



LOGO

## Beyond GDP

Measuring progress, wealth and wellbeing

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# HAPPY LIFE YEARS

### Short description

A measure of how long and happy people live in nations, which is the most comprehensive indicator of apparent quality of life.

### Methodology (max. 3 lines):

Survey data on average happiness in nations are combined with register based estimates of life-expectancy

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Link: [http://worlddatabaseofhappiness.eur.nl/hap\\_nat/findingreports/RankReport\\_HappyLifeYears.php](http://worlddatabaseofhappiness.eur.nl/hap_nat/findingreports/RankReport_HappyLifeYears.php)

**Periodicity:** Updated every 5 years. Current coverage 158 nations, first version in 1990 covered 45 nations

**Last Updated:** July 2018

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### Need for a measure of quality of life in nations

How to assess how well a nation is doing? One way is to look at the quality-of-life of the people who live there. This view is gaining prominence, both among policy makers and the general public. This begs the question what quality-of-life is precisely and how that can be measured comprehensively.

### **Assumed quality-of-life**

Quality-of-life in nations is commonly measured by taking stock of conditions that are believed to make for a better life, such as economic affluence, full employment and education. Measures of such conditions are added in an index, like the Human Development Index (HDI) or the Index of Social Progress (ISP).

Items in such indexes are typically things that are on the political agenda and as such these indexes inform about progress on the way chosen. Yet these indexes do not tell us whether we are on the right track, that is, whether these policy achievements really improved the lives of citizens. Still another problem is that such measures typically assume that more is better and do not inform us about an optimum, e.g. how many years of education is optimal for a good life.

### **Apparent quality of life**

Another approach is to assess how well people thrive in a society. The focus is then on the outcomes of life, rather than on the preconditions. How well an organism thrives is typically reflected in its lifetime. In higher animals, thriving reflects also in affective experience and humans are moreover able to estimate how well they have felt over longer periods of time. These estimates of how we feel most of the time are at the basis of the appraisal of how happy we are. Hence in the case of humans, thriving reflects both in how long and how happy they live.

### **Measure of Happy Life Years**

How can we assess how long and happy people live in a country? This can be done combining data on average happiness assessed in surveys of the general population with data on longevity taken from civil registration.

### *Happiness*

Happiness is how much one likes the life one lives. Since this is something people have in mind, it can be measured using single direct questions. An example of a survey question on happiness is:

Taking all together, how satisfied or dissatisfied are you currently with your life as a whole?

1 2 3 4 5 6 7 8 9 10  
Dissatisfied Satisfied

### Longevity

How long people will live in a country can be estimated on the basis of longevity of people who have passed away. Statisticians call this life expectancy.

### Happy-Life-Years = Life-expectancy at birth x 0-1 happiness

Suppose that life expectancy in a country is 60 years. If everybody were perfectly happy in that country (average score 10), people would live 60 Happy Life Years in that country. If the average score is 5 the number of Happy Life Years is obviously lower, in this case  $60 \times 0,5 = 30$ . If life expectancy is also 60 years but average happiness 8, the number of happy life years is 48 ( $60 \times 0,8$ ).

### Happy Life Years in nations around 2010

<b>Top</b>		<b>Middle range</b>		<b>Bottom</b>	
> 60 years		± 40 years		<20 years	
Iceland	66,4	Iran	43,1	Benin	17,9
Denmark	66,4	Lithuania	42,1	Sierra Leone	16,2
Switzerland	66,0	Bhutan	41,0	Burundi	15,9
Canada	65,3	Pakistan	40,1	Tanzania	15,1
Norway	65,0	Latvia	39,8	Togo	14,8

Full list of 158 nations available at:

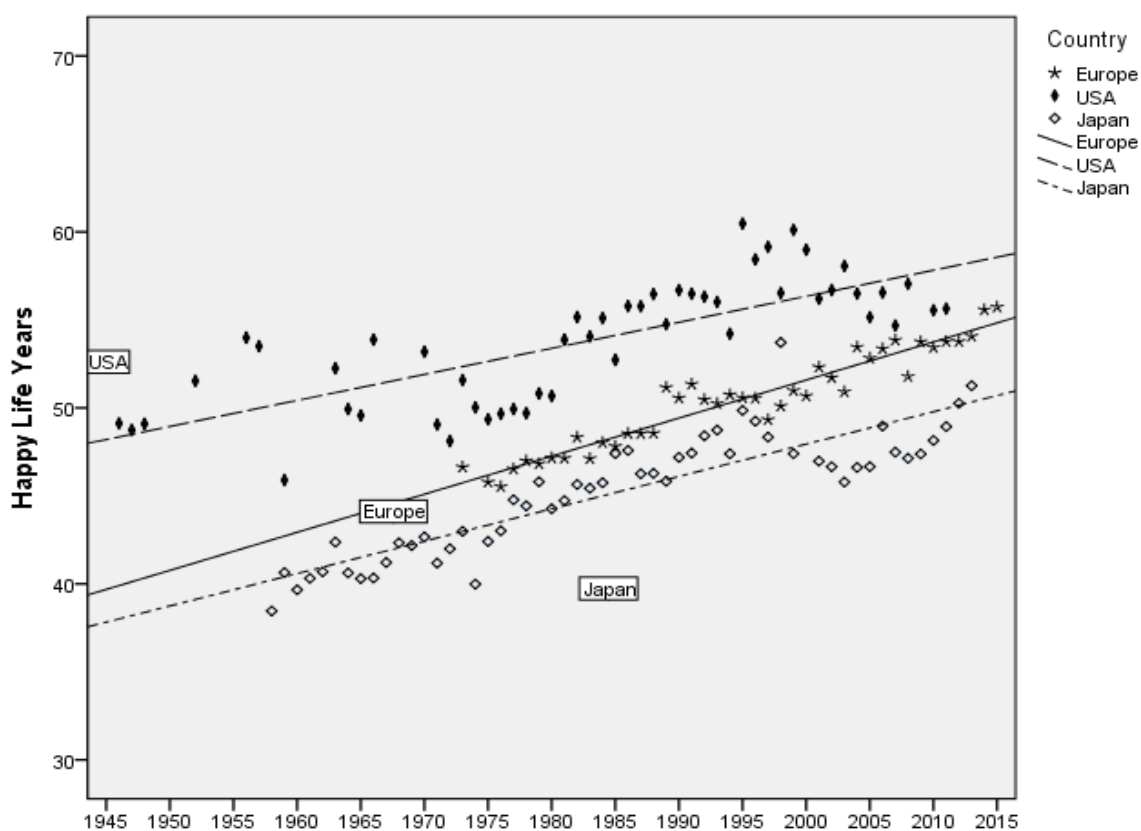
[http://worlddatabaseofhappiness.eur.nl/hap\\_nat/findingreports/RankReport\\_HappyLifeYears.php](http://worlddatabaseofhappiness.eur.nl/hap_nat/findingreports/RankReport_HappyLifeYears.php)

### Large differences in Happy Life Years across nations

Theoretically, this indicator has a broad variation; HLY is zero if nobody can live in the country, and will be endless if society is ideal and its inhabitants immortal. The practical range is about 50 years, the highest number of Happy Life Years is observed in Iceland (66,4) and the lowest in Togo (14.8).

## Gains in Happy Life Years over time in EU8, Japan and the USA

Happiness has risen in slightly in most developed nations since the second half of the 20<sup>th</sup> century and life-expectancy has grown substantially. As a result, the number of Happy Life Years has grown remarkably.



Trend lines for 16 nation available at: [http://worlddatabaseofhappiness.eur.nl/hap\\_nat/finding-reports/TrendReport\\_HappyLifeYears.pdf](http://worlddatabaseofhappiness.eur.nl/hap_nat/finding-reports/TrendReport_HappyLifeYears.pdf)

### **Happy Life Years sensitive for things that policy makers can improve**

There is a system in the differences in Happy Life Years across nations. Most of the large differences in HLY across nations can be explained by societal variation in economic affluence, freedom, equality, brotherhood and justice. The table below presents correlations with indicators of these matters.

All variables in the table are things over which policy makers have some control. So the data leave no doubt that policy matters for final quality of life and also indicate what matters most. Economic affluence still stands out as a major factor, but 'rule of law' appears to be equally important.

Yet not everything deemed desirable appears to go with more happy life years. For instance, income-inequality rather appears to be slightly positively related to HLY. This illustrates the above difference between assumed quality of life

## Societal Qualities and Happy-Life-Years in 158 nations around 2010

Condition in nation	Correlation with HLY		N
	Zero order	Wealth Controlled	
<b>Wealth</b>			
• Purchasing power per head	+0.23	-	157
<b>Freedom</b>			
• Economic	+0.22	+0.12	145
• Political	+0.21	+0.15	154
• Personal	+0.18	+0.10	144
<b>Equality</b>			
• Inequality in incomes	-0.08	+0.00	128
• Discrimination of women	-0.70	-0.73	130
• Inequality in happiness (SD)	-0.39	-0.25	136
<b>Brotherhood</b>			
• Trust in people	+0.47	+0.42	70
• Voluntary work	+0.08	+0.06	147
• Social security	+0.46	+0.41	74
<b>Justice</b>			
• Rule of law	+0.29	+0.19	143
• Respect of civil rights	+0.14	+0.07	127
• Corruption	-0.34	-0.26	152
<b>Explained variance</b>	<b>78 %</b>		

Source: World Database of Happiness, Data file States of Nations, version 2018

## Useful links

Veenhoven, R. (1996)

[Happy life-expectancy: A comprehensive measure of quality-of-life in nations](#)

Social Indicators Research, 39: 1-58

Veenhoven, R. (2005d)

[Apparent quality of life: How long and happy people live](#)

Social Indicators Research, 71: 61-86

Veenhoven, R. (2017)

[Happy life years in 158 nations 2005-2014. How long and happy people live](#)

World Database of Happiness, Collection distributional findings on Happiness in Nations

*World Database of Happiness, Archive of research findings on subjective enjoyment of life*  
Erasmus University Rotterdam, The Netherlands, Erasmus Happiness Economics Research Organization EHERO

Available at: <http://worlddatabaseofhappiness.eur.nl>