Economics

These Are the World's Happiest (and Most Miserable) Countries

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Finland has topped a global happiness ranking for the second year in a row.

It beat Nordic peers Denmark, Norway and Iceland in a ranking of 156 countries by the United Nations Sustainable Development Solutions Network.

Happiness Scoreboard

The gap between the top and bottom countries is wide

Source: World Happiness Report

The ranking saw the U.S. drop one place, to 19th, while people in South Sudan were the least happy.

The results are based on an average of three years of surveys taken by Gallup between 2016 and 2018 and include factors such as gross domestic product, social support from friends and family, healthy life expectancy, freedom to make life choices, generosity, perceived corruption and recent emotions -- both happy and sad.

According to the report published on Wednesday, Finland has witnessed modest but steady gains since 2014, and the country is now "significantly ahead" of other countries in the top 10, the researchers said.

The data "offer the world's governments and individuals the opportunity to rethink public policies as well as individual life choices, to raise happiness and well-being," said Jeffrey Sachs, director of the Sustainable Development Solutions Network. "We are in an era of rising tensions and negative emotions and these findings point to underlying challenges that need to be addressed."

Country (region)
Name of the country.

Ladder
Cantril Ladder is a measure of life satisfaction.

SD of Ladder
Standard deviation of the ladder.

Positive affect
Measure of positive emotion.

Negative affect
Measure of negative emotion.

Social support
The extent to which Social support contributed to the calculation of the Happiness Score.

Freedom
The extent to which Freedom contributed to the calculation of the Happiness Score.

Corruption
The extent to which Perception of Corruption contributes to Happiness Score.

Generosity
The extent to which Generosity contributed to the calculation of the Happiness Score.

Log of GDP per capita
The extent to which GDP contributes to the calculation of the Happiness Score.

Healthy life expectancy
The extent to which Life expectancy contributed to the calculation of the Happiness Score.

The World Happiness Report is a landmark survey of the state of global happiness that ranks 156 countries by how happy their citizens perceive themselves to be. The report is produced by the United Nations Sustainable Development Solutions Network in partnership with the Ernesto Illy Foundation.

The World Happiness Report was written by a group of independent experts acting in their personal capacities. Any views expressed in this report do not necessarily reflect the views of any organization, agency or program of the United Nations

Technical Box 1: Detailed information about each of the predictors in Table 2.1

1. GDP per capita is in terms of Purchasing Power Parity (PPP) adjusted to constant 2011 international dollars, taken from the World Development Indicators (WDI) released by the World Bank on November 14, 2018. See Statistical Appendix 1 for more details. GDP data for 2018 are not yet available, so we extend the GDP time series from 2017 to 2018 using country-specific forecasts of real GDP growth from the OECD Economic Outlook No. 104 (Edition November 2018) and the World Bank's Global Economic Prospects (Last Updated: 06/07/2018), after adjustment for population growth. The equation uses the natural log of GDP per capita, as this form fits the data significantly better than GDP per capita.
2. The time series of healthy life expectancy at birth are constructed based on data from the World Health Organization (WHO) Global Health Observatory data repository, with data available for 2005, 2010, 2015, and 2016. To match this report's sample period, interpolation and extrapolation are used. See Statistical Appendix 1 for more details.
3. Social support is the national average of the binary responses (either 0 or 1) to the Gallup World Poll (GWP) question "If you were in trouble, do you have relatives or friends you can count on to help you whenever you need them, or not?"
4. Freedom to make life choices is the national average of binary responses to the GWP question "Are you satisfied or dissatisfied with your freedom to choose what you do with your life?"
5. Generosity is the residual of regressing the national average of GWP responses to the question "Have you donated money to a charity in the past month?" on GDP per capita.
6. Perceptions of corruption are the average of binary answers to two GWP questions: "Is corruption widespread throughout the government or not?" and "Is corruption widespread within businesses or not?" Where data for government corruption are missing, the perception of business corruption is used as the overall corruption-perception measure.
7. Positive affect is defined as the average of previous-day affect measures for happiness, laughter, and enjoyment for GWP waves 3-7 (years 2008 to 2012, and some in 2013). It is defined as the average of laughter and enjoyment for other waves where the happiness question was not asked. The general form for the affect questions is: Did you experience the following feelings during a lot of the day yesterday? See pp. 1-2 of Statistical Appendix 1 for more details.
8. Negative affect is defined as the average of previous-day affect measures for worry, sadness, and anger for all waves.

Table 2.1: Regressions to Explain Average Happiness across Countries (Pooled OLS)

	Dependent Variable			
Independent Variable	Cantril Ladder (0-10)	Positive Affect (0-1)	Negative Affect (0-1)	Cantril Ladder (0-10)
Log GDP per capita	0.318	-.011	0.008	0.338
	(0.066)***	(0.01)	(0.008)	(0.065)***
Social support	2.422	0.253	-.313	1.977
	(0.381)***	(0.05)***	(0.051)***	(0.397)***
Healthy life expectancy at birth	0.033	0.001	0.002	0.03
	(0.01)***	(0.001)	(0.001)	(0.01)***
Freedom to make life choices	1.164	0.352	-.072	0.461
	(0.3)***	(0.04)***	(0.041)*	(0.287)
Generosity	0.635	0.137	0.008	0.351
	(0.277)**	(0.03)***	(0.028)	(0.279)
Perceptions of corruption	-.540	0.025	0.094	-.612
	(0.294)*	(0.027)	(0.024)***	(0.287)**
Positive affect				2.063
				(0.384)***
Negative affect				0.242
				(0.429)
Year fixed effects	Included	Included	Included	Included
Number of countries	157	157	157	157
Number of obs.	1,516	1,513	1,515	1,512
Adjusted R-squared	0.74	0.476	0.27	0.76

Notes: This is a pooled OLS regression for a tattered panel explaining annual national average Cantril ladder responses from all available surveys from 2005 to 2018. See Technical Box 1 for detailed information about each of the predictors. Coefficients are reported with robust standard errors clustered by country in parentheses. ***, **, and * indicate significance at the 1, 5 and 10 percent levels respectively.

FAQ

What is the original source of the data for Figure 2.7? How are the rankings calculated?

The rankings in Figure 2.7 of World Happiness Report 2019 use data that come from the Gallup World Poll (for more information see the Gallup World Poll methodology). The rankings are based on answers to the main life evaluation question asked in the poll. This is called the Cantril ladder: it asks respondents to think of a ladder, with the best possible life for them being a 10, and the worst possible life being a 0. They are then asked to rate their own current lives on that 0 to 10 scale. The rankings are from nationally representative samples, for the years 2016-2018. They are based entirely on the survey scores, using the Gallup weights to make the estimates representative. The sub-bars show the estimated extent to which each of six factors - levels of GDP, life expectancy, generosity, social support, freedom, and corruption - contribute to making life evaluations higher in each country than they are in Dystopia, a hypothetical country that has values equal to the world's lowest national averages for each of the six factors (see FAQs: What is Dystopia?). The sub-bars have no impact on the total score reported for each country, but instead are just a way of explaining for each country the implications of the model estimated in Table 2.1. People often ask why some countries rank higher than others - the sub-bars (including the residuals, which show what is not explained) are an attempt to provide an answer to that question.

What is your sample size for figure 2.7?

We use the most recent years in order to provide an up-to-date measure, and to measure changes over time. We combine data from the years 2016-2018 to make the sample size large enough to reduce the random sampling errors. (The horizontal lines at the right-hand end of each of the main bars show the 95% confidence interval for the estimate.) The typical annual sample is 1,000 people. So if a country had surveys in each year, then the sample size would be 3,000 people. However, there are many countries that have not had annual surveys. If a country was not surveyed in any year between 2016 and 2018, we use their 2015 surveys if available; there are 3 such countries out of a total of 156. In no case do we use data from surveys prior to 2015. Tables 1-3 of the online statistical appendix show the sample size for each country in each year.

Is this sample size really big enough to calculate rankings?

A sample size of 2,000 to 3,000 is large enough to give a fairly good estimate at the national level. This is confirmed by the 95% confidence intervals shown at the right-hand end of each country bar.

What is the confidence interval?

The confidence intervals, as shown by the horizontal lines at the right-hand end of the country bars, show the range of values within which there is a 95% likelihood of the population mean being located. These are useful to readers wishing to see whether countries differ significantly in the average life evaluations.

Where do the sub-bars come from for each of the six explanatory factors?

The sub-bars show, tentatively, what share of a country's overall score can be explained by each of the six factors in Table 2.1. The sub-bars are calculated by multiplying average national data for the period 2016-2018 for each of the six factors (minus the value of that variable in Dystopia) by the coefficient on this variable in the first equation of Table 2.1. This product then shows the average amount by which the overall happiness score (the life evaluation) is higher in a country because they perform better than Dystopia on that variable.

To describe an example, let's look at the variable of life expectancy in the case of Brazil. First, we calculate the number of years by which healthy life expectancy in Brazil exceeds that of the country with the lowest life

expectancy. Then, we multiply this number of years by the estimated Table 2.1 coefficient for life expectancy. This product then shows the average amount by which the overall happiness score (the life evaluation) is higher in Brazil, because life expectancy is higher there than it is in the country with the lowest life expectancy. This process is repeated for each country and for each of the six variables.

Because of the way these six bars were constructed, they will in total always be less than each country's average life evaluation. They also will not alter in any way the width of the overall life evaluation bar on which the rankings are based. The difference between what is attributed to the six factors and the total life evaluations is the sum of two parts. These are the average life evaluations in Dystopia, and each country's residual. You may find the following FAQs useful: What is Dystopia? What are the residuals?

What is Dystopia?

Dystopia is an imaginary country that has the world's least-happy people. The purpose in establishing Dystopia is to have a benchmark against which all countries can be favorably compared (no country performs more poorly than Dystopia) in terms of each of the six key variables, thus allowing each sub-bar to be of positive (or zero, in six instances) width. The lowest scores observed for the six key variables, therefore, characterize Dystopia. Since life would be very unpleasant in a country with the world's lowest incomes, lowest life expectancy, lowest generosity, most corruption, least freedom, and least social support, it is referred to as "Dystopia," in contrast to Utopia.

What are the residuals?

The residuals, or unexplained components, differ for each country, reflecting the extent to which the six variables either over- or under-explain average 2016-2018 life evaluations. These residuals have an average value of approximately zero over the whole set of countries. Figure 2.7 shows the average residual for each country if the equation in Table 2.1 is applied to average 2016- 2018 data for the six variables in that country. We combine these residuals with the estimate for life evaluations in Dystopia so that the combined bar will always have positive values. As can be seen in Figure 2.7, although some life evaluation residuals are quite large, occasionally exceeding one point on the scale from 0 to 10, they are always much smaller than the calculated value in Dystopia, where the average life is rated at 1.88 on the 0 to 10 scale. Table 7 of the online Statistical Appendix 1 for Chapter 2 puts the Dystopia plus residual block at the left side, and also draws the Dystopia line, making it easy to compare the signs and sizes of the residuals in different countries.

Why do we use these six factors to explain life evaluations?

The variables used reflect what has been broadly found in the research literature to be important in explaining national-level differences in life evaluations. Some important variables, such as unemployment or inequality, do not appear because comparable international data are not yet available for the full sample of countries. The variables are intended to illustrate important lines of correlation rather than to reflect clean causal estimates, since some of the data are drawn from the same survey sources, some are correlated with each other (or with other important factors for which we do not have measures), and in several instances there are likely to be two-way relations between life evaluations and the chosen variables (for example, healthy people are overall happier, but as Chapter 4 in the World Happiness Report 2013 demonstrated, happier people are overall healthier). In Statistical Appendix 1 of World Happiness Report 2018, we assessed the possible importance of using explanatory data from the same people whose life evaluations are being explained. We did this by randomly dividing the samples into two groups, and using the average values for .e.g. freedom gleaned from one group to explain the life evaluations of the other group. This lowered the effects, but only very slightly (e.g. 2% to 3%), assuring us that using data from the same individuals is not seriously affecting the results.

OECD

http://www.oecdbetterlifeindex.org/#/11111111111

https://stats.oecd.org/Index.aspx?DataSetCode=BLI

https://stats.oecd.org/

WORD BANK

https://databank.worldbank.org/indicator/SP.POP.TOTL/1ff4a498/Popular-Indicators#

ETC

https://www.who.int/mental_health/prevention/suicide/countrydata/en/

Table 2.2: Happiness League Tables

Country (region)	Ladder	SD of ladder	Positive affect	Negative affect	Social support	Freedom	Corruption	Generosity	Log of GDP per capita	Healthy life expectancy
OECD										
Finland	1	4	41	10	2	5	4	47	22	27
Denmark	2	13	24	26	4	6	3	22	14	23
Norway	3	8	16	29	3	3	8	11	7	12
Iceland	4	9	3	3	1	7	45	3	15	13
Netherlands	5	1	12	25	15	19	12	7	12	18
Switzerland	6	11	44	21	13	11	7	16	8	4
Sweden	7	18	34	8	25	10	6	17	13	17
New Zealand	8	15	22	12	5	8	5	8	26	14
Canada	9	23	18	49	20	9	11	14	19	8
Austria	10	10	64	24	31	26	19	25	16	15
Australia	11	26	47	37	7	17	13	6	18	10
Israel	13	14	104	69	38	93	74	24	31	11
Luxembourg	14	3	62	19	27	28	9	30	2	16
United Kingdom	15	16	52	42	9	63	15	4	23	24
Ireland	16	34	33	32	6	33	10	9	6	20
Germany	17	17	65	30	39	44	17	19	17	25
Belgium	18	7	57	53	22	53	20	44	21	26
United States	19	49	35	70	37	62	42	12	10	39
Czech Republic	20	20	74	22	24	58	121	117	32	31
Mexico	23	76	6	40	67	71	87	120	57	46
France	24	19	56	66	32	69	21	68	25	5
Chile	26	61	15	78	58	98	99	45	49	30
Spain	30	21	107	107	26	95	78	50	30	3
Italy	36	31	99	123	23	132	128	48	29	7
Slovakia	38	39	53	47	21	108	142	70	35	38
Poland	40	28	76	33	44	52	108	77	41	36
Lithuania	42	55	138	41	17	122	113	124	36	62
Slovenia	44	54	114	71	14	13	97	54	34	29
Latvia	53	30	119	38	34	126	92	105	43	68
South Korea	54	57	101	45	91	144	100	40	27	9
Estonia	55	32	50	6	12	45	30	83	37	41
Japan	58	43	73	14	50	64	39	92	24	2
Hungary	62	36	86	31	51	138	140	100	42	56
Portugal	66	73	97	100	47	37	135	122	39	22
Turkey	79	58	154	121	61	140	50	98	44	69
Greece	82	87	102	94	102	150	123	152	46	21