How to Measure Social Progress?

Prosperity

Growth in mean **income (not only GDP** but other National Accounts concepts) Also look to **Household Surveys flows** data**).**

1

Sustainability

Ability to **maintain the standards of living** achieved. **Stocks of human, environmental, physical , cultural and social assets plus productivity.**

3

Equity

Looking at the **distribution among individuals and social groups** of income flows, stocks of assets and rights.

2

Sensibility

The last dimension is **subjective**, based on **people's perception** about the **country,** the **public services** and **life quality**.

4

Results based Approach

General Social Welfare Function (**Single Period**)

Integrated evaluation of **Prosperity and Equality** of

$\tilde{x} \approx [x_1, x_2, ----- -x_N]$ in a single number

- $W = \int_1^N u(x)v(x)f(x)dx$

where $\int_1^N v(x)f(x)dx = 1$

- Social Welfare Function (**Multi Period**)

$$W = \int_{t=0}^T \int_1^N u(x_{it})v(x_{it})f(x_{it})dx_{it}$$

Adds **Sustainability** $\tilde{x}_t \approx [x_{11}, \dots x_{1T}, --- -, x_{N1} \dots x_{NT}]$

- **Sensibility** question: Can $u(\quad)$ be measured

2

In Economics we do not have to observe utility just assume its properties and derive its Implications But what if we did observe subjective utility (felicity) functions?
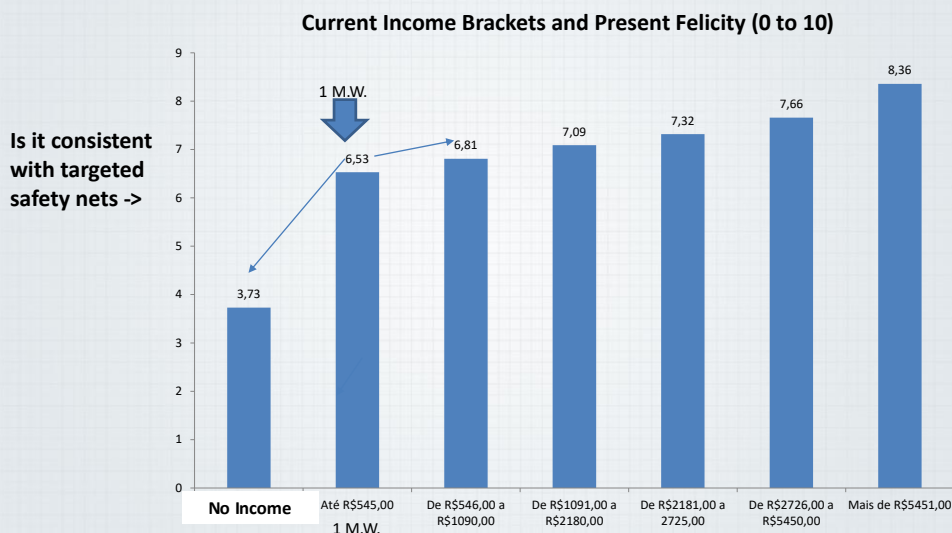
Does Money bring Happiness?

$y = 1E\text{-}04x + 4,4338$
$R^2 = 0,6499$

Present Satisfaction x Real GDP *per capita*
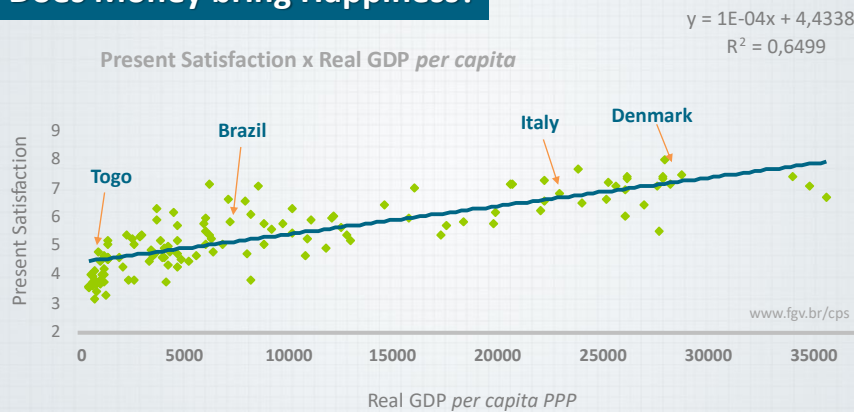
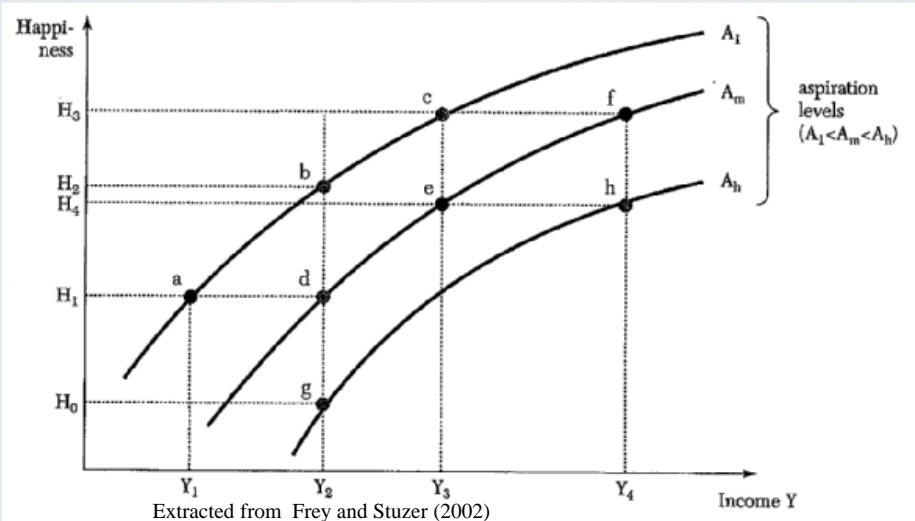Brazil was above the International norm given by GDP;

Source: FGV Social from Gallup World Poll 2006 – Adapted from Deaton (2013)

In Brazil, life satisfaction is positive related with income but relative insensitive with respect to income. compared with other countries. However there is a relative sensibility at the bottom of the distribution
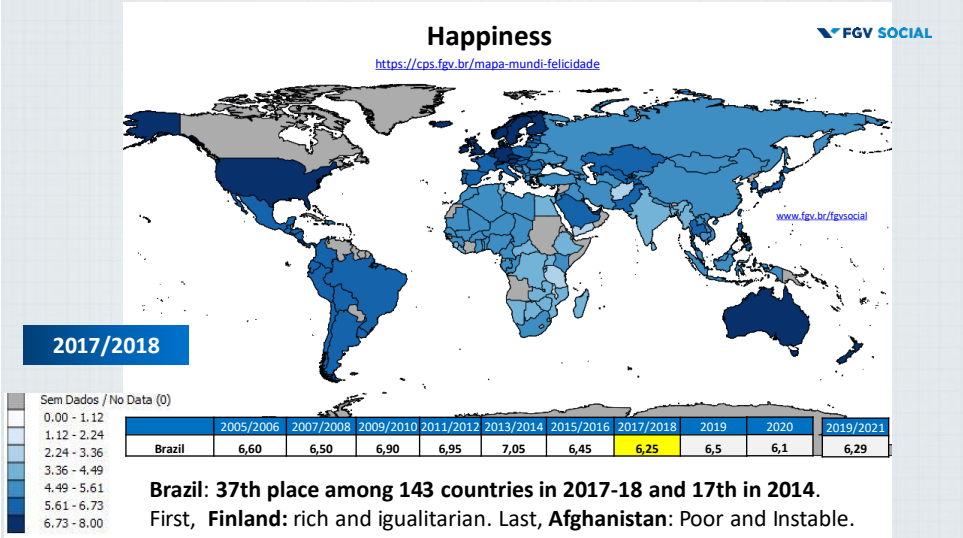
Current Income Brackets and Present Felicity (0 to 10)

Is it consistent with targeted safety nets ->

Source: SIPP/IPEA – October 2012

The Problem of Adaptation

Extracted from Frey and Stuzer (2002)

Global Happiness Map (2017-2018)

Happiness

https://cps.fgv.br/mapa-mundi-felicidade

FGV SOCIAL

www.fgv.br/fgvsocial

2017/2018

Sem Dados / No Data (0)
0.00 - 1.12
1.12 - 2.24
2.24 - 3.36
3.36 - 4.49
4.49 - 5.61
5.61 - 6.73
6.73 - 8.00

	2005/2006	2007/2008	2009/2010	2011/2012	2013/2014	2015/2016	2017/2018	2019	2020	2019/2021
Brazil	6,60	6,50	6,90	6,95	7,05	6,45	6,25	6,5	6,1	6,29

Brazil: **37th place among 143 countries in 2017-18 and 17th in 2014**.
First, **Finland:** rich and igualitarian. Last, **Afghanistan**: Poor and Instable.

Source: FGV Social/CPS from Gallup World Poll Microdata

International Comparisons Happiness – Satisfaction with the Present Life

Subjective Grade: 0 to 10

Mean Grade of Satisfaction with Life and its Change in Brazil and the World

	2019	2020	Dif=2020-2019
Brazil	6.50	6.10	-0.40
World, 40 countries	6.02	6.04	0.02
		Dif em Dif	-0.42

Source: FGV Social from the Gallup World Poll

Mean happiness has a strong drop in Brazil but remains stable in other countries measured.

In the Brazilian case that figures as the treatment group in our quasi experiment, the first interview was made between August 27 and October 25, 2019 and the final question was asked between **September 10 and November 11, 2020. The** 40 countries in control group includes from Austria to Zimbawe

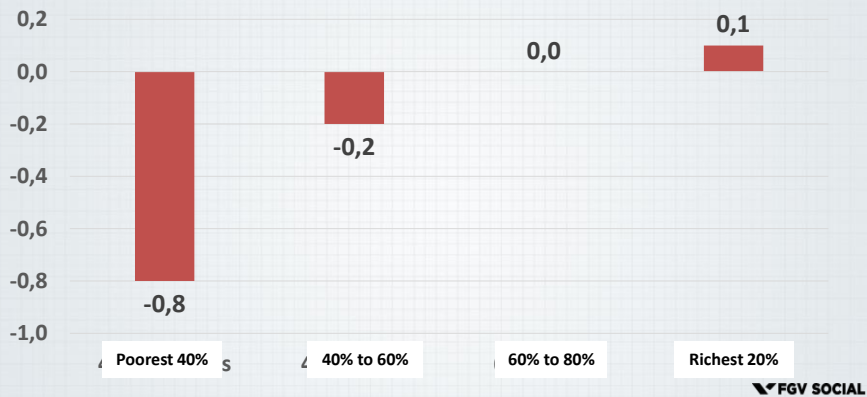**FGV SOCIAL**

Subjective Happiness vs. Income - Pandemic Change
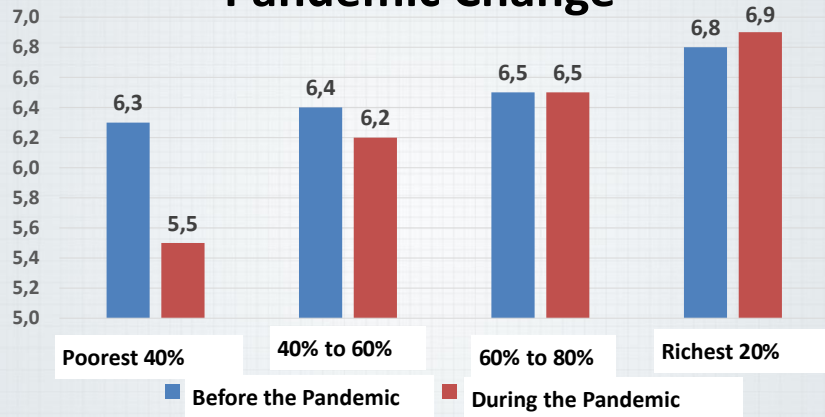
Source: FGV Social from the Gallup World Poll

There is a marked increase in the inequality of happiness. The difference in life satisfaction between income extremes rises from 7.9% to 25.5%.

Change in Happiness during the Pandemic along the Income Distribution

Source: FGV Social from the Gallup World Poll

**All the fall in happiness occurs in the poorest 40% (-0.8%) and in the lower middle group (-0.2)
During the pandemic inequality of happiness has increased.**

Global Social Indicators

**The Millennium Development Goals (MDGs)

From 1990 to 2015 (launched in 2000)
Agreed by 189 countries

Expert Commission – Stiglitz, Sen, Fitoussi ((Mis)Measuring Our Lives) Also Arrow, Atkinson, Deaton, Heckman, Kanehman, Piketty…

OVERVIEW (My Take on the Expert Commission main directions)

A good guide can be found in the 2010 book *Mis-Measuring Our Lives* by two Nobel prize winners in Economics, Joseph Stiglitz and Amartya Sen. The book discusses the conclusions from an international committee of experts on how to measure social progress, and they can be summarized in four recommendations:

Growth in household surveys – The work calls attention to the need to improve the current economic development measures centered on the GDP. In particular, also to emphasize the growth prospects of the average income and expenditure of families interviewed in household surveys, to measure the improvement in mean living standards.

Equality – Measurements of income, consumption and wealth must be accompanied by indicators that reflect their distribution among people and social groups. This means we must keep an eye on the vertical and horizontal inequality of income flows and asset stocks.

- **Sustainability –** To consider asset stocks such as, for example, environmental attributes to incorporate the sustainability of performance indicators as time goes by, in other words whether current welfare levels can continue for future generations. The different assets inventories collected by the surveys and, especially, education and housing to analyze the stability of labor earnings and living standards.
- **Perceptions –** Lastly, the conjugation of objective and subjective well-being measurements by using questions raised in opinion polls relating to the assessment of their lives is designed to obtain a more realistic view of the quality of life in different countries. In other words, it is not enough to objectively improve our lives, but it is also necessary for people to recognize this development. Here, we use as a benchmark of subjective indicators, measurements of happiness or life satisfaction that has become more prominent in the recent economic literature.

*How to Measure Social Progress?

Emphasize not only **GDP Growth**, but also:

- **Household** Flows;
- **Productivity** & **Capital** Stocks/Wealth (Physical, Natural, Human, Social);
- **Distribution** of Stocks and Flows;
- **Subjective** Measures of Well-being

Global Social Indicators

- **MPI** (Multidimensional Poverty Index)
- **HDI** (Human Development Index)
- **IHDI** (Inequality Adjusted HDI)
- **PHDI** (Perceived HDI - Subjective)
- **MDGs** (8 Millenium Development Goals)
- **SDGs** (17 Sustainable Development Goals)
  - International Poverty Lines (1,9 U$S a day PPP), Shared Prosperity (Bottom 40%), My World (Subjective Priorities)
- **Happiness and Well-Being** (Gallup World Poll)
  - World Happiness Report (UN) or Beyond GDP (OECD)
- **Expert Commission** ((Mis)Measuring Our Lives)

Impact Channels of Public Policies (Means Approach)

QUALITY OF THE WORKER

HUMAN CAPITAL (General & Specific)

EMPLOYMENT AND ENTREPRENEURSHIP

QUALITY OF JOBS

BUSINESS ENVIRONMENT

QUALITY OF EDUCATION

GOVERNMENT TRANSFERS

INCOME GENERATION

Productivity
PRODUCTION FUNCTION

HEALTH

DIRECT EFFECT

CURRENT FINAL INCOME

CURRENT BUDGET CONSTRAINT

POPULATION WELL-BEING

DIRECT EFFECT

UTILITY

PROVISION OF PUBLIC GOODS AND SERVICES

TAXES (Direct & Indirect)

TEMPORAL BUDGET CONSTRAINT & DECENT MARKETS

LEVERAGE OPPORTUNITIES AND SMOOTH SHOCKS

CONSUMER PROTECTION AND FINANCIAL EDUCATION

SAVINGS, CREDIT AND INSURANCE
MICROFINANCE