

# **GDP and beyond**

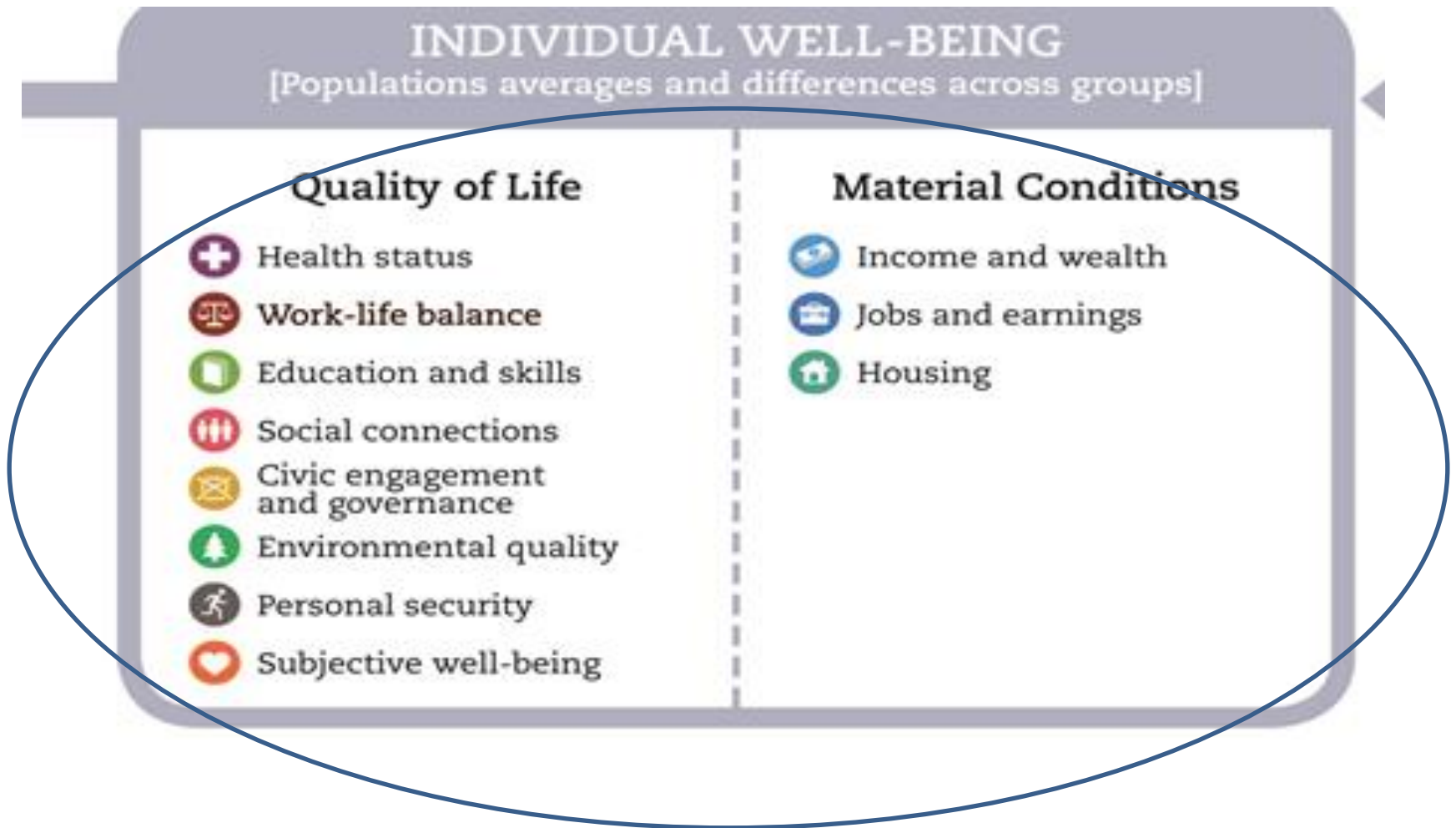
## **Lesson 2. Dimensions of people's well-being: Multi-dimensionality and Capabilities**

International Monetary Economics, GMEP Module 2 2016-17  
Part III. GDP and beyond

University Carlo Cattaneo, LIUC

Marco Mira d'Ercole  
OECD Statistics Directorate

# We'll focus today on this part of OECD well-being framework



# Structure

- A. Traditional economists' view on people's well-being
- B. Moving beyond the traditional view:
  - Behavioural economics: how *humans* behave
  - Different types of commodities
  - Absolute and relative income
  - Beyond commodities: outcomes and capabilities
- C. Universal dimensions of people's well-being?
- D. Operationalisation through indicators
- E. Comparisons of multi-dimensional well-being
  - Scoreboards
  - Single summary measures
- F. What matters the most to people?
- G. Multi-dimensionality in policy-making

# A. Traditional economists' view on people's well-being (1)

## Theory of consumer behaviour

- Consumers behave to maximise 'utility', defined in the space of consumption goods, i.e. 'opulence'
- When consumer preferences satisfy a number of axioms:
  - Completeness (you can compare all bundles in a set)
  - Transitivity (there is a most preferred bundle in set)
  - Continuity (there are no jumps in preferences).. they can be represented by a 'utility function'
- Additional assumptions made in most practical applications
  - Strong monotonicity (more is better)
  - Non-satiation (you can always do a little better)
  - Convexity (diminishing marginal rates of substitution).. lead to traditional downward sloping demand curves

# A. Traditional economists' view of people's well-being (2)

- Conclusions
  - For given preferences, prices and budget constraint, consumers always choose the 'most preferred' bundle
  - Consumers are 'sovereign', firms produce what consumers want (A. Smith's "invisible hand")
- These '*econs*' are the agents of micro-economic analysis and of (DSGE) macros models: 1 single worker-owner-consumer, planning ahead and living forever
- Critique: "*Representative agents have two great failings: they know too much, and they live too long*"



# B. Moving beyond the traditional view (1)



- **How do people behave in reality?**  
Economists meet psychologists
  - System 1: rational/reflective (*econs*)
  - System 2: intuitive (*humans*)
- Many unconscious decisions (System 2) are not necessarily worse than those based on evaluations (System 1): efforts to rationalise unconscious choices can lead to worse outcome
- System 2 decisions are based on rules of thumb
  - Anchoring (i.e. start from anchor you know, adjust in right direction, e.g. ‘what’s the population of Castellanza?’)
  - Availability (i.e. assess likelihood of risk through examples coming to mind, e.g. ‘what is the probability of dying due to homicide?’)
  - Representativeness (i.e. your judgement of whether John belongs to group A depends on how close John is to the stereotype of A)

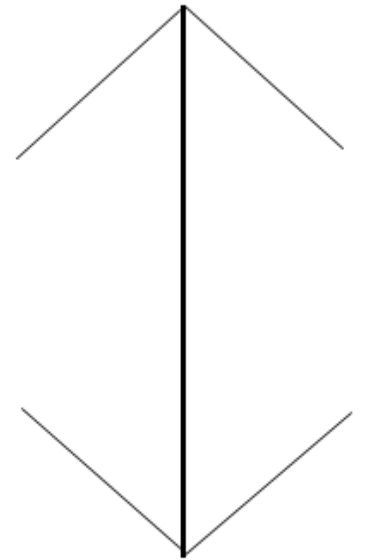
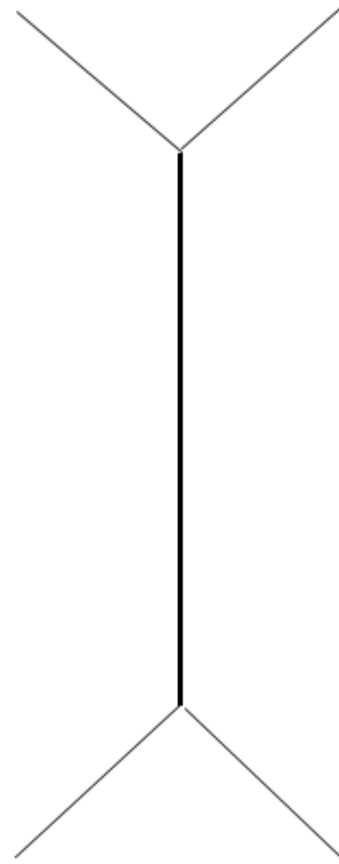
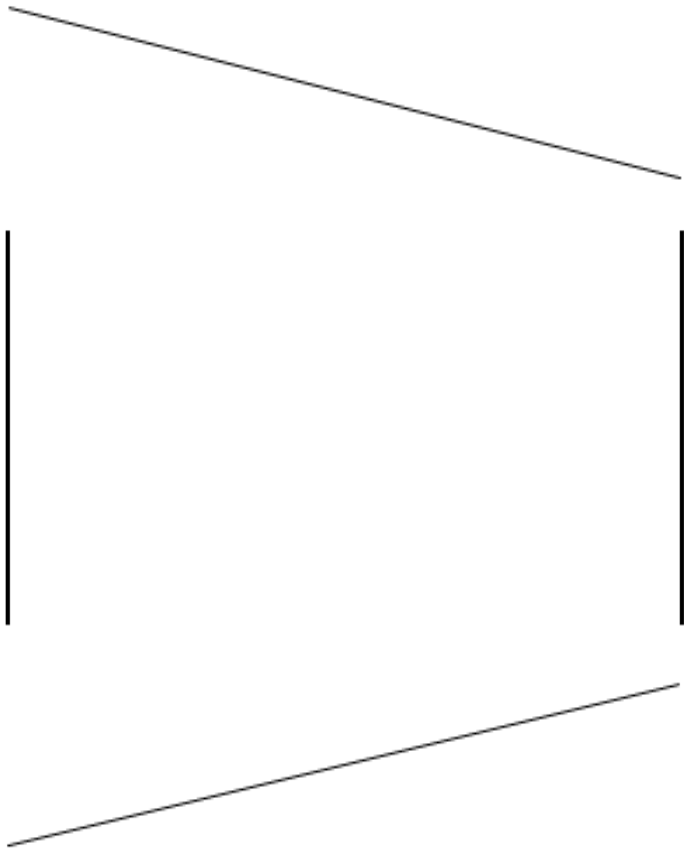
## B. Moving beyond the traditional view (2)

- Intuitive system works well most of the time but is also subject to biases
  - When anchoring, you seldom adjust enough
  - Overconfidence (we all think we are ‘better than average’ drivers)
  - Loss averse (losing X makes you more miserable than gaining it)
  - Preferences for *status quo*: importance of default option
  - ‘Over-rationalise’ (once informed that X has happened, we easily come up with ‘stories’ explaining why this should be the case)

We can all improve on our ‘snap’ decisions by being conscious about the existence of these biases
- Common factor shaping these biases: “Framing”  
(choices depend on how problems are presented) 7

## B. Moving beyond the traditional view (3)

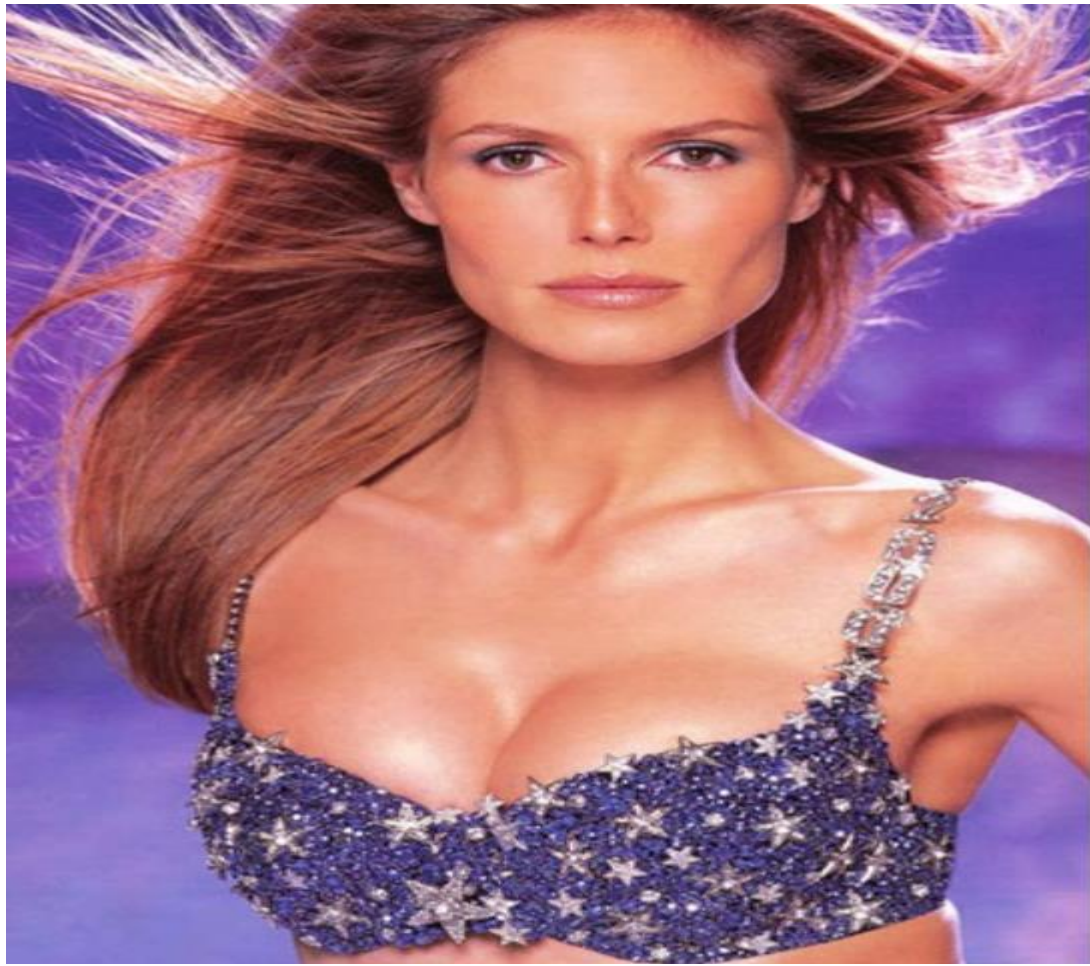
Examples of framing: which line is longer?





## B. Moving beyond the traditional view (4)

Framing: irrelevant alternatives shape decisions of what to buy (Victoria's Secret \$15 million Fantasy Bra)



R. H. Frank  
(2007), *Falling  
Behind: How  
Rising Inequality  
Harms the  
Middle Class*

## B. Moving beyond the traditional view (5)

- Implications of behavioural economics..
  - For how you think of people's behaviours
    - People don't always chose what is best for them (e.g. obesity, smoking)
    - 'Nudges' may be needed to push people to make better decisions (choice architecture)

# B. Moving beyond the traditional view (6)

- For how you think about firms
  - Whenever there are biases in consumer choices, there will be firms ready to take advantage of them (Akerloff & Shiller, ‘phishing for phools’)
    - Informational phools (people who are provided wrong information)
    - Psychological phools
      - Emotional biases (drawn by compulsion, e.g. gamblers)
      - Cognitive biases (deciding based on optical illusions)
  - Preferences are not ‘given’ as postulated by consumer theory but open to manipulation
    - role of advertisement in creating new ‘wants’ as demand for existing goods reaches satiation
    - E. Barnays (‘father of public relations’), role of ‘enlightened manipulation’ in orienting people’s decisions
    - Advertisement industry, USD 600 bl in 2015

## B. Moving beyond the traditional view (7)

- Are all consumption goods really the same? No
  - Private goods (excludable, rivalrous)
  - Public goods (non-excludable, non-rivalrous)
  - Merit goods (provided to everyone in a particular situation based on needs)
  - Common-pool goods (rivalrous, non-excludable)
  - Goods generating externalities (others' consumption brings cost to you)
  - Positional goods (benefits depend on consumption by others)
  - Status goods (goods delineated by style/brand)
  - Club goods (necessary for people to be part of desired social group)
  - Goods inherently in short supply (a room with a view)
- Why this matter?
  - Relationship between consumption and well-being depends on the types of goods consumed
  - Share of non-private goods may be rising over time

*“We must call into question.. the assumption that all goods are commensurable (and) can be translated without loss into a single .. unit of value” (M. Sandel, 1998)*



## B. Moving beyond the traditional view (6)

### ➤ Do people care about absolute or relative income?

- Back to Keynes' distinction between 'absolute' and 'relative' needs (Skidelsky's argument to move from "more is better" to "how much is enough?")
- Root-cause of "economic insatiability" is humans' disposition to compare their fortune to that others
- Envy or something else? "*ultimate scarce resource in life is willingness of others to pay attention to us*"
- When relative, rather than absolute, income shapes your well-being this leads to "rat race" / "positional arms races"
- Relative comparisons are stronger for some goods than others, but also depend on how societies are organised (e.g. wage norms versus performance pay)



## B. Moving beyond the traditional view (7)

- Beyond behaviours and commodities: capabilities (economists' door to moral philosophy)
- Two main ideas:
  - People differ in their capacity to transform goods into utility (e.g. people with disabilities)
  - People derive utility from more than consumption
    - They value attributes of their life (e.g. healthy, informed, recognised by others, treated fairly, free to choose what is best for them)
    - They engage in a variety of valuable activities beyond consumption (e.g. spending time with family, friends, leisure), with some activities much more valued than others
    - They value 'processes' as well as final outcomes (procedural utility)

## B. Moving beyond the traditional view (8)

- Capabilities as ‘freedom to achieve’, beyond specific outcomes (functionnings)
  - e.g. fasting and starving, “Sophie’s choice”
- Distinction between well-being and freedom
  - *“Well-being is concerned with a person achievement.. Advantage refers to the real opportunities that a person has, especially compared to others. The freedom to achieve well-being is closer to the notion of advantage than well-being itself” (A. Sen, 1984)*
- Development as broadening space of people’s choices
  - e.g. ‘tragic choice’ confronting poor parents in less developed countries on whether to send their kids to school or work



## B. Moving beyond the traditional view (9)

### Common features of all variants of capabilities approach

- *Each person as an end*, i.e. focus on social justice and inequality (i.e. beyond utilitarian's focus on 'greatest happiness of greatest numbers')
- Focus on *people's choice*, agency and freedom
- *Heterogeneity*, i.e. capabilities that are central to people cannot be reduced to a single numerical scale; each matters and cannot be substituted by others (rights/ entitlements)

### Differences within capability school

- Sen: focus on 'evaluation space', with no named items
- Nussbaum: central / fertile capabilities, thresholds



# B. Moving beyond the traditional view (10)

## ➤ Capabilities beyond abstract theory

- Introducing **Vasanti**, Ahmedabad (Gurajat)
- Life experiences: early 30s, 1.50 cm, illiterate, married (to a gambler / alcoholic), no children, domestic violence
- Returns at home, works in brother's business, making eye-holes on sari tops
- With support from *Self-Employed Women's Organisation (SEWA)* she got small bank loans, enrolled in SEWA educational programmes, got involved in combatting domestic violence in her community



- *“Suppose we were interested not in economic.. theory but just in people: what would be noticed and considered salient in Vasanti's story?” (M. Nussbaum)*
- *“The dominant theoretical approaches in development economics .. do not ‘read’ her situation the way a concerned observer might. Nor.. do they read it in a way that would make sense to Vasanti.. They equate doing well (for a state or a nation) with an increase in GDP”*

# C. Universal dimensions of people's well-being? (1)

- If well-being is multi-dimensional, how can we decide on its key ingredients?
- To decide what items qualify as 'dimensions' of individual well-being, you need to consider whether they have 'intrinsic' or 'instrumental' importance
  - *'questions of ends are not amenable to rational argument'* (B. Russell)
  - .. but they lend themselves to *deliberations* between members of the same community
- Various lists of ingredients of a 'good life' have been proposed, many of them starting from framework proposed by Stiglitz Commission



# C. Universal dimensions of people's well-being? (2)

## ➤ Many ingredients common to different approaches

### OECD well-being dimensions

-  Income and wealth
-  Jobs and earnings
-  Housing
-  Health status
-  Work and life balance
-  Education and skills
-  Social connections
-  Civic engagement and governance
-  Environmental quality
-  Personal security
-  Subjective well-being

### Norman Whybray (2002), *The Good Life in the Old Testament*

- ‘Wealth’
- ‘A land to live in’
- ‘Food and sustenance’
- ‘A long life’
- ‘Family’
- ‘Justice’
- ‘Laws’
- ‘Wisdom’
- ‘Pleasure’
- ‘Power’
- ‘Trust in God’

### Skidelski and Skidelski (2012), *How Much is Enough?* *7 basic goods*

- ‘Health’
- ‘Security’
- ‘Leisure’
- ‘Respect’
- ‘Harmony with nature’
- ‘Friendship’
- ‘Personality’

### Martha Nussbaum 10 ‘central capabilities’

- ‘Life’
- ‘Bodily health’
- ‘Bodily Integrity’
- ‘Senses, imagination, thought’
- ‘Emotions’
- ‘Practical reasons’
- ‘Affiliation’
- ‘Concerns for other species’
- ‘Play’
- ‘Control over one’s environment’

- Beyond specific differences, much in common
- Disagreements are more about ‘weights’ than on ‘ingredients’ to a good life

# D. Operationalising well-being through key indicators (1)

## ➤ OECD approach

Selection of headline indicators, based on statistical criteria

- **Relevance**

- face valid (do they match what you want to capture?)
- clear interpretation (is 'more' of it better?)
- Policy-relevant (can it be changed?)



- **Data considerations**

- official or established sources (non-official statistics used as place-holders)
- comparable/standardized definitions
- maximum country-coverage
- recurrent data collection
- can be disaggregated by population groups

# D. Operationalisation through indicators (2)

## ➤ OECD approach

Assessment of headline indicators based on statistical criteria

Table 5.1. The quality of health status indicators

	Target concept	INDICATORS							
		Relevance to measure and monitor well-being				Statistical quality			
		Face validity	Unambiguous interpretation (good/bad)	Amenable to policy changes	Can be disaggregated	Well-established instrument collected	Comparable definition	Country coverage	Recurrent data collection
Health status									
HS I Life expectancy at birth	Length of life	√	√	√	~	√	√	√	√
hs 1 Infant mortality		√	√	√	~	√	√	√	√
HS II Self-reported health status	Morbidity in its different dimensions	√	√	√	√	√	~	~	√
hs 2 Self-reported longstanding illness		√	√	√	√	√	~	~	~
hs 3 Self-reported limitations in daily activities		√	√	√	√	√	~	~	~
hs 4 Overweight and obesity		~	√	√	√	√	~	√	√

# D. Operationalisation through indicators (3)

## ➤ OECD approach

### OECD headline well-being indicators

Well-being domain	Concept	Indicator	Year <sup>1</sup>	Unit of measurement
<b>Income and wealth</b>	Household income	Household net adjusted disposable income	2013	USD at 2010 PPPs, per capita
	Financial wealth	Net household financial wealth	2013	USD at current PPPs, per capita
<b>Jobs and earnings</b>	Employment	Employment rate	2014	Employed aged 15-64, as a percentage of the population aged 15-64
	Earnings	Average annual gross earnings per full-time employee	2013	USD at 2013 PPPs
	Job security	Probability of becoming unemployed	2014	The annual inflow into unemployment (percentage points)
	Long-term unemployment	Long-term unemployment rate	2014	Percentage of the labour force unemployed for one year or more
<b>Work-life balance</b>	Working hours	Employees working very long hours	2013	Percentage of employees routinely working 50 hours or more per week
	Time off	Time devoted to leisure and personal care	Various	Hours per day, persons in full-time employment only
<b>Housing</b>	Rooms per person	Rooms per person	2013	Average number of rooms per person (excluding bathroom, toilet, kitchenette, scullery/utility rooms and garages)
	Housing affordability	Housing expenditure	2012	Percentage of household gross adjusted disposable income spent on housing and house maintenance
	Basic sanitation	Dwellings without basic sanitary facilities	2013	Percentage of people without an indoor flushing toilet for the sole use of their household

# D. Operationalisation through indicators (4)

## ➤ OECD approach

### OECD headline well-being indicators

<b>Environmental quality</b>	Water quality	Satisfaction with water quality	2014	Percentage of satisfied people in the overall population
	Air quality (PM <sub>2.5</sub> )	Annual exposure to fine particulate matter (PM <sub>2.5</sub> ) air pollution	2010-2012 average	Population-weighted exposure to PM <sub>2.5</sub> concentrations, micrograms per cubic metre
<b>Health status</b>	Life expectancy	Life expectancy at birth	2013	Number of years a newborn can expect to live
	Perceived health	Perceived health status	2013	Percentage of adults reporting that their health is “good” or better than good
<b>Education and skills</b>	Educational attainment	Educational attainment of the adult population	2013	Percentage of people aged 25-64 with at least an upper secondary education
	Cognitive skills	Cognitive skills of 15 year old students	2012	The OECD Programme on International Students Assessment (PISA) mean score for reading, mathematics and science
	Adult skills	Competencies of the adult population aged 16-65	2012	The OECD Programme for the International Assessment of Adult Competencies (PIAAC) mean proficiency scores on literacy and numeracy
<b>Social connections</b>	Social support	Perceived social network support	2014	Percentage of people who have friends or relatives that they can count on in times of trouble
<b>Civic engagement and governance</b>	Voter turnout	Voter turnout	2014	Percentage of votes cast among the population registered to vote
<b>Personal security</b>	Deaths due to assault	Deaths due to assault	2012	Age-standardised rate, per 100 000 population
	Self-reported victimisation	Self-reported assault	2010	Percentage of people declaring that they have been assaulted in the previous 12 months
<b>Subjective well-being</b>	Life evaluation	Life satisfaction	2014	Mean values reported using the “Cantril ladder” 0-10 scale, ranging from best possible to worst possible life.

## D. Operationalisation through indicators (5)

➤ *All well-being indicators rely on ethical judgments*

### Example 1: unemployment rate

- The most common measure of labour market conditions. Measured through household surveys rather than registers (ICLS standards)
- People classified as ‘unemployed’ as a ratio of those counted as ‘active’ (in the labour force, i.e. in paid employment or unemployed)
- Who is counted as ‘employed’? People who worked at least 1 hour in the reference week (or temporarily absent from work, e.g. holidays)
- Who is counted as ‘unemployed’? People ‘available for work’ if one was available, and who have taken active steps to find a job over the past 4 weeks
- Who is excluded? Inactive people who have stopped searching because thinking that no job is available; people with jobs who would like to work more hours; ‘inactive people’ at school



# D. Operationalisation through indicators (6)

➤ *All well-being indicators rely on ethical judgments*

## Example 2: Household income

- The typical measure of household disposable income sums all income flows regularly received by people and deducts current transfers paid (e.g. alimonies, remittances, taxes on income and wealth and social security contributions that finance public spending on education, health, etc.)
- What happens when taxes and public health-benefits are reduced by the same amount? Household income increases by construction, even if the household may have to spend more in terms of out-of-pocket health spending
- Are households better off economically? Possibly yes, if private health has higher quality than public health, but not in general
- One way of avoiding this problem is to rely on measures of household **adjusted** disposable income, which include the value of public services provided in kind; but this measure is not always available in micro statistics

# D. Operationalisation through indicators (7)

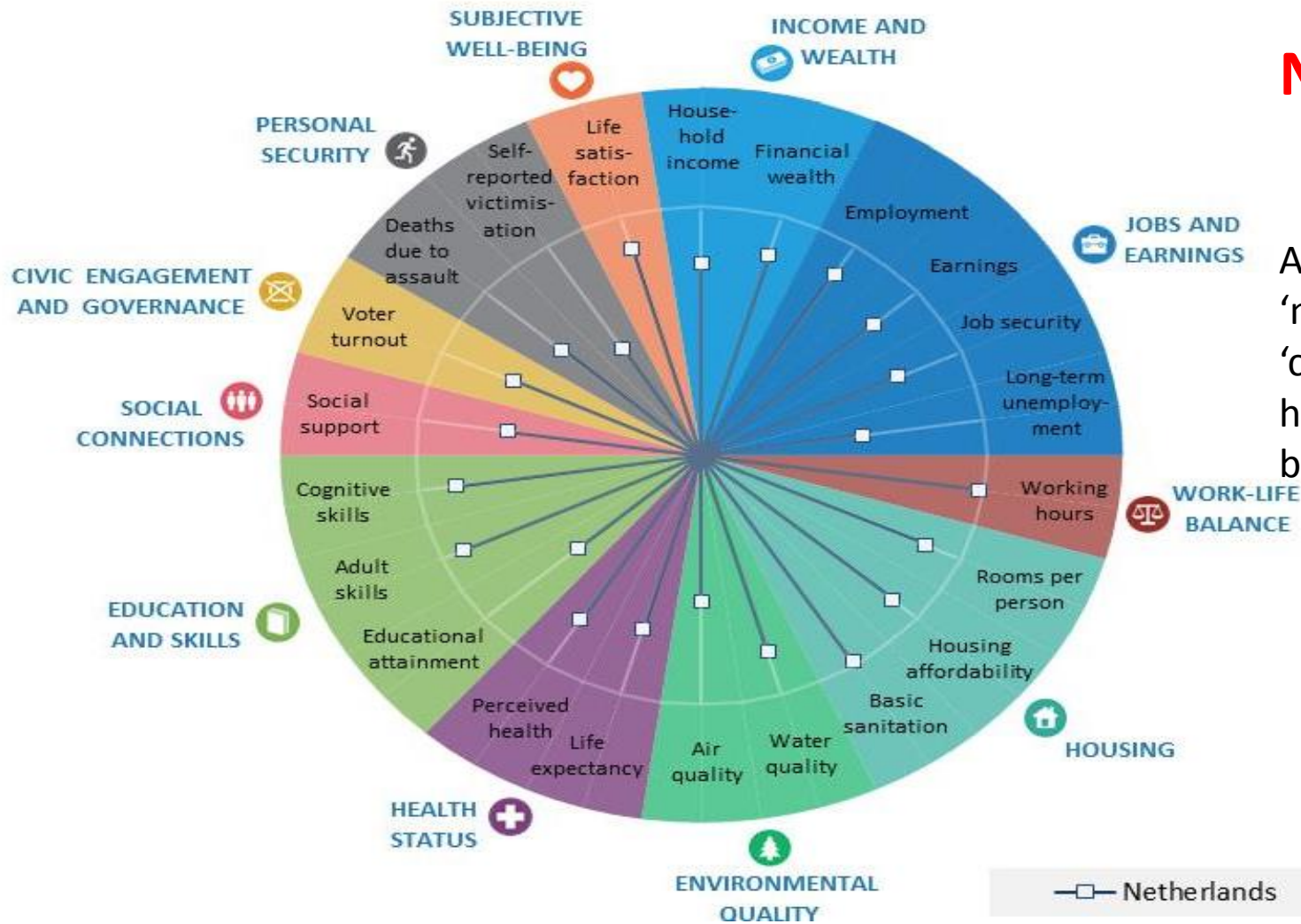
## Example 3: life expectancy at birth

- The most commonly used measure of health status, measured based on death registers (where one exists)
- Number of years a person born today may expect to live based on today's mortality rates (they under-estimate a person's expected life length to the extent that mortality rates keep falling in the future)
- More sensitive to early- than late-mortality, i.e. saving the life of a new-born is (by construction) more important than saving the life of an adult: is this a plausible value judgment?
  - *“when choosing (any indicator) as a measure of well-being.. we are buying into an ethical judgment.. Such judgements need to be explicitly defended, not adopted without thought” (A. Deaton)*

# E. Comparisons of multi-dimensional well-being: scoreboards (1)

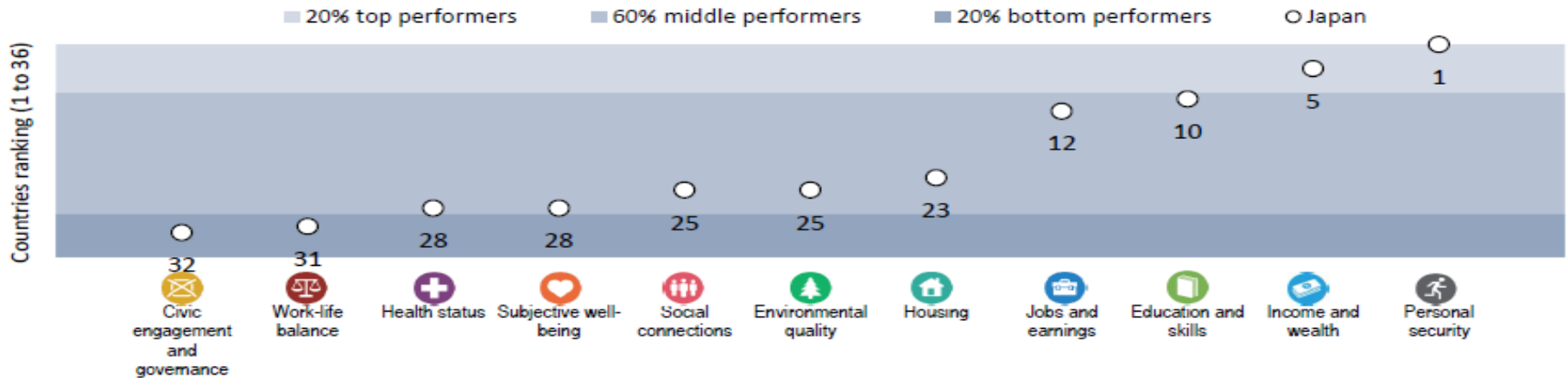
## Netherlands

All indicators 'normalised' and 'converted' so that higher values denote better performance

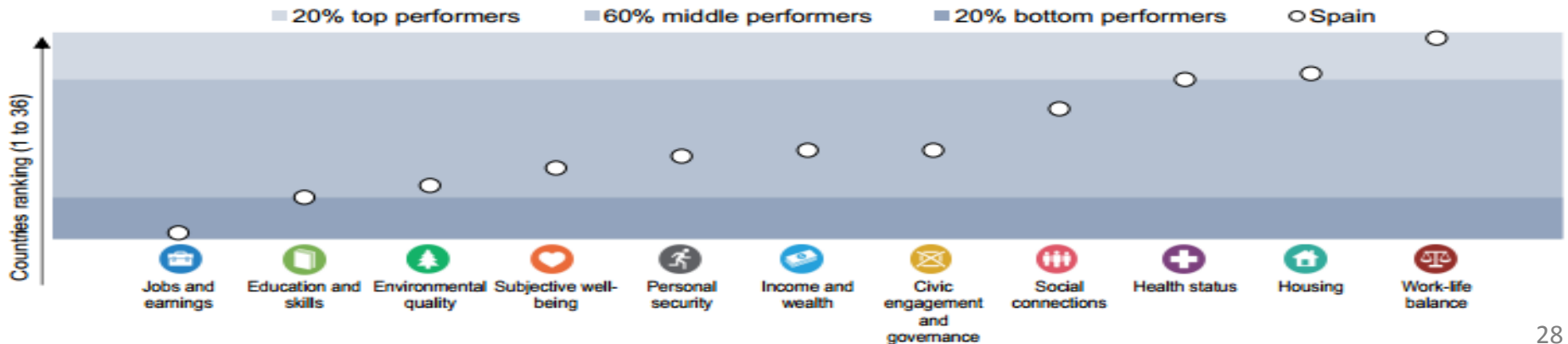


# E. Comparisons of multi-dimensional well-being: scoreboards (2)

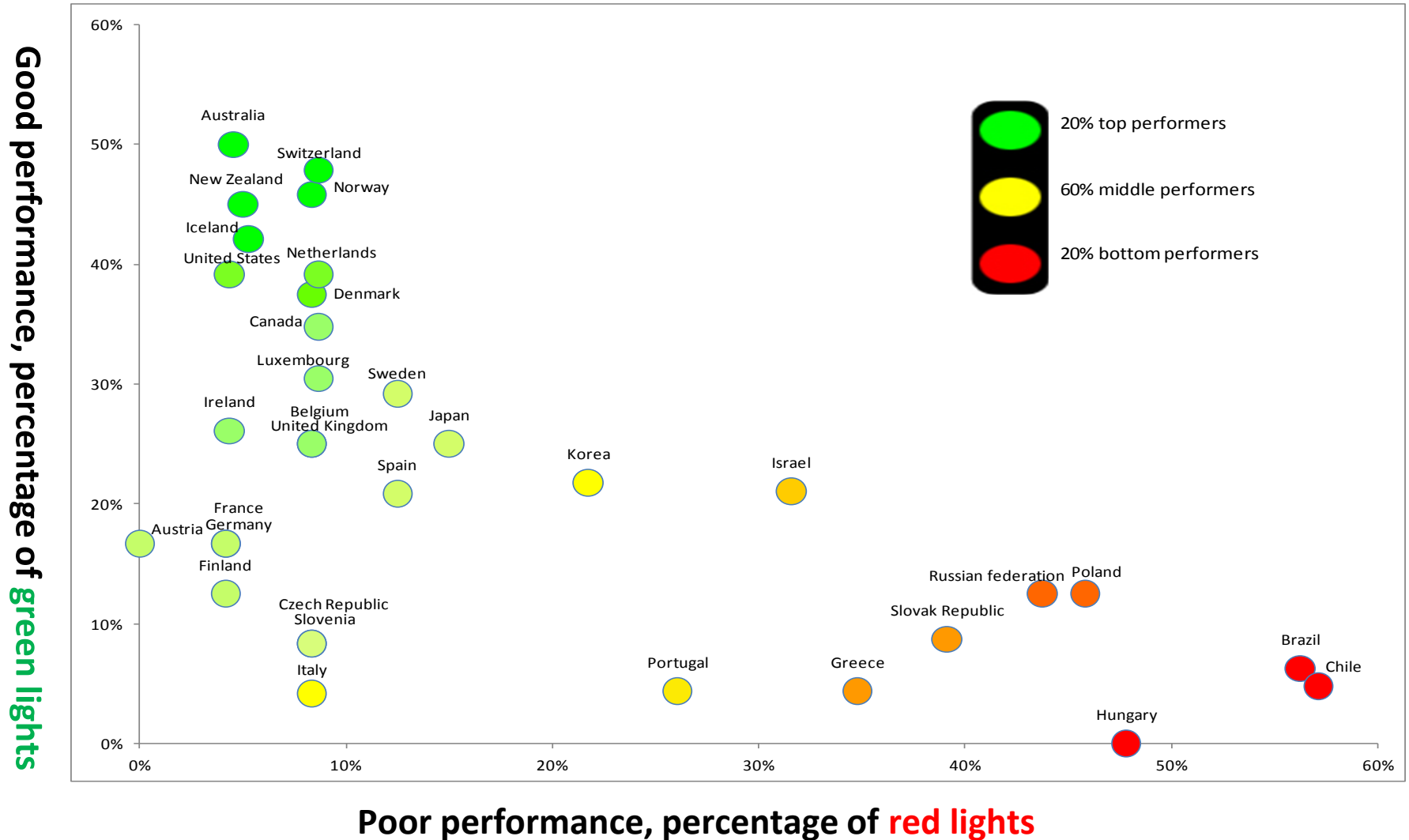
**- How does Japan compare?**  
*Japan's well-being compared with other OECD countries, 2015*



**- How does Spain compare?**  
*Spain's well-being compared with other OECD countries and major economies, 2014*



# E. Comparisons of multi-dimensional well-being: scoreboards (3)



Source : OECD calculations

# E. Comparisons of multi-dimensional well-being: single indexes (1)

- ‘Holy Grail’ of decades of research on social and environmental indicators
- Several single indexes exist (HDI, Social Progress Index, etc.) based on different philosophies, indicator- sets, normalisation (i.e. the holy grail has not been found)
- *“Statistical offices should provide the information needed to aggregate across dimensions, allowing the construction of different indexes”* SSF, (2009)
  - *This is the approach underpinning OECD Better Life Index*  
<http://www.oecdbetterlifeindex.org>

# E. Comparisons of multi-dimensional well-being: single indexes (2)



English Español Français Русский Deutsch Português contact us oecd.org

Index Responses Countries ▾ Topics ▾ FAQ



## Create Your Better Life Index

Rate the topics according to their importance to you:

Housing	<input type="range"/>
Income	<input type="range"/>
Jobs	<input type="range"/>
Community	<input type="range"/>
Education	<input type="range"/>
Environment	<input type="range"/>
Civic Engagement	<input type="range"/>
Health	<input type="range"/>
Life Satisfaction	<input type="range"/>
Safety	<input type="range"/>
Work-Life Balance	<input type="range"/>

Reset Help

Display countries alphabetically | by rank

# E. Comparisons of multi-dimensional well-being: single indexes (3)



Index

Responses

Countries ▾

Topics ▾

FAQ



## Create Your Better Life Index

Rate the topics according to their importance to you:

Topic	Importance Slider
Housing	<input type="range"/>
Income	<input type="range"/>
Jobs	<input type="range"/>
Community	<input type="range"/>
Education	<input type="range"/>
Environment	<input type="range"/>
Civic Engagement	<input type="range"/>
Health	<input type="range"/>
Life Satisfaction	<input type="range"/>
Safety	<input type="range"/>
Work-Life Balance	<input type="range"/>

Display countries alphabetically | by rank

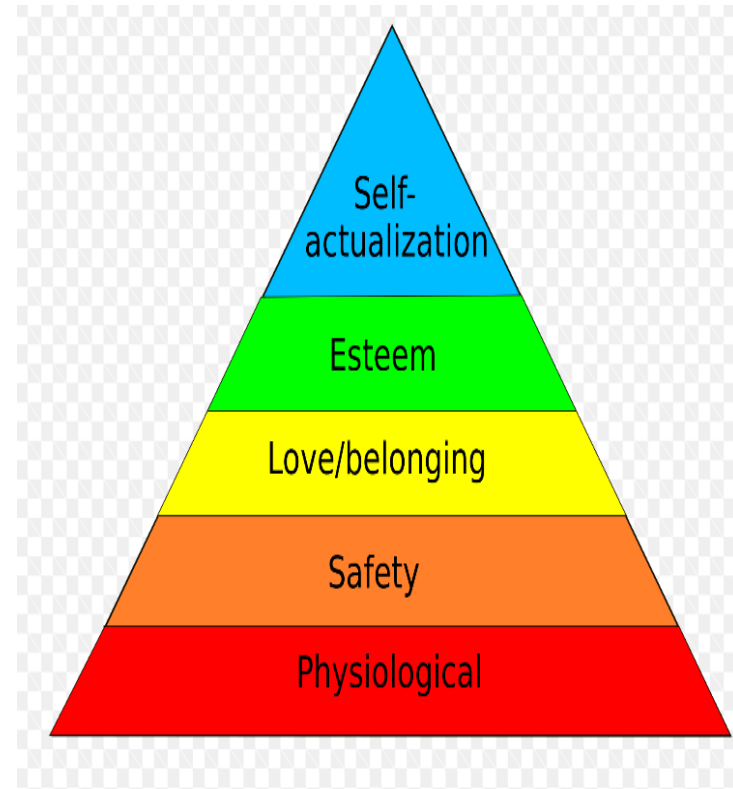
Let us know what

Gender differences



# F. What matters the most to people? (1)

- The idea of a hierarchy of needs has been prominent in all discussions about well-being (e.g. Abraham Maslow).
- But:
  - Needs of people vary across cultures (people in individualistic societies have different needs than people in communal ones)
  - When asking poor people about their needs (e.g. *Voices of the Poor*), they stress the importance of ‘complex needs’, i.e. recognition, shame, being heard by others
  - Needs vary for reasons other than the level of economic development of a society, e.g. age, gender, etc.



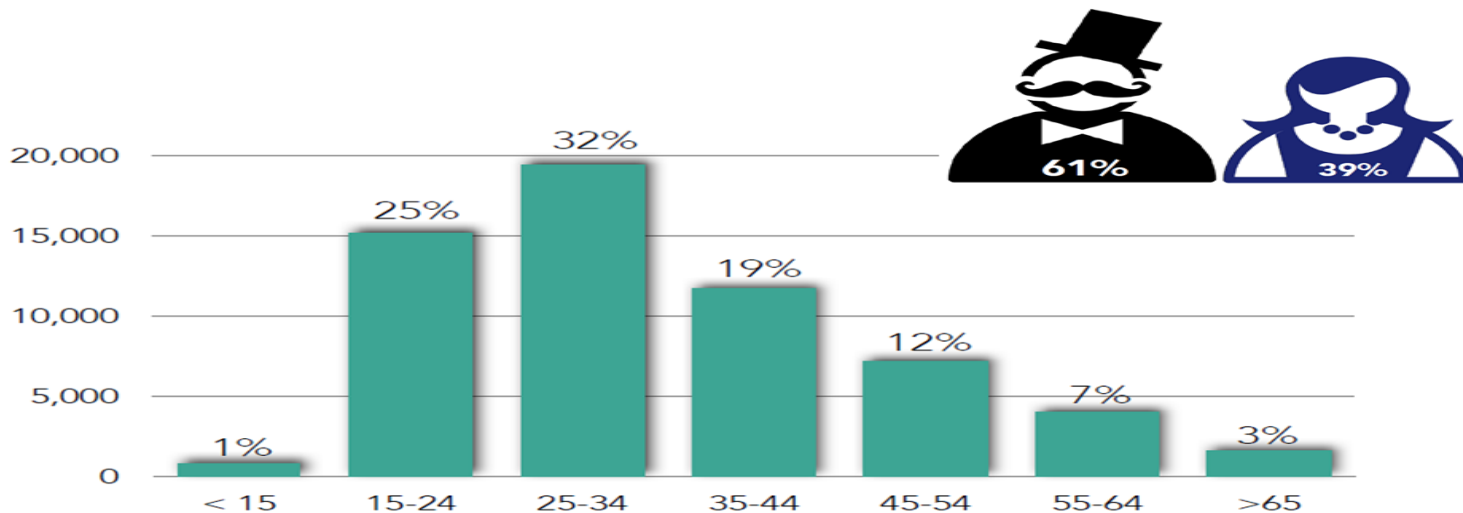
Maslow's pyramid of needs

## F. What matters the most to people? (2)

➤ Is there evidence on what counts most to people?

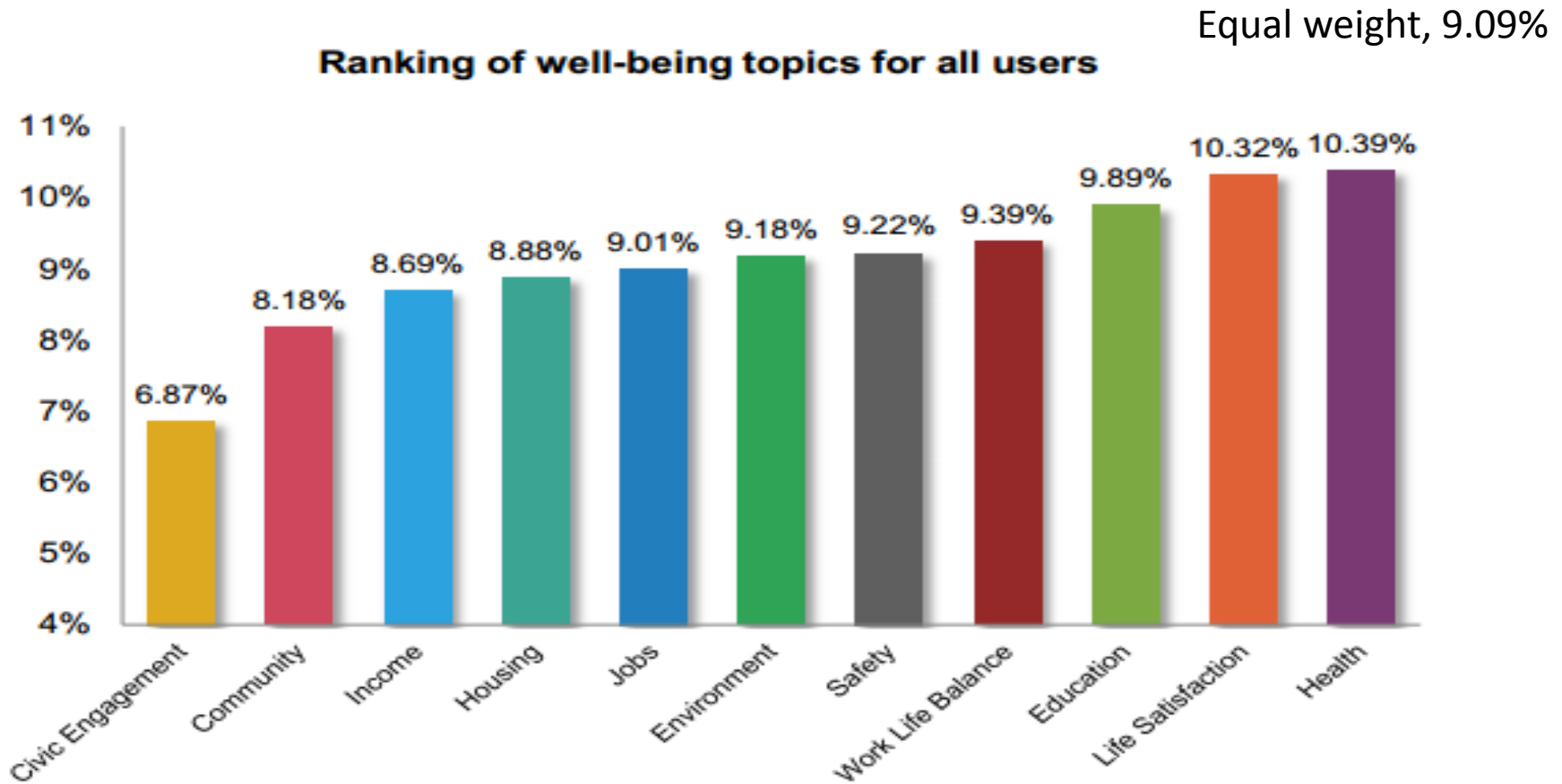
What do the choices of weight by BLI users tell us about people's needs and preferences?

- BLI's users can share information on their choices with OECD: close to **88,000 users** have done so
- In addition to choice on weights, users provide information on their gender and age through **background questionnaire**



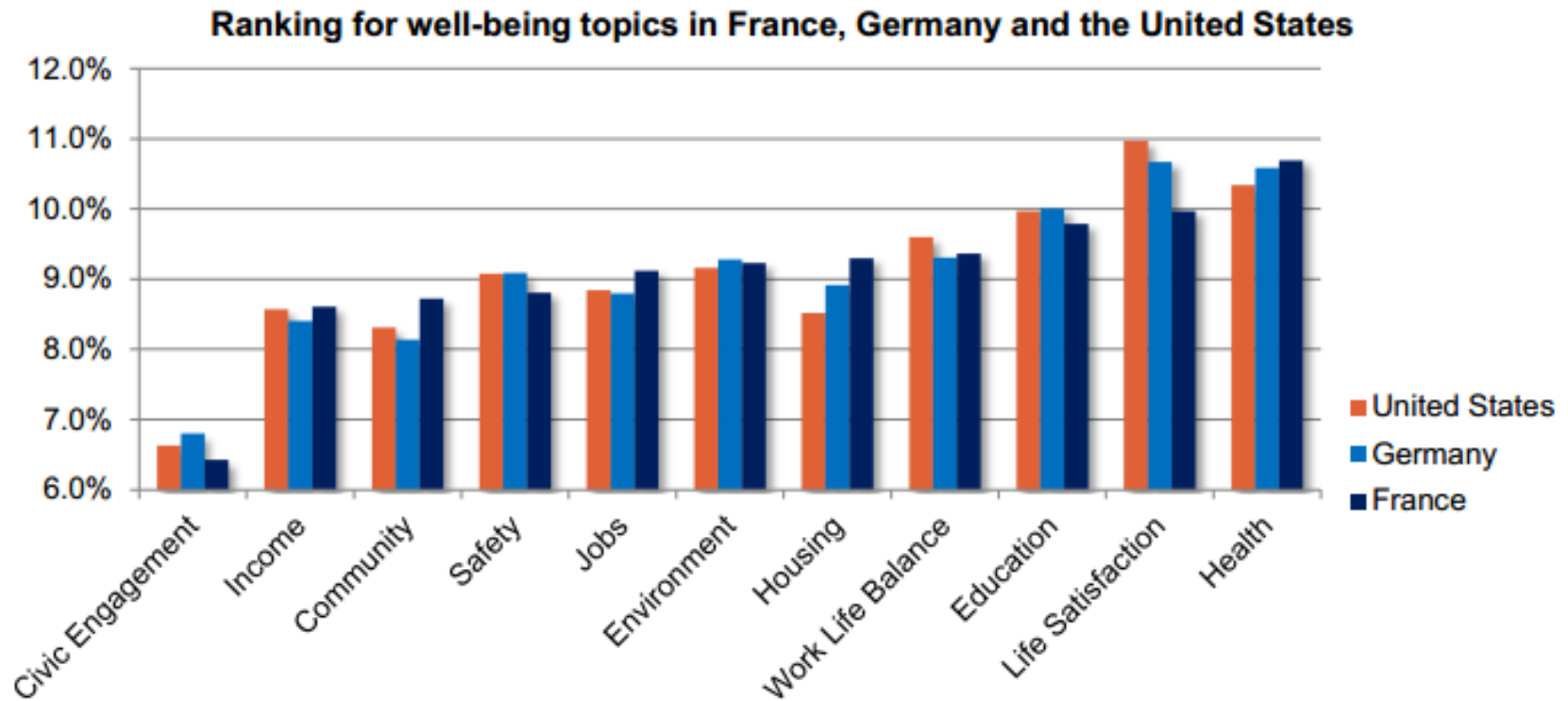
# F. What matters the most to people? (3)

➤ Evidence from BLI users: across all countries



# F. What matters the most to people? (4)

➤ Evidence from BLI users: cross-countries differences

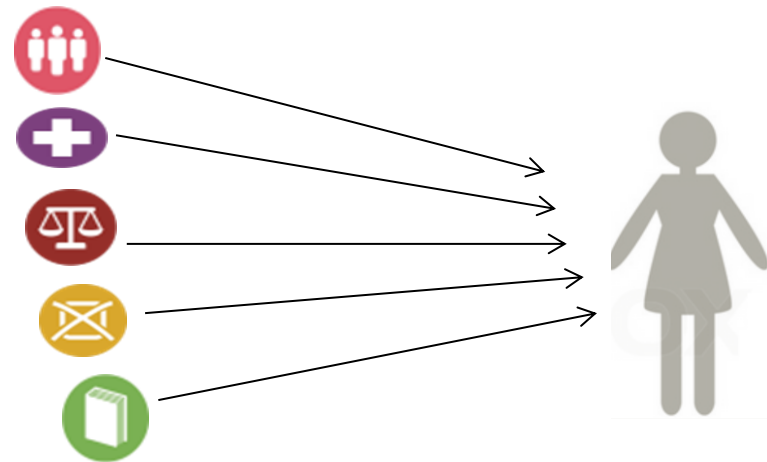


# F. What matters the most to people? (5)

## ➤ Gender patterns in choice of weights

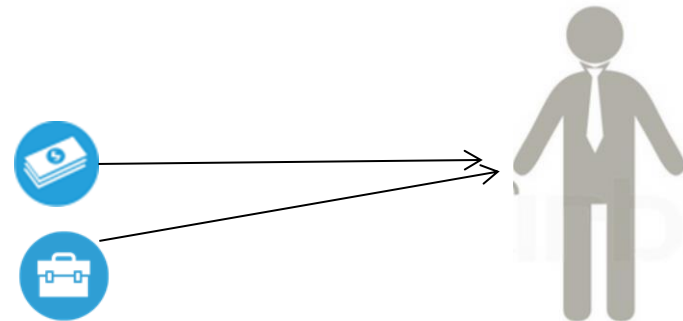
- For women a better life means more of:

- ✓ Community;
- ✓ Health;
- ✓ Work-Life Balance;
- ✓ Civic Engagement;
- ✓ Education



- For men a better life means more of:

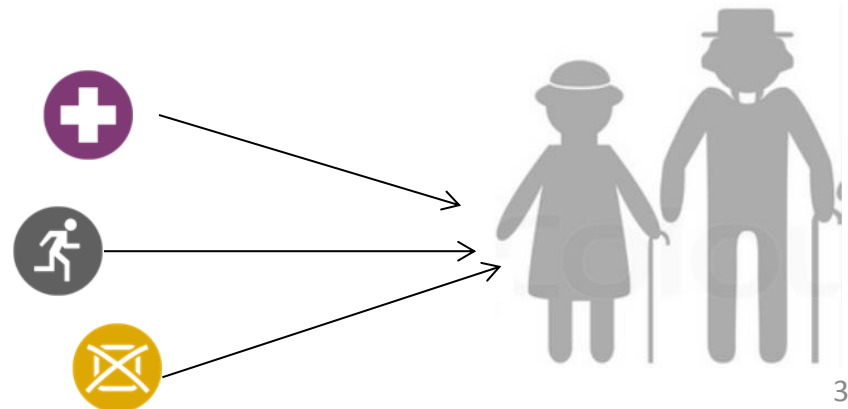
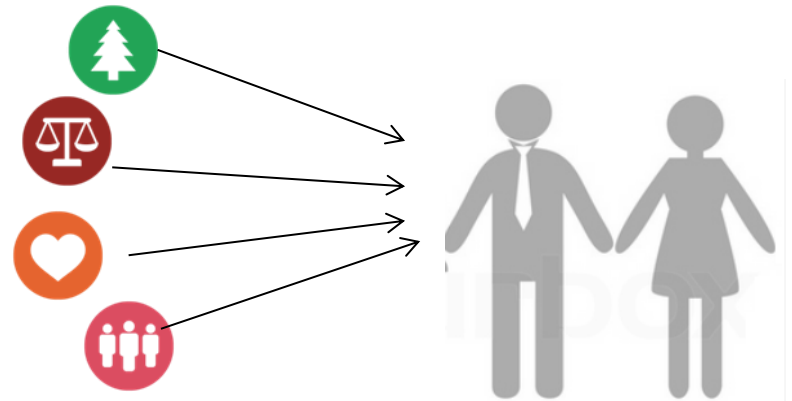
- ✓ Income;
- ✓ Jobs



# F. What matters the most to people? (6)

## ➤ Age patterns in choice of weights

- Young adults (25-34) care about:
  - ✓ living in a clean environment;
  - ✓ balancing work and family;
  - ✓ being happy and connected
  
- Older adults (55+) care about:
  - ✓ being healthy;
  - ✓ feeling safe;
  - ✓ engaging in society



# G. Multi-dimensionality and policy making

- Policy making typically conducted in ‘silos’, with one policy-instrument used for each goal
  - Consequence: ‘unintended’ effects of policies are only recognised *ex post*, some may fall in the cracks
- Implications for economists’ criterion of Pareto-efficiency, i.e. policies are efficient when *income* increases for some and no-one else is worse off in income terms. Problem
  - those who get more income (at the top) may get more favourable political treatment
  - those who lose out in terms of political voice, health, etc. may have higher money but be worse off in other dimensions

# Additional references for this lesson

- OECD (2013), *How's Life? Measuring well-being*, Ch. 1, OECD
- H. Varian (1984), *Microeconomic Analysis*, Chapter 3, “Theory of Consumers”, W. W. Norton & Company
- A. Turner (2012), *Economics after the crisis*, MIT Press
- D. Kahneman (2014), *Thinking, fast and slow*, Farrar, Straus & Giroux
- R. and E. Skidelsky (2012), *How much is enough?* Other Press, NY
- A. Sen (1999), *Commodities and Capabilities*, Oxford
- M. Nussbaum (2011), *Creating Capabilities*, Harvard Un. Press