

State of the World Scorecard

The purpose of the scorecard is to represent the “state of the world,” in general, as well as global outcomes that would likely change were global transformation to occur.

Measurement tracks change, not transformation. When a caterpillar transforms into a butterfly, it ceases being one thing and becomes another. We can infer the transformation by measuring differences in the mass, color, shape, etc. of the caterpillar and the butterfly but we aren't measuring transformation. The transformation is simply “there used to be a caterpillar and now there is a butterfly.” The scorecard measures aspire to reveal changes that point to transformation in the world.

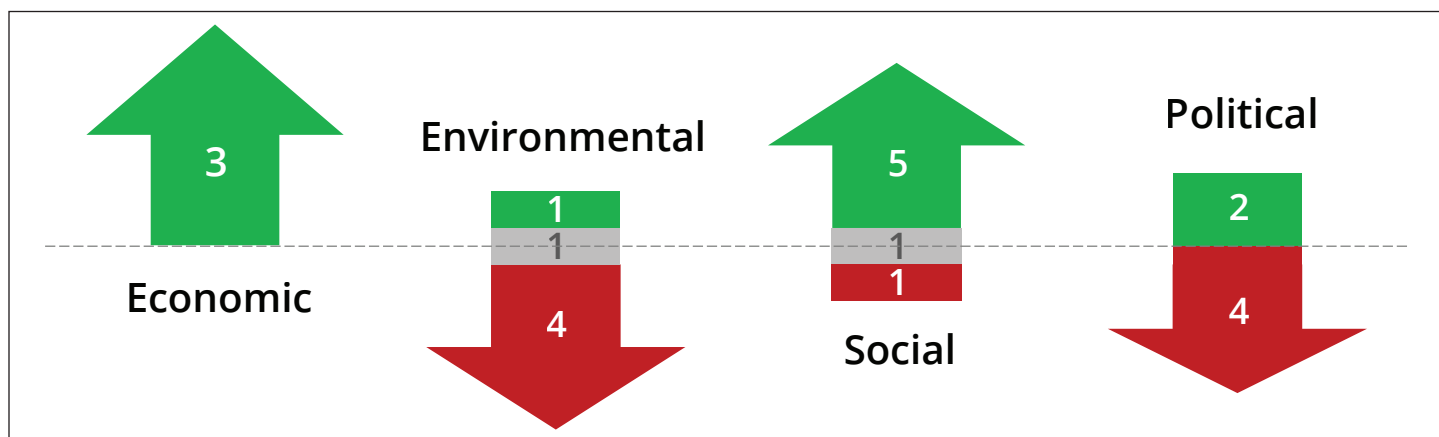
The scorecard is intended to empower a profound relationship to “what’s so,” both generally and in the details, and to track progress over the last 22 years. A survey of conference participants showed many of the participants’ commitments are connected to these measures, though not all.

Questions you could ask include:

“How does the progress with this measure align with my commitment for the world?”

“What action can I take in this area to make a difference?”

How the measures have tracked over the last 21 years



The numbers above show the number of measures in each category that **improving**, **worsening**, or for which there is no significant change (gray).

The format of the scorecard was updated in 2021 based on feedback from participants in scorecard workshops at the conference and a survey of Conference for Global Transformation participants that year.

The measures are presented in four groups: Economic, Environmental, Social and Political.

The next two pages show the charts for the 21 scorecard measures at the global level based on data

for the available countries. The number of countries comprising the global measure is noted parenthetically in the graph legend.

The graphs also display lines for the individual metrics for the three most populous countries (**China**, **India**, and **United States**) that represent 40% of the global population. This is intended to give some insight into the diversity of both the direction and velocity of change for the metrics.

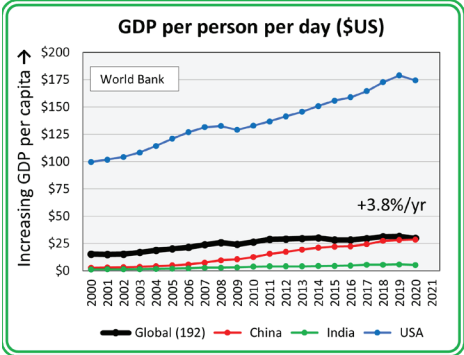
Anyone who has a commitment to make a difference in the world can determine which measures and which methods of tracking data and trends will be the most useful.



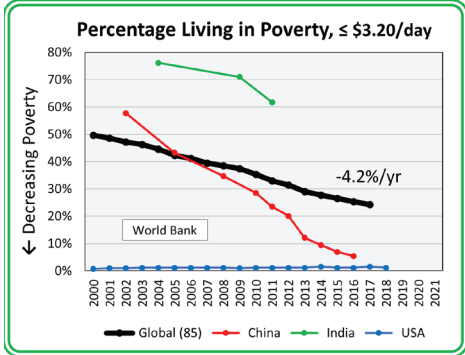
Charts of the Scorecard Measures

- The horizontal axis on all the charts covers the 22 years from 2000 to 2021.
- A legend of **“Global (192)”** means 192 countries comprise the global metric, generally all for which data are available.
- Where a worldwide metric is published, that is used for the global data.
- Absent a worldwide metric, global data are the population-weighted averages⁽¹⁾ for the included countries.
- The vertical axis on each chart spans the range of values for the global, China, India, and United States measures.
- For each graph, the arrow in the vertical axis title always points in the “good” direction.
- Green border indicates that the measure is moving in a “good” direction; red border indicates a “bad” direction.
- Gray border indicates that the change is not statistically significant.
- Double border indicates that the measure is changing faster than the rate of population growth (1.1%).
- The ±%/yr on each chart represents the global rate of change over the period estimated by least-squares regression.

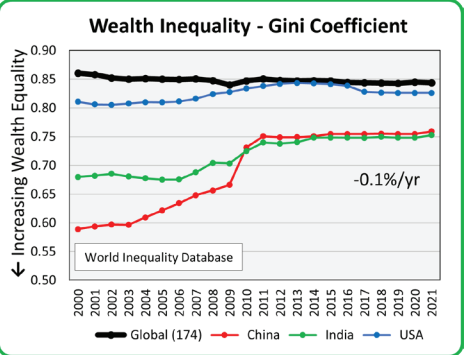
Economic Measures



<https://data.worldbank.org/indicator/NY.GDP.PCAP.CD>

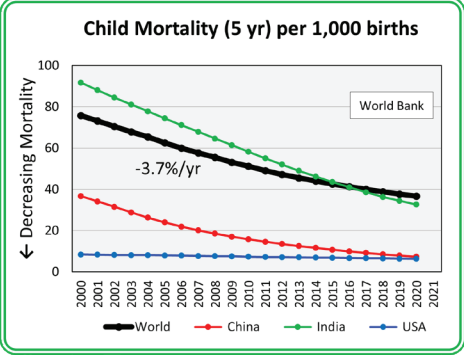


<https://data.worldbank.org/indicator/SI.POV.LMIC>

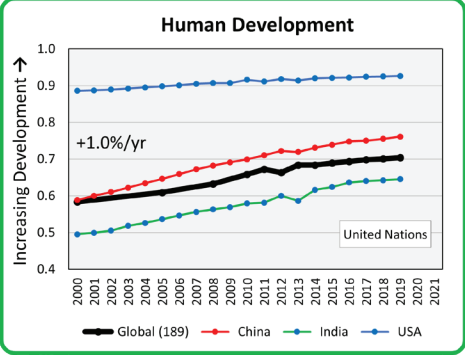


<https://wid.world/data/>

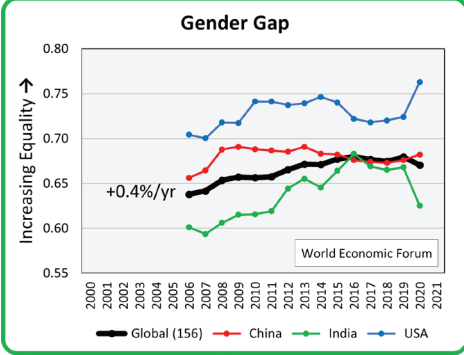
Social Measures



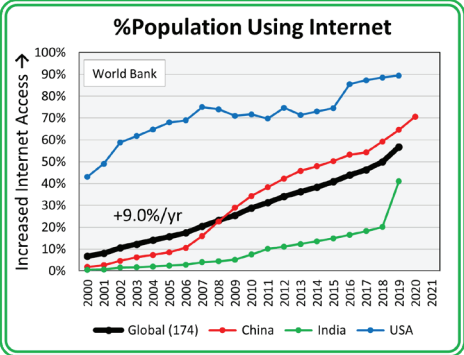
<https://data.worldbank.org/indicator/SH.DYN.MORT>



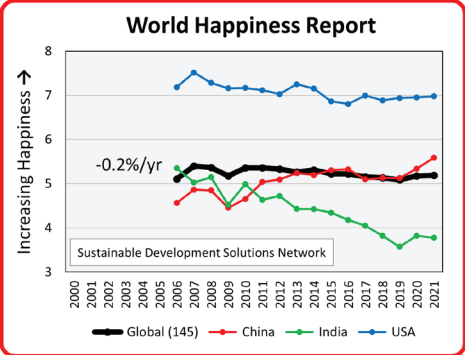
<http://hdr.undp.org/en>



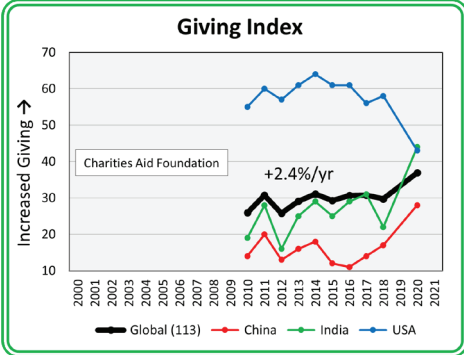
<https://www.weforum.org/reports>



<https://data.worldbank.org/indicator/IT.NET.USER.ZS>

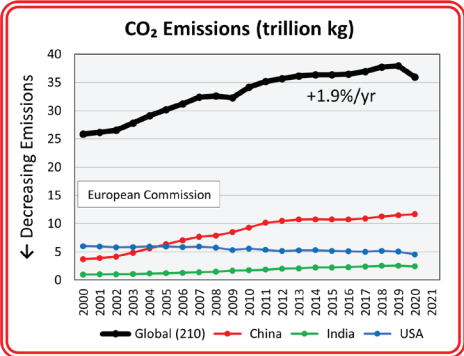


<https://worldhappiness.report/>

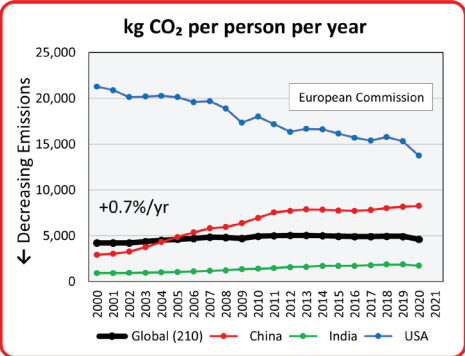


<https://www.cafonline.org/about-us/research>

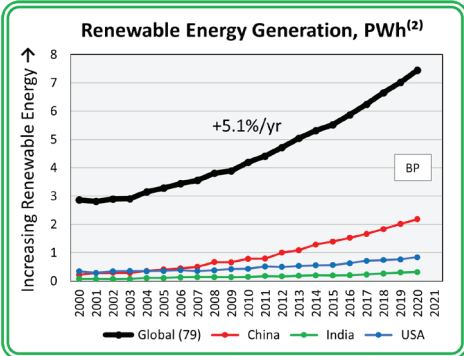
Environmental Measures



<https://edgar.jrc.ec.europa.eu/>

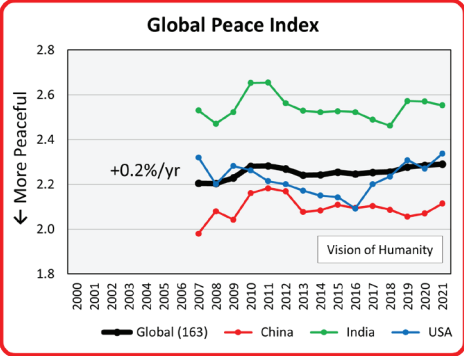


<https://edgar.jrc.ec.europa.eu/>

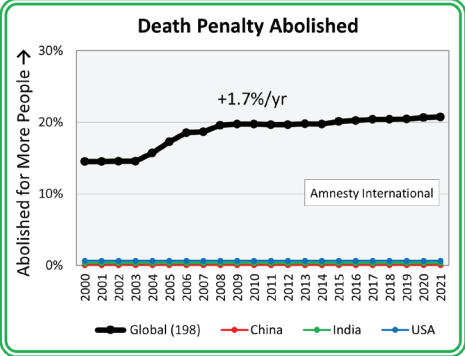


<http://www.bp.com/statisticalreview>

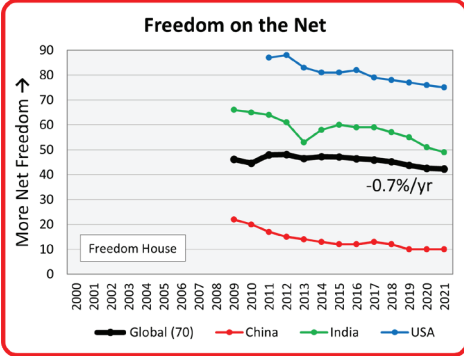
Political Measures



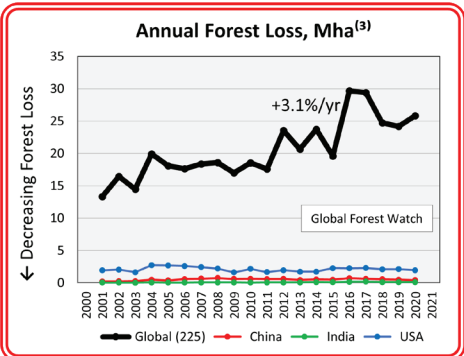
<http://visionofhumanity.org/indexes/global-peace-index/>



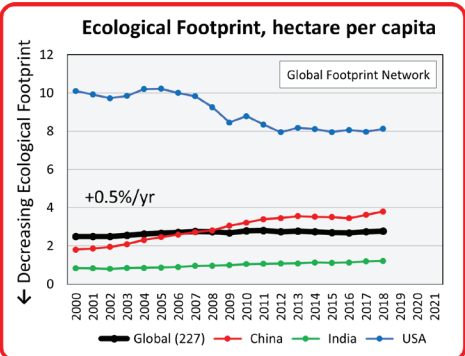
<http://www.amnesty.org/en/what-we-do/death-penalty/>



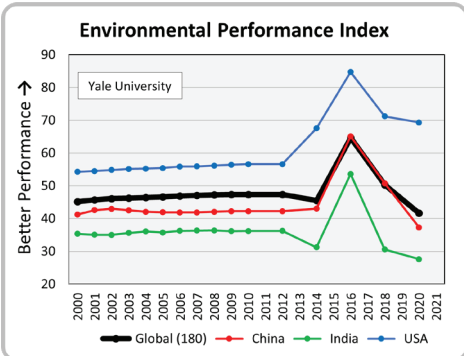
<http://www.freedomhouse.org/reports>



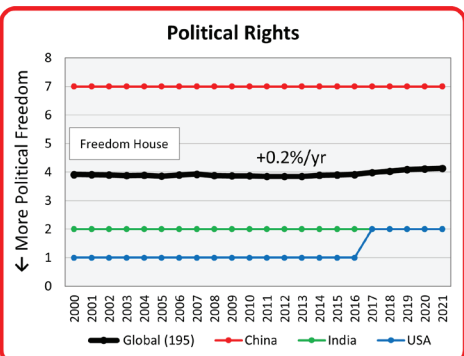
<https://www.globalforestwatch.org/dashboards/global/>



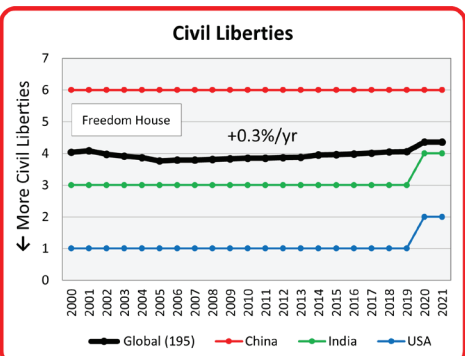
<https://www.footprintnetwork.org/resources/data/>



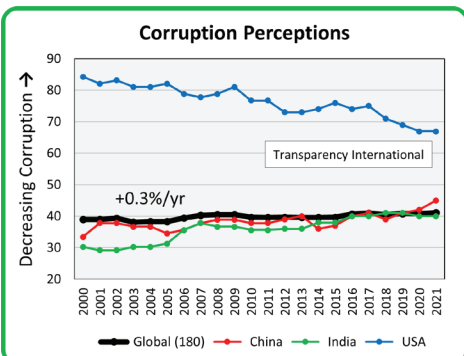
<https://epi.yale.edu/epi-results/2020/component/epi>



<http://www.freedomhouse.org/reports>



<http://www.freedomhouse.org/reports>



www.transparency.org/cpi2020

⁽¹⁾See notes for exceptions ⁽²⁾PWh is petawatt-hour or 10¹⁵ watt-hours ⁽³⁾Mha is megahectare or 10⁶ hectares

Notes About the Scorecard

Measures selected by the Scorecard Team are published by respected organizations that specialize in their subject areas and use rigorous methods for data collection and analysis. Measures are selected that use the same methodology over many years so that valid comparisons can be made over time. In order to create a broad and manageable view of the world, several of the measures are indices. These measures compile multiple direct measures in a specific interest area into an index being tracked. For most of these measures, the index component values are also published. As discussed below regarding averages, indices are a necessary aggregation of detail during which important elements of the underlying data can be lost. Anyone with a commitment in these domains is encouraged to explore the source data which may be much more aligned with their specific intention. More details of the measures and the questions they are intended to explore are tabulated on the right.

Global metrics are used for the global trend if the source organization reports a metric for the world. If not, measures are calculated as population-weighted averages. The exceptions are the measures for CO₂ Emissions, Forest Loss and Renewable Energy, which are aggregate totals for the world based on all published countries. Additionally, the measure for Death Penalty Abolished is the percentage of the population (of a country or the world) for whom the death penalty has been abolished by law.

Population data are sourced from the World Bank

database <https://data.worldbank.org/indicator/SP.POP.TOTL>. Links to other data sources are provided under the graphs of the scorecard metrics.

The Environmental Performance Index has twice changed its methodology, so the over-time comparison is not reliable.

Measures are categorized as Political (rather than Social) when they are primarily attributable to government policy.

Trends and Significance are estimated using least-squares regression over the full period of the dataset. Trends are inferred to be significant based on a Student’s (t) two-tailed likelihood of less than 0.05 based on the standard error of the fit coefficient. This single treatment appropriately evaluates the significance of the overall trend in the global data but does not adequately describe the behavior of several scorecard metrics. Some changed rapidly in the first 10 years and have changed little since (e.g., Death Penalty); others are changing at a greater rate only recently (e.g., Freedom on the Net). For other measures a global trend may obscure divergent behavior among countries (e.g., CO₂ Emissions per Person and Corruption Perceptions). If a measure reflects an outcome to which you are committed, having a powerful relationship with that outcome is enabled by building a deeper understanding of the data over time and across the world. We encourage you to visit the primary sources of the data and explore.

Measure		What It Is	Questions It Addresses
Economic	Gdp/Person/Day	Total value of goods and services produced per person per day	Are global economies strong enough to pull people out of poverty and provide a good standard of living for all?
	% Living in Poverty	% of the population living on less than \$3.20/day	How many people don’t have the resources to live decent, fulfilling lives?
	Wealth Inequality, Gini Index	How greatly the distribution of wealth deviates from an equal distribution	Is the distribution of wealth fair or is the gap between people too big or small?
Environmental	CO ₂ Emissions	Total CO ₂ emitted from all sources	How are we doing reducing CO ₂ ? Who’s leading & lagging?
	CO ₂ Emissions per Person	Total CO ₂ divided by population	How are our individual carbon footprints changing?
	Renewable Energy Generation	Energy from renewable & hydroelectric sources	How fast is generation moving to renewable sources?
	Annual Forest Loss	Area of forest lost where tree canopy >30%	Are we preserving the trees that produce oxygen, moderate the climate and regulate water cycles?
	Ecological Footprint	Resources consumed for food, shelter, transportation including carbon footprint	Are we consuming too many natural resources for future generations to thrive?
	Environmental Performance Index	A composite of 29 measures of environmental performance including emissions & biodiversity	The environment is big and complex and we depend on it -- how well are we doing on protecting it in general?
Social	Child Mortality	The number of children who die before age 5 per 1,000 births	How well is women's and children's health being addressed?
	Human Development	The UN HDI index composed of income, life expectancy & educational attainment	How much opportunity do people have to grow and develop physically, educationally economically?
	Gender Gap	A composite of 14 measures of gender equity across health, education, and economic domains	Do women and men have equal opportunities to prosper in politics, business, education and health?
	% of Population Using Internet	% of population using the internet in the last 3 months	Who can benefit from using the internet and who is left out?
	Happiness Report	Self-report of subjective well-being, life satisfaction and positive emotion	Are people experiencing well-being and satisfaction with their lives?
	Giving Index	An index of contributions of money or time to benefit others	How generous are we being with others?
Political	Global Peace	A composite of 23 measures of conflict, criminality and violence	How secure is our society from crime, violence and war?
	Death Penalty	% of population for whom the death penalty has been abolished by law	How many live free from the threat of execution by their government?
	Freedom on the Net	A composite of 12 measures of access, content control and user rights	Can people communicate, express and create freely on the internet without interference?
	Political Rights	A composite of 10 measures of electoral integrity, political participation and governance	Are our systems of government representative, fair and inclusive?
	Civil Liberties	A composite of 15 measures of individual freedoms and rule of law	Are people free to live and express without suppression or inequity?
	Corruption Perceptions	Standardized assessment of risk of corruption assembled from 12 sources	How corrupt are our governments?

2022 Scorecard Comments

Changes in the composition of the scorecard measures are made periodically. Measures may be dropped when they are retired by the source organization or their underlying methodology becomes unreliable. Measures may be added when significant shifts in the conversation of what is possible for humanity call for new measures to reflect that.

For this year’s scorecard the Index of Economic Freedom was dropped because the team concluded it isn’t a measure of an outcome; rather, it is an assessment of compliance with a set of policies hypothesized to deliver prosperity. Our intention is to measure prosperity as an outcome.

The Gini coefficient of wealth inequality has been added to the Economic measures for the 2022 scorecard. This measure is intended to show how equitably the growth in wealth and prosperity is distributed within the population of a country or the world.

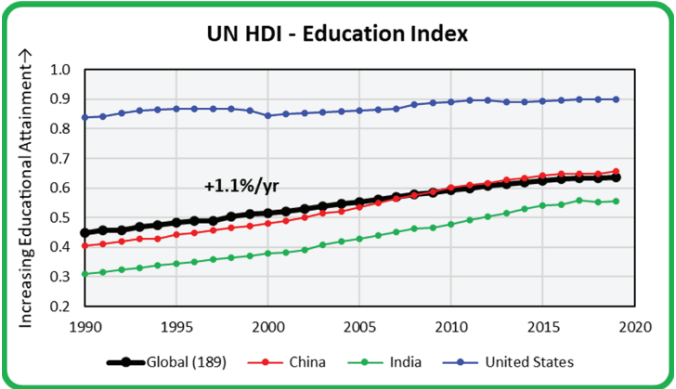
The COVID-19 pandemic was an extraordinary circumstance in 2020 and 2021 and some of the recent trends in the scorecard are likely connected to its societal disruption.

Decreases in CO₂ emissions and GDP are clearly connected; the perturbations in many other measures over this period may be more complex and challenging to understand. Although the connection to the pandemic isn’t clear, it is notable that the aggregate trend of the set of social metrics improved slightly and the aggregate trend of the political metrics worsened slightly.

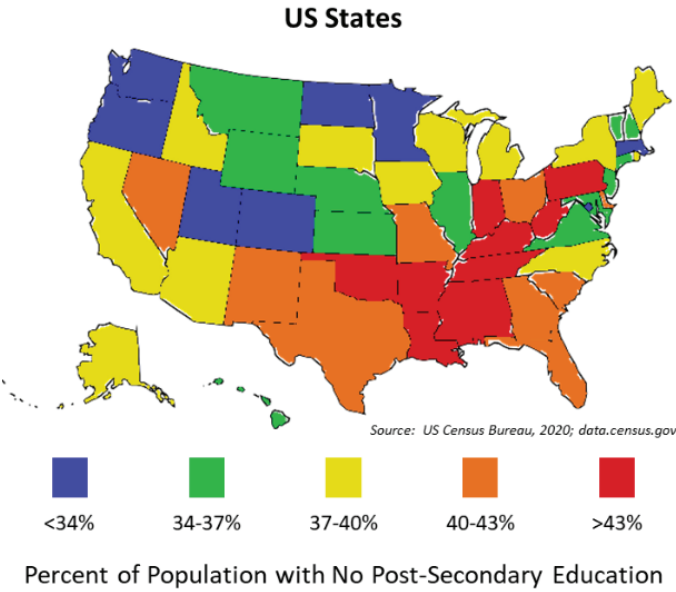
Limitations of the scorecard are important to keep in mind. Great attention is paid to selecting sources of data that are rigorous and reliable; nevertheless, any measurement has inherent uncertainty and is subject to unconscious or conscious bias.

The Power of Data Behind the Graphs

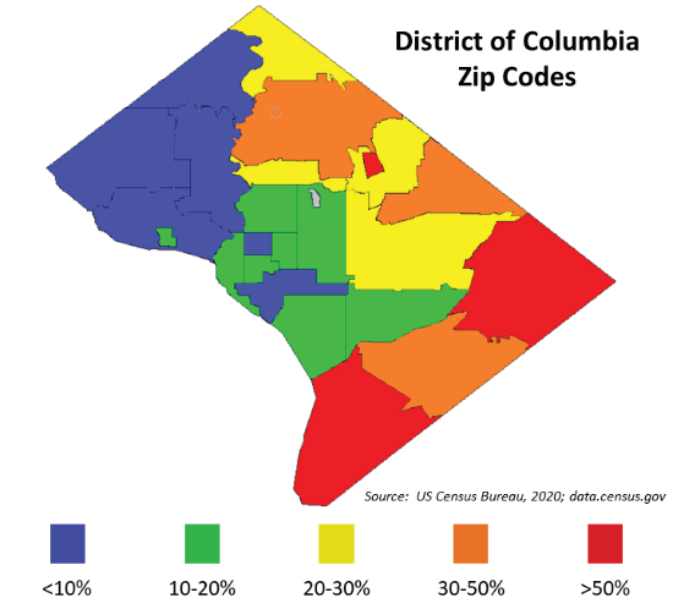
Averages can obscure crucial texture that is available in the raw data. Taking a view of the world overall necessarily aggregates and averages numerous individual measurements; generalized conclusions from those macroscopic observations can miss critical details. As an example, educational attainment is a component of the United Nations Human Development Index. At the scorecard level, the graph looks like this:



One could accurately conclude that the United States is doing well overall based on the aggregate comparison to the world average – it is the highest line on the graph. To expand the view of the data behind that single line, one can examine the U.S. state-by-state for the percent of the population that has had no post-secondary education (another measure of educational attainment). That analysis looks like this:



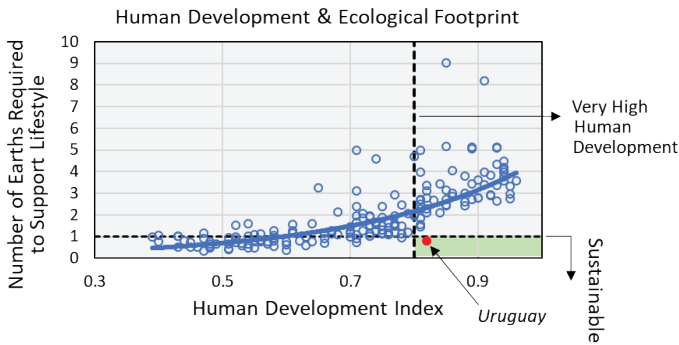
States aren’t all near the overall average (39%); the fraction of the population in West Virginia with no post-secondary education (52%) is *twice* as large as it is in Washington, D.C. (26%). If one has a commitment to education, this detail may be critical and is not discoverable in the aggregate graph. An accurate conclusion may be made at this level that D.C. is doing well overall – it has the lowest fraction in the entire U.S. Looking at the same metric within D.C. by zip code looks like this:



Not only are there large differences among different areas of D.C. but these differences (<4% to >80%) cover a far wider range than the U.S. state data. This is an example of how we find data works in general and isn’t related to the topic of education or the U.S. as a country. We would expect analogous patterns in almost all the metrics as we drill down into the detailed data. To be responsible for a promise in this area almost certainly demands a more profound relationship to “what’s so” than can be realized with aggregated and averaged information.

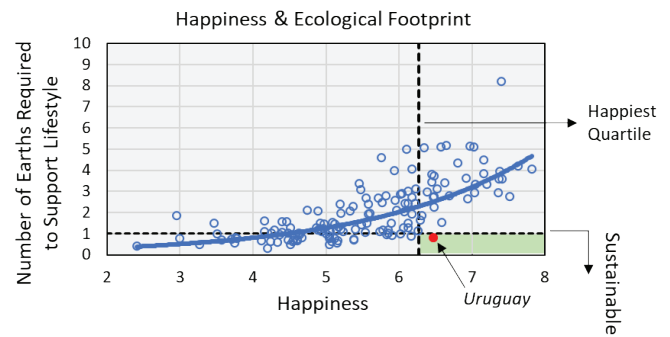
Outliers are often bright spots from which more may be learned than can be seen in overall trends. As an example, we can look at measures together. The Ecological Footprint of a country compares all resources consumed to global resources and can be

expressed as “Number of Earths” to estimate whether the Earth could sustain everyone if they consumed resources at that level. Comparing that to the Human Development index (measured by the United Nations based on income, life expectancy and educational attainment) one finds a trend with sustainability worsening as human development improves.



Sources: HDI – United Nations; hdr.undp.org
Eco Footprint – Global Footprint Network; footprintnetwork.org

The general trend doesn't apply to *every* country; Uruguay is the lone occupant of the area of the graph that shows sustainability and very high human development – it's an outlier. Making a similar comparison with reported happiness as assessed in the World Happiness Report, we find a similar trend – happier societies tend to consume more resources.



Sources: Happiness – Sustainable Development Solutions Network; worldhappiness.report
Eco Footprint – Global Footprint Network; footprintnetwork.org

Once again, Uruguay deviates from the trend and is by itself in the upper quartile of happiness with sustainable consumption. Outliers point to places to explore further and give us questions to ask that could deliver valuable insight. The message in this example is not about these measures or Uruguay, but rather how developing a powerful relationship to the measures and the data in the areas to which we are committed can empower our action and insight.

Moving beyond averages and interrogating outliers are examples of why we highly encourage participants with a promise to examine more closely the data behind the scorecard graphs. Go to the websites that are the sources of the measures, review the components of the relevant indices, and examine the more detailed information that is readily available.

Contact Details for the Scorecard Team

- For questions or comments about the scorecard charts, data, or analysis, contact david.flattery@post.harvard.edu
- New Scorecard Team members are welcome. Contact david.flattery@post.harvard.edu

Current members of the State of the World Scorecard Team: Dr. Angela Amado, Dr. Khush Cooper, Dave Flattery, Dave Forrest, Dr. Tony Graddon, Rose Grant, Wendy Keilin, Gisele Larose, Peg Miller, Lauren Minis, Joe Ousby and Susan Weitz.

