

2015 HDR

Human Development Index

Frequently Asked Questions

What does the Human Development Index tell us?

The Human Development Index (HDI) was created to emphasize that expanding human choices should be the ultimate criteria for assessing development results. Economic growth is a mean to that process, but is not an end by itself. The HDI can also be used to question national policy choices, asking how two countries with the same level of GNI per capita can end up with different human development outcomes. For example, Malaysia has GNI per capita higher than Chile, but in Malaysia, life expectancy at birth is about 7 years shorter and expected years of schooling is 2.5 years shorter than Chile, resulting in Chile having a much higher HDI value than Malaysia. These striking contrasts can stimulate debate about government policy priorities.

How many countries are included in the 2014 HDI?

The 2014 HDI covers 188 countries, compared to 187 countries covered during 2011-2013. This year it became possible to compute the HDI value for South Sudan. The wide coverage is the result of efforts by the Human Development Report Office (HDRO) to work with UN agencies and the World Bank, who provide internationally standardized data and also with national statistical agencies to obtain required development indicators for the HDI. For a full explanation of the results and methodology of the 2014 HDI and other composite indexes in the 2015 Human Development Report, please see the Technical Notes 1-5.

Did the HDI rankings change for many countries in 2014?

In general, the rankings change a little between two successive years because of the nature of the HDI component indicators – with the exception of gross national income per capita, other indicators change very slowly year to year.

Based on the consistent data series, that were available on the cut-off date for downloading data for the computation of composite indices for the 2015 Human Development Report, there are several countries with ranks that changed between 2013 and 2014. The HDI values and ranks for 2013 and 2014 are given in Table 2 of Statistical Annex. In Table 2 we also provide the change in ranks between 2009 and 2014.

The consistent data are based on the latest updates and data revisions and are obtained using the same methodology. The effect of change in achievements (improvement or decline) in human development indicators in terms of health, education and living standards is captured by comparing the HDIs obtained from such consistent data series.

The difference between HDI values (and ranks) published in HDRs for different years represents a combined effect of data revision, change in methodology, and the real change in achievements in indicators.

We advise users of the HDR not to compare the estimates from Reports published in different years, but to use the consistent data given in Table 2 of the latest report.

Were there any significant data revisions of the component indicators for the 2014 HDI?

Two major data revisions were made in 2014 and 2015. The first one relates to the new purchasing power parity (PPP) conversion rates based on 2011 International Comparison Program surveys. The World Bank published the new series of GDP and GNI expressed in new PPP terms in May 2014. In addition, GDP and GNI series have been rebased to 2011 from the previously used 2005.

The other data revision was made by the United Nations Population Division for population indicators, including life expectancy. New data were released by the United Nations Population Division as [‘The 2015 World Population Prospect’](#) on 29 July 2015. Thanks to the advanced access to population data, the 2015 HDR uses the new series of life expectancy estimates.

Both revisions have had impacts on HDI values and ranking, especially among the middle-income countries which were affected non-uniformly - some got life expectancy revised upwards some downwards, the same happened to GNI per capita, although on average worldwide - GNI pc was revised upwards by about 33 percent.

Were there any significant revisions of the methodology for computation of the HDI?

There was no change in methodology for computation of the 2014 HDI compared to the methodology used in the computation of the 2013 HDI.

Are the ties in the HDI ranking of countries kept this year?

Although the HDI is calculated with the larger numbers of decimals, we report only the HDI rounded to three decimals. Often there are ties in the HDI values of countries, which is also reflected in ties in their ranks. The HDI values, by the very nature of the estimated components, are not significant beyond three decimal places.

Why were fixed cut-off points to define the human development groups reintroduced in the 2014 HDR?

There are two major reasons why we went back to fixed cut-off points to define the human development groups. First, with the previously used quartile grouping, countries could not clearly see their progress to a higher level of human development because the quartiles of the HDI distribution change values every year. Second, the number of countries is always the same in a quartile group. So if a country moves up into a higher level group, another country has to move down into a lower group.

The 2014 HDI introduces a system of fixed cut-off values for the four categories of human development achievements. The cut-off values are obtained as the HDI values calculated using the quartiles of the distributions of component indicators. For more details see Technical note 1.

Where do data for HDI computation come from?

Life expectancy at birth is provided by the UN Population Division in the UN Department of Economic and Social Affairs (UNDESA); mean years of schooling are based on UNESCO Institute for Statistics (UIS) educational attainment data and, for some countries, Barro and Lee (2013) methodology where UIS data are not available; expected years of schooling is provided by UIS; and GNI per capita (in 2011 \$PPP) by the World Bank and the International Monetary Fund. For several countries, mean years of schooling is estimated from nationally representative household surveys and for some countries GNI was obtained from the UN Statistical Division's database – National Accounts Main Aggregates Database.

Are there discrepancies between national and international data used for calculation of the HDI and other human development indices?

Data differences between national and international values of indicators still exist for some countries. HDRO actively advocates for the improvement of quality of human development data at all levels – national and international and for an efficient communication and collaboration between national statistical authorities and the UN statistical entities. The Human Development Report Office does not collect data directly from countries.

Why is it important to express GNI per capita in purchasing power parity (PPP) international dollars?

The HDI attempts to make an assessment of 188 diverse countries and territories, with very different price levels. To compare economic statistics across countries, the data must first be converted into a common currency. Unlike market exchange rates, PPP rates of exchange allow this conversion to take account of price differences between countries. In that way GNI per capita (PPP \$) better reflects people's living standards uniformly. In theory, 1 PPP dollar (or international dollar) has the same purchasing power in the domestic economy of a country as US\$1 has in the US economy.

The new PPP values have been introduced in May 2014. The latest International Comparison Programme (ICP) Surveys from which the PPPs were calculated, was conducted in 2011. It covered 199 economies from all geographical regions and from the OECD.

What is an “imputed” indicator – and for which countries were these imputed statistics used?

When one indicator is missing, the HDRO estimates the missing value using an alternative source or a cross-country regression model. The estimated values along with the method and/or model used are first communicated to the affected country before using it for the computation of the HDI. For example, the Mean years of schooling (MYS) for Andorra and Liechtenstein was based on the MYS of neighbouring countries Spain and Switzerland, respectively. For 29 countries, the MYS was estimated from nationally representative household surveys—UNICEF's Multiple Indicator Cluster Surveys (MICS) and ICF Macro's

Demographic and Health Surveys (DHS), and the World Bank's International Income Distribution Database. For 11 countries—Antigua and Barbuda, Cabo Verde, Dominica, Eritrea, Guinea Bissau, Grenada, Kiribati, Seychelles, St. Kitts and Nevis, St. Vincent and the Grenadines, and Turkmenistan — mean years of schooling was estimated by a cross-country regression model. Expected years of schooling was estimated by cross-country regression for four countries—Bahamas, Haiti, Papua New Guinea, and South Sudan.

Can GNI per capita be used to measure human development instead of the HDI?

No. Income is a means to human development, and not the end. The GNI per capita only reflects average national income. It does not reveal how that income is spent, nor whether it translates to better health, education and other human development outcomes. In fact, comparing the GNI per capita rankings and the HDI rankings of countries can reveal much about the results of national policy choices. Gabon with a GNI per capita of \$16,367 (PPP\$) has a GNI rank of 68, but an HDI rank 110 – the same as that of Indonesia whose GNI per capita is only \$9,788 (PPP\$).

Can the HDI alone measure a country's level of human development?

No. The concept of human development is much broader than what can be captured by the HDI, or by any other composite index in the Human Development Report (Inequality-adjusted HDI, Gender development index, Gender Inequality Index and Multidimensional Poverty Index). The composite indices are a focused measure of human development, zooming in on a few selected areas. A comprehensive assessment of human development requires analysis of other human development indicators and information presented in the statistical annex of the report (see the Readers guide to the Report).

Can the HDI indicators adapted to compute the HDI at the country level?

Yes, the HDI indicators can be adapted to country-specific indicators provided they meet other aspects of statistical quality. For example, some countries have used under-5 mortality rates at sub-national levels instead of life expectancies and some have used average disposable income per capita instead of GNI per capita. The HDI can also be disaggregated at sub-national level to compare levels and disparities among different subpopulations within a country, provided that appropriate data at the level of disaggregation are available or can be estimated using sound statistical methodology. The highlighting of internal disparities using HDI methodology has prompted constructive policy debates in many countries.

Why is geometric mean used for the HDI rather than the arithmetic mean?

In 2010, the geometric mean was introduced to compute the HDI. Poor performance in any dimension is directly reflected in the geometric mean. That is to say, a low achievement in one dimension is not anymore linearly compensated for by high achievement in another dimension. The geometric mean reduces the level of substitutability between dimensions and at the same time ensures that a 1 percent decline in index of, say, life expectancy has the same impact on the HDI as a 1 percent decline in education or income index. Thus, as a basis for comparisons of achievements, this method is also more respectful of the intrinsic differences across the dimensions than a simple average.

What is the effect of fixing the maximum of GNI per capita at \$75,000?

Income is instrumental to human development, but the contribution diminishes as incomes rise. Also a high income without being translated into other human development outcomes is of less relevance for human development. Fixing the maximum at \$75,000 also means that for countries with income greater than \$75,000 takes care of both these points and prevents high income to dominate the HDI value. Currently we have only 4 countries with GNI pc above the cap – Liechtenstein, Kuwait, Qatar and Singapore. The projections based on fairly realistic growth rates have shown that by 2018 not more than five countries will exceed the limit.

What is the rationale behind the minimum values for indicators?

Generally, the minimum values are set to the values that a society needs to survive over time. For life expectancy – 20 years is based on historical evidence (Maddison, 2010, and Riley, 2005), which indicates 20 years as the minimum. If a society or a subgroup of society has a life expectancy below the typical age of reproduction, that society would die out. Lower values have occurred during some crises, such as the Rwandan genocide, but these were exceptional cases that were not sustainable. See:

- Maddison, A. 2010. *Historical Statistics of World Economy: 1-2008 AD*. Paris: Organization for Economic Cooperation and Development.
- Riley, J.C. 2005. *Poverty and Life Expectancy*. Cambridge, UK: Cambridge University Press.
- Noorkbakhsh (1998). The Human Development Index: Some Technical Issues and Alternative Indices. *Journal of International Development* 10, 589-605.

For both education indicators, the minimum is set to 0 since societies can subsist without formal education. For income, it is set at \$100 per capita GNI, which is lower than the lowest value attained by any country in recent history (Zimbabwe in 2008). Should any country's per capita GNI fall close to or below \$100, the minimum will be changed accordingly.

Why is the HDI using the logarithm of income component?

In addition to capping, the income enters the HDI as a logarithmically transformed variable. The idea is to emphasize diminishing marginal utility of transforming income into human capabilities. This means that the concave logarithmic transformation brings closer the notion that an increase of GNI per capita by \$100 in a country where the average income is only \$500 has a much greater impact on the standard of living than the same \$100 increase in a country where the average income is \$5,000 or \$50,000.

Why has the principle of “diminishing returns” not been applied to other indicators?

There are arguments for and against transforming the health and education variables to account for diminishing returns. It is true that health and education are not only of intrinsic value; they, like income, are instrumental to other dimensions of human development not included in the HDI (Sen, 1999). Thus, their ability to be converted into other ends may likewise incur diminishing returns. However, the

approach taken is to value each year of age or education equally, and therefore the principle has been applied only to the income indicator.

Are the HDI dimensions weighted equally?

The HDI assigns equal weight to all three dimension indices; the two education sub-indices are also weighted equally. The choice of weights is based on the normative assumption that all human beings value three dimensions equally. Research papers that provide a statistical justification for this approach include Noorkbakhsh (1998) and Decanq and Lugo (2009). The geometric mean has more equal ranges of variation of dimension indices than the arithmetic mean - implying that the effective weighting is more equal than it was before.

Why does the HDI not include dimensions of participation, gender and equality?

As a simple summary index, the HDI is designed to reflect average achievements in three basic aspects of human development – leading a long and healthy life, being knowledgeable and enjoying a decent standard of living. Participation and other aspects of well-being are measured using a range of objective and subjective indicators and are discussed in the Report. Measurement issues related to these aspects of human development demonstrate the conceptual and methodological challenges that need to be further addressed.

What are the criteria for a country to be included in the HDI?

The Human Development Report Office strives to include as many UN member countries as possible in the HDI. To include a country in the HDI we need recent, reliable and comparable data for all three dimensions of the Index. For a country to be included, statistics should ideally be available from the relevant international data agencies.