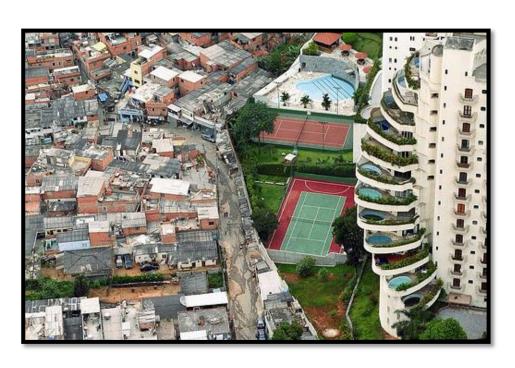








Inequality: root cause of all kind of social evils, especially health







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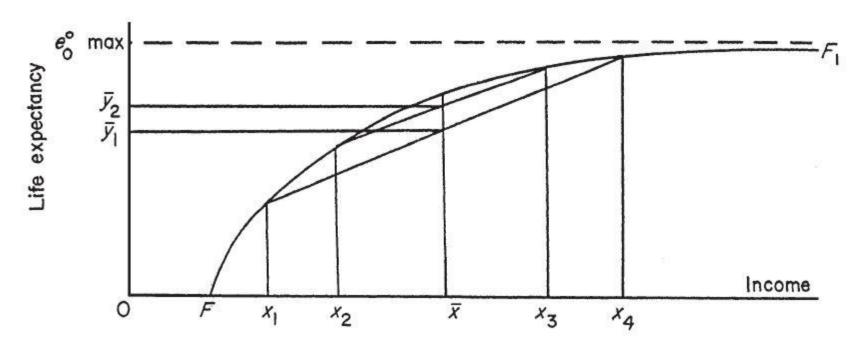
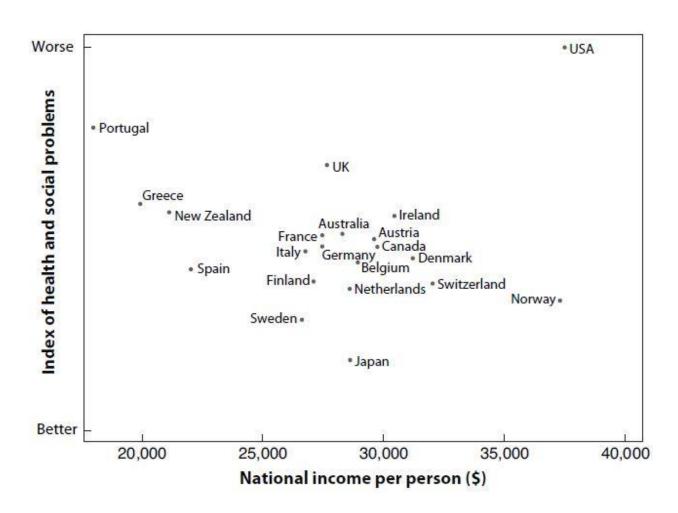


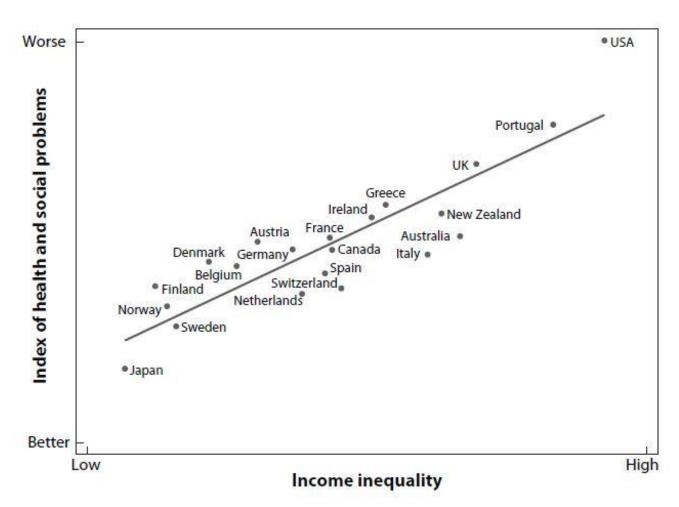
Diagram 1 Life expectancy as a function of income

Rodgers (1979)





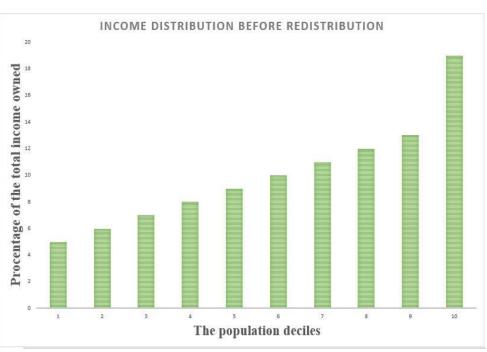


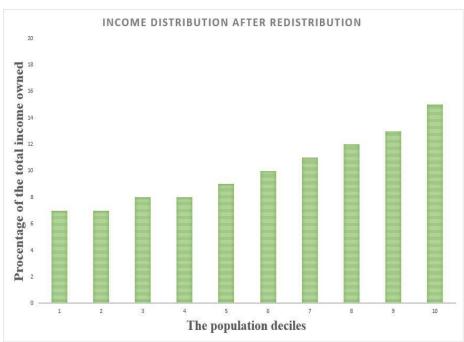




Wilkinson and Pickett (2009)

Genuine contextual effect or compositional effect?







# Income inequality and mental well-being

Income inequality and depression: The role of social comparisons and coping resources

Van Deurzen, van Ingen, van Oorschot (2015)

The effect of inequality on well-being: exploring corruption as an alternative mechanism

(under review)



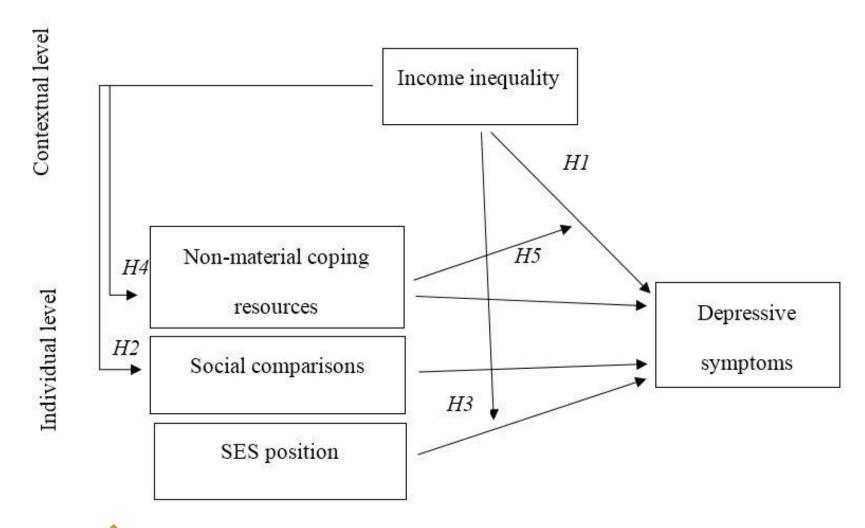
### Income inequality and depression in Europe

#### Our research questions:

- can inequality aggravate depression?
- if so, what are the mechanisms behind this detrimental effect?
- can individuals protect themselves?
- does inequality harm everyone, or are some groups more vulnerable than others?



# Income inequality and depression in Europe



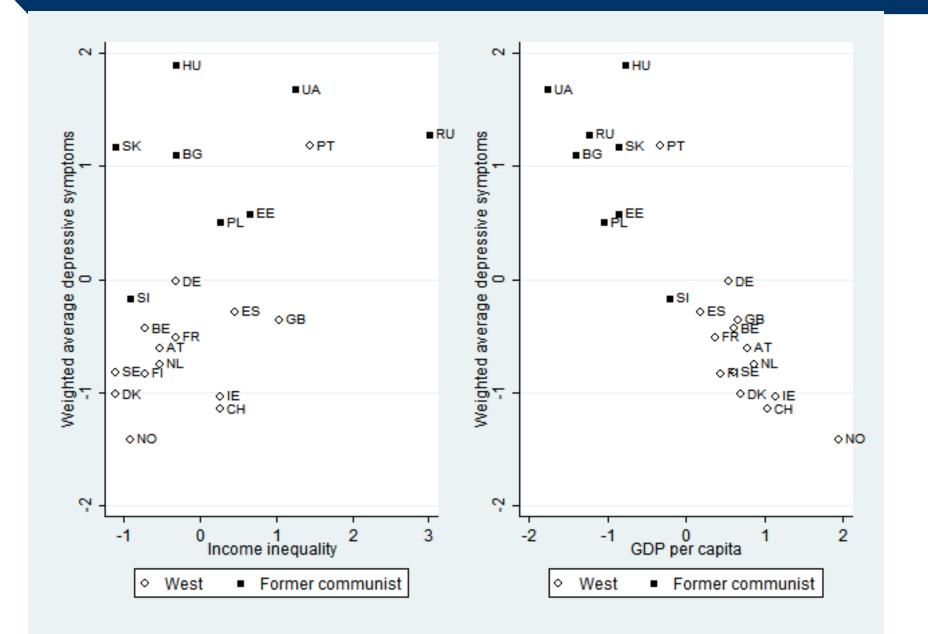


- European Social Survey 2006
- 43824 respondents nested in 23 countries
- Multi-level techniques
- Chained equations multiple imputation method (ICE)
  - Imputations within the country
- Dependent variable: Center for Epidemiologic Studies Depression Scale (CES-D8)
  - Sum scale 8 items: feeling depressed, everything was an effort, slept bad, felt lonely, felt sad, could not get going, enjoyed life and felt happy



- Income inequality: GINI Index net consumption (SWIID, Solt 2009)
- Social comparisons: one item important to compare income with other people's income
- Non-material coping resources:
  - Supportive relations there are people in my life who really care about me / have anyone with whom I can "discuss intimate and personal matters"
  - Psychological coping resources: optimism /self-esteem /resilience
- Controlling for composition:
  - Absolute income (per person equivalised income available for consumption in PPP)





	Model 1	Model 2	Model 3	Model 4	Model 5
Gini Index income	<b>.64</b> (.23)	<b>.61</b> (.22)	<b>.60</b> (.20)	<b>.51</b> (.17)	<b>.50</b> (.17)
Important to compare income with others			<b>.43</b> (.04)		<b>.15</b> (.03)
Psychological coping resources				<b>-1.97</b> (.02)	<b>-1.96</b> (.02)
There are people who care				<b>35</b> (.02)	<b>35</b> (.02)
Someone with whom intimate and personal matters can be discussed				<b>-1.08</b> (.06)	<b>-1.08</b> (.06)
Intercept	<b>6.17</b> (.23)	<b>6.83</b> (.25)	<b>7.03</b> (.26)	<b>7.67</b> (.21)	<b>7.83</b> (.22)
Other individual-level variables	No	Yes	Yes	Yes	Yes
Variance country level	1.17	1.01	.90	.63	.60
Variance individual level	16.49	15.27	15.09	11.02	11.00



Interaction with:	Gini Index income
Psychological coping resources	<b>09</b> (.05)
There are people who care	04 (.04)
Someone with whom intimate and personal matters can be discussed	<b>29</b> (.12)



- In conclusion income inequality was related to average depressive symptoms after controlling for composition effects
  - however, the effect was sensitive when other contextual variables were added;
  - no evidence for the social comparison mechanism people did not engage more in comparisons of their income in countries with higher income inequality
  - also, no evidence for the mechanism through the non-material coping resources
  - but, coping resources mattered psychological resources or social support offered protection against the detrimental effect of inequality;



- The status of the income inequality thesis:
  - Accumulation of inconsistent results;
  - Mechanisms proposed, through:
    - social comparisons or social support no strong evidence;
    - trust and status anxiety some supporting evidence;
    - **institutional context** (via systematic underinvestment in public goods such as health services and infrastructure) weak support;

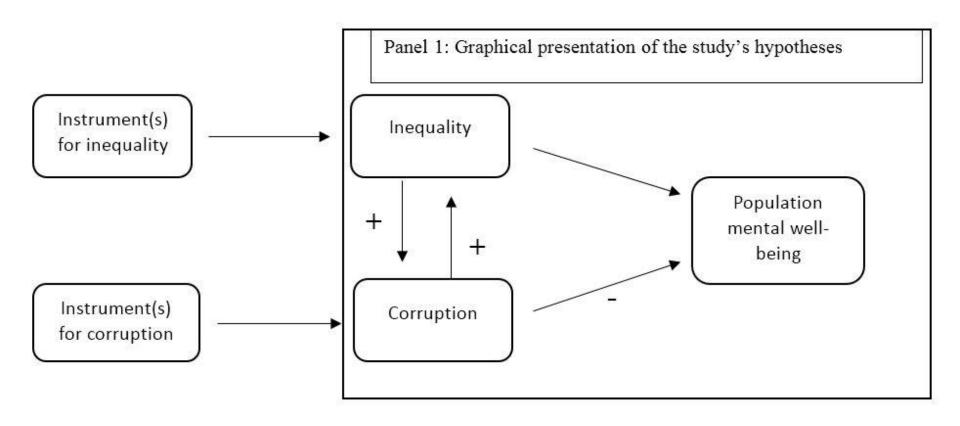






- Research question:
  - can we find evidence for a causal mechanism linking inequality to population wellbeing through an effect on corruption?

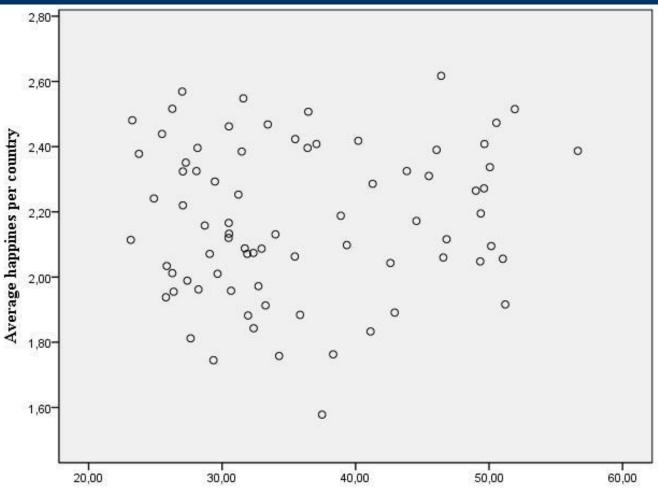






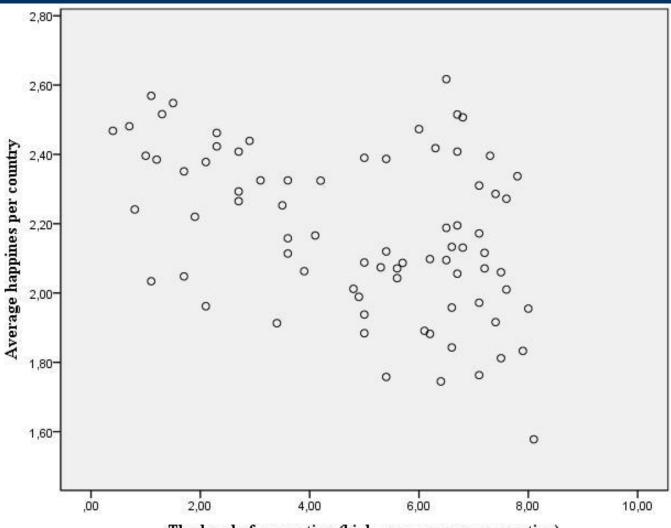
- Data: European Values Study (EVS), wave 2008 and World Values Survey (WVS), wave 2005-2009
- 150256 individuals nested in 77 countries
- Dependent variable: self-reported happiness
- Method: 2 step-approach of analysis of multilevel data
  - Individual level: regress on the DV a set of individual level variables + country dummies + a dummy for the survey where the data came from + dummies for the year of data collection. Outcome: average DV for each country, controlled for composition
  - Country level: SEM model with instrumental variables





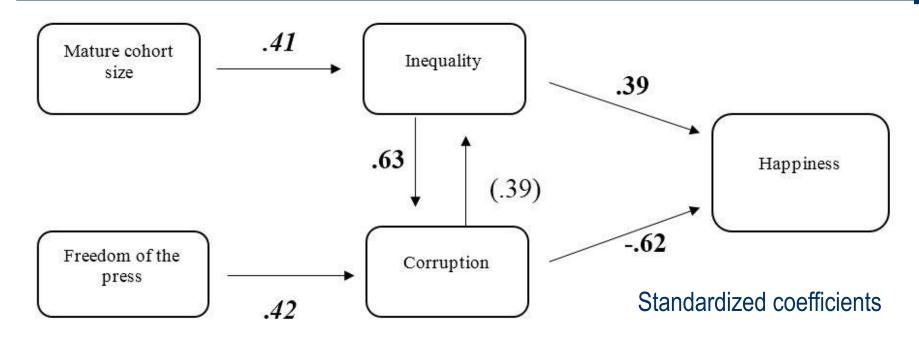
Income inequality (Gini Index of income, average 5 years, higher score more inequality)











	Estimate	SE	р	Standardized effect
Indirect effect of:				
Income inequality on happiness	012	.005	.03	419
Corruption on happiness	007	.004	.13	063
Total effect of:				
Income inequality on happiness	004	.007	.55	155
Corruption on happiness	078	.011	.00	723



### The income inequality revisited

- Focus on mechanisms at individual or contextual level:
  - The stress mechanism can inequality "get under the skin" and stress people?;
  - Cultural norms about inequality, i.e., fair inequality;
  - Other alternative contextual paths;
- Different effects for different social groups?;
- All health outcomes are the same?



### The income inequality revisited

Thank you for your attention!

