

INEQUALITIES IN HEALTH AND WELL-BEING

Week 3

Health status

- Health status includes physical, psychical and social characteristics of quality of life.
- Evaluation of health status of the population is mainly based on specific information systems, registers and reports on activity of health establishments.
- Basic information on health status is reported by primary health care providers.

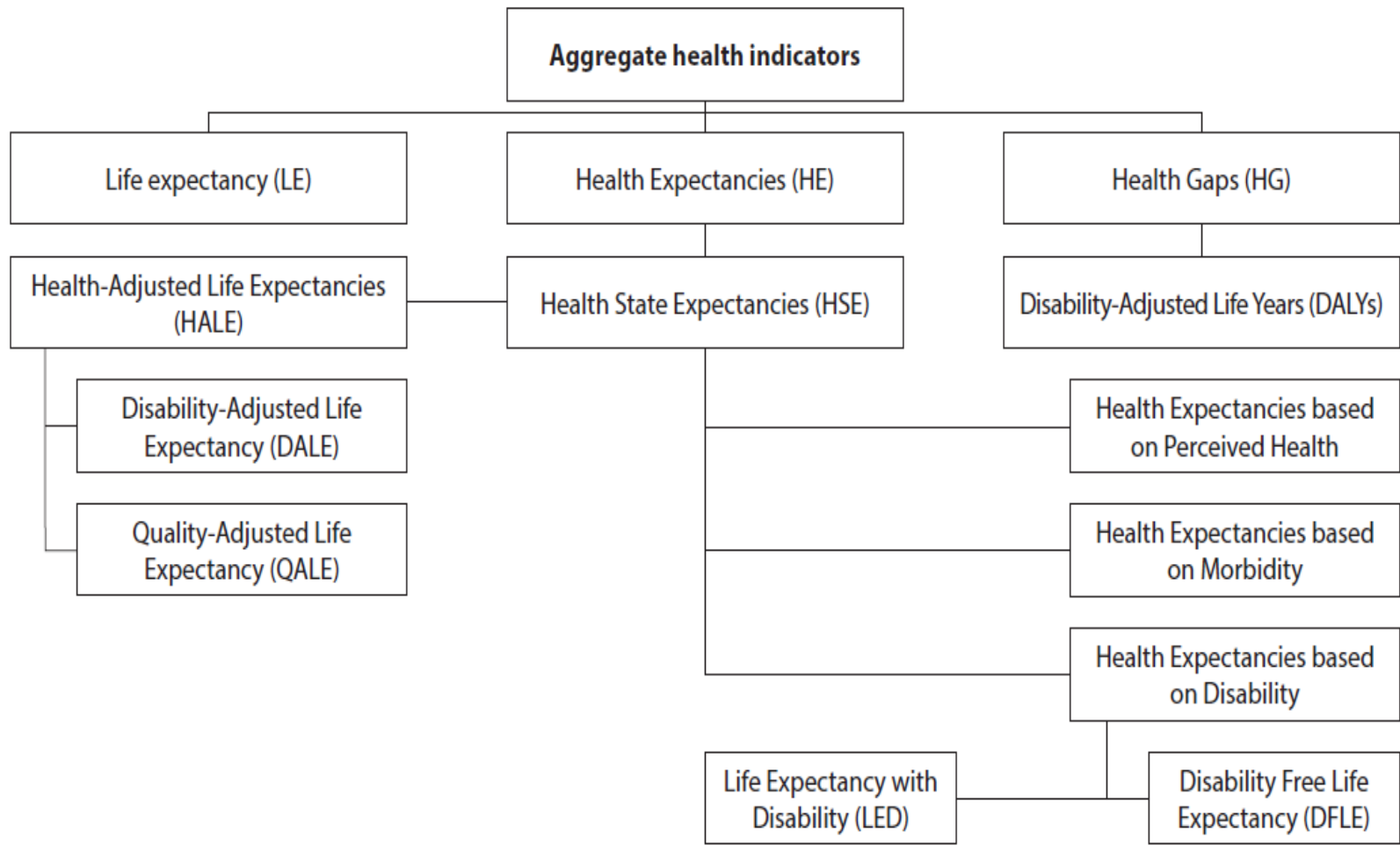
Global health

- **Social epidemiology** is the study of the causes and distribution of diseases.
- It can reveal how social problems are connected to the health within different populations.

How does health differ around the world?

Health and its measurement

- Where? - in social and medical sciences
- „Hard“ and „soft“ indicators
- Sociology – „soft“ – concept of health (*self-rated health*)



Source: Czech Demographic Society (2010): English and Czech terms for summary indicators of population health: Basic overview.

Subjective measurement of health – historical overview

- Up to the 90s XX century – objective indicators.
- Subjective measurement of health appears in connection with research focused on *quality of life* and/or *subjective well-being*.

Concept of health

Multidimensional:

1. Objective or *biological health*
2. Subjective or *lived health (SRH)*

Different ways to measure SRH

2 ways:

- the individual evaluates his own health
- the health status is assessed by another, "third" person.

In social research - self-rated health - SRH.

Conceptualization of SRH

- Two basic categories according to the number of internal dimensions:

1. *one-dimensional concepts*

2. *multi-dimensional concepts*

Operacionalization in survey

- question: "*Would you say that your health is...?*"

For evaluation:

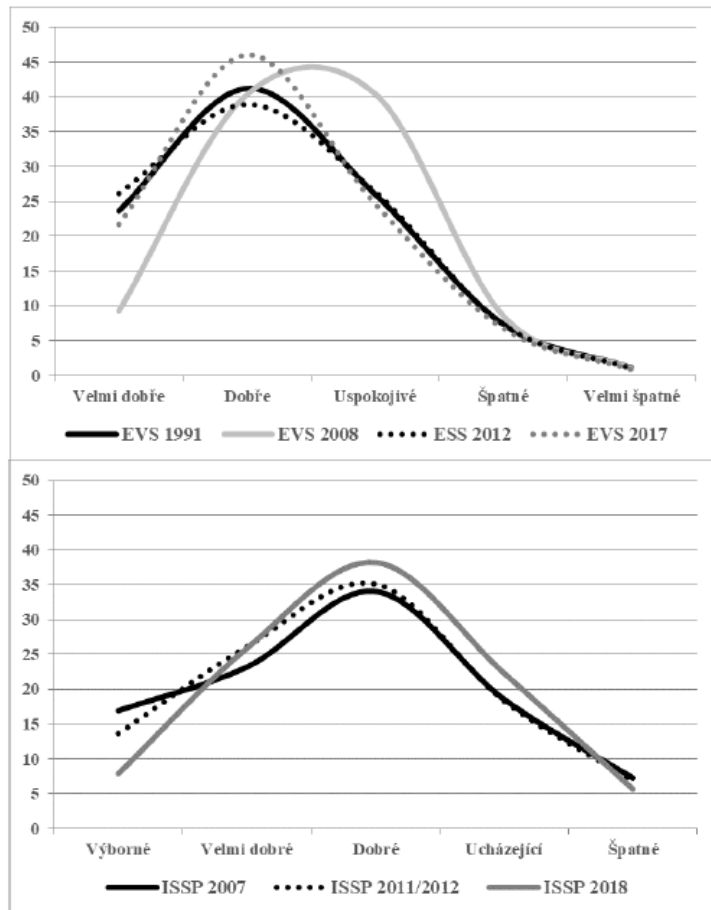
- most often similar to the so-called Likert scale: "very good; good; average; poorly; very bad"
- an interval scale ranging from 1 to 100.
- Less often - pictograms or using a "Visual Analogue Scales"

Wong-Baker **FACES**® Pain Rating Scale



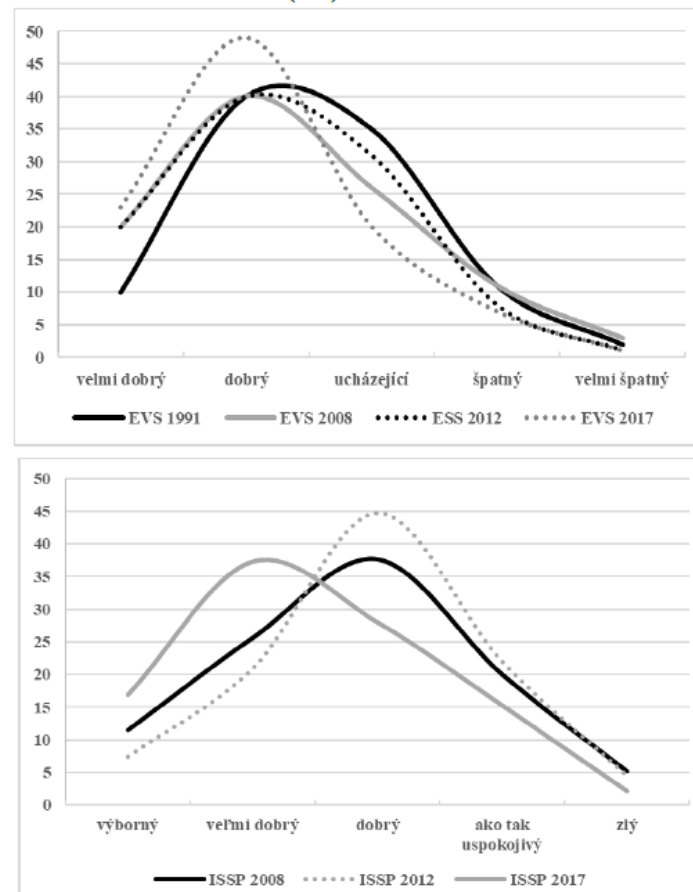
Measuring SRH by use of different scales in CR

Obrázek č. 1a: Rozložení subjektivního zdraví měřeno pomocí různých škál v ČR v období let 1991 – 2018 (v %)



Zdroj: EVS integrated 1981-2008, ESS 2012, ISSP 2007, ISSP 2011/2012, ISSP 2018, EVS 2nd release EVS Cross-Sectional Data 2018 (vlastní výpočty)

Obrázek č. 1b: Rozložení subjektivního zdraví měřeno pomocí různých škál v SR v období let 1991 – 2018 (v %)



Zdroj: EVS integrated 1981-2008, ESS 2012, ISSP 2008, ISSP 2012, ISSP 2017, EVS 2nd release EVS Cross-Sectional Data 2018 (vlastní výpočty)

Limits of SRH

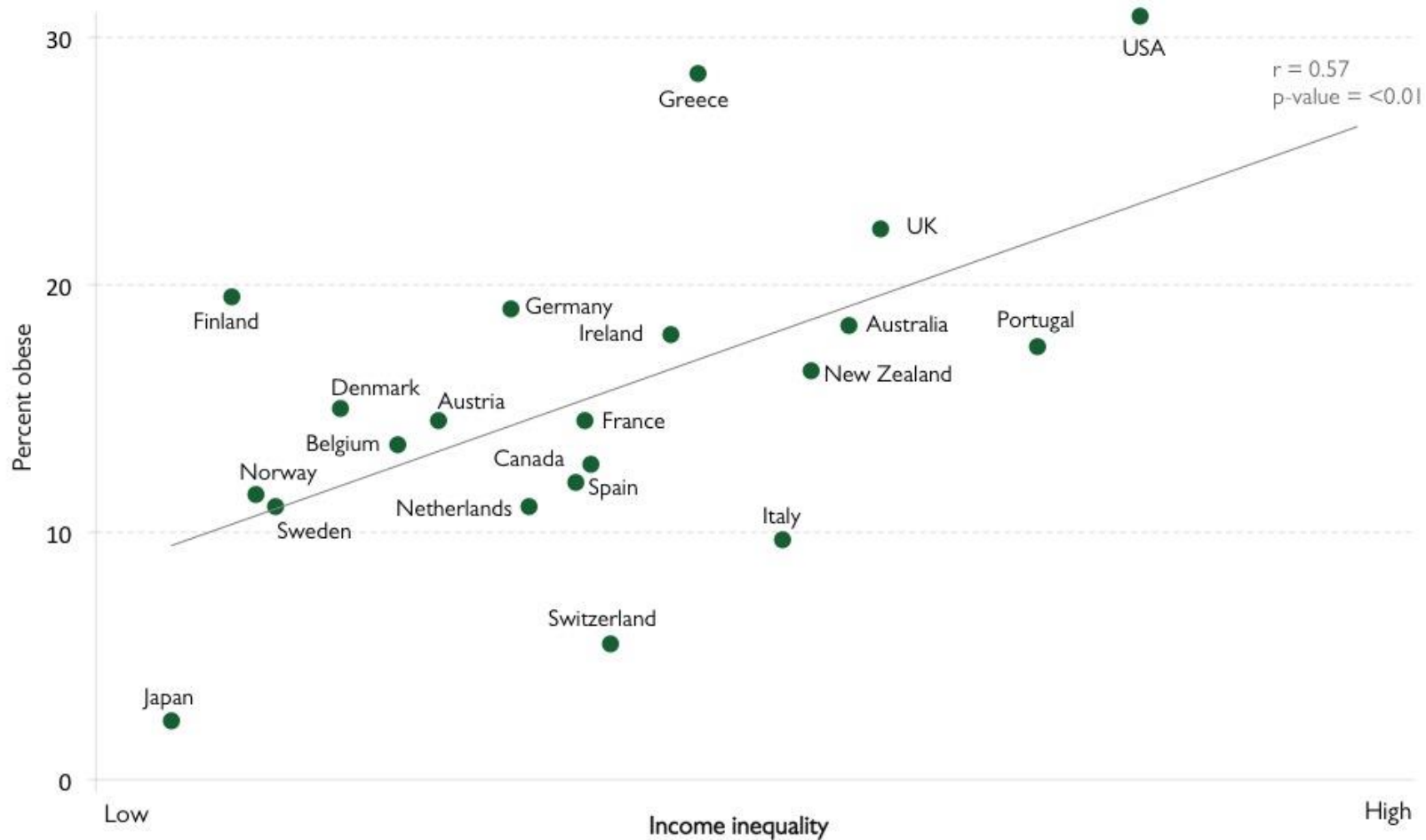
1. Different wording of questions, number of answers/options offered and the role of translation
2. Heterogeneity in reporting
3. Health optimism and pessimism

Health in high-income countries

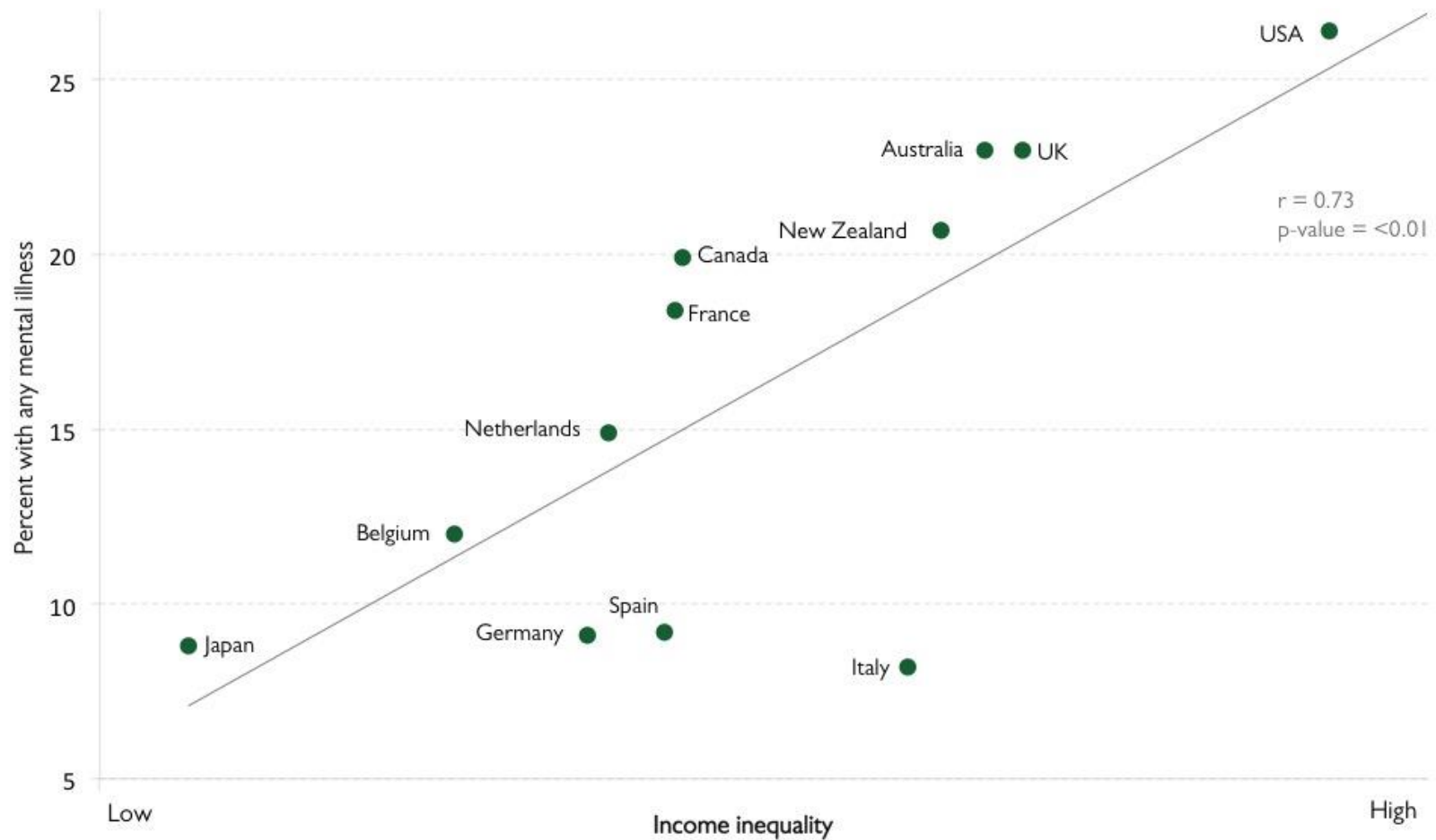
Obesity, which is on the rise in high-income nations.

- Improvements in technology and reduced family size have led to a reduction of work to be done in household production.
- Unhealthy market goods are replacing home-produced goods.
- Leisure activities are growing more sedentary.
- More workers are shifting from active work (agriculture and manufacturing) to service industries.
- Increased access to passive transportation has led to more driving and less walking.

More adults are obese in more unequal rich countries



The prevalence of mental illness is higher in more unequal rich countries

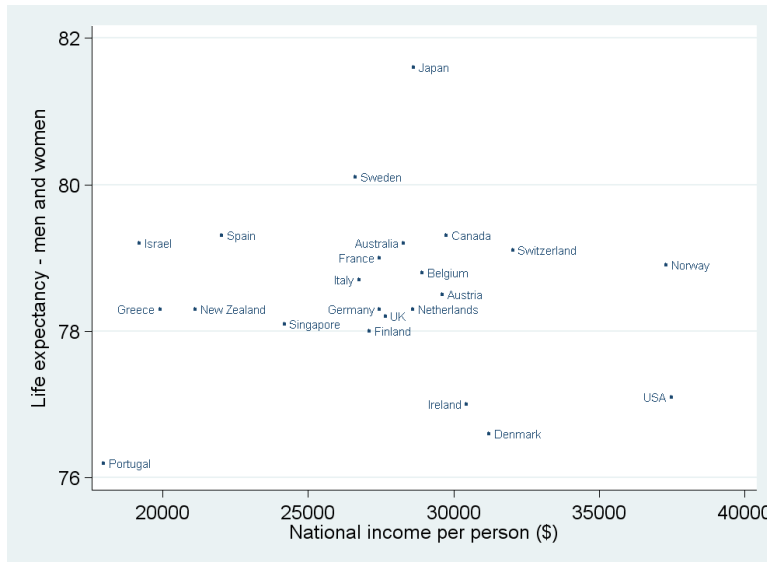


Health in low-income countries

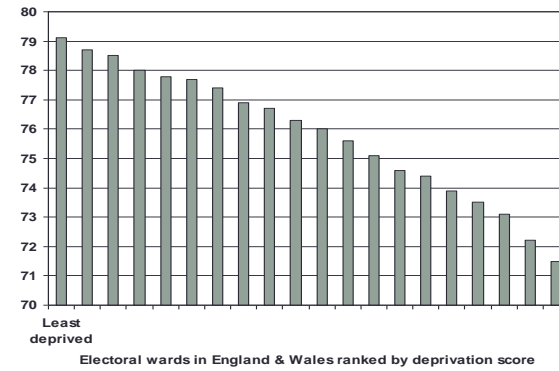
- Problems such as infectious disease, high infant mortality rates, scarce medical personnel, and inadequate water and sewer systems.
- The most frequent causes of death for children under five were pneumonia and diarrheal diseases.
- The availability of doctors and nurses in low-income countries is one-tenth that of nations with a high income.

Health and income

Between (rich) societies



Within societies



Most deprived

Source: Wilkinson & Pickett, *The Spirit Level* (2009)

- **Predominantly female-bias:**

- 1) cultural norms
- 2) legal codes

Developing countries ⇒ more vulnerable to suffering from health problems, less able to have access and control over healthcare resources.

- **Disparities against males:**

- 1) armed conflicts
- 2) drug cartels
- 3) alcohol consumption and psychological stress

Health status and women

- Women live longer than men, but they tend to be “sicker” than men (Waldron, 1994, 2002).
- When social discrimination decreases, women’s life expectancy increases (Waldron, 1983, 2001)
- Women show healthier behaviors than men do across a wide range of activities ⇒ **For example????**

Health status and men

- Behavioral factors are fundamental causes in the etiology of gender differences in health and illness ⇒ **Macho's self-concept**
- In general, men tend to engage in more health-risk behaviors than women ⇒ **For example????**
- Fewer men than women engage in positive or preventive health behaviors.
- Men have more toxic/death occupational exposure.

Health and social problems are worse in more unequal countries

Index of:

- Life expectancy
- Math & Literacy
- Infant mortality
- Homicides
- Imprisonment
- Teenage births
- Trust
- Obesity
- Mental illness – incl. drug & alcohol addiction
- Social mobility



It doesn't matter *how* you get to more income equality:

Japan: incomes are not that far apart before taxes – small welfare state.

Sweden: incomes differ widely, taxes are used to redistribute the income - large welfare state.

Source: Wilkinson & Pickett, *The Spirit Level* (2009)

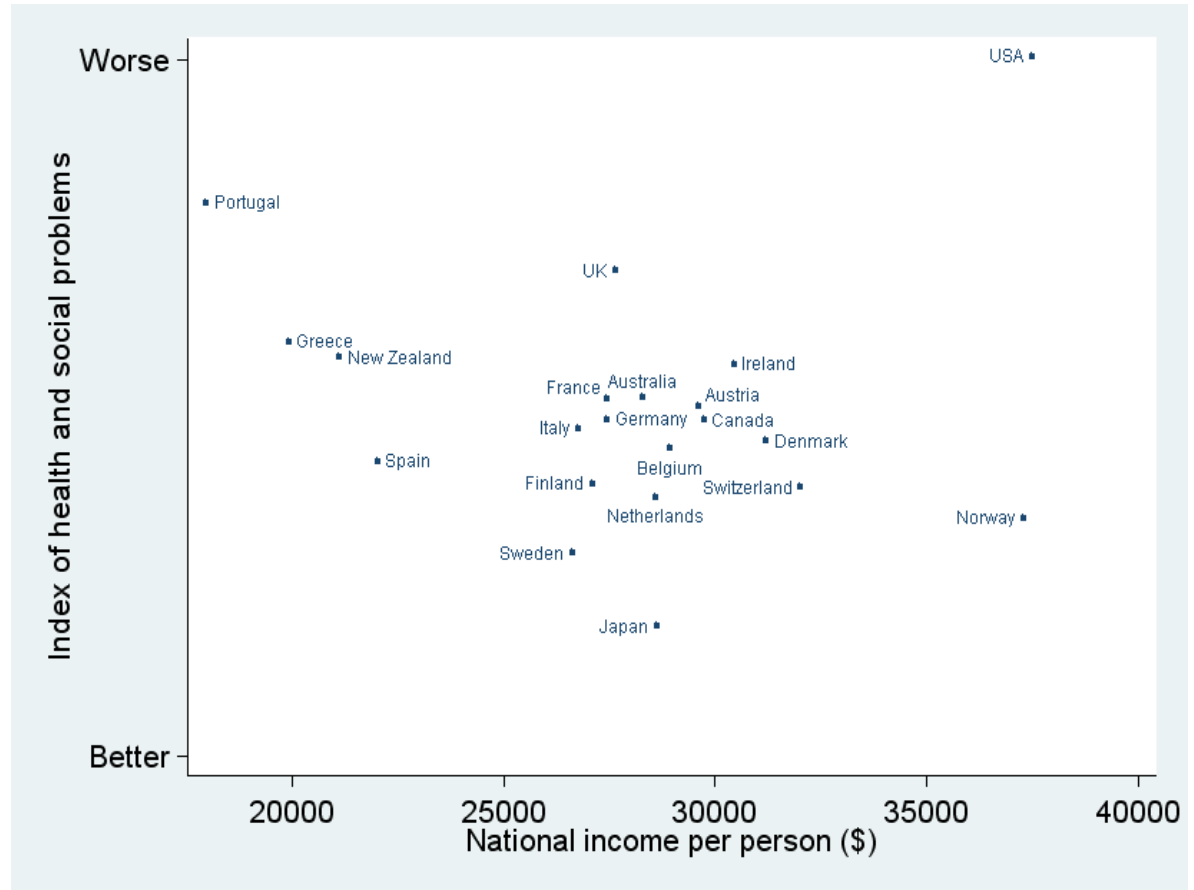
www.equalitytrust.org.uk

The Equality Trust

Health and social problems are not related to average income in rich countries

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Source: Wilkinson & Pickett, *The Spirit Level* (2009)

Well-being

- An increasing interest in quality of life and life satisfaction.
- Subjective wellbeing (SWB) \Rightarrow a person's evaluation of his or her life, including both *cognitive judgments* of life satisfaction and *affective evaluations* of moods.

Well-being in an aggregate perspective – 1.

- Well-being = Gross Domestic Product (GDP)
- Is is a valid measurement tool?

WHY???

- GDP reflects the economic dimension only.
- Determinants that cannot be traded on market.

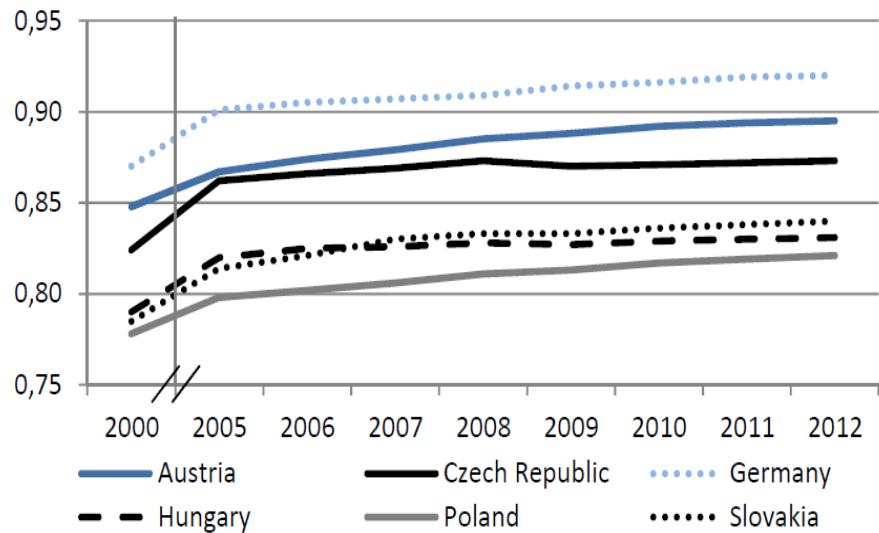
Well-being in an aggregate perspective – 2.

- *Well-being = a multidimensional phenomenon*
- Quantification by aggregation = **weighting scheme**
- No clear consensus can be found in existing literature on the issue of weighting.

Well-being in an aggregate perspective – 3.

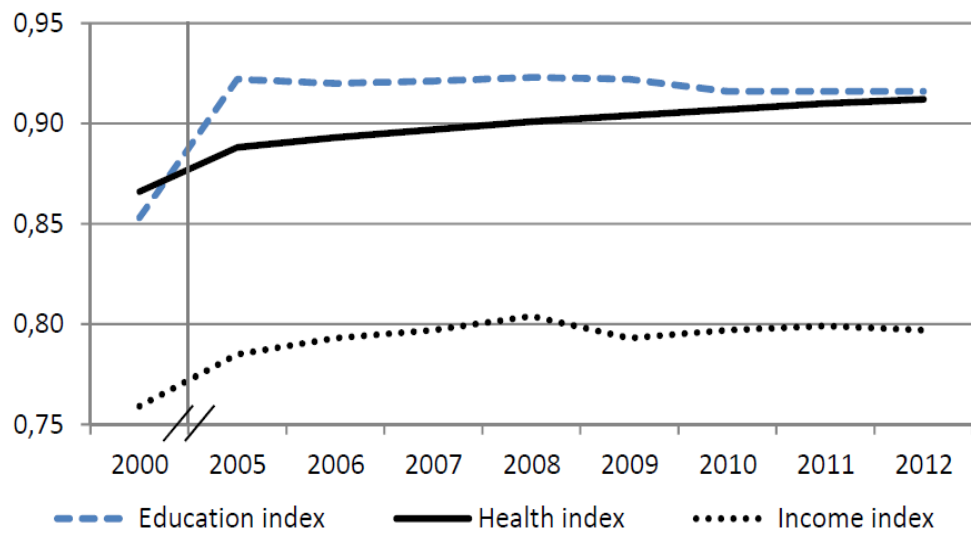
- *Human Development Index (HDI)* = first synthetic well-being metrics designed to overcome the GDP-related issues.
- Three dimensions:
 1. “Long and healthy life”
 2. “Education”
 3. “Decent standard of living”
- A new well-being measure = *Inequality-adjusted HDI (IHDI)*.

Figure 1 Human Development Index, 2000-2012



Source: UNDP

Figure 2 Human Development Index Components in the Czech Republic, 2000-2012



Source: UNDP

Well-being in an aggregate perspective – 4.

Subjective measurement of well-being:

“All things considered, how satisfied are you with your life as a whole these days?”

Table 2 Life Satisfaction (Cantril Ladder, mean value) in 2006, 2010, and 2012

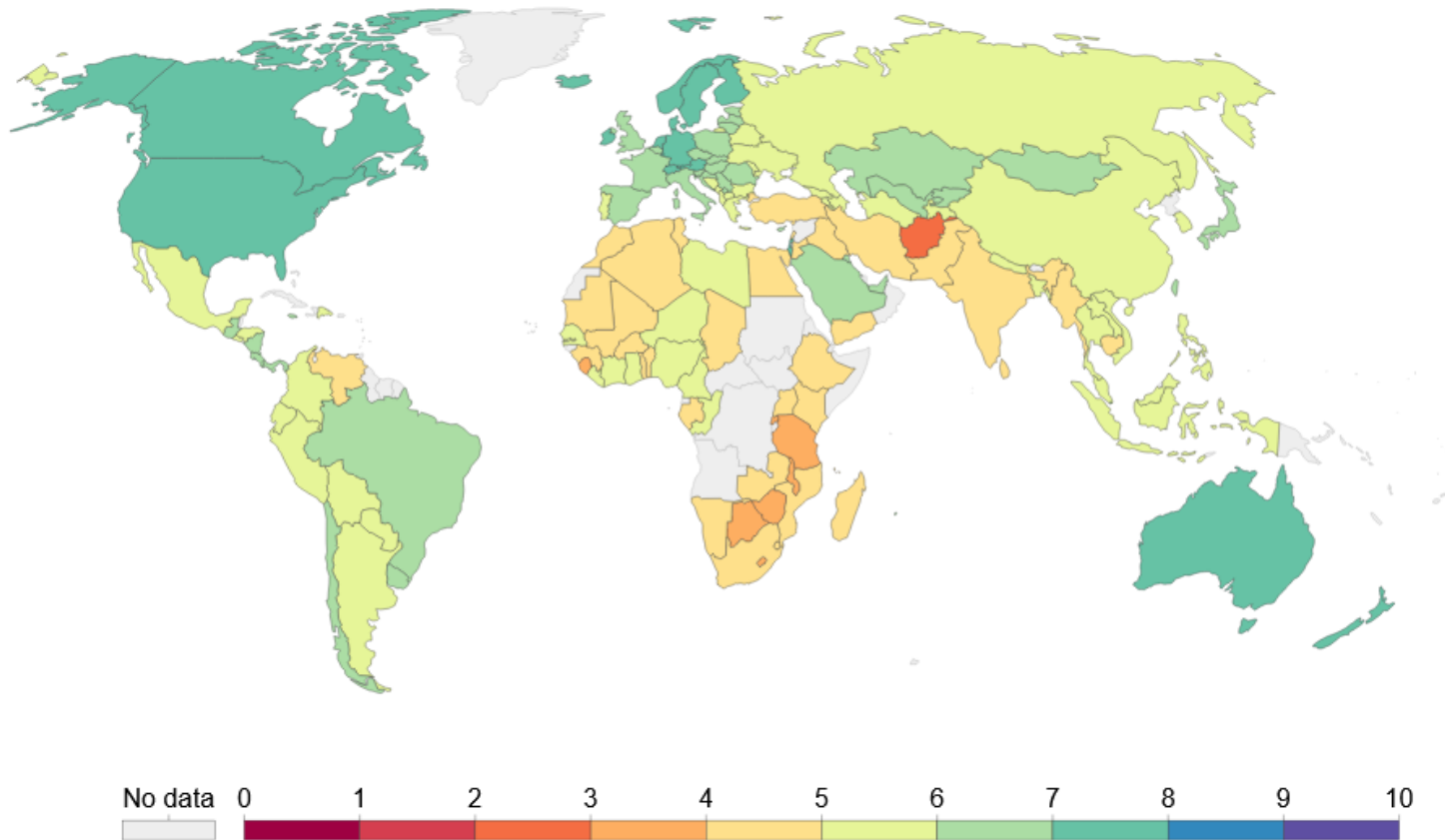
	2006	2010	2012
Austria	7.1	7.3	7.4
Czech Republic	6.4	6.2	6.3
Germany	6.6	6.7	6.7
Hungary	5.2	4.7	4.7
Poland	5.9	5.8	5.9
Slovakia	5.2	6.1	5.9

Note: The Cantril Ladder is measured on a scale from 0 to 10.

Source: Gallup World Poll in: OECD (2013)

Self-reported Life Satisfaction, 2020

“Please imagine a ladder, with steps numbered from 0 at the bottom to 10 at the top. The top of the ladder represents the best possible life for you and the bottom of the ladder represents the worst possible life for you. On which step of the ladder would you say you personally feel you stand at this time?”



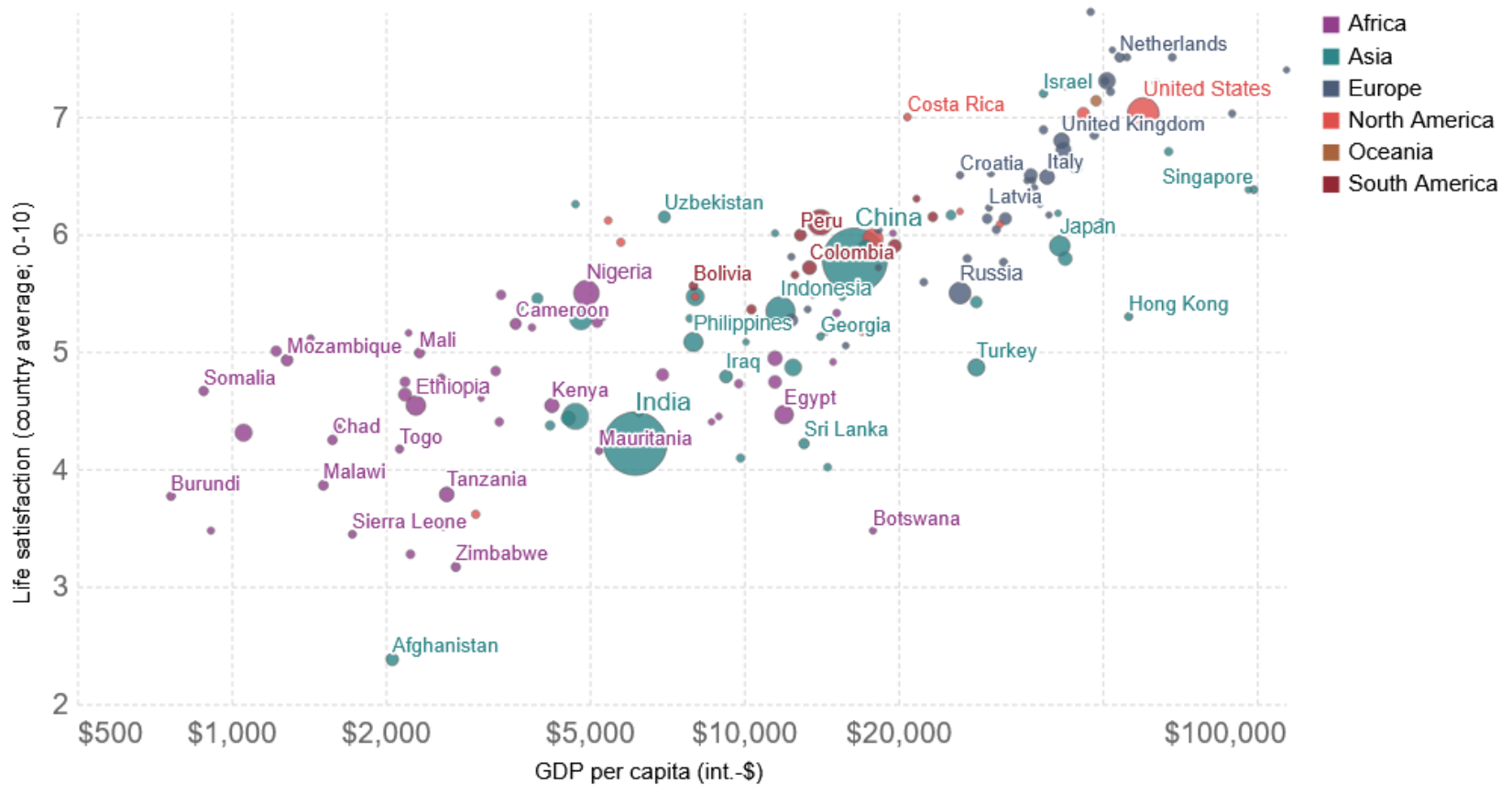
Source: World Happiness Report (2021)

OurWorldInData.org/happiness-and-life-satisfaction/ • CC BY

Self-reported Life Satisfaction vs GDP per capita, 2020

The vertical axis shows the national average of the self-reported life satisfaction on a scale ranging from 0-10, where 10 is the highest possible life satisfaction.

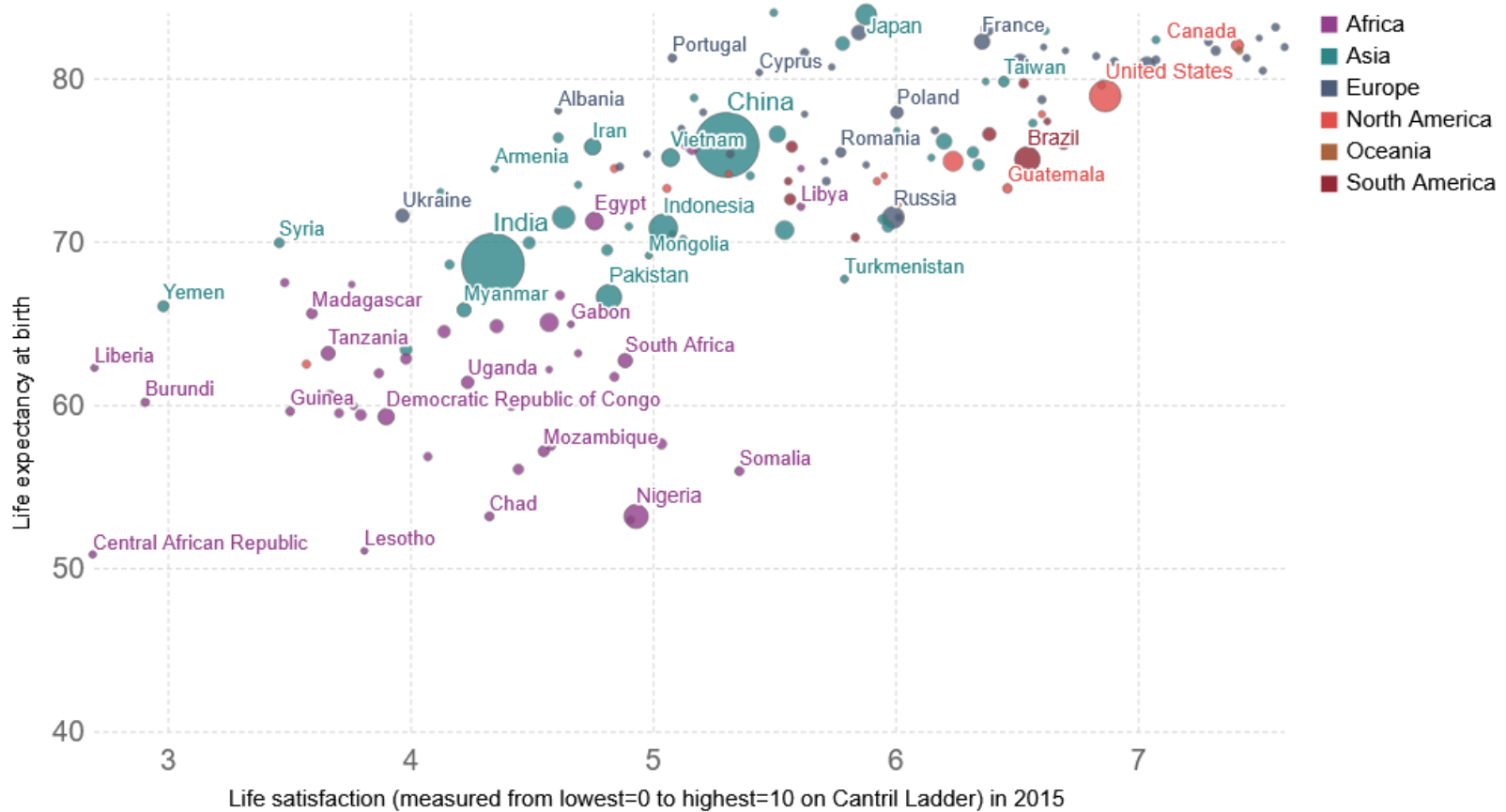
The horizontal axis shows GDP per capita adjusted for inflation and cross-country price differences.



Source: World Happiness Report (2021), Data compiled from multiple sources by World Bank
OurWorldInData.org/happiness-and-life-satisfaction/ • CC BY

Life satisfaction vs Life expectancy, 2015

The vertical axis shows life expectancy at birth. The horizontal axis shows self-reported life satisfaction in the Cantril Ladder (0-10 point scale with higher values representing higher life satisfaction).



Source: United Nations – Population Division (2019 Revision), World Happiness Report (2019)
OurWorldInData.org/bonheur-et-satisfaction/ • CC BY

Well-being in an aggregate perspective – 5.

- OECD within *Better Life Initiative*.
- It builds upon three pillars: *material living conditions*, *quality of life*, and *sustainability*.
- Each of the domains is measured by several indicators.
- *Your Better Life index* - a composite indicator combined from these eleven dimensions:
<http://www.oecdbetterlifeindex.org/>

Table 3 Rankings of Countries Among 34 OECD Countries Under Different Well-being Indicators, 2012

	HDI	IHDI	LS	YBLI
Austria	17	12	9	14
Czech Republic	25	14	22	23
Germany	5	5	19	16
Hungary	29	25	34	29
Poland	30	28	28	25
Slovakia	28	22	27	28

Source: UNDP, OECD

Well-being in an aggregate perspective – 6.

- *Happy Planet Index*

<https://neweconomics.org/2006/07/happy-planet-index/>

$$\text{HPI} = \frac{\text{Life satisfaction} \times \text{Life expectancy at birth}}{\text{Ecological footprint}}$$

- *Sustainable Society Index*

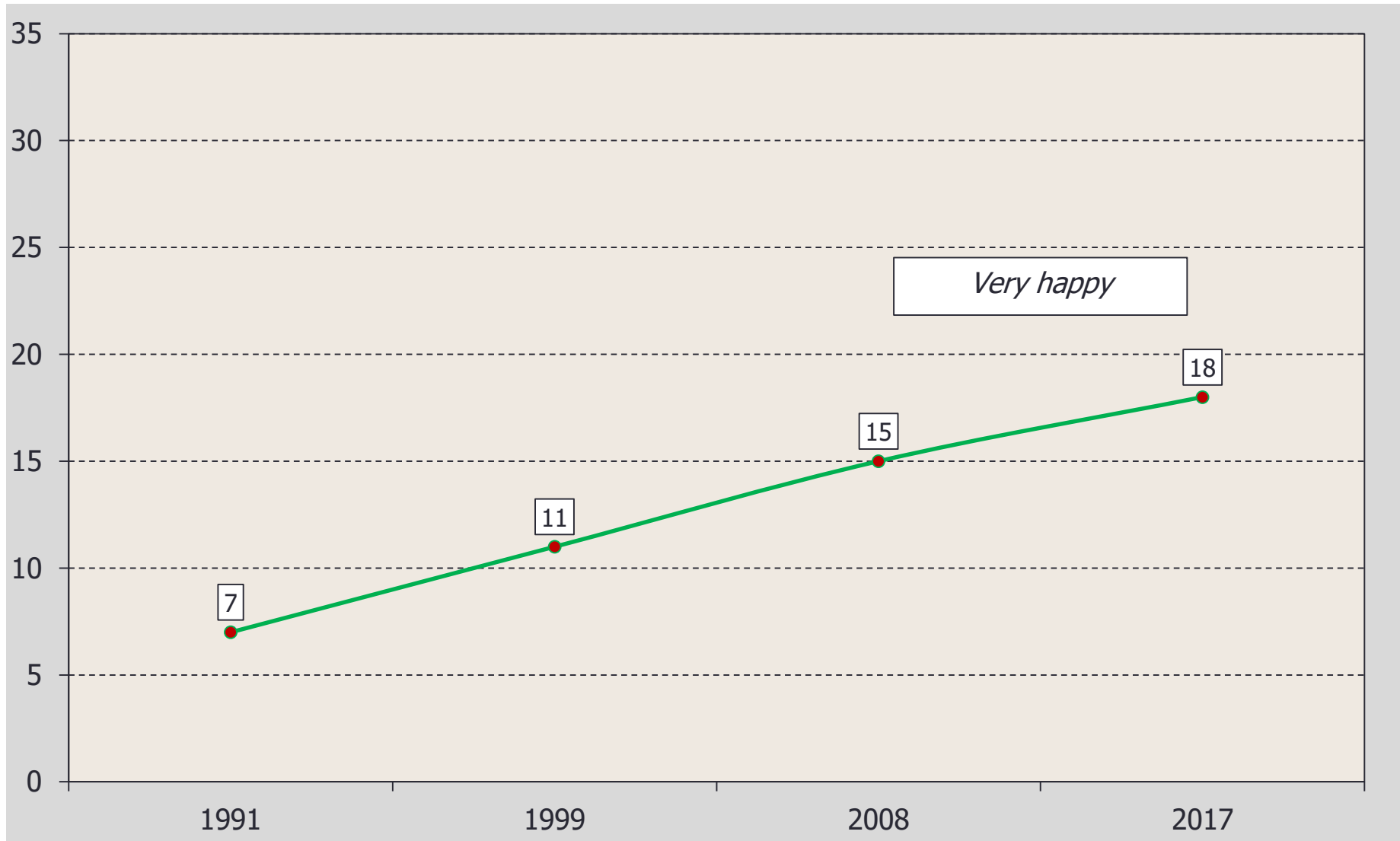
<https://ssi.wi.th-koeln.de/>

Components of SWB (subjective well-being)

- *Cognitive* component of SWB: *satisfaction*.
- *Affective* component of SWB: *happiness*.
- Most widely used measure of SWB: *life satisfaction*.
- *Satisfaction* and *happiness* are often used interchangeably in the literature 🖐️ **It can complicate interpretation of findings and comparability between countries.**
- <https://personal.eur.nl/veenhoven/>
- Relatively high positive levels of SWB consistently found even in developing countries.

„Happiness“ – Subjective well-being in Czechia

Question: *All things together, would you say you are...*



„Happiness“ – Subjective well-being

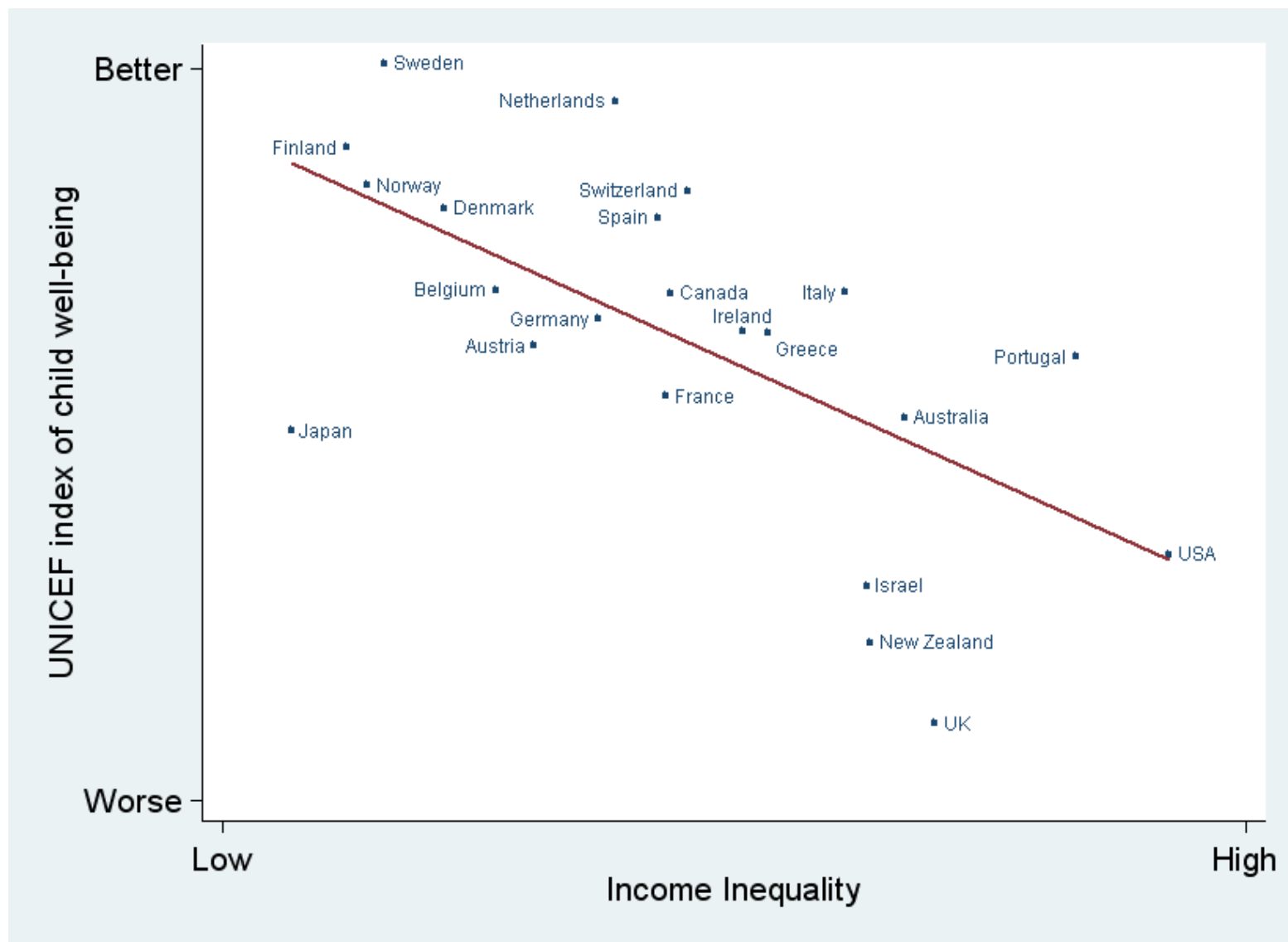
	Very happy	Happy	Not too happy	Very unhappy	%
1991	7	78 71	19	2	100 %
1999	11	86 75	13	1	100 %
2008	15	86 71	13	2	100 %
2017	18	90 72	10	1	100 %

Life satisfaction in Czechia- answer (%): *satisfied*

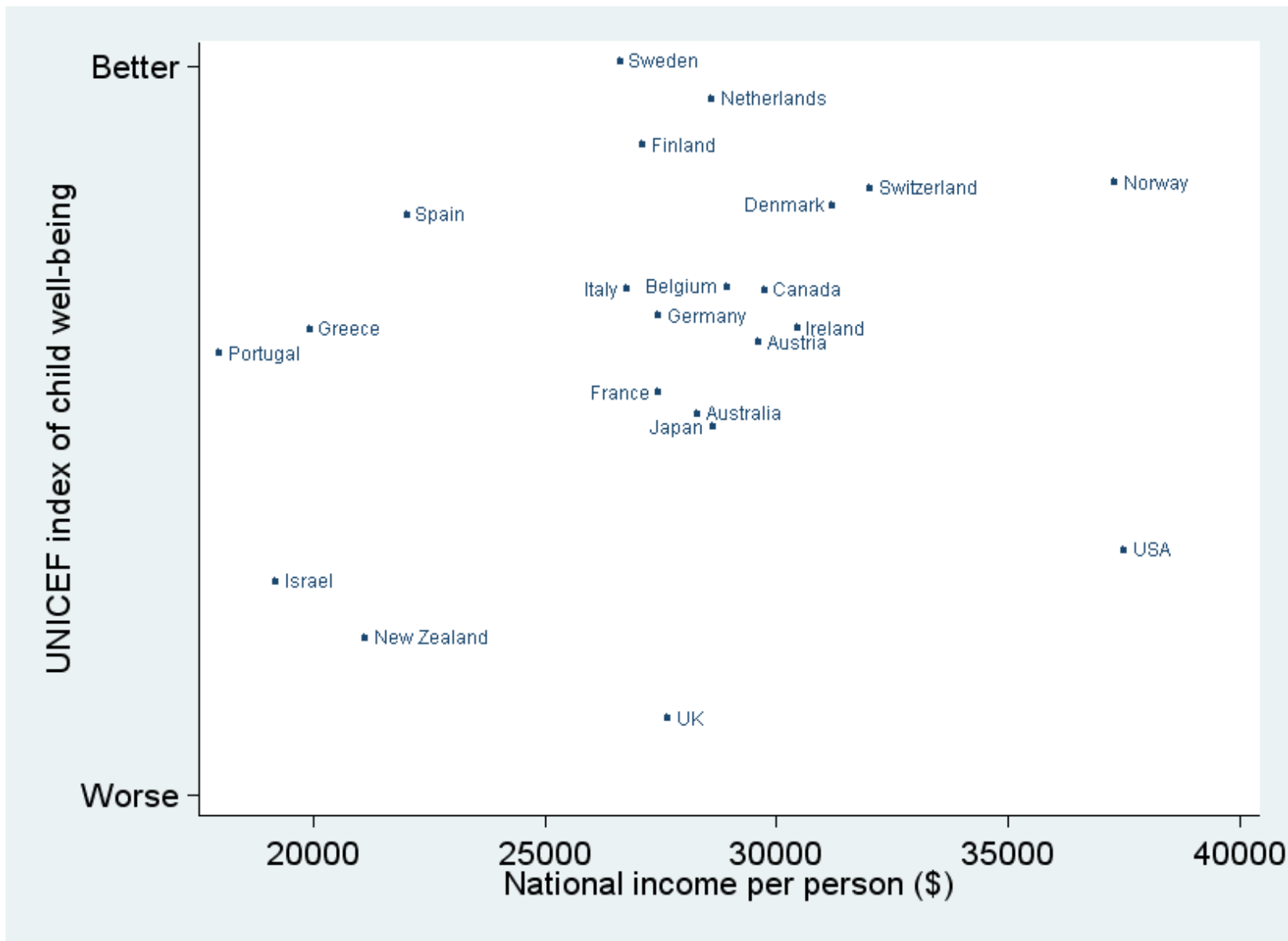
All things together, how satisfied are you with your own life?



Child well-being is better in more equal rich countries



Child-wellbeing is unrelated to average incomes in rich countries



Source: Wilkinson & Pickett, *The Spirit Level* (2009)