

Snakes and ladders in sustainable development indexing

By Roberto Bissio

Are Finland and Norway a model to follow if you want to achieve sustainable development or an example of bad practices to avoid? It all depends who you ask.

The two Nordic countries are listed among the top ten in the Global SDG Index¹ published last September by the Bertelsmann Stiftung and the Sustainable Development Solutions Network (BS-SDGI). But they rank among the bottom 10 worst performers in the Sustainable Development Index (JH-SDI) published by anthropologist Jason Hickel in the January 2020 edition of the *Ecological Economics Journal*.²

Both indexes use the same raw data from the same international databases (even when Hickel uses 2015 as the latest year of the JH-SDI series) and the difference in the rankings derives from how sustainable development is understood.

The difference is not a minor one, as Table 1 illustrates by showing the extreme ends of the rankings on both indexes. Many of the top-ranked countries by the BS-SDG Index are at the bottom of the table in the JH-SD Index.

Table 1: Top 10 and bottom 10 countries in two different sustainable development indexes³

Country	BS-SDG Index 2019 (0-100)	Country	JH-SD Index (0-1)
Top 10		Top 10	
Denmark	85.2	Cuba	0.859
Sweden	85.0	Costa Rica	0.830
Finland	82.8	Sri Lanka	0.825
France	81.5	Albania	0.811
Austria	81.1	Panama	0.808

¹ J. Sachs, G. Schmidt-Traub, C. Kroll, G. Lafortune, G. Fuller, Sustainable Development Report 2019. New York: Bertelsmann Stiftung and Sustainable Development Solutions Network (SDSN), 2019.

² Jason Hickel, "The Sustainable Development Index: Measuring the Ecological Efficiency of Human Development in the Anthropocene," *Ecological Economics* vol 167, January 2020.

³ The JH-SDI can be found online at www.sustainabledevelopmentindex.org. The BS-SDGI can be found online at <https://www.sdginde.org/>

Germany	81.1	Algeria	0.805
Czech Rep.	80.7	Georgia	0.801
Norway	80.7	Armenia	0.800
Netherlands	80.4	Azerbaijan	0.798
Estonia	80.2	Peru	0.788
Bottom 10		Bottom 10	
Afghanistan	49.6	Iceland	0.233
Niger	49.4	Finland	0.227
Sierra Leone	49.2	Estonia	0.209
Haiti	48.4	Norway	0.200
Liberia	48.2	Canada	0.194
Madagascar	46.7	United States	0.184
Nigeria	46.4	Australia	0.153
Congo, DR	44.9	UAE	0.108
Chad	42.8	Kuwait	0.102
Central Africa	39.1	Singapore	0.081

The BS-SDGI is computed by averaging some indicators for each of the 17 Sustainable Development Goals and then averaging these 17 sub-indices into a final global positioning number. Since a majority of the chosen indicators actually measure well-being (in areas like health, education or nutrition) or material wealth (in energy, infrastructure) the final average correlates highly with the UN Human Development Index (For a detailed analysis see: <https://www.globalpolicywatch.org/blog/2019/07/03/bs-sdg-index-can-progress-on-sustainable-development-be-reduced-to-a-single-number/>)

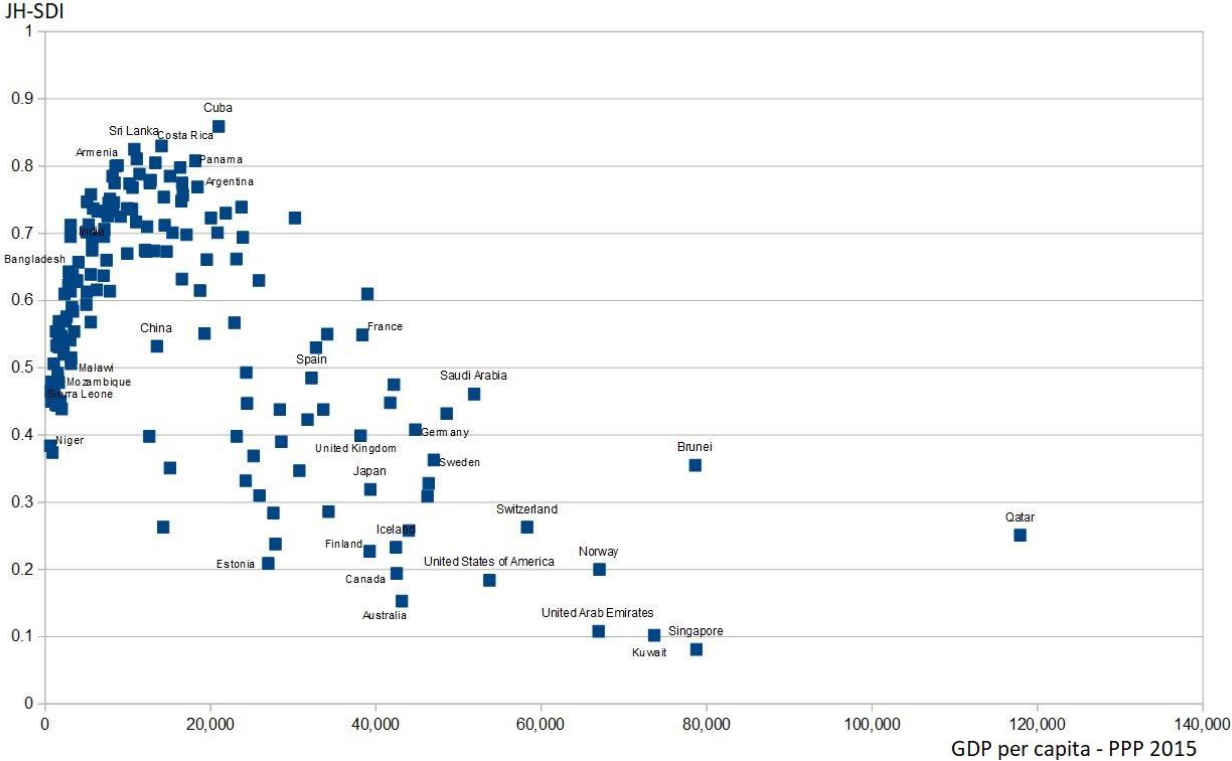
The JH-SDI also takes the UN Human Development Index as a starting point, but it acknowledges, in the words of its main author, Jason Hickel, that “the countries that score highest on the HDI also contribute most, in per capita terms, to climate change and other forms of ecological breakdown. In this sense, HDI promotes a model of development that is empirically incompatible with ecological key indicators of ecological impact: CO2 emissions and material footprint, both calculated in per capita consumption-based terms and rendered vis-à-vis planetary boundaries.”

The BS-SDGI also reflects damaging material consumption in its sub-index for SDG 12 (sustainable consumption and production) and on SDG 13 (climate change). The Joint Research Centre (JRC), the European Commission’s science and knowledge service, found that “some countries that have poor performance on SDG 12 (on sustainable production and consumption patterns) and SDG 13 (on climate) have good performance on all the other goals and vice-versa. (...) The top five countries in the index are ranked among the bottom positions of SDG12 and

SDG13. For example, Sweden tops the list on the SDG Index, but is in the 138th position on the SDG12 ranking. On the other direction, Central African Republic which is at the bottom of the SDG Index gets the second best position on SDG13.”

In the average of 17 sub-indices, the bad ranking of rich countries in two of them is diluted in the BS-SDG Index, while on the JH-SD Index, CO2 emissions and material footprint combined directly penalize the final ranking. This is clearly shown in the Figures 1 and 2, which show the performance on the two sustainable development indexes in relation to per capita income.

Figure 1: JH-Sustainable Development Index in relation to per capita income

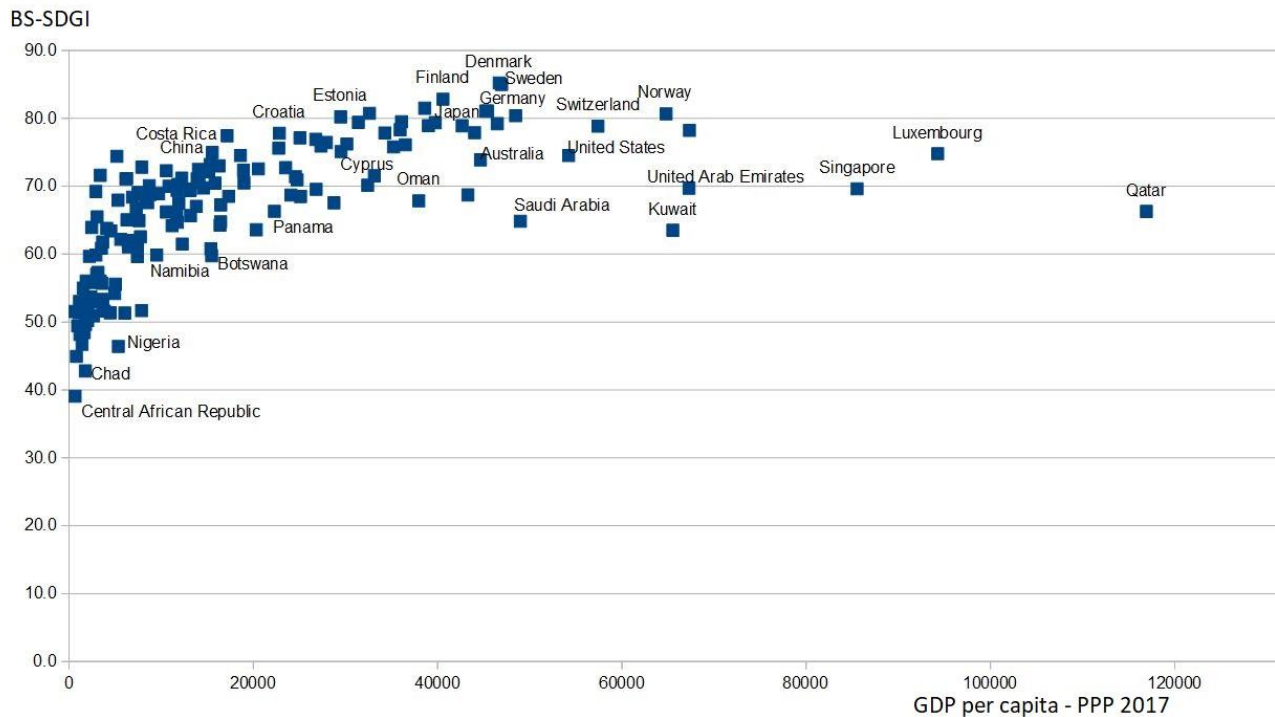


Source: Compiled by the author with data from the JH-SDI

In the JH-SDI, the index grows as countries get richer but its value peaks at an annual income of around US\$ 20,000 dollars per capita in purchasing parity terms. As income grows beyond that amount, the index values drop, as more wealth is associated with higher CO2 emissions and a bigger material footprint.

The picture is different in the BS-SDG Index:

Figure 2: BS-Sustainable Development Goals Index in relation with per capita income



Source: Compiled by the author with data from the BS-SDGI

In this Index the left part of the graph, grouping the low income countries, is similar to the JH-SDI. Their performance improves as income grows, but the ranking keeps growing more and more and reaches its peak for Nordic countries with annual incomes of around US\$ 50,000 in purchasing parity terms. However, from that point countries stop improving as they get richer, either because of their comparative poorer social services, their high CO2 emissions, unsustainable consumption or a combination of these and other factors.

Which path to choose?

Both indices have a similar message for the countries at the left of the graph, with average incomes under US\$ 8,600 a year: as your economies grow you will have more opportunities to provide the essential public services that will improve the well-being of your peoples, as required by the UN 2030 Agenda for Sustainable Development.

But from there on the two indices offer diverging paths. If you want to reach the top, the BS-SDGI tells you to keep growing, but to do so with efficient social services and, ideally recycling your garbage and paying attention to energy efficiency... as the Nordics do.

The JH-SDI tells a different story. If all countries had the lifestyle of the Nordics the planet would suffer an ecological breakdown. The average material footprint of nations with “very high” Human Development scores is 26t per capita (four times over the sustainable boundary), while their average CO2 emissions is 11t per capita (six times over the boundary). It is not

ecologically possible for all nations to consume at this level. In other words, “this is not a tenable approach for the 21st century”.

On the other hand, Hickel notices that high income is not necessary to achieve well-being. “Greece, Chile, and Portugal have higher life expectancy than the US with less than half the income per capita. Costa Rica has a life expectancy that exceeds that of the US with one-fourth of the income per capita. Similarly, there are a number of countries that score highly on the education index with relatively low levels of income. Kazakhstan’s education levels rival Austria’s, with half of the income per capita. Belarus exceeds Austria with one-third of the income per capita. Georgia and Ukraine rival Austria with less than one-fifth of the income per capita.”

From a sustainable development view, the countries that manage to perform well within planetary boundaries should be commended and celebrated. But they are not at the top of any indicator ranking. The world records are for nations that achieve them thanks to the unsustainable “steroids” of CO2 emissions and wasteful consumption. The JH-SDI does justice to these frugal achievers. And it breaks with the conventional “development” wisdom that systematically places the richer countries, which also happen to be the biggest donors to development agencies, as “models”. This narrative, argues Hickel, “represents the countries of the global North as automatically superior to the countries of the South, erasing and indeed even legitimizing the violence that the former have deployed in order to accumulate their surplus, through for example colonization, the slave trade, structural adjustment, land grabs, labour exploitation, resource extraction and other methods by which nations at the core of the world system have sabotaged the periphery for the sake of their own development.”

Without any mention of history, the introduction of ecological indicators that reflect the negative effects of the excess extraction, consumption and accumulation practiced by rich countries, and demoting them accordingly challenges mainstream wisdom.

While this is not a minor achievement, this new JH-SDI cannot yet claim to be a proxy for the Sustainable Development Goals, as it does not account in any way for inequalities (including gender inequalities) or governance issues (including human rights and access to justice). There is room for improvement, certainly, but this does not in any way diminish the intellectual accomplishment of Jason Hickel. Using only five indicators (life expectancy, education, per capita income, material footprint and CO2 emissions) his Sustainable Development Index pushes the debate forward and improves our understanding of where we are on the 2030 Agenda in a way that the SDG Indicators Framework with its 300 indicators (most lacking sufficient data) has not yet been able to do.