 40 > x ≥ 25 | 25 > x ≥ 10 | >10 | 0 | Average of 3 best OECD performers |
| 4 | PISA score (worst 0–600 best) | 525.6 | ≥493 | 493 > x ≥ 446.5 | 446.5 > x ≥ 400 | >400 | 350 | Average of 3 best OECD performers |
| 4 | Variation in science performance explained by socio-economic status (%) | 8.3 | ≤10.5 | 10.5 < x ≤ 15.25 | 15.25 < x ≤ 20 | >20 | 21.4 | Average of 3 best OECD performers |
| 4 | Underachievers in science (% of 15-year-olds) | 10 | ≤15 | 15 < x ≤ 22.5 | 22.5 < x ≤ 30 | >30 | 48 | Average of 3 best OECD performers |
| 4 | Resilient students in science (% of 15-year-olds) | 46.6 | ≥38 | 38 > x ≥ 29 | 29 > x ≥ 20 | >20 | 12.8 | Average of 3 best OECD performers |
| 5 | Demand for family planning satisfied by modern methods (% of females aged 15 to 49) | 100 | ≥80 | 80 > x ≥ 70 | 70 > x ≥ 60 | >60 | 17.5 | Leave no one behind |
| 5 | Ratio of female-to-male mean years of education received (%) | 100 | ≥98 | 98 > x ≥ 86.5 | 86.5 > x ≥ 75 | >75 | 41.8 | SDG target |
| 5 | Ratio of female-to-male labor force participation rate (%) | 100 | ≥70 | 70 > x ≥ 60 | 60 > x ≥ 50 | >50 | 21.5 | SDG target |
| 5 | Seats held by women in national parliament (%) | 50 | ≥40 | 40 > x ≥ 30 | 30 > x ≥ 20 | >20 | 1.2 | SDG target |
| 5 | Gender wage gap (% of male median wage) | 0 | ≤8 | 8 < x ≤ 14 | 14 < x ≤ 20 | >20 | 36.7 | Technical optimum |
| 5 | Gender gap in time spent doing unpaid work (minutes/day) | 0 | ≤90 | 90 < x ≤ 135 | 135 < x ≤ 180 | >180 | 245 | Technical optimum |
| 6 | Population using at least basic drinking water services (%) | 100 | ≥98 | 98 > x ≥ 89 | 89 > x ≥ 80 | >80 | 40 | Leave no one behind |
| 6 | Population using at least basic sanitation services (%) | 100 | ≥95 | 95 > x ≥ 85 | 85 > x ≥ 75 | >75 | 9.7 | Leave no one behind |
| 6 | Freshwater withdrawal (% of available freshwater resources) | 12.5 | ≤25 | 25 < x ≤ 50 | 50 < x ≤ 75 | >75 | 100 | Technical optimum |
| 6 | Anthropogenic wastewater that receives treatment (%) | 100 | ≥50 | 50 > x ≥ 32.5 | 32.5 > x ≥ 15 | >15 | 0 | Technical optimum |
| 6 | Scarce water consumption embodied in imports (m ³ /capita) | 0 | ≤25 | 25 < x ≤ 37.5 | 37.5 < x ≤ 50 | >50 | 100 | Average of 5 best performers |
| 6 | Population using safely managed water services (%) | 100 | ≥95 | 95 > x ≥ 87.5 | 87.5 > x ≥ 80 | >80 | 10.5 | Leave no one behind |
| 6 | Population using safely managed sanitation services (%) | 100 | ≥90 | 90 > x ≥ 77.5 | 77.5 > x ≥ 65 | >65 | 14.1 | Leave no one behind |
| 7 | Population with access to electricity (%) | 100 | ≥98 | 98 > x ≥ 89 | 89 > x ≥ 80 | >80 | 9.1 | Leave no one behind |
| 7 | Population with access to clean fuels and technology for cooking (%) | 100 | ≥85 | 85 > x ≥ 67.5 | 67.5 > x ≥ 50 | >50 | 2 | Average of 3 best OECD performers |
| 7 | CO ₂ emissions from fuel combustion for electricity and heating per total electricity output (MtCO ₂ /TWh) | 0 | ≤1 | 1 < x ≤ 1.25 | 1.25 < x ≤ 1.5 | >1.5 | 5.9 | Technical optimum |

Table 4.6

(continued)

| SDG | Indicator | Optimum (value = 100) | Green | Yellow | Orange | Red | Lower bound | Justification for optimum |
|-----|---|--------------------------|------------|----------------------|-----------------------|----------|-------------|-----------------------------------|
| 7 | Share of renewable energy in total primary energy supply (%) | 51 | ≥ 20 | $20 > x \geq 15$ | $15 > x \geq 10$ | > 10 | 3 | Average of 3 best OECD performers |
| 8 | Adjusted GDP growth (%) | 5 | ≥ 0 | $0 > x \geq -1.5$ | $-1.5 > x \geq -3$ | > -3 | -14.7 | Average of 5 best performers |
| 8 | Victims of modern slavery (per 1,000 population) | 0 | ≤ 4 | $4 < x \leq 7$ | $7 < x \leq 10$ | > 10 | 22 | Leave no one behind |
| 8 | Adults with an account at a bank or other financial institution or with a mobile-money-service provider (% of population aged 15 or over) | 100 | ≥ 80 | $80 > x \geq 65$ | $65 > x \geq 50$ | > 50 | 8 | Technical optimum |
| 8 | Unemployment rate (% of total labor force) | 0.5 | ≤ 5 | $5 < x \leq 7.5$ | $7.5 < x \leq 10$ | > 10 | 25.9 | Average of 5 best performers |
| 8 | Fundamental labor rights are effectively guaranteed (worst 0–1 best) | 0.85 | ≥ 0.7 | $0.7 > x \geq 0.6$ | $0.6 > x \geq 0.5$ | > 0.5 | 0.3 | Average of 5 best performers |
| 8 | Fatal work-related accidents embodied in imports (per 100,000 population) | 0 | ≤ 1 | $1 < x \leq 1.75$ | $1.75 < x \leq 2.5$ | > 2.5 | 6 | Technical optimum |
| 8 | Employment-to-population ratio (%) | 77.8 | ≥ 60 | $60 > x \geq 55$ | $55 > x \geq 50$ | > 50 | 50 | Average of 3 best OECD performers |
| 8 | Youth not in employment, education or training (NEET) (% of population aged 15 to 29) | 8.1 | ≤ 10 | $10 < x \leq 12.5$ | $12.5 < x \leq 15$ | > 15 | 28.2 | Average of 3 best OECD performers |
| 9 | Population using the internet (%) | 100 | ≥ 80 | $80 > x \geq 65$ | $65 > x \geq 50$ | > 50 | 2.2 | Leave no one behind |
| 9 | Mobile broadband subscriptions (per 100 population) | 100 | ≥ 75 | $75 > x \geq 57.5$ | $57.5 > x \geq 40$ | > 40 | 1.4 | Leave no one behind |
| 9 | Logistics Performance Index: Quality of trade and transport-related infrastructure (worst 1–5 best) | 3.8 | ≥ 3 | $3 > x \geq 2.5$ | $2.5 > x \geq 2$ | > 2 | 1.6 | Average of 5 best performers |
| 9 | The Times Higher Education Universities Ranking: Average score of top 3 universities (worst 0–100 best) | 50 | ≥ 30 | $30 > x \geq 15$ | $15 > x \geq 0$ | > 0 | 0 | Average of 5 best performers |
| 9 | Scientific and technical journal articles (per 1,000 population) | 1.2 | ≥ 0.7 | $0.7 > x \geq 0.375$ | $0.375 > x \geq 0.05$ | > 0.05 | 0 | Average of 5 best performers |
| 9 | Expenditure on research and development (% of GDP) | 3.7 | ≥ 1.5 | $1.5 > x \geq 1.25$ | $1.25 > x \geq 1$ | > 1 | 0 | Average of 5 best performers |
| 9 | Researchers (per 1,000 employed population) | 15.6 | ≥ 8 | $8 > x \geq 7.5$ | $7.5 > x \geq 7$ | > 7 | 0.8 | Average of 3 best OECD performers |
| 9 | Triadic patent families filed (per million population) | 115.7 | ≥ 20 | $20 > x \geq 15$ | $15 > x \geq 10$ | > 10 | 0.1 | Average of 3 best OECD performers |
| 9 | Gap in internet access by income (percentage points) | 0 | ≤ 7 | $7 < x \leq 26$ | $26 < x \leq 45$ | > 45 | 63.6 | Leave no one behind |
| 9 | Female share of graduates from STEM fields at the tertiary level (%) | 50 | ≥ 30 | $30 > x \geq 25$ | $25 > x \geq 20$ | > 20 | 15 | Leave no one behind |
| 10 | Gini coefficient adjusted for top income | 27.5 | ≤ 30 | $30 < x \leq 35$ | $35 < x \leq 40$ | > 40 | 63 | Average of 5 best performers |
| 10 | Palma ratio | 0.9 | ≤ 1 | $1 < x \leq 1.15$ | $1.15 < x \leq 1.3$ | > 1.3 | 2.5 | Average of 3 best OECD performers |
| 10 | Elderly poverty rate (% of population aged 66 or over) | 3.2 | ≤ 5 | $5 < x \leq 15$ | $15 < x \leq 25$ | > 25 | 45.7 | Average of 3 best OECD performers |
| 11 | Proportion of urban population living in slums (%) | 0 | ≤ 5 | $5 < x \leq 15$ | $15 < x \leq 25$ | > 25 | 90 | Leave no one behind |
| 11 | Annual mean concentration of particulate matter of less than 2.5 microns in diameter (PM2.5) ($\mu\text{g}/\text{m}^3$) | 6.3 | ≤ 10 | $10 < x \leq 17.5$ | $17.5 < x \leq 25$ | > 25 | 87 | Average of 5 best performers |
| 11 | Access to improved water source, piped (% of urban population) | 100 | ≥ 98 | $98 > x \geq 86.5$ | $86.5 > x \geq 75$ | > 75 | 6.1 | Leave no one behind |

Table 4.6

(continued)

| SDG | Indicator | Optimum (value = 100) | Green | Yellow | Orange | Red | Lower bound | Justification for optimum |
|-----|--|--------------------------|-------------|-----------------------|----------------------|----------|-------------|-----------------------------------|
| 11 | Satisfaction with public transport (%) | 82.6 | ≥ 72 | $72 > x \geq 57.5$ | $57.5 > x \geq 43$ | > 43 | 21 | Average of 5 best performers |
| 11 | Population with rent overburden (%) | 4.6 | ≤ 7 | $7 < x \leq 12$ | $12 < x \leq 17$ | > 17 | 25.6 | Average of 3 best OECD performers |
| 12 | Municipal solid waste (kg/capita/day) | 0.1 | ≤ 1 | $1 < x \leq 1.5$ | $1.5 < x \leq 2$ | > 2 | 3.7 | Average of 5 best performers |
| 12 | Electronic waste (kg/capita) | 0.2 | ≤ 5 | $5 < x \leq 7.5$ | $7.5 < x \leq 10$ | > 10 | 23.5 | Average of 5 best performers |
| 12 | Production-based SO ₂ emissions (kg/capita) | 0 | ≤ 30 | $30 < x \leq 65$ | $65 < x \leq 100$ | > 100 | 525 | Average of 5 best performers |
| 12 | SO ₂ emissions embodied in imports (kg/capita) | 0 | ≤ 5 | $5 < x \leq 7.5$ | $7.5 < x \leq 10$ | > 10 | 30 | Technical optimum |
| 12 | Production-based nitrogen emissions (kg/capita) | 2 | ≤ 20 | $20 < x \leq 35$ | $35 < x \leq 50$ | > 50 | 100 | Average of 5 best performers |
| 12 | Nitrogen emissions embodied in imports (kg/capita) | 0 | ≤ 5 | $5 < x \leq 10$ | $10 < x \leq 15$ | > 15 | 45 | Technical optimum |
| 12 | Non-recycled municipal solid waste (kg/capita/day) | 0.6 | ≤ 0.8 | $0.8 < x \leq 0.9$ | $0.9 < x \leq 1$ | > 1 | 1.5 | Average of 3 best OECD performers |
| 13 | CO ₂ emissions from fossil fuel combustion and cement production (tCO ₂ /capita) | 0 | ≤ 2 | $2 < x \leq 3$ | $3 < x \leq 4$ | > 4 | 20 | Technical optimum |
| 13 | CO ₂ emissions embodied in imports (tCO ₂ /capita) | 0 | ≤ 0.5 | $0.5 < x \leq 0.75$ | $0.75 < x \leq 1$ | > 1 | 3.2 | Technical optimum |
| 13 | CO ₂ emissions embodied in fossil fuel exports (kg/capita) | 0 | ≤ 100 | $100 < x \leq 4050$ | $4050 < x \leq 8000$ | > 8000 | 44000 | Technical optimum |
| 13 | Carbon Pricing Score at EUR60/tCO ₂ (%; worst 0–100 best) | 100 | ≥ 70 | $70 > x \geq 50$ | $50 > x \geq 30$ | > 30 | 0 | Technical optimum |
| 14 | Mean area that is protected in marine sites important to biodiversity (%) | 100 | ≥ 85 | $85 > x \geq 75$ | $75 > x \geq 65$ | > 65 | 0 | Technical optimum |
| 14 | Ocean Health Index: Clean Waters score (worst 0–100 best) | 100 | ≥ 80 | $80 > x \geq 75$ | $75 > x \geq 70$ | > 70 | 28.6 | Technical optimum |
| 14 | Fish caught from overexploited or collapsed stocks (% of total catch) | 0 | ≤ 25 | $25 < x \leq 37.5$ | $37.5 < x \leq 50$ | > 50 | 90.7 | Technical optimum |
| 14 | Fish caught by trawling or dredging (%) | 1 | ≤ 7 | $7 < x \leq 33.5$ | $33.5 < x \leq 60$ | > 60 | 90 | Average of 5 best performers |
| 14 | Fish caught that are then discarded (%) | 0 | ≤ 5 | $5 < x \leq 10$ | $10 < x \leq 15$ | > 15 | 20 | Technical optimum |
| 14 | Marine biodiversity threats embodied in imports (per million population) | 0 | ≤ 0.2 | $0.2 < x \leq 0.6$ | $0.6 < x \leq 1$ | > 1 | 2 | Technical optimum |
| 15 | Mean area that is protected in terrestrial sites important to biodiversity (%) | 100 | ≥ 85 | $85 > x \geq 75$ | $75 > x \geq 65$ | > 65 | 0 | Technical optimum |
| 15 | Mean area that is protected in freshwater sites important to biodiversity (%) | 100 | ≥ 85 | $85 > x \geq 75$ | $75 > x \geq 65$ | > 65 | 0 | Technical optimum |
| 15 | Red List Index of species survival (worst 0–1 best) | 1 | ≥ 0.9 | $0.9 > x \geq 0.85$ | $0.85 > x \geq 0.8$ | > 0.8 | 0.6 | Technical optimum |
| 15 | Permanent deforestation (% of forest area, 5-year average) | 0 | ≤ 0.05 | $0.05 < x \leq 0.275$ | $0.275 < x \leq 0.5$ | > 0.5 | 1.5 | SDG target |
| 15 | Terrestrial and freshwater biodiversity threats embodied in imports (per million population) | 0 | ≤ 1 | $1 < x \leq 2$ | $2 < x \leq 3$ | > 3 | 10 | Technical optimum |
| 16 | Homicides (per 100,000 population) | 0.3 | ≤ 1.5 | $1.5 < x \leq 2.75$ | $2.75 < x \leq 4$ | > 4 | 38 | Average of 5 best performers |
| 16 | Unsentenced detainees (% of prison population) | 7 | ≤ 30 | $30 < x \leq 40$ | $40 < x \leq 50$ | > 50 | 75 | Average of 5 best performers |
| 16 | Population who feel safe walking alone at night in the city or area where they live (%) | 90 | ≥ 70 | $70 > x \geq 60$ | $60 > x \geq 50$ | > 50 | 33 | Average of 5 best performers |

Table 4.6

(continued)

| SDG | Indicator | Optimum (value = 100) | Green | Yellow | Orange | Red | Lower bound | Justification for optimum |
|-----|---|--------------------------|-------------|-----------------------|-----------------------|----------|-------------|--|
| 16 | Property Rights (worst 1–7 best) | 6.3 | ≥ 4.5 | $4.5 > x \geq 3.75$ | $3.75 > x \geq 3$ | > 3 | 2.5 | Average of 5 best performers |
| 16 | Birth registrations with civil authority (% of children under age 5) | 100 | ≥ 98 | $98 > x \geq 86.5$ | $86.5 > x \geq 75$ | > 75 | 11 | Leave no one behind |
| 16 | Corruption Perception Index (worst 0–100 best) | 88.6 | ≥ 60 | $60 > x \geq 50$ | $50 > x \geq 40$ | > 40 | 13 | Average of 5 best performers |
| 16 | Children involved in child labor (% of population aged 5 to 14) | 0 | ≤ 2 | $2 < x \leq 6$ | $6 < x \leq 10$ | > 10 | 39.3 | Leave no one behind |
| 16 | Exports of major conventional weapons (TIV constant million USD per 100,000 population) | 0 | ≤ 1 | $1 < x \leq 1.75$ | $1.75 < x \leq 2.5$ | > 2.5 | 3.4 | Technical optimum |
| 16 | Press Freedom Index (best 0–100 worst) | 10 | ≤ 30 | $30 < x \leq 40$ | $40 < x \leq 50$ | > 50 | 80 | Average of 5 best performers |
| 16 | Access to and affordability of justice (worst 0–1 best) | 0.75 | ≥ 0.65 | $0.65 > x \geq 0.575$ | $0.575 > x \geq 0.5$ | > 0.5 | 0.1 | Average of 5 best performers |
| 16 | Persons held in prison (per 100,000 population) | 25 | ≤ 100 | $100 < x \leq 175$ | $175 < x \leq 250$ | > 250 | 475 | Average of 5 best performers |
| 17 | Government spending on health and education (% of GDP) | 15 | ≥ 10 | $10 > x \geq 7.5$ | $7.5 > x \geq 5$ | > 5 | 0 | Average of 5 best performers |
| 17 | For high-income and all OECD DAC countries: International concessional public finance, including official development assistance (% of GNI) | 1 | ≥ 0.7 | $0.7 > x \geq 0.525$ | $0.525 > x \geq 0.35$ | > 0.35 | 0.1 | Average of 5 best performers |
| 17 | Other countries: Government revenue excluding grants (% of GDP) | 40 | ≥ 30 | $30 > x \geq 23$ | $23 > x \geq 16$ | > 16 | 10 | Average of 5 best performers |
| 17 | Corporate Tax Haven Score (best 0–100 worst) | 40 | ≤ 60 | $60 < x \leq 65$ | $65 < x \leq 70$ | > 70 | 100 | Average of best performers (EU Report) |
| 17 | Financial Secrecy Score (best 0–100 worst) | 42.7 | ≤ 45 | $45 < x \leq 50$ | $50 < x \leq 55$ | > 55 | 76.5 | Average of 5 best performers |
| 17 | Shifted profits of multinationals (US\$ billion) | 0 | ≥ 0 | $0 > x \geq -15$ | $-15 > x \geq -30$ | > -30 | -70 | Technical optimum |
| 17 | Statistical Performance Index (worst 0–100 best) | 100 | ≥ 80 | $80 > x \geq 65$ | $65 > x \geq 50$ | > 50 | 25 | Technical optimum |

Source: Authors' analysis

References

Cited in the text

- Abbott, A. (2021). COVID's mental-health toll: how scientists are tracking a surge in depression. *Nature*, 590(7845), 194–195. <https://doi.org/10.1038/d41586-021-00175-z>.
- Adyel, T. M. (2020). Accumulation of plastic waste during COVID-19. *Science*, 369(6509), 1314–1315. <https://doi.org/10.1126/science.abd9925>.
- Arias, E., Tejada-Vera, B., and Ahmad, F. (2021). Provisional life expectancy estimates for January through June, 2020. *Vital Statistics Rapid Release*; no 6. Centers for Disease Control and Prevention, US. <https://www.cdc.gov/nchs/data/vsrr/VSRR10-508.pdf>.
- Atanda, K., and Cojocar, A. (2021). Shocks and vulnerability to poverty in middle-income countries. *World Bank Blogs*, 31 March. <https://blogs.worldbank.org/developmenttalk/shocks-and-vulnerability-poverty-middle-income-countries>.
- Banza Lubaba Nkulu, C., Casas, L., Haufroid, V., De Putter, T., Saenen, N. D., Kayembe-Kitenge, T., Musa Obadia, P., Kyanika Wa Mukoma, D., Lunda Ilunga, J.-M., Nawrot, T. S., Luboya Numbi, O., Smolders, E., and Nemery, B. (2018). Sustainability of artisanal mining of cobalt in DR Congo. *Nature Sustainability*, 1(9), 495–504. <https://doi.org/10.1038/s41893-018-0139-4>.
- Benedek, D., Gemayel, E. R., Senhadji A. S., and Tieman A. F. (2021). *A Post-Pandemic Assessment of the Sustainable Development Goals*. IMF Staff Discussion Note 2021/003, International Monetary Fund.
- Board of Governors of the Federal Reserve System (2020). *Federal Reserve announces the establishment of temporary U.S. dollar liquidity arrangements with other central banks*. 19 March. (Accessed 10 May 2021: <https://www.federalreserve.gov/newsevents/pressreleases/monetary20200319b.htm>)
- Brancalion, P. H. S., Broadbent, E. N., de-Miguel, S., Cardil, A., Rosa, M. R., Almeida, C. T., Almeida, D. R. A., Chakravarty, S., Zhou, M., Gamarra, J. G. P., Liang, J., Crouzeilles, R., Hérault, B., Aragão, L. E. O. C., Silva, C. A., and Almeyda-Zambrano, A. M. (2020). Emerging threats linking tropical deforestation and the COVID-19 pandemic. *Perspectives in Ecology and Conservation*, 18(4), 243–246. <https://doi.org/10.1016/j.pecon.2020.09.006>.
- Çakmaklı, C., Demiralp, S., Kalemli-Özcan, Ş., Yeşiltaş, S., and Yıldırım, M. A. (2021). *The Economic Case for Global Vaccinations: An Epidemiological Model with International Production Networks*. Working Paper 28395, National Bureau of Economic Research. <https://doi.org/10.3386/w28395>.
- Castelán, C. R., Himelein, K., and Dabalén, A. (2020). Evolution in the data ecosystem – an idea that's got legs. *World Bank Blogs*, 4 June. <https://blogs.worldbank.org/opendata/evolution-data-ecosystem-idea-thats-got-legs>.
- Dabalén, A., Himelein, K., and Castelán, C. R. (2020). *Data for Policy (D4P) Initiative*. World Bank. <https://openknowledge.worldbank.org/bitstream/handle/10986/33857/Data-for-Policy-D4P-Initiative.pdf?sequence=1&isAllowed=y>.
- Dahmm, H. (2021). Major environmental data gaps remain, but progress is on the horizon. Thematic Research Network on Data and Statistics (TReNDS), 22 April. <https://www.sdsntrends.org/blog/2021/environmentaldatagaps?locale=en>.
- Dang, H.-A. H., Pullinger, J., Serajuddin, U., and Stacy, B. (2021). *Statistical Performance Indicators and Index: A New Tool to Measure Country Statistical Capacity*. World Bank. <https://openknowledge.worldbank.org/handle/10986/35301>.
- European Commission (2021). *Guidance to Member States Recovery and Resilience Plans*. European Commission, Brussels. https://ec.europa.eu/info/sites/default/files/document_travail_service_part1_v2_en.pdf.
- Eurostat (2021). *Life Expectancy at Birth by Sex (sdg_03_10)*. Eurostat, the statistical office of the European Union, 30 March. https://ec.europa.eu/eurostat/cache/metadata/en/sdg_03_10_esmsip2.htm.
- Fan, S. (2020). Preventing global food security crisis under COVID-19 emergency. International Food Policy Research Institute (IFPRI) Blog, 6 March. <https://www.ifpri.org/blog/preventing-global-food-security-crisis-under-covid-19-emergency>.
- FAO (2021). Acute hunger set to soar in over 20 countries, warn FAO and WFP. Food and Agriculture Organization, Rome, 23 March. <http://www.fao.org/news/story/en/item/1382490/icode/>.
- Ferri G., Liu L.-G., and Majnoni G. (2000). *How the Proposed Basel Guidelines on Rating-Agency Assessments Would Affect Developing Countries*. Policy Research Working Paper No. 2369. World Bank, Washington, DC. <http://hdl.handle.net/10986/19835>.
- Forbes (2021). *World's Billionaires List: The Richest in 2021*. K.A. Dolan, J. Wang, and C. Peterson-Withorn (eds.), April 2021. (Accessed 10 May 2021: <https://www.forbes.com/billionaires/>)
- García-Bernardo, J., and Janský, P. (2021). *Profit Shifting of Multinational Corporations Worldwide*. ICTD Working Paper 119, Institute of Development Studies. Doi: 10.19088/ICTD.2021.005
- Gaspar V., Amaglobeli D., García-Excribano M., Prady D, and Soto M. (2019). *Fiscal Policy and Development: Human, Social, and Physical Investment for the SDGs*. IMF Staff Discussion Note 2019/003, International Monetary Fund.
- Geldmann, J., Manica, A., Burgess, N. D., Coad, L., and Balmford, A. (2019). A global-level assessment of the effectiveness of protected areas at resisting anthropogenic pressures. *Proceedings of the National Academy of Sciences*, 116(46), 23209–23215. <https://doi.org/10.1073/pnas.1908221116>.
- Hester, A., Le Bourdais, C., Chaundy, D., Mc Donald, G., Ahluwalia, G., Ramos, H., Kestle, J., and Wolfson, M. C. (2020). *Towards a Stronger National Statistical System*. Canadian Statistics Advisory Council. <https://www.statcan.gc.ca/eng/about/relevant/CSAC/report/annual2020>.

References

- ILO (2021b). Unemployment, total (% of total labor force) (modeled ILO estimate). International Labour Organization, Geneva. Available from: <http://data.worldbank.org/indicator/SL.UEM.TOTL.ZS>.
- IMF (2021a). *Fiscal Monitor: A Fair Shot*. International Monetary Fund, Washington, D.C. <https://www.imf.org/-/media/Files/Publications/fiscal-monitor/2021/April/English/text.ashx>
- IMF (2021b). GDP per capita, current prices (purchasing power parity; international dollars per capita). *World Economic Outlook*. International Monetary Fund, Washington, D.C. www.imf.org/external/datamapper/PPP@WEO/ADVEC/SSQ/WE/USA.
- IMF (2021c). *IMF Executive Directors Discuss a New SDR Allocation of US\$650 billion to Boost Reserves, Help Global Recovery from COVID-19*. Press Release No. 21/77. International Monetary Fund, Washington, D.C., March 23. <https://www.imf.org/en/News/Articles/2021/03/23/pr2177-imf-execdire-discuss-new-sdr-allocation-us-650b-boost-reserves-help-global-recovery-covid19>.
- IMF (2021d). Net lending/borrowing (also referred as overall balance). *Fiscal Monitor*, April. International Monetary Fund, Washington, D.C. <https://www.imf.org/external/datamapper/datasets/FM>.
- IMF (2021e). *Questions and Answers on Sovereign Debt Issues*. International Monetary Fund, Washington, D.C. <https://www.imf.org/en/About/FAQ/sovereign-debt> (Accessed 10 May 2021).
- IMF (2021f). Unemployment rate. *World Economic Outlook*. International Monetary Fund, Washington, D.C., April. <https://www.imf.org/external/datamapper/datasets/WEO>.
- Investing.com. (2021). *Bovespa Historical Data*. <https://www.investing.com/indices/bovespa-historical-data>.
- IPCC. (2019). Summary for policymakers. In *Climate Change and Land: An IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems* [P.R. Shukla, J. Skea, E. Calvo Buendia, V. Masson-Delmotte, H.-O. Pörtner, D. C. Roberts, P. Zhai, R. Slade, S. Connors, R. van Diemen, M. Ferrat, E. Haughey, S. Luz, S. Neogi, M. Pathak, J. Petzold, J. Portugal Pereira, P. Vyas, E. Huntley, K. Kissick, M. Belkacemi, J. Malley, (eds.), Intergovernmental Panel on Climate Change, Geneva.] <https://www.ipcc.ch/srccl/chapter/summary-for-policymakers/>.
- Jiang, L., and O'Neill, B. C. (2017). Global urbanization projections for the Shared Socioeconomic Pathways. *Global Environmental Change*, 42, 193–199. <https://doi.org/10.1016/j.gloenvcha.2015.03.008>.
- Johns Hopkins Center for Health Security and NTI. (2019). *Global Health Security Index: Building Collective Action and Accountability*. <https://www.ghsindex.org/>.
- Kay, C., Gale, J., and Cortez, M. F. (2021). Vaccine Nationalism Keep World's Poorest Waiting for Shots. *Bloomberg*. Bloomberg, 25 March. <https://www.bloomberg.com/news/articles/2021-03-25/curbs-by-world-s-biggest-vaccine-exporter-to-hit-poorest-nations>.
- Kickbusch, I., and Gitahi, G. (2020). *COVID-19 (coronavirus): Universal health coverage in times of crisis*. World Bank, 29 April. <https://blogs.worldbank.org/health/covid-19-coronavirus-universal-health-coverage-times-crisis>.
- Kroll, C. (2015). *Sustainable Development Goals: Are the Rich Countries Ready?* Bertelsmann Stiftung. <https://www.bertelsmann-stiftung.de/en/publications/publication/did/sustainable-development-goals-are-the-rich-countries-ready/>.
- Lafortune, G. (2020). *How Much Do We Know about Countries Preparedness to Respond to Pandemics? Insights from Two Country-Level Indices*. Sustainable Development Solutions Network (SDSN), 20 April. <http://www.unsdsn.org/how-much-do-we-know-about-countries-preparedness-to-respond-to-pandemics-insights-from-two-country-level-indices>.
- Lafortune, G., and Schmidt-Traub, G. (2020a). Using the Sustainable Development Goals to guide the Covid-19 recovery. *Apolitical*, 1 October. https://apolitical.co/en/solution_article/using-sustainable-development-goals-to-help-covid-19-recovery.
- Lafortune, G., and Schmidt-Traub, G. (2020b). How the EU can help accelerate the implementation of the SDGs internally and worldwide in 2021. *Modern Diplomacy*, 20 December. <https://moderndiplomacy.eu/2020/12/20/how-the-eu-can-help-accelerate-the-implementation-of-the-sdgs-internally-and-worldwide-in-2021/>.
- Lafortune, G., Fuller, G., Moreno, J., Schmidt-Traub, G., and Kroll, C. (2018). *SDG Index and Dashboards Detailed Methodological paper*. Sustainable Development Solutions Network (SDSN). <https://raw.githubusercontent.com/sdsna/2018GlobalIndex/master/2018GlobalIndexMethodology.pdf>.
- Lafortune, G., Wendling, Z. A., Miller, R., Schmidt-Traub, G., Esty, D., Woelm, F., and Baez, C. (2021). A new approach to measuring countries' impacts on the global commons based on production- and consumption-based accounting. In *Understanding the Spillovers and Transboundary Impacts of Public Policies: Implementing the 2030 Agenda for More Resilient Societies*. Organisation for Economic Co-operation and Development (OECD) and the European Commission Joint Research Centre (EC-JRC).
- Liu, Z., Ciais, P., Deng, Z., Lei, R., Davis, S. J., Feng, S., Zheng, B., Cui, D., Dou, X., Zhu, B., Guo, R., Ke, P., Sun, T., Lu, C., He, P., Wang, Y., Yue, X., Wang, Y., Lei, Y., ... Schellnhuber, H. J. (2020). Near-real-time monitoring of global CO₂ emissions reveals the effects of the COVID-19 pandemic. *Nature Communications*, 11(1), 5172. <https://doi.org/10.1038/s41467-020-18922-7>.

- Malik, A., Lafortune, G., Carter, S., Li, M., and Lenzen, M. (2020). *Social Spillover Effects in the EU's Textile Supply Chains*. Sustainable Development Solutions Network (SDSN). <https://resources.unsdsn.org/social-spillover-effects-in-the-eu-s-textile-supply-chains>.
- Nelson, R. M. (2020). *Multilateral Development Banks: Overview and Issues for Congress*. Congressional Research Service Report R41170, Library of Congress, Washington D.C., 11 February. [crsreports.congress.gov](https://www.crsreports.congress.gov)
- OECD. (2019). *PISA 2018 Results (Volume II): Where All Students Can Succeed*. PISA, Organisation for Economic Co-operation and Development (OECD). <https://doi.org/10.1787/b5fd1b8f-en>.
- OECD. (2020). *A Territorial Approach to the Sustainable Development Goals: Synthesis Report*. OECD Urban Policy Reviews, Organisation for Economic Co-operation and Development (OECD). <https://doi.org/10.1787/e86fa715-en>.
- Our World in Data. (2021). *COVID-19 Data Explorer*. <https://ourworldindata.org/explorers/coronavirus-data-explorer>.
- Papadimitriou, E., Fragoso Neves, A., and Becker, W. E. (2019). *JRC Statistical Audit of the Sustainable Development Goals Index and Dashboards*. European Commission. <https://ec.europa.eu/jrc/en/publication/jrc-statistical-audit-sustainable-development-goals-index-and-dashboards>.
- Reinhard, B., Brown, E., Thebault, R., and H. Sun, L. (2020). *CDC wants states to count 'probable' coronavirus cases and deaths, but most aren't doing it*. *Washington Post*, 8 June. Available from: https://www.washingtonpost.com/investigations/cdc-wants-states-to-count-probable-coronavirus-cases-and-deaths-but-most-arent-doing-it/2020/06/07/4aac9a58-9d0a-11ea-b60c-3be060a4f8e1_story.html.
- Sachs, J. D., Horton, R., Bagenal, J., Amor, Y. B., Caman, O. K., and Lafortune, G. (2020). The Lancet COVID-19 Commission. *The Lancet*, 396(10249), 454–455. [https://doi.org/10.1016/S0140-6736\(20\)31494-X](https://doi.org/10.1016/S0140-6736(20)31494-X).
- Sachs, J. D., Schmidt-Traub, G., and Lafortune, G. (2020). Speaking truth to power about the SDGs. *Nature*, 584(7821), 344–344. <https://doi.org/10.1038/d41586-020-02373-7>.
- Sachs, J. D., Schmidt-Traub, G., Kroll, C., Lafortune, G., Fuller, G., and Woelm, F. (2020b). *The Sustainable Development Goals and COVID-19. Sustainable Development Report 2020*. Cambridge University Press. <https://www.sdgindex.org/>.
- Sachs, J. D., Schmidt-Traub, G., Mazzucato, M., Messner, D., Nakicenovic, N., and Rockström, J. (2019). Six Transformations to achieve the Sustainable Development Goals. *Nature Sustainability*, 2(9), 805–814. <https://doi.org/10.1038/s41893-019-0352-9>.
- Schleicher, A. (2020). *Talis 2018: Insights and Interpretations*. Organisation for Economic Co-operation and Development. https://www.oecd.org/education/talis/TALIS2018_insights_and_interpretations.pdf.
- Schmidt-Traub, G. (2020). The SDGs can guide our recovery. *SDGs: Building Back Better*, United Nations Association – UK (UNA-UK), 22 October. <https://www.sustainablegoals.org.uk/the-sdgs-can-guide-our-recovery/>.
- SDSN (2015). *Indicators and a Monitoring Framework for Sustainable Development Goals: Launching a Data Revolution for the SDGs*. Sustainable Development Solutions Network. <https://resources.unsdsn.org/indicators-and-a-monitoring-framework-for-sustainable-development-goals-launching-a-data-revolution-for-the-sdgs>.
- SDSN and IEEP (2020). *Europe Sustainable Development Report 2020: Meeting the Sustainable Development Goals in the Face of the COVID-19 Pandemic*. Sustainable Development Solutions Network and Institute for European Environmental Policy. <https://sdgindex.org/reports/europe-sustainable-development-report-2020/>.
- SDSN, Yale Center for Environmental Law and Policy, and the Center for Global Commons at the University of Tokyo. (2020). *Pilot Global Commons Stewardship Index*. <https://www.tokyoforum.tc.u-tokyo.ac.jp/content/000003330.pdf>.
- Taquet, M., Geddes, J. R., Husain, M., Luciano, S., and Harrison, P. J. (2021). 6-month neurological and psychiatric outcomes in 236 379 survivors of COVID-19: A retrospective cohort study using electronic health records. *The Lancet Psychiatry*, 8(5), 416–427. [https://doi.org/10.1016/S2215-0366\(21\)00084-5](https://doi.org/10.1016/S2215-0366(21)00084-5).
- The Lancet COVID-19 Commissioners, Task Force Chairs and Members, and Commission Secretariat. (2021). *Statement of the Lancet COVID-19 Commission: Enhancing Global Cooperation to end the COVID-19 pandemic*. <https://covid19commission.org/enhancing-global-cooperation>.
- TReNDS (2020). *Leaving No One off the Map: A Guide for Gridded Population Data for Sustainable Development*. SDSN Thematic Research Network on Data and Statistics. <https://www.unsdsn.org/leaving-no-one-off-the-map-a-guide-for-gridded-population-data-for-sustainable-development>.
- TReNDS, Open Data Watch, and Data Ready (2021). *Towards a Framework for Governing Data Innovation: Fostering Trust in the Use of Non-Traditional Data Sources in Statistical Production*. SDSN Thematic Research Network on Data and Statistics. <https://www.sdsntrends.org/research/trustinnontraditionaldata>.
- UBS and PwC (2020). *Riding the Storm: Market Turbulence Accelerates Diverging Fortunes*. Billionaires Insights 2020. UBS Group AG and Pricewaterhouse Coopers. <https://www.ubs.com/global/en/global-family-office/reports/billionaires-insights-2020.html>.
- UN DESA (2020). *COVID 19, Inequalities and Building Back Better*. United Nations Department of Economic and Social Affairs. <https://www.un.org/development/desa/dspd/wp-content/uploads/sites/22/2020/10/HLCP-policy-brief-on-COVID-19-inequalities-and-building-back-better-1.pdf>.

References

- UN-Habitat (2020). *Sustainable Development Goals: Monitoring Human Settlements Indicators*. UN-Habitat. https://unhabitat.org/sites/default/files/2020/06/sustainable_development_goals_summary_version.pdf.
- UNECE (2015). *Declaration on the role of national statistical offices in measuring and monitoring the Sustainable Development Goals*. United Nations Economic Commission for Europe. https://unece.org/DAM/stats/documents/ece/ces/2015/CES_89_Add.1-E.pdf.
- UNECE (2020). *How Are National Statistical Offices Contributing to Managing the COVID-19 Disaster?* Virtual discussion, 10 June. <https://unece.org/statistics/events/how-are-national-statistical-offices-contributing-managing-covid-19-disaster>.
- UNEP (2019). *Sustainable Development Goals Policy Brief*. United Nations Environment Programme. https://wedocs.unep.org/bitstream/handle/20.500.11822/30672/SDG_Brief_008.pdf?sequence=1&isAllowed=y.
- UNEP (2020). *Emissions Gap Report 2020*. United Nations Environment Programme, Nairobi. <http://www.unep.org/emissions-gap-report-2020>.
- UNESCO (2021). *Education: From Disruption to Recovery*. UNESCO, 1 April. <https://en.unesco.org/covid19/educationresponse>.
- United Nations (2015). *Transforming our world: The 2030 Agenda for Sustainable Development*. United Nations. https://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E.
- United Nations (2019). *The Sustainable Development Goals Report*. United Nations, New York.
- UNSD (2016). *Tier Classification for Global SDG Indicators*. United Nations Statistics Division, 21 September. [https://unstats.un.org/sdgs/files/meetings/iaeg-sdgs-meeting-04/Tier Classification of SDG Indicators Updated 23-09-16.pdf](https://unstats.un.org/sdgs/files/meetings/iaeg-sdgs-meeting-04/Tier%20Classification%20of%20SDG%20Indicators%20Updated%2023-09-16.pdf).
- UNSD (2019). *Data and indicators for the 2030 Agenda for Sustainable Development*. United Nations Statistics Division. <https://unstats.un.org/unsd/statcom/decisions-ref/?code=50/102>.
- UNSD (2020). *The need for data innovations in the time of COVID-19*. United Nations Statistics Division. <https://unstats.un.org/sdgs/report/2020/the-need-for-data-innovations-in-the-time-of-COVID-19/>.
- UNSD (2021a). *Global SDG Indicators Database*. United Nations Statistics Division. <https://unstats.un.org/sdgs/indicators/database/>.
- UNSD (2021b). *IAEG-SDGs: Tier Classification for Global SDG Indicators*. Updated 29 March 2021 by the Inter-agency and Expert Group on SDG Indicators. United Nations Statistics Division. <https://unstats.un.org/sdgs/iaeg-sdgs/tier-classification/>.
- Weisse, M., and Goldman, L. (2021). *Primary Rainforest Destruction Increased 12% from 2019 to 2020*. Global Forest Watch, 31 March. <https://blog.globalforestwatch.org/data-and-research/global-tree-cover-loss-data-2020/>.
- WFP (2020). *COVID-19 will double number of people facing food crises unless swift action is taken*. United Nations World Food Programme, Rome, 21 April. <https://www.wfp.org/news/covid-19-will-double-number-people-facing-food-crisis-unless-swift-action-taken>.
- WHO (2019). *Primary Health Care on the Road to Universal Health Coverage: 2019 Monitoring Report (Conference Edition)*. World Health Organization. https://www.who.int/healthinfo/universal_health_coverage/report/uhc_report_2019.pdf.
- WHO (2020). *A global pandemic requires a world effort to end it – none of us will be safe until everyone is safe*. World Health Organization, 30 September. <https://www.who.int/news-room/commentaries/detail/a-global-pandemic-requires-a-world-effort-to-end-it-none-of-us-will-be-safe-until-everyone-is-safe>.
- World Bank (2020). *Survey of National Statistical Offices (NSOs) during COVID-19*. Washington, 6 July. <https://www.worldbank.org/en/research/brief/survey-of-national-statistical-offices-nsos-during-covid-19>.
- World Bank (2021). *International Debt Statistics 2021*. World Bank, Washington, DC. <https://openknowledge.worldbank.org/handle/10986/34588>.
- World Data Lab (2021). *World Poverty Clock*. <https://worldpoverty.io/>

Databases

- Alsamawi, A., Murray, J., Lenzen, M., and Reyes, R. C. (2017). Trade in occupational safety and health: Tracing the embodied human and economic harm in labour along the global supply chain. *Journal of Cleaner Production*, 147, 187–196.
- BirdLife International, IUCN, UNEP-WCMC (2021). Resources and Data. Available from: <https://unstats.un.org/sdgs/indicators/database/>.
- Bonhommeau, S., Dubroca, L., Le Pape, O., Barde, J., Kaplan, D. M., Chassot, E., and Nieblas, A. E. (2013). Eating up the world's food web and the human trophic level. *Proceedings of the National Academy of Sciences*, 110(51), 20617–20620. Available from: <https://doi.org/10.1073/pnas.1305827110>.
- Chandy, L., Seidel B. (2017). How much do we really know about inequality within countries around the world? Adjusting Gini coefficients for missing top incomes. Op-Ed, 17 February. The Brookings Institution. Available from: <https://www.brookings.edu/opinions/how-much-do-we-really-know-about-inequality-within-countries-around-the-world/>

- Cuaresma, J. C., Fengler, W., Kharas, H., Bekhtiar, K., Brottrager, M., and Hofer, M. (2018). Will the Sustainable Development Goals be fulfilled? Assessing present and future global poverty. *Palgrave Communications*, 4(1) 29.
- Curtis et al. (2018). Classifying drivers of global forest loss. *Science*, Vol. 361, Issue 6407, pp. 1108–1111. (Data updated in 2020).
- Demirgüç-Kunt, A.i, Klapper, L., Singer, D., Ansar, S., and Hess, J. (2018). *Global Financial Inclusion Database*. World Bank, Washington, D.C. Available from: <https://data.worldbank.org/indicator/FX.OWN.TOTL.ZS>
- FAO (2021). AQUASTAT. Level of water stress: freshwater withdrawal as a proportion of available freshwater resources (%). Food and Agriculture Organization, Rome. Available from: <http://www.fao.org/nr/water/aquastat/data/query/index.html?lang=en>.
- FAO (2021). Cereal yield (kg per hectare). Food and Agriculture Organization, Rome. Available from: <http://data.worldbank.org/indicator/AG.YLD.CREL.KG>.
- FAO (2021). Prevalence of undernourishment (% of population). Food and Agriculture Organization, Rome. Available from: <http://data.worldbank.org/indicator/SN.ITK.DEFC.ZS>.
- FAO (2021). Trade in hazardous pesticides. Food and Agriculture Organization, Rome. Available from: <http://www.fao.org/faostat/en/#data/RT/metadata>.
- Forti V., Baldé C.P., Kuehr R., Bel G. (2020). *The Global E-waste Monitor 2020: Quantities, Flows and the Circular Economy Potential*. United Nations University/United Nations Institute for Training and Research, International Telecommunication Union, and International Solid Waste Association, Bonn/Geneva/Rotterdam.
- Friedlingstein, P., et al. (2020). Global carbon budget 2020. *Earth Syst. Sci. Data* 12, 3269–3340. <https://doi.org/10.5194/essd-12-3269-2020>.
- Gallup (2021). *Gallup World Poll*. <http://www.gallup.com>,
- Global Yield Gap Atlas (2015). *Global Yield Gap Atlas*. A joint initiative of Wageningen University and Research and University of Nebraska-Lincoln. Available from: <http://www.yieldgap.org>.
- IEA (2019). *CO₂ Emissions from Fuel Combustion*. International Energy Agency, Paris. Available from: <https://www.iea.org/reports/co2-emissions-from-fuel-combustion-2019>.
- IHME (2020). The global burden of disease study 2019. Institute for Health Metrics and Evaluation (IHME), University of Washington. *The Lancet*, 17 October 2020, Volume 396, Issue 10258, Pages 1129–1306.
- ILO (2021a). Ratio of female to male labor force participation rate (%) (modeled ILO estimate). International Labour Organization, Geneva. Available from: <https://data.worldbank.org/indicator/SL.TLF.CACT.FM.ZS>.
- ILO (2021b). Unemployment, total (% of total labor force) (modeled ILO estimate). International Labour Organization, Geneva. Available from: <http://data.worldbank.org/indicator/SL.UEM.TOTL.ZS>.
- IMF (2021). *Government Finance Statistics Yearbook*. International Monetary Fund. Available from: <https://data.worldbank.org/indicator/GC.REV.XGRT.GD.ZS?view=chart>.
- IPU (2021). Proportion of seats held by women in national parliaments (%). Inter-Parliamentary Union, Geneva. Available from: <http://data.worldbank.org/indicator/SG.GEN.PARL.ZS>.
- ITU (2021). World Telecommunication/ICT Indicators database. International Telecommunication Union, Geneva. Available from: <http://www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx>.
- IUCN, BirdLife International (2021). *IUCN Red List*. International Union for Conservation of Nature and BirdLife International. Available from: <http://unstats.un.org/sdgs/indicators/database/?indicator=15.5.1>.
- Kaza, Silpa; Yao, Lisa C.; Bhada-Tata, Perinaz; Van Woerden, Frank (2018). *What a Waste 2.0: A Global Snapshot of Solid Waste Management to 2050*. Washington, DC: World Bank.
- Lenzen, M., Malik, A., Li, M., Fry, J., Weisz, H., Pichler, P-P, Chaves, L.S.M., Capon, A. Pencheon, D. (2020). The environmental footprint of health care: a global assessment, *The Lancet Planetary Health* 4(7).
- Lenzen, M., Moran, D., Bhaduri, A., Kanemoto, K., Bekchanov, M., Geschke, A. and Foran, B. (2013), International trade of scarce water. *Ecological Economics*, Vol. 94, pp. 78–85.
- Lenzen, M., Moran, D., Kanemoto, K., Foran, B., Lobefaro, L., and Geschke, A. (2012). International trade drives biodiversity threats in developing nations. *Nature*, 486, 109–112. (Dataset updated to 2015 by Isaac Russell Peterson, Matthew Selinkske and colleagues). Available from: doi: 10.1038/nature11145.
- National Science Foundation (2021). Scientific and technical journal articles. National Science Foundation, Arlington, VA. Available from: <http://data.worldbank.org/indicator/IP.JRN.ARTC.SC>.
- Ocean Health Index (2019). *Ocean Health Index 2019 Global Assessment*. National Center for Ecological Analysis and Synthesis, University of California, Santa Barbara. Available from: <http://data.oceanhealthindex.org/data-and-downloads>.
- OECD (2020). *OECD Affordable Housing Database*. Available from: <http://www.oecd.org/housing/data/affordable-housing-database/>, indicator HC1.2.
- OECD (2021a). *Environmental Policy: Effective Carbon Rates*. OECD Environment Statistics (database), <https://doi.org/10.1787/108c55c1-en>.

References

- OECD (2021b). *OECD Statistics*. Organisation for Economic Cooperation and Development, Paris. Available from: <http://stats.oecd.org/>.
- OECD (2021c). *PISA Database*. Organisation for Economic Cooperation and Development, Paris. Available from: <http://pisadataexplorer.oecd.org/ide/idepisa/dataset.aspx>.
- Oita, A., Malik, A., Kanemoto, K. et al. (2016). Substantial nitrogen pollution embedded in international trade. *Nature Geoscience*, 9, pp. 111–115. Available from: doi: 10.1038/ngeo2635.
- Pauly D, Zeller D, and Palomares M.L.D. (editors) (2020). *Sea Around Us Concepts, Design and Data* (www.seararoundus.org).
- Reporters without Borders (2020). *World Press Freedom Index 2020*. Available from: <https://rsf.org/en/ranking>.
- Schwab, K. and Zahidi, S. (2020). *The Global Competitiveness Report Special Edition 2020*. World Economic Forum, Geneva. Available from: <https://www.weforum.org/reports/the-global-competitiveness-report-2020>.
- SE4All (2021). Access to clean fuels and technologies for cooking (% of population). *Sustainable Energy for All*. Available from <https://data.worldbank.org/indicator/EG.CFT.ACCS.ZS>.
- SE4All (2021). Access to electricity (% of population). *Sustainable Energy for All*. Available from: <http://data.worldbank.org/indicator/EG.ELC.ACCS.ZS>.
- SIPRI (2021). *SIPRI Arms Transfers Database*. Stockholm International Peace Research Institute. Available from: <https://www.sipri.org/databases/armstransfers>.
- Tax Justice Network (2019). *Corporate Tax Haven Index*. Tax Justice Network, London. Available from: <https://corporatetaxhavenindex.org/introduction/cthi-2019-results>.
- Tax Justice Network (2020). *Financial Secrecy Index – 2020 Results*. Tax Justice Network, London. Available from: <https://www.financialsecrecyindex.com/introduction/fsi-2018-results>.
- Times Higher Education (2021). *World University Rankings 2021*.
- Transparency International (2021). *Corruption Perceptions Index 2020*. Transparency International, Berlin. Available from: <https://www.transparency.org/en/cpi/>.
- UIS (2021a). Lower secondary completion rate, total (% of relevant age group). UNESCO Institute of Statistics. Available from: <http://data.uis.unesco.org/>.
- UIS (2021b). Net enrolment rate, primary, both sexes (%). UNESCO Institute of Statistics. Available from: <http://data.uis.unesco.org/>.
- UIS (2021c). Youth literacy rate, population 15–24 years, both sexes (%). UNESCO Institute of Statistics. Available from: <http://data.uis.unesco.org/>.
- UN Comtrade (2021). *UN Comtrade Database*. Available from: <https://comtrade.un.org>
- UN Habitat (2021). Proportion of urban population living in slums. United Nations Human Settlements Programme, Nairobi, Kenya. Available from: https://data.unhabitat.org/datasets/52c52084f31a403397e2c3bbee37f378_0/data.
- UN IGME (2021). Mortality rate, neonatal (per 1,000 live births). United Nations Interagency Group for Child Mortality Estimation (UN IGME). United Nations Children's Fund (UNICEF), New York. Available from: <http://data.worldbank.org/indicator/SH.DYN.NMRT>.
- UNAIDS (2021). Aidsinfo. HIV incidence per 1000 population (15–49). Joint United Nations Programme on HIV and AIDS, Geneva. Available from: <http://aidsinfo.unaids.org>
- UNDESA (2021) Adolescent fertility rate (births per 1,000 women ages 15–19). United Nations Department of Economic and Social Affairs Population Division, New York. Available from: <http://data.worldbank.org/indicator/SP.ADO.TFRT>.
- UNDESA (2021). Proportion of women of reproductive age (aged 15–49 years) who have their need for family planning satisfied with modern methods (% of women aged 15–49 years).
- UNDESA (2021). World contraceptive use. United Nations Department of Economic and Social Affairs Population Division, New York. Available from: <https://www.un.org/en/development/desa/population/publications/dataset/contraception/wcu2021.asp>.
- UNESCO (2021). Government expenditure on education. United Nations Educational, Scientific and Cultural Organization, Paris. Available from: <http://data.worldbank.org/indicator/SE.XPD.TOTL.GD.ZS>. WHO (2021).
- UNICEF (2021a). Births attended by skilled health staff (% of total). United Nations Children's Fund (UNICEF), New York. Available from: <http://data.worldbank.org/indicator/SH.STA.BRTC.ZS>.
- UNICEF (2021b). Birth registration. United Nations Children's Fund (UNICEF), New York. Available from: <http://data.unicef.org/topic/child-protection/birth-registration/>.
- UNICEF (2021c). *Child Labour*. United Nations Children's Fund (UNICEF), New York. Available from: <http://data.unicef.org/topic/child-protection/child-labour/>.
- UNICEF, WHO, World Bank (2021). Prevalence of stunting, height for age (% of children under 5). Joint Child Malnutrition Estimates. United Nations Children's Fund (UNICEF), New York. Available from: <https://data.worldbank.org/indicator/SH.STA.STNT.ZS>.
- UNICEF, WHO, World Bank (2021). Prevalence of wasting, weight for height (% of children under 5). Joint Child Malnutrition Estimates. United Nations Children's Fund (UNICEF), New York. Available from: <https://data.worldbank.org/indicator/SH.STA.WAST.ZS>.

- UNODC (2021a). *Global Study on Homicide*. United Nations Office on Drugs and Crime, Vienna. Available from: <https://www.unodc.org/unodc/en/data-and-analysis/global-study-on-homicide.html>.
- UNODC (2021b). Total persons held unsentenced. United Nations Office on Drugs and Crime, Vienna. Available from: <https://dataunodc.un.org/data/prison/total%20persons%20held%20unsentenced>.
- UNODC (2021c). Total prison population. United Nations Office on Drugs and Crime, Vienna. Available from: <https://dataunodc.un.org/crime/total-prison-population>.
- Walk Free Foundation (2018). *Global Slavery Index*. Walk Free Foundation, Broadway Nedlands, Australia. Available from: <https://www.globalslaveryindex.org/>.
- Wendling, Z. A., Emerson, J. W., Esty, D. C., Levy, M. A., de Sherbinin, A., et al. (2018). *2018 Environmental Performance Index*. Yale Center for Environmental Law and Policy, New Haven, CT. Available from: <http://epi.yale.edu>.
- WHO (2020). *World Health Expenditure Database*. World Health Organization, Geneva. Available from: <http://apps.who.int/nha/database>.
- WHO (2021a). Age-standardized death rate attributable to household air pollution and ambient air pollution, per 100 000 population. World Health Organization, Geneva. Available from: <https://apps.who.int/gho/data/view.main.GSWCAH37v>.
- WHO (2021b). Age-standardized death rate due to cardiovascular disease, cancer, diabetes, and chronic respiratory disease in populations age 30–70 years, per 100 000 population. World Health Organization, Geneva. Available from: <https://apps.who.int/gho/data/view.main.GSWCAH21v>.
- WHO (2021c). GHO Life expectancy and healthy life expectancy. World Health Organization, Geneva. Available from: <http://apps.who.int/gho/data/node.main.688>.
- WHO (2021d). GHO Obesity (age- standardized estimate). World Health Organization, Geneva. Available from: <http://apps.who.int/gho/data/view.main.CTRY2450A?lang=en>.
- WHO (2021e). GHO Road traffic deaths. World Health Organization, Geneva. Available from: <http://apps.who.int/gho/data/node.main.A997>.
- WHO (2021f). Incidence of tuberculosis (per 100,000 people). World Health Organization, Geneva. Available from: <http://data.worldbank.org/indicator/SH.TBS.INCD>.
- WHO (2021g). *Tracking Universal Health Coverage: 2021 Global Monitoring Report*. World Health Organization, Geneva. Available from: http://www.who.int/healthinfo/universal_health_coverage/report/2021/en/.
- WHO and UNICEF (2021a). *Immunization Coverage*. World Health Organization and United Nations Children's Fund, Geneva and New York. Available from: <http://data.unicef.org/topic/child-health/immunization/>.
- WHO and UNICEF (2021b). *Data and Estimates*. WHO / UNICEF Joint Monitoring Programme: World Health Organization and United Nations Children's Fund, Geneva and New York. Available from: <https://washdata.org/data>.
- WHO, UNICEF, and UNFPA, World Bank Group, and the United Nations Population Division (2021). Maternal mortality ratio (modeled estimate, per 100,000 live births). In *Trends in Maternal Mortality: 2000 to 2017*. World Health Organization, Geneva. Available from: <http://data.worldbank.org/indicator/SH.STA.MMRT>.
- World Bank (2018). Logistics performance index (LPI). World Bank, Washington, D.C. Available from: <http://lpi.worldbank.org/international/global>.
- World Bank (2021a). Female share of graduates from science, technology, engineering and mathematics (STEM) programmes, tertiary (%). World Bank, Washington, D.C. Available from: <https://databank.worldbank.org/reports.aspx?source=283&series=SE.TER.GRAD.FE.SI.ZS>.
- World Bank (2021b). GDP per capita, PPP (current international \$). World Bank, Washington, D.C. Available from: <https://data.worldbank.org/indicator/NY.GDP.PCAP.PP.CD>.
- World Bank (2021c). Gini index (World Bank estimate). World Bank, Washington, D.C. Available from: <https://data.worldbank.org/indicator/SI.POV.GINI>.
- World Bank (2021d). Statistical Performance Indicators (SPI). World Bank, Washington D.C., Available from: [https://databank.worldbank.org/Statistical-Performance-Indicators-\(SPI\)/id/c6cc9909](https://databank.worldbank.org/Statistical-Performance-Indicators-(SPI)/id/c6cc9909).
- World Justice Project (2020). *World Justice Project Rule of Law Index 2020*. The World Justice Project, Washington, D.C. Available from: <https://worldjusticeproject.org/our-work/research-and-data/wjp-rule-law-index-2020>.
- Zhang, X., and Davidson, E. (2019). *Sustainable Nitrogen Management Index*. Earth and Space Science Open Archive. Available from: <https://doi.org/10.1002/essoar.10501111.1>.
- Zucman, G. et al. (2019). *The Missing Profits of Nations: 2016 Figures*. Available from: <https://missingprofits.world>.

