PSYCHOLOGICAL RESEARCH ON ECONOMIC INEQUALITY: METHODOLOGICAL AND THEORETICAL APPROACHES

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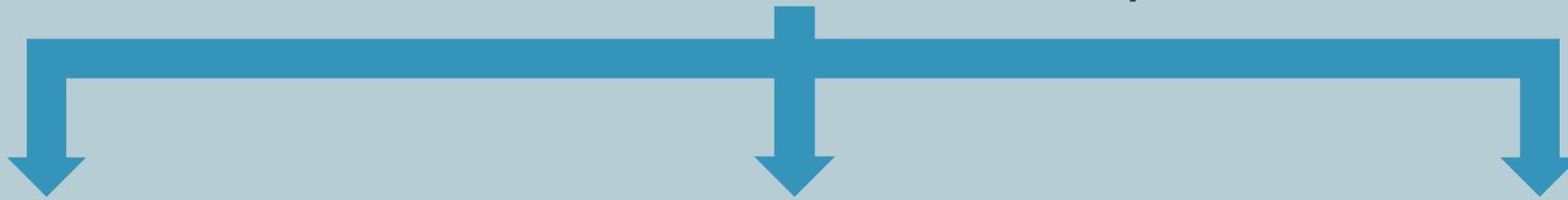
Applied social cognition to public policies - AEPS

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WHAT IS ECONOMIC INEQUALITY?

Economic inequality refers to the gap in economic outcomes between people at the top and at the bottom of a society

Wage inequality

Differences in wages paid to different people. It reflects differences in labor market discrimination.

Income inequality

Extent to which income is distributed unevenly across people or across households.

Income encompasses labor earnings (such as wages, salaries, and bonuses), capital income, interest on savings accounts, rent from real estate, welfare benefits, state pensions.

Wealth inequality

Extent to which wealth is distributed unevenly across people or across households.

While income refers to the flow of money over a given period, an individual's wealth represents the stock of all assets that a person holds, including financial assets (bonds and stocks), property, and savings.

ECONOMIC INEQUALITY AND ITS MEASURES

In essence, measuring inequality involves comparing wages, income or wealth distributions within a country or over time.

Distribution of family income per person across households in the US in 2013
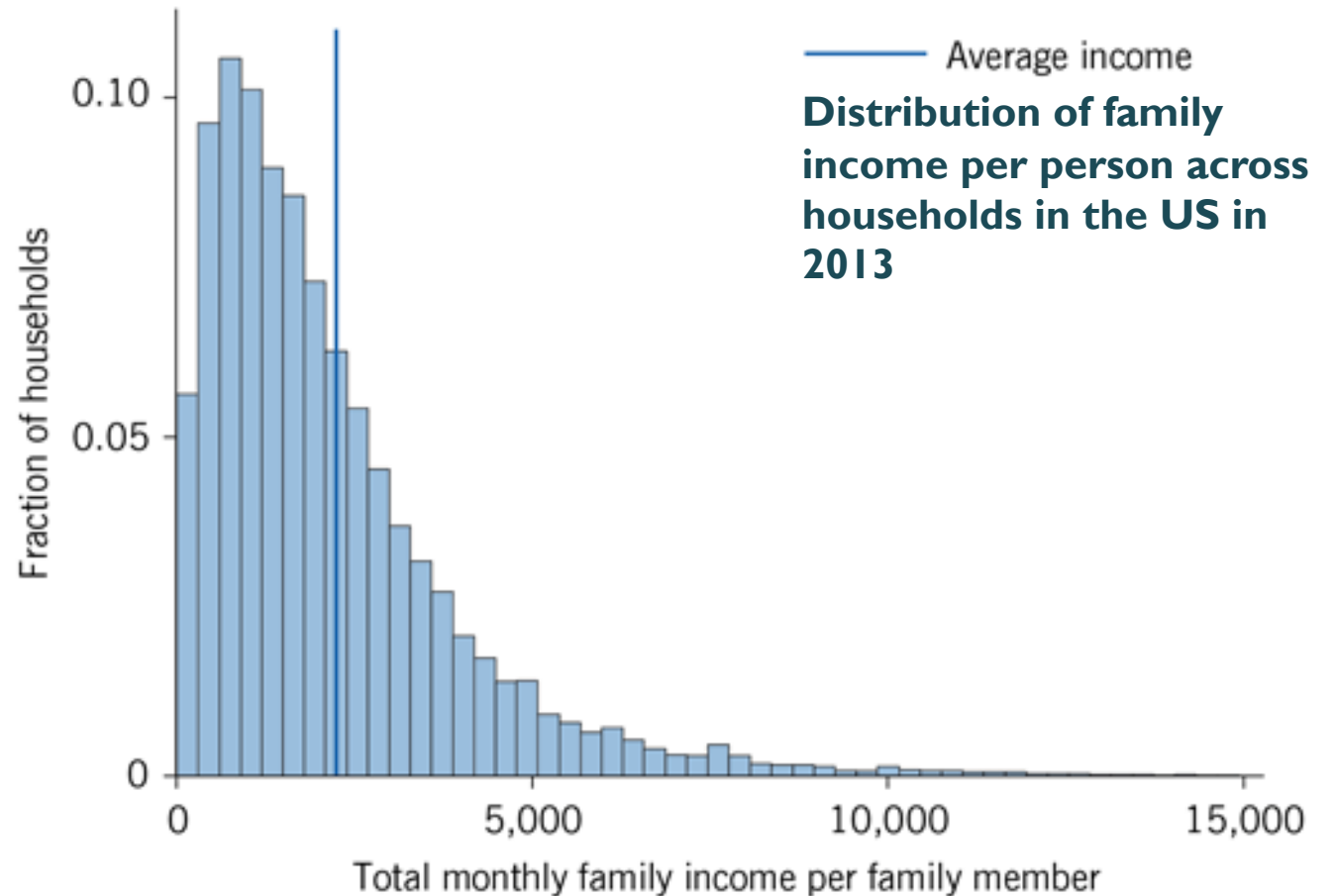
Source: Author's calculations based on Survey of Income and Program Participation 2008 Panel. Online at: https://www.census.gov/sipp/

The skewed shape with a long right tail is typical for income distributions (i.e., most households earn below the average with a few households earning a very high income)

Measures of inequality attempt to capture the dispersion, or the spread, of this distribution.

MEASURING ECONOMIC INEQUALITY

There exists a variety of **objective measures** of economic inequality.

Inter-decile ratio (P90/P10 ratio, but also P90/P50 and P50/P10)
→ For example, the **P90/P10 ratio in the US is 6.3**. This means that the income of the top 10% of households in the US is more than six times greater than that of the bottom 10%.

Interquintile share ratio (S80/S20 ratio)
→ For example, the **S80/S20 ratio in the Italy is 5.86**. This means that the income of the wealthiest quintile of the population is nearly 6 times higher than the income of the poorest quintile (World Bank, 2021).

Inter-quintile ratios are usually preferred over inter-decile ratios, because they are **less vulnerable to extreme values** and consider a **larger part of the distribution**.

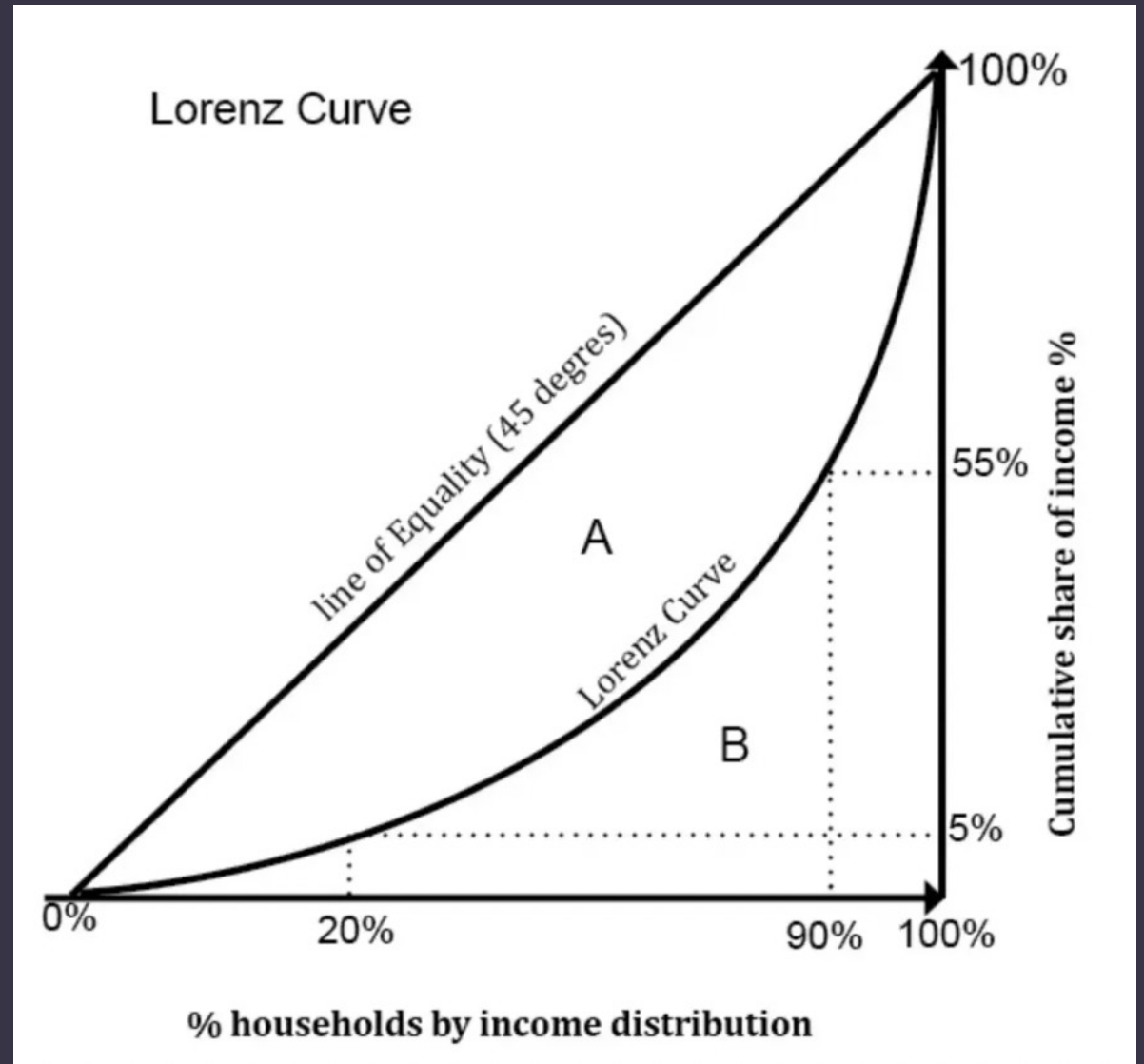But the most used one is the Gini Index.

| Country | Interdecile ratios | | |
	90–10	90–50	50–10
Belgium (2015)	3.4	1.7	2.0
Brazil (2013)	8.7	2.9	3.0
Germany (2015)	3.7	1.8	2.0
India (2011)	9.4	3.2	2.9
Norway (2015)	3.1	1.7	1.9
Russian Federation (2011)	5.9	2.5	2.4
South Africa (2015)	25.6	5.3	4.8
UK (2016)	4.2	2.0	2.1
US (2016)	6.3	2.3	2.7

Source: OECD data, "Income inequality." Online at: https://data.oecd.org/inequality/income-inequality.htm

GINI INDEX

The Gini index is based on the comparison of cumulative proportions of the population against cumulative proportions of income they receive, and it ranges between 0 in the case of perfect equality and 1 in the case of perfect inequality

Unlike the ratio measures, the Gini coefficient uses information from the entire income distribution.

Lorenz Curve

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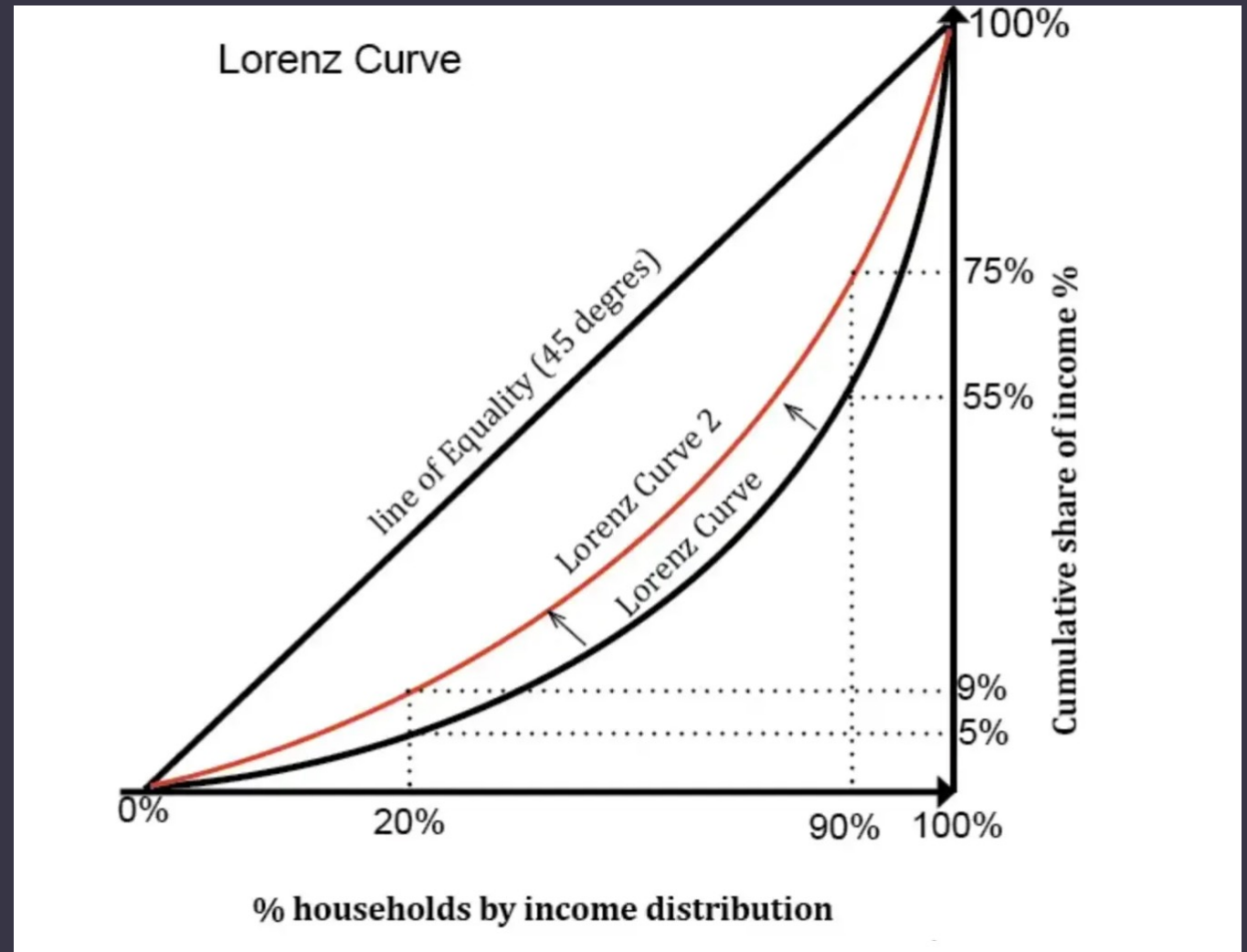
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Income inequality – Gini Index, 2019
A higher Gini index indicates higher inequality.

Our World in Data

World

No data 20   30   35   40   45   50   55   60   70

Economies with Gini values **above 0.5 are considered very unequal**, with countries like Botswana, Colombia, and Zambia being in this group.
A Gini coefficient **below 0.3 is considered low** and is typical for Scandinavian countries, as well as Slovenia, the Czech Republic, and Slovakia.
In most countries the Gini coefficient lies between 0.3 and 0.5.
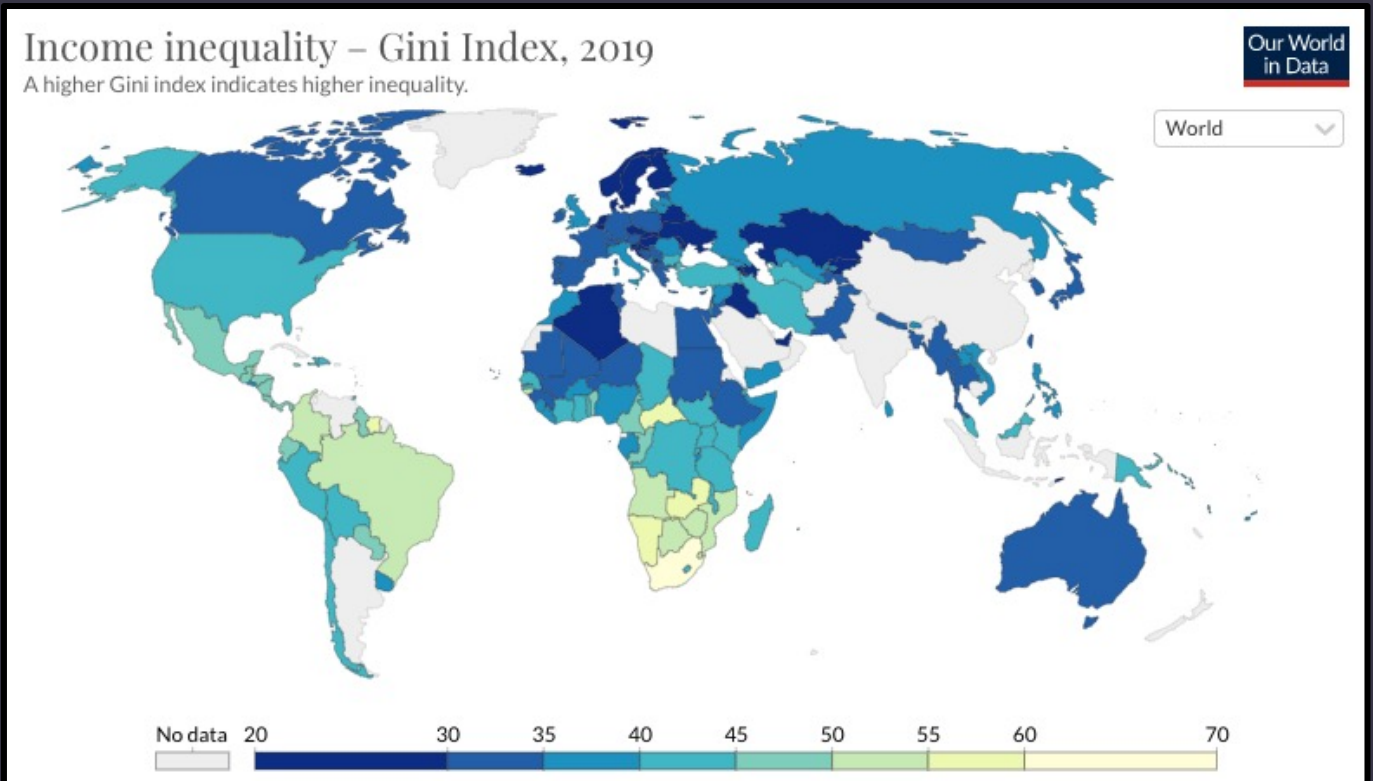
WHAT DOES THE CHART TELL US ABOUT INEQUALITY WITHIN COUNTRIES?

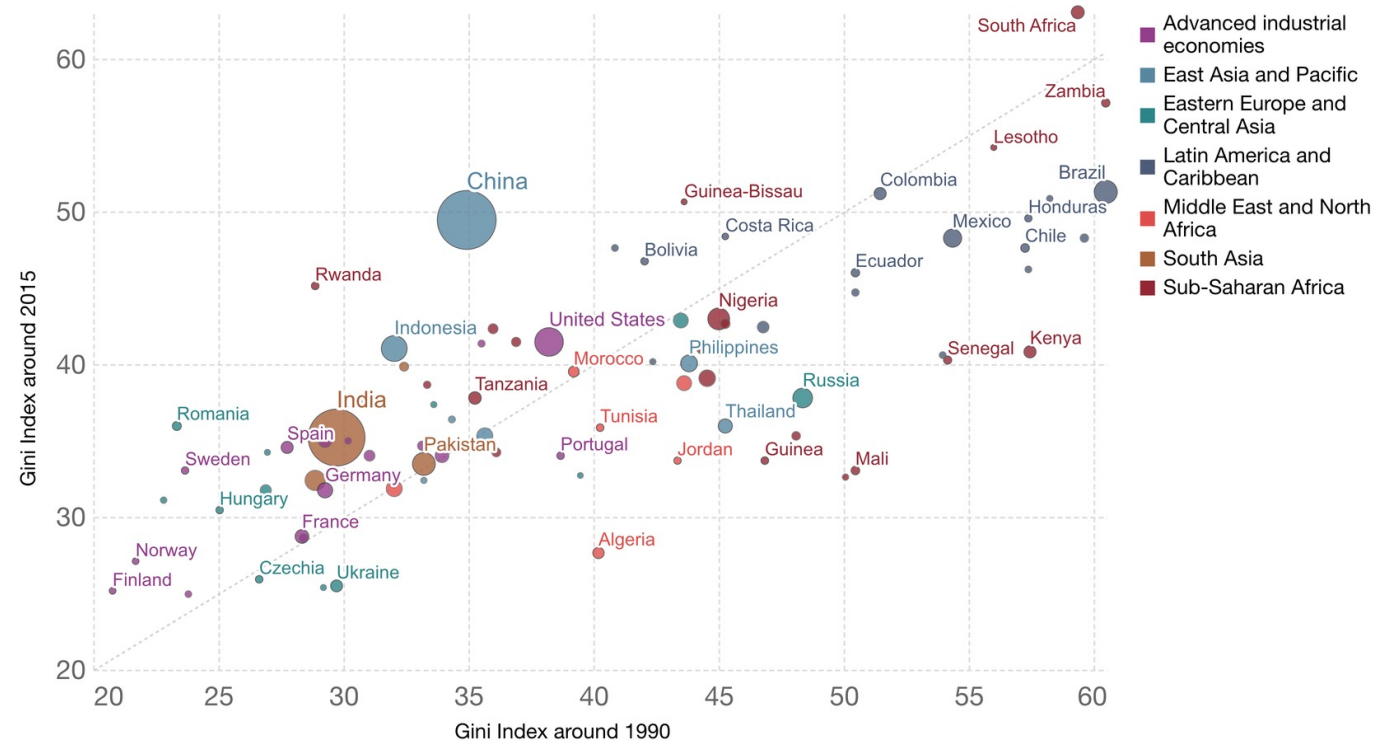**1** **No general trend to higher inequality**
It's a mistake to think that inequality is rising everywhere. Rising inequality is not ubiquitous, nor inevitable in the face of globalization, and suggests that politics and policy at the level of individual countries can make a difference.

2 **Note the diversity between countries**
As well as there being different trends, notice how very different the level of inequality is across countries. The spread you see – from the highest inequality countries in Latin America and Sub-Saharan Africa, to the lowest-inequality countries in Scandinavia – is much larger than the changes in individual countries over this period.

Inequality in 1990 vs 2015
A higher Gini index represents higher inequality.

Our World in Data

Legend:
- Advanced industrial economies
- East Asia and Pacific
- Eastern Europe and Central Asia
- Latin America and Caribbean
- Middle East and North Africa
- South Asia
- Sub-Saharan Africa

Source: Povcal (2018), The Chartbook of Economic Inequality (2017), Kandbur et al. (2017) Table 1.B
Note: Estimates are based on household survey data of either incomes or consumption. All countries for which comparable surveys within five years of each reference year were available are shown.
CC BY

WHAT DOES THE CHART TELL US ABOUT INEQUALITY WITHIN COUNTRIES?

3

There are clear regional patterns
Almost all Latin American countries show very high levels of inequality, but considerable declines from 1990 to 2015.
Conversely, advanced industrial economies show lower levels of inequality, but rises in most instances.
A number of Eastern European countries experienced rising inequality as they transitioned from socialist regimes.

Inequality in 1990 vs 2015
A higher Gini index represents higher inequality.

Legend:
- Advanced industrial economies
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- Eastern Europe and Central Asia
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Source: Povcal (2018), The Chartbook of Economic Inequality (2017), Kandbur et al. (2017) Table 1.B
Note: Estimates are based on household survey data of either incomes or consumption. All countries for which comparable surveys within five years of each reference year were available are shown.

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4

Across countries, the average level of inequality has not changed
The rises and falls seen in the Gini index in different countries more or less cancel out, the average Gini across countries fell marginally from 39.6 to 38.6.
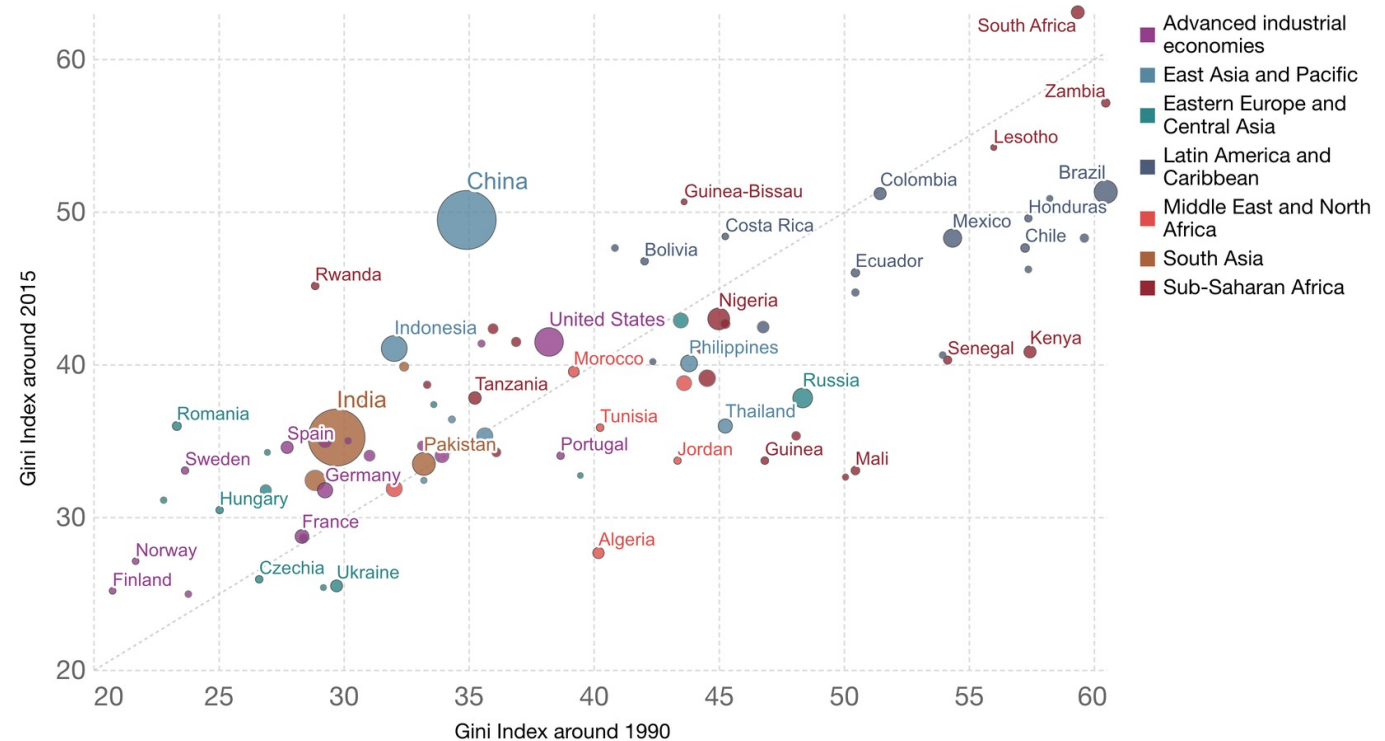
"Rising economic inequality is the defining challenge of our time"

Barak Obama, Center for American Progress, 2013

WHY IS ECONOMIC INEQUALITY A PROBLEM?

Community life and social relations (e.g., horizontal trust; Uslaner & Brown 2005)

Mental and physical health and life expectancy (Wilkinson & Pickett, 2009): higher rates of infant mortality, shorter height, poor self-reported health, low birthweight, AIDS.

Educational performance, aspirations, opportunities
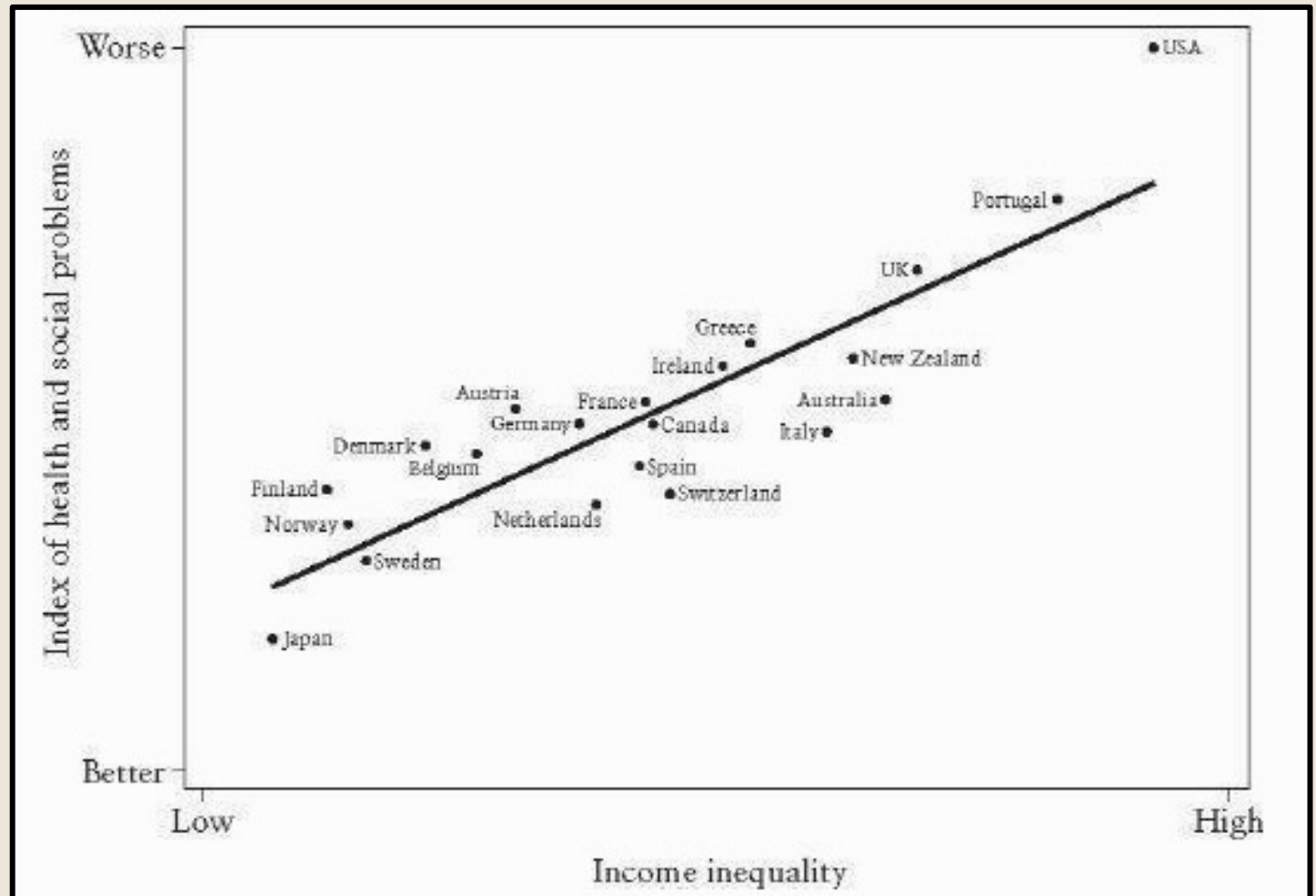
Social mobility (both inter and intra generational)

Homicide rates, group conflicts

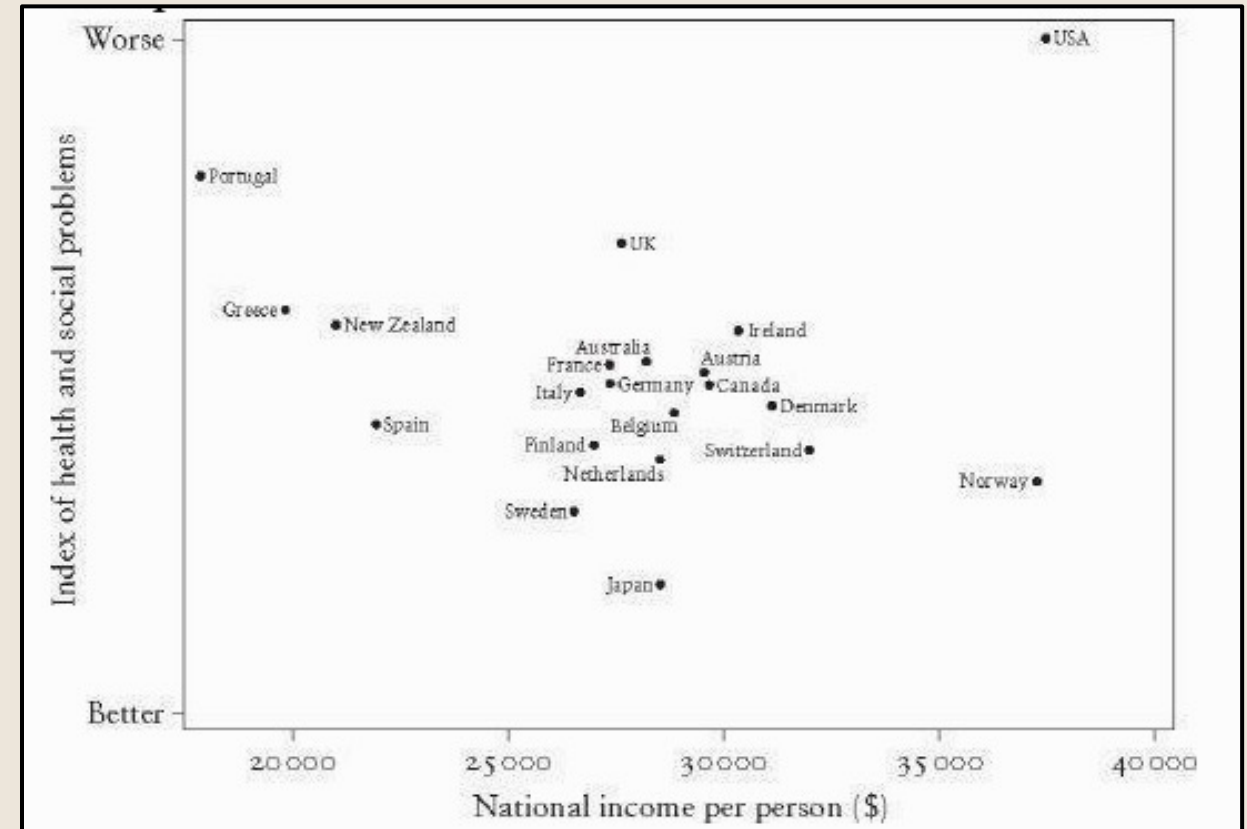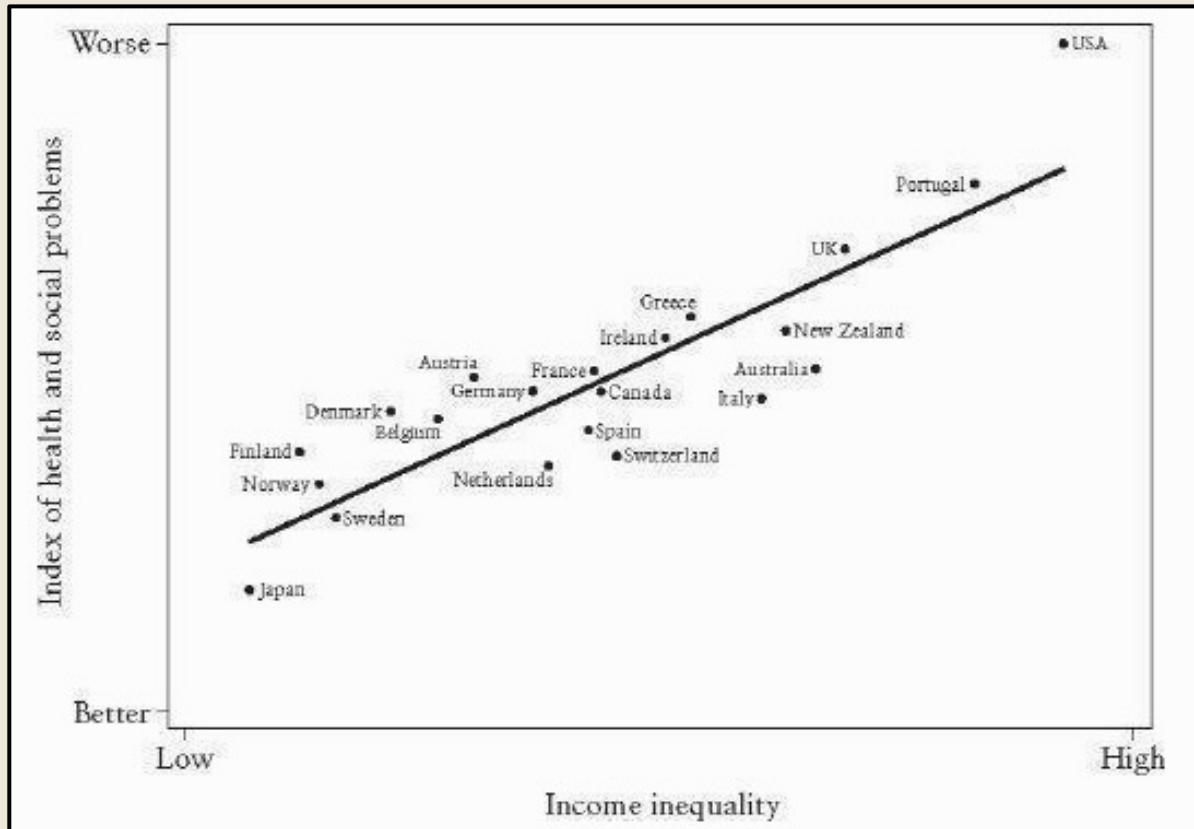# WHY IS ECONOMIC INEQUALITY A PROBLEM?

Most of the important health and social problems of the rich world are more common in more unequal societies (Wilkinson & Pickett, 2009; 2018)
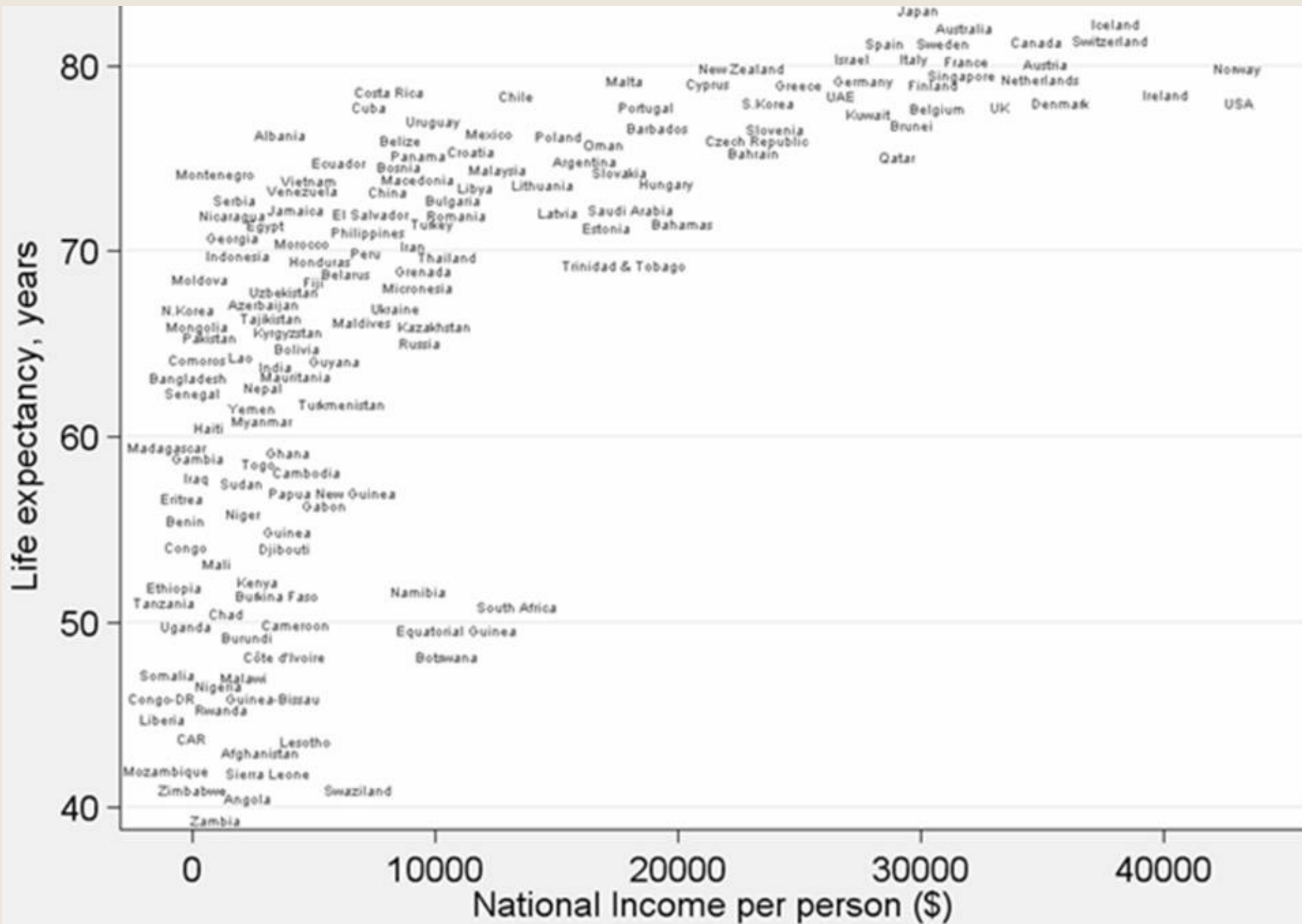
→ Social gradient

→ Inequality vs. richness

Wilkinson & Pickett, 2009

WHY IS ECONOMIC INEQUALITY A PROBLEM?


Wilkinson & Pickett, 2009

WHAT ABOUT SOCIAL PSYCHOLOGY?

Previous research has focused on a somewhat narrow set of outcomes. In particular, most of this work has addressed the **impact of inequality on societal outcomes**

This work lacks compelling, theory-driven explanations for **why inequality has these effects and when and for whom** these effects are likely to emerge.
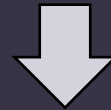
Social psychological theorizing is suited to develop an understanding of the processes through which inequality can have societal level effects. It can help to fill the gaps in at least two ways:

1

by emphasizing the relevance of **subjective perceptions of inequality**

2

by pointing to the **processes that explain why inequality has negative effects** for individuals and societies

Jolanda Jetten
Kim Peters *Editors*

The Social Psychology of Inequality

Springer

HOW TO MEASURE SUBJECTIVE ECONOMIC INEQUALITY?

Research focusing on objective indicators of inequality rest on the assumption that changes in actual income inequality in a society are tightly coupled with citizens' perceptions of and reactions to this inequality.

ECOLOGICAL FALLACY

People's responses to inequality are a function of their perceptions. There is a rich literature explaining why people perceive the world the way they do and how they then respond to those perceptions (e.g., subjective SES).

People's perceptions and responses to inequality can be expected to be influenced by a range of psychological processes that relate to inequality, including social comparisons, relative deprivation, fairness perceptions, and ideological stances.
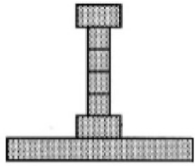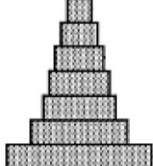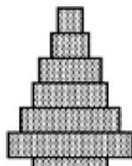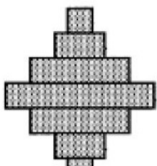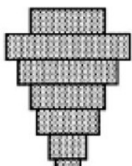
The perception of inequality can be measured using relative or absolute measures

They can be framed to capture the **representations of what is (actual inequality) and what should be (ideal inequality)** (Janmaat, 2013, Norton & Ariely, 2011)

HOW TO MEASURE SUBJECTIVE ECONOMIC INEQUALITY?

Relative measures ask about percentages of capital or income and use diagrams or pictorial figures that represent the distribution of resources in society

Q15. These five diagrams show different types of society. Please read the descriptions and look at the diagrams and decide which you think best describes [COUNTRY] …

Type A	Type B	Type C	Type D	Type E
A small elite at the top, very few people in the middle and the great mass of people at the bottom.	A society like a pyramid with a small elite at the top, more people in the middle, and most at the bottom.	A pyramid except that just a few people are at the bottom.	A society with most people in the middle.	Many people near the top, and only a few near the bottom.

a. <DIAGRAM: BCDE> **First, what type of society is [COUNTRY] today – which diagram comes closest?** *(Please tick one box only)*

Type A	1
Type B	2
Type C	3
Type D	4
Type E	5
Can't choose	8

ISSP 2019 on Social inequality

HOW TO MEASURE SUBJECTIVE ECONOMIC INEQUALITY?

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Figure 1

Open in figure viewer | ⬇PowerPoint

The Graphic Notes Inequality Measure (GNIM Rodríguez-Bailón et al. 2017).

Type E	5
Can't choose	8

ISSP 2019 on Social inequality

HOW TO MEASURE SUBJECTIVE ECONOMIC INEQUALITY?

Relative measures ask about percentages of capital or income and use diagrams or pictorial figures that represent the distribution of resources in society

Absolute measures, in contrast, ask specifically about mean salaries, income or wealth.

Compared to relative measures, absolute measures more consistently predict political attitudes. **Relative measures are very sensitive to the way the questions are asked** and are **more likely to underestimate real levels of inequality** (Eriksson & Simpson, 2012; Easterbrook, 2021).

Q15. These five diagrams show different types of society. Please read the descriptions and look at the diagrams and decide which you think best describes [COUNTRY] …
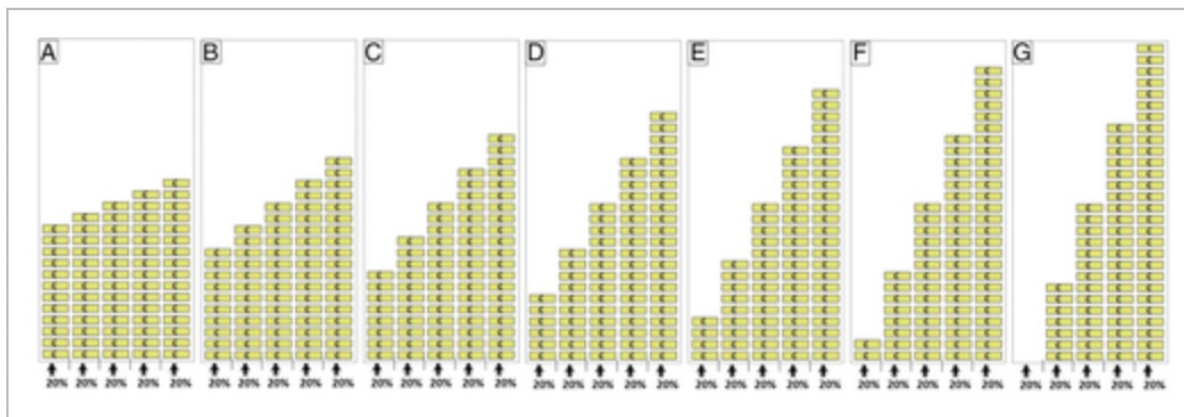
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ISSP 2019 on Social inequality (Niehus, 2014)

Q3. Next, what do you think people in these jobs ought to be paid? How much do you think they should earn each [YEAR/MONTH/FORTNIGHT/WEEK], [BEFORE/AFTER] taxes, regardless of what they actually get…

Please write in how much they SHOULD earn each [YEAR / MONTH / FORTNIGHT / WEEK] [BEFORE / AFTER] taxes
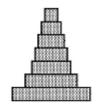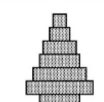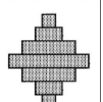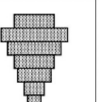
a.	<SHOULD2: ABCDE> About how much do you think a doctor in general practice should earn?	
b.	<SHOULD5: ABCDE> How much do you think a chairman of a large national corporation should earn?	
c.	<SHOULD12: BCDE> How much do you think a shop assistant should earn?	
d.	<SHOULD10: ABCDE> How much do you think an unskilled worker in a factory should earn?	
e.	<SHOULD11: ABCDE> How much do you think a cabinet minister in the [national] government should earn?	

ISSP 2019 on Social inequality

These are convenient in cross-national research and readily comparable to real world data on economic inequality

SUBJECTIVE GINI COEFFICIENT

Niehus, 2014

Kuhn, 2015

- Does the elite earn thousand times more, or a million times more?

- We will only have five distinct estimates for all people, which limits the variation in the data (Knell and Stix, 2020).

- The assessment is very different if someone believes there is a doctor for every fifty factory workers, or if they believe there is one for every ten thousand.

- people generally do not know how much a person in the upper positions of a company earns → wide variety of responses
- the use of malleable and biased heuristics when responding (e.g., **anchoring effects**)
- **ratio bias effects,** especially the ideal measure (Pedersen & Mutz 2019)

SUBJECTIVE GINI COEFFICIENT

Extract the sizes of lower, middle, and upper classes

Extract the average earnings for each class

Gáspár, et al. (2022). A twofold subjective measure of income inequality.
Under review

Twofold subjective perceived Gini

- accommodates multiple dimensions of income inequality → directly comparable to the objective Gini
- more closely correlated with responses to general statements on whether domestic income differences are too large, and how respondents think about redistribution

	Twofold subjective	Paygap only	Shape only
Perceived Gini	2.737	3.127	2.975
	(0.066)***	(0.073)***	(0.090)***
Desired Gini	-4.069	-3.065	-3.020
	(0.103)***	(0.073)***	(0.126)***
Adjusted R^2	0.091	0.082	0.058
N	27591	27591	27591

Standard errors in parentheses
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

OTHER (IMPORTANT) MEASURES

Generic indicator to determine the degree of agreement with the existence of economic equality, with statements such as '**income differences are too large**' (Bavetta et al., 2019; Castillo et al., 2012).

Multiple-item scales: conceptualizing perceptions of inequality as an individual difference variable that assesses how people interpret and evaluate the level of inequality around them—that is, their global assessments of how unequal their group, society, country feels

→ **Perceived Economic Inequality in Everyday Life** (PEIEL; García-Castro et al., 2019) – 17 items, e.g., I know people with very different levels of income; Among the people I know, some have bigger and more luxurious homes than others

→ **Subjective Inequality Scale** (SIS; Schmalor & Heine, 2021) – 8 items, e.g., Almost all the money that is earned goes to only a few people. It is extremely unjust if children of affluent parents get a better education.

→ **Perceived Economic Inequality Scale** (PEIS; Valtorta, et al., 2022) – 7 items, e.g., In Italy, there are few very rich people and many very poor people; It is not at all fair that there are large differences in income between rich and poor people

PERCEIVED ECONOMIC INEQUALITY SCALE (PEIS; VALTORTA, ET AL., 2022)

Validated on an Italian representative sample (N=1446)

Cross-valifated EFA-CFA

1. Today, in Italy, there is a lot of economic inequality.
2. In Italy, there are few very rich people and many very poor people.
3. In Italy, the real opportunities for success in life are available only to rich people.
4. A high level of economic inequality is extremely unfair.
5. It is unfair that the chances of success depend on where a person grew up.
6. It is not at all fair that there are large differences in income between rich and poor people.
7. It is extremely unfair that children of wealthy parents get a better education.
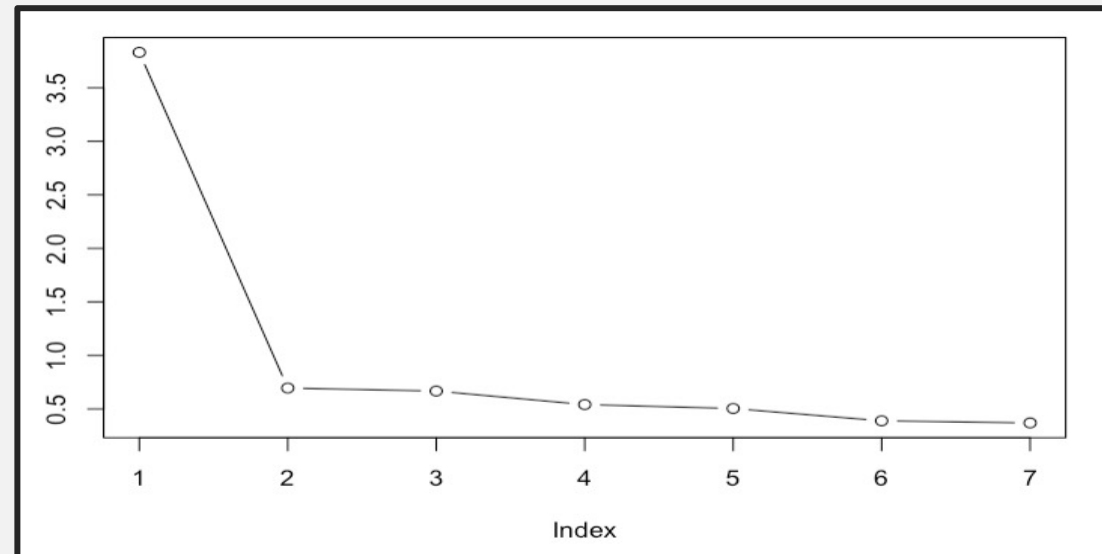
CFI = 0.998;
TLI = 0.997;
RMSEA = 0.022, 90% CI [0.00, 0.045];
SRMR = 0.037

PERCEIVED ECONOMIC INEQUALITY SCALE

Italian representative sample (N=1446)   **Construct validity**

Variable	1	2	3	4	5	6	7
1. PEIS	-						
2. Actual wage gap	**.21**[***]	-					
3. Ideal wage gap	**.06**	.54[***]	-				
4. ESJ Fairness	**-.57**[***]	-.15[***]	-.02	-			
5. ESJ Rich vs poor	**-.23**[***]	-.04	-.008	.26[***]	-		
6. Social Dominance	**-.50**[***]	-.13[***]	-.03	.47[***]	.38[***]	-	
7. Meritocratic beliefs	**-.11**[***]	.001	.06[**]	.09[***]	.30[***]	.11[***]	-
8. Political orientation	**-.26**[***]	-.04	-.005	.26[***]	.26[***]	.34[***]	.17[***]

PSYCHOLOGICAL FACTORS ASSOCIATED TO PERCEIVED INEQUALITY

Ideology – set of beliefs shared by people to describe and understand the world in which they live (Jost et al., 2009).

People who tend to **justify the system** more (García-Sánchez et al., 2019; Rodríguez-Bailón et al., 2017), who have a greater **social dominance orientation** (Kteily et al., 2017; Waldfogel et al., 2021) and who exhibit stronger **meritocratic beliefs** (Castillo et al., 2019; Hauser & Norton, 2017) tend to perceive less economic inequality. Conservative people perceive less inequality (Hing et al., 2019).

Reference group – social circles in which people interact (Evans & Kelley, 2017).

When estimating inequality, individuals collect information via their experiences with friends, family members, colleagues and acquaintances (García-Castro et al., 2021). They extrapolate this information to the rest of society, creating a systematic perceptual bias in their inference on the distribution of economic resources (Cruces et al., 2013).

Social comparison – entails comparison with others' resources to understand the place one occupies in society (Norton, 2013)

Comparisons can be made upward (i.e., with people with a higher income) or downward (i.e., with people with a lower income) with different effects. For example, upward comparisons can cause a sense of relative deprivation (Condon & Wichowsky, 2020), leading to a larger inequality perception, while downward comparisons can lead to a sense of wellbeing and security (Irwin, 2015).

EFFECTS OF PERCEIVED ECONOMIC INEQUALITY

- less interdependent self-construal (Sánchez-Rodríguez et al., 2019)
- social protests and political participation (Jo & Choi, 2019; Vezzoli et al., 2022)
- diminishes the perception of social mobility (Browman et al., 2021)
- influence on redistributive preferences (Bobzien, 2020; García-Sánchez et al., 2020)
- risky behaviors (Brown-Iannuzzi & McKee, 2019)
- subjective wellbeing and life satisfaction (Vezzoli et al 2022)
- more conspiracy theories (Casara et al., 2022)
- higher depression, anxiety, stress and status anxiety (Schmalor & Heine, 2021; Melita et al., 2021)
- beliefs on cross-country economic differences (Gaspar et al., 2022)

Lower class (n = 296) Middle class (n = 866) Upper class (n = 284)

	Lower class β	95% CI	p	Middle class β	95% CI	p	Upper class β	95% CI	p
			.037	0.13	0.04 – 0.23	**.006**	0.09	-0.04 – 0.22	.177
			.973	0.08	0.02 – 0.15	**.014**	0.20	0.08 – 0.31	**.001**
			.343	0.06	-0.02 – 0.14	.137	0.16	0.02 – 0.31	**.027**
			.012	0.13	0.05 – 0.21	**.001**	0.13	-0.01 – 0.27	.070
			.988	0.09	0.01 – 0.17	**.022**	0.09	-0.04 – 0.22	.160
			.004	-0.18	-0.25 – -0.12	**<.001**	-0.17	-0.28 – -0.05	**.004**
Gender [female]	-0.32	-0.55 – -0.09	**.006**	-0.25	-0.38 – -0.12	**<.001**	-0.27	-0.49 – -0.05	**.015**
Gender [non-binary]	1.29	-0.68 – 3.26	.200	-1.08	-2.95 – 0.79	.259	-0.14	-1.93 – 1.65	.879
Age	-0.07	-0.18 – 0.05	.264	0.00	-0.06 – 0.06	.998	0.01	-0.10 – 0.12	.858
Perceived economic inequality * Impacts on finance	-0.03	-0.18 – 0.13	.722	0.02	-0.07 – 0.10	.669	-0.06	-0.22 – 0.10	.467
Perceived economic inequality * Impacts on resource procurement	-0.08	-0.22 – 0.06	.255	-0.11	-0.20 – -0.03	**.008**	-0.03	-0.18 – 0.11	.657
Perceived economic inequality * Impacts on psychological health	-0.02	-0.17 – 0.13	.803	-0.02	-0.10 – 0.06	.641	0.20	0.06 – 0.34	**.006**
Observations	296			866			284		
R2 / R2 adjusted	.099 / .064			.111 / .100			.228 / .196		

- mor
- high
- beli

Table 2. Regression analyses for activism by socioeconomic classes.

	Lower Class			Middle class			Upper class		
	β	95% CI	p	β	95% CI	p	β	95% CI	p
(Intercept)	0.18	0.01 – 0.35	**.037**	0.13	0.04 – 0.23	**.006**	0.09	-0.04 – 0.22	.177
Perceived economic inequality	-0.001	-0.12 – 0.11	.973	0.08	0.02 – 0.15	**.014**	0.20	0.08 – 0.31	**.001**
Impacts on finance	-0.07	-0.20 – 0.07	.343	0.06	-0.02 – 0.14	.137	0.16	0.02 – 0.31	**.027**
Impacts on resource procurement	0.17	0.04 – 0.31	**.012**	0.13	0.05 – 0.21	**.001**	0.13	-0.01 – 0.27	.070
Impacts on psychological health	0.00	-0.14 – 0.14	.988	0.09	0.01 – 0.17	**.022**	0.09	-0.04 – 0.22	.160
Political orientation	-0.17	-0.29 – -0.06	**.004**	-0.18	-0.25 – -0.12	**<.001**	-0.17	-0.28 – -0.05	**.004**
Gender [female]	-0.32	-0.55 – -0.09	**.006**	-0.25	-0.38 – -0.12	**<.001**	-0.27	-0.49 – -0.05	**.015**
Gender [non-binary]	1.29	-0.68 – 3.26	.200	-1.08	-2.95 – 0.79	.259	-0.14	-1.93 – 1.65	.879
Age	-0.07	-0.18 – 0.05	.264	0.00	-0.06 – 0.06	.998	0.01	-0.10 – 0.12	.858
Perceived economic inequality * Impacts on finance	-0.03	-0.18 – 0.13	.722	0.02	-0.07 – 0.10	.669	-0.06	-0.22 – 0.10	.467
Perceived economic inequality * Impacts on resource procurement	-0.08	-0.22 – 0.06	.255	-0.11	-0.20 – -0.03	**.008**	-0.03	-0.18 – 0.11	.657
Perceived economic inequality * Impacts on psychological health	-0.02	-0.17 – 0.13	.803	-0.02	-0.10 – 0.06	.641	0.20	0.06 – 0.34	**.006**
Observations		296			866			284	
R2 / R2 adjusted		.099 / .064			.111 / .100			.228 / .196	

ECONOMIC INEQUALITY

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Table 2. Regression analyses for activism by socioeconomic classes.

Table 4. Regression analysis for formal participation by socioeconomic classes.

	Lower Class			Middle class			Upper class		
	β	95% CI	p	β	95% CI	p	β	95% CI	p
(Intercept)	0.20	0.04 – 0.37	**.015**	0.17	0.08 – 0.26	**<.001**	0.12	-0.01 – 0.26	.077
Perceived economic inequality	-0.18	-0.29 – -0.07	**.001**	-0.14	-0.20 – -0.08	**<.001**	-0.03	-0.15 – 0.09	.651
Impacts on finance	-0.10	-0.24 – 0.03	.123	0.02	-0.06 – 0.09	.640	0.06	-0.09 – 0.21	.424
Impacts on resource procurement	0.29	0.16 – 0.42	**<.001**	0.28	0.20 – 0.35	**<.001**	0.29	0.15 – 0.44	**<.001**
Impacts on psychological health	0.01	-0.12 – 0.14	.883	0.05	-0.02 – 0.12	.177	0.04	-0.09 – 0.18	.514
Political orientation	-0.01	-0.12 – 0.10	.809	-0.02	-0.08 – 0.04	.551	0.02	-0.10 – 0.13	.765
Gender [female]	-0.37	-0.59 – -0.15	**.001**	-0.33	-0.45 – -0.21	**<.001**	-0.34	-0.56 – -0.11	**.003**
Gender [non-binary]	-0.87	-2.76 – 1.02	.363	-1.00	-2.79 – 0.80	.277	-0.91	-2.74 – 0.92	.329
Age	-0.15	-0.26 – -0.04	**.009**	-0.12	-0.18 – -0.05	**<.001**	-0.09	-0.20 – 0.02	.122
Perceived economic inequality * Impacts on finance	0.09	-0.05 – 0.24	.217	0.05	-0.03 – 0.13	.203	-0.06	-0.23 – 0.11	.491
Perceived economic inequality * Impacts on resource procurement	-0.16	-0.30 – -0.03	**.017**	-0.13	-0.21 – -0.05	**.002**	-0.09	-0.24 – 0.06	.223
Perceived economic inequality * Impacts on psychological health	0.00	-0.15 – 0.15	.982	-0.04	-0.12 – 0.03	.261	0.14	-0.00 – 0.28	*.052*
Observations		296			866			284	
R2 / R2 adjusted		.171 / .139			.180 / .169			.194 / .161	

ECONOMIC INEQUALITY

400

300

Count

200

100

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EFFECTS OF PERCEIVED ECONOMIC INEQUALITY

- less interdependent self-construal (Sánchez-Rodríguez et al., 2019)
- social protests and political participation (Jo & Choi, 2019; Vezzoli et al., 2022)
- diminishes the perception of social mobility (Browman et al., 2021)
- influence on redistributive preferences (Bobzien, 2020; García-Sánchez et al., 2020)
- risky behaviors (Brown-Iannuzzi & McKee, 2019)
- subjective wellbeing and life satisfaction (Vezzoli et al 2022)
- more conspiracy theories (Casara et al., 2022)
- higher depression, anxiety, stress and status anxiety (Schmalor & Heine, 2021; Melita et al., 2021)
- beliefs on cross-country economic differences (Gaspar et al., 2022)

Life satisfaction

Fixed effects	Model 3 β	95% CI	pValue
Individual level			
Intercept	0.04	−0.02–0.10	.250
Individual Gini	−0.01	−0.05–0.04	.791
Objective SES	−0.01	−0.06–0.03	.545
Subjective SES	0.33	0.28–0.38	<.001
Perceived social support	0.30	0.25–0.34	<.001
COVID-19 personal impact	−0.15	−0.19 to −0.10	<.001
Age	0.04	−0.00–0.08	.076
Gender (female)	−0.07	−0.16–0.02	.113
Gender (other)	−0.94	−1.88–0.01	.052
Perceived economic inequality	−0.08	−0.14 to −0.02	.007
Economic vulnerability			
Anger toward inequality			
Regional-level			
Gini	0.07	−0.06–0.20	.299
GDP per capita	0.11	−0.02–0.24	.098
Cross-level interaction			
Perceived economic inequality X Gini	0.01	−0.04–0.07	.619
Random effects			
σ^2_e		0.827	
σ^2_0		0.001	
σ^2_1	0.041		
N		$5_{regional\ area}$	
Observations		1446	
R^2		.318	

Abbreviations: SES, socioeconomic stat

Well-being

Fixed effects	Model 3 β	95% CI	p Value
Individual-level variables			
Intercept	0.13	0.05–0.21	<.001
Individual Gini	0.01	−0.03–0.05	.606
Objective SES	−0.06	−0.10 to −0.02	.008
Subjective SES	0.15	0.10–0.19	<.001
Perceived social support	0.21	0.16–0.25	<.001
COVID-19 personal impact	−0.42	−0.47 to −0.38	<.001
Age	0.16	0.12–0.20	<.001
Gender (female)	−0.25	−0.33 to −0.17	<.001
Gender (other)	−0.54	−1.44–0.36	.252
Perceived economic inequality	−0.06	−0.14–0.02	.005
Economic vulnerability			
Anger toward inequality			
Regional-level variables			
Gini	−0.01	−0.15–0.14	.729
GDP per capita	0.05	−0.10–0.19	.198
Cross-level interaction			
Perceived economic inequality X Gini	0.02	−0.06–0.09	.581
Random effects			
σ^2_e		0.793	
σ^2_{u0}		0.001	
σ^2_{u1}		0.105	
N		$5_{regional\ area}$	
Observations		1446	
R^2		.371	

Abbreviations: SES, socioeconomic status

FIGURE 2 Parallel mediati...

$a1 = 0.43$
95% CI = [0.38, 0.47]
$p < .001$

$b1 = -0.18$
95% CI = [-0.23, -0.13]
$p < .001$

Perceived anger toward inequality

$c' = -0.02$
95% CI = [-0.03, 0.06]
$p = .415$

Perceived economic inequality

Psychological well-being

$a2 = 0.16$
95% CI = [0.12, 0.20]
$p < .001$

$b2 = -0.07$
95% CI = [-0.13, -0.02]
$p = .014$

Economic Vulnerability

5% CI | p Value
0.05–0.21 | <.001
0.03–0.05 | .606
0.10 to −0.02 | .008
0.10–0.19 | <.001
0.16–0.25 | <.001
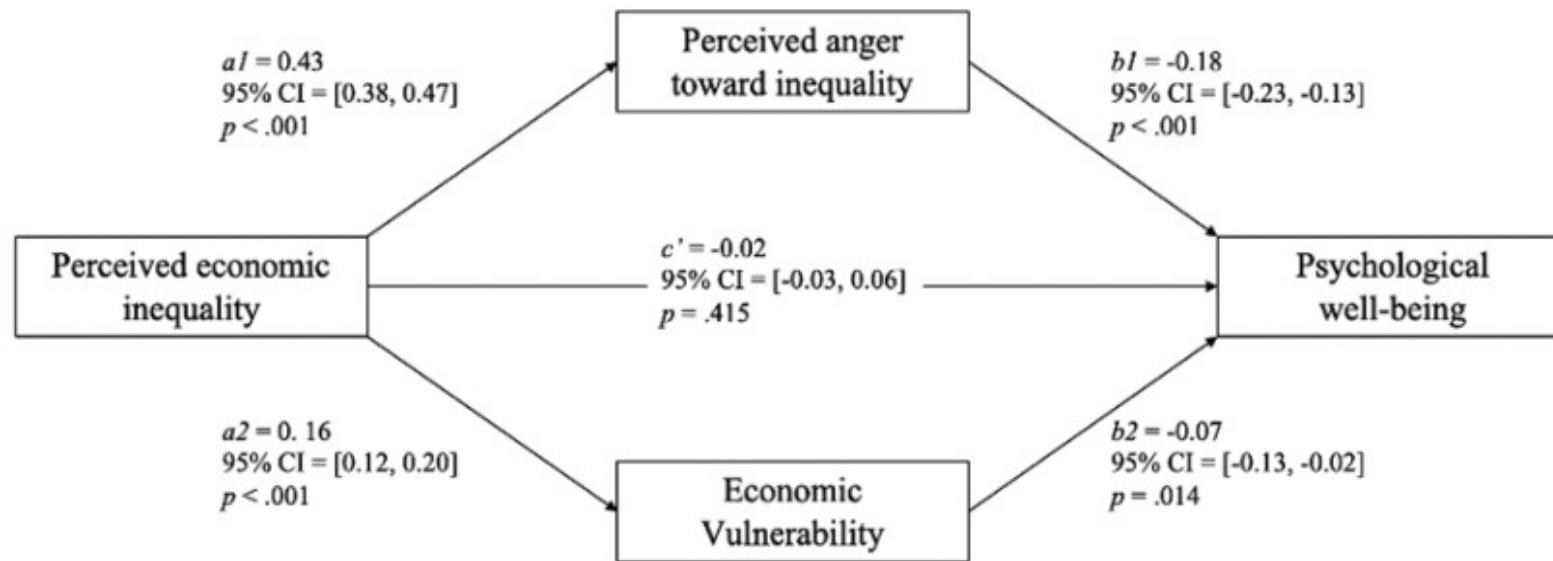0.47 to −0.38 | <.001
0.12–0.20 | <.001
0.33 to −0.17 | <.001

- Economic vulnerabili...
- Anger toward inequa...
- Regional-level
- Gini
- GDP per capita
- Cross-level interacti...
- Perceived economic...
- Random effects
- σ^2_e
- σ^2_o
- σ^2_1
- N
- Observations
- R^2

Abbreviations: SES, s...

FIGURE 1 Parallel mediation analysis for life satisfaction

$a1 = 0.43$
95% CI = [0.38, 0.47]
$p < .001$

$b1 = -0.07$
95% CI = [-0.12, -0.02]
$p = .003$

Perceived anger toward inequality

$c' = -0.04$
95% CI = [-0.09, 0.01]
$p = .137$

Perceived economic inequality

Life satisfaction

$a2 = 0.16$
95% CI = [0.12, 0.20]
$p < .001$

$b2 = -0.14$
95% CI = [-0.20, -0.09]
$p < .001$

Economic Vulnerability

https://doi.org/10.1111/jasp.12928

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- higher depression, anxiety, stress and status anxiety (Schmalor & Heine, 2021; Melita et al., 2021)
- beliefs on cross-country economic differences (Gaspar et al., 2022)

Subjective variables	β (ES)
Perceived Gini	0.6854***
	(0.0474)
Desired Gini	-0.6418***
	(0.0771)
Socal ladder (centered at 5)	-0.0376***
	(0.0039)
Objective variables	
Country percentile (centered at 50)	-0.0005*
	(0.0002)
Gini (income, demeaned)	-0.3760
	(0.1997)
GDP pc. (demeaned)	0.0037***
	(0.0008)
Country ptile X Gini	0.0018
	(0.0031)
Country ptile X GDP pc.	-0.0000
	(0.0000)
R^2	0.067
N	24651

Independent variable: perceived Gini

BEYOND DOMESTIC BORDERS: PERCEPTION OF CROSS-COUNTRY INEQUALITY

People from Western societies (i.e., USA, Germany, France, and the UK) tend to **underestimate how wealthy they are compared to other countries** (Nair, 2018; Fehr, 2019; Ziano & Onyeador, 2021)

Perceived cross-country inequality links to preference toward global redistribution
The results, however, are mixed
→ Ziano and Onyeador (2021) correlates with support for aid to poorer countries
→ Nair (2018): by correcting inequality misperception, people to express greater support for foreign economic assistance and donate more to international charities
→ Fehr and colleagues (2019): inequality is neither correlated with nor causally related to demand for global redistribution.

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CAUSAL ATTRIBUTIONS FOR CROSS-COUNTRY INEQUALITY
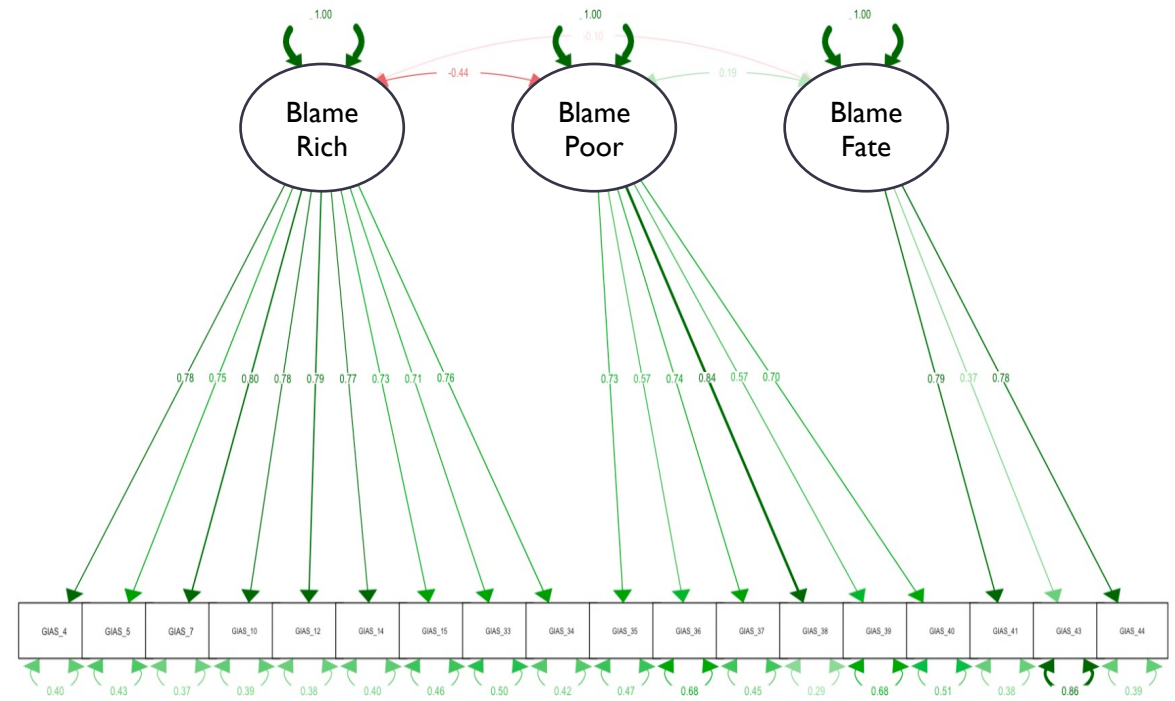
Uk, Italy, and South Africa (Study1 N = 736; Study2 N = 722)

- Rich countries snatch the resources of poor countries
- Greediness of rich countries

- The laziness of poor countries
- The lack of effort at self-improvement of poor countries

- That is what fate/destiny has in store for each of us
- The good or bad luck the country has compared to other countries

THANK YOU FOR LISTENING!

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Essential bibliography
- Wilkinson, R., Pickett, K., 2018. The Inner Level: How More Equal Societies Reduce Stress, Restore Sanity and Improve Everyone's Well-being. Penguin Books, London, UK.
- Jetten, J., & Peters, K. (Eds.). (2019). The Social Psychology of Inequality. Springer International Publishing. https://doi.org/10.1007/978-3-030-28856-3
- Payne, K. (2017). The broken ladder: How inequality affects the way we think, live, and die. Viking.
- Payne, B. K., Brown-Iannuzzi, J. L., & Hannay, J. W. (2017). Economic inequality increases risk taking. Proceedings of the National Academy of Sciences, 114(18), 4643–4648. https://doi.org/10.1073/pnas.1616453114
- Brown-Iannuzzi, J. L., Lundberg, K. B., & McKee, S. (2017). Political Action in the Age of High-Economic Inequality: A Multilevel Approach. Social Issues and Policy Review, 11(1), 232–273. https://doi.org/10.1111/sipr.12032
- Jachimowicz, J. M., Davidai, S., Goya-Tocchetto, D., Szaszi, B., Day, M. V., Tepper, S. J., Phillips, L. T., Mirza, M. U., Ordabayeva, N., & Hauser, O. P. (2022). Inequality in researchers' minds: Four guiding questions for studying subjective perceptions of economic inequality. Journal of Economic Surveys, joes.12507. https://doi.org/10.1111/joes.12507
- Castillo, J.-C., García-Castro, J.-D., & Venegas, M. (2022). Perception of economic inequality: Concepts, associated factors and prospects of a burgeoning research. International Journal of Social Psychology, 37(1), 180–207. https://doi.org/10.1080/02134748.2021.2009275

Slides @ https://github.com/mikivezzoli/PsychologyOfEcomicInequality