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The Human Quest for Fairness & Equality

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Overview

- The egalitarian evolutionary roots of homo sapiens
- Egalitarian behavior in contemporaneous small-scale societies
- The empirical distribution of altruism and inequality aversion in broad population samples
- The role of altruism and inequality aversion in redistributive politics
- Effort vs luck generated inequality & social preferences
- Which (social) preference type responds to information about actual inequality?
- Overall lessons for positive and normative economics

Egalitarian Roots of Homo Sapiens

- For roughly 90 percent of human history – until about 11-12'000 years ago – modern humans (homo sapiens) lived in **hunter-gatherer societies**
- Rich anthropological evidence (e.g., Kaplan & Gurven 2005, Hill & Hurtado 2009, Boehm 2012) that a considerable share of their calories were provided by
  - cooperative hunting of big game and
  - the egalitarian sharing of food – even with the sick and injured

- **Extremely egalitarian societies in terms of**
  - **Sharing the most valuable foods (e.g., meat)**
  - **political organization**

- Hunger-Gatherer societies lacked powerful chiefs and had a rich menu of levelling mechanisms against strongmen and would-be alpha-males
  - Individual & collective criticism, ridiculing, ostracism, expulsion from groups and even killing of persistent would-be strongmen
- **90% of human history, homo sapiens lived under extremely egalitarian conditions**
- **Can we still observe traces of an «egalitarian ethos» in contemporary small scale societies?**
  - Horticulturalist, pastoralist, mixed farming/foraging societies

In Search of Homo Economicus: Behavioral Experiments in 15 Small-Scale Societies

(Henrich-Boyd-Bowles-Camerer-Fehr-Gintis-McElreath 2001)

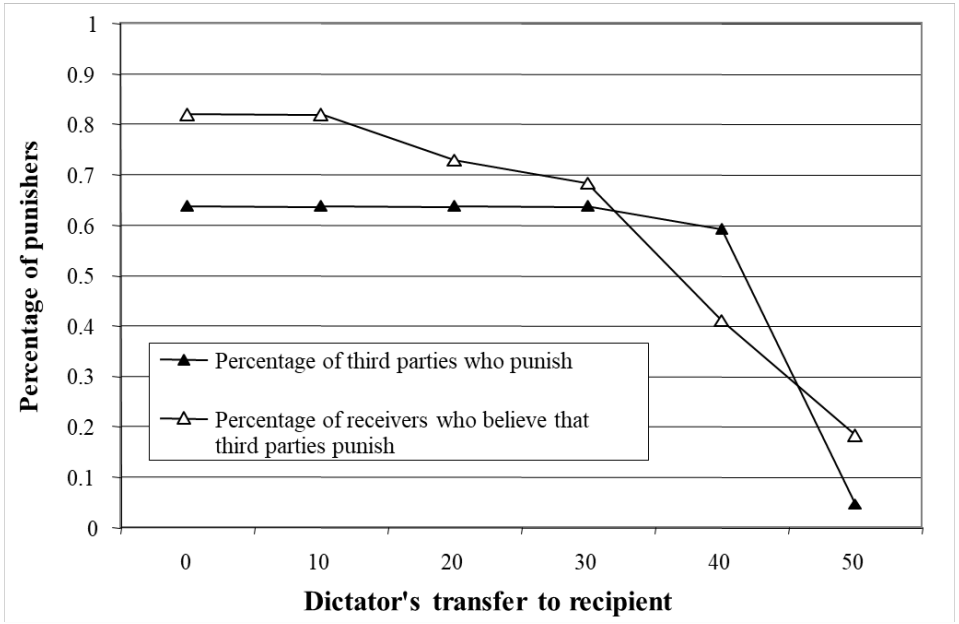
- Anthropologists and economists teamed up to conduct ultimatum games in 15 culturally very diverse small-scale societies
- Conclusion: **In none of the 15 societies the subgame perfect equilibrium prediction of the self-interest model prevails**
- In every society
  - Positive shares offered to recipients
  - Rejections of low offers

A powerful illustration of the «egalitarian ethos»

The Third Party Punishment Game (Fehr-Fischbacher 2004)

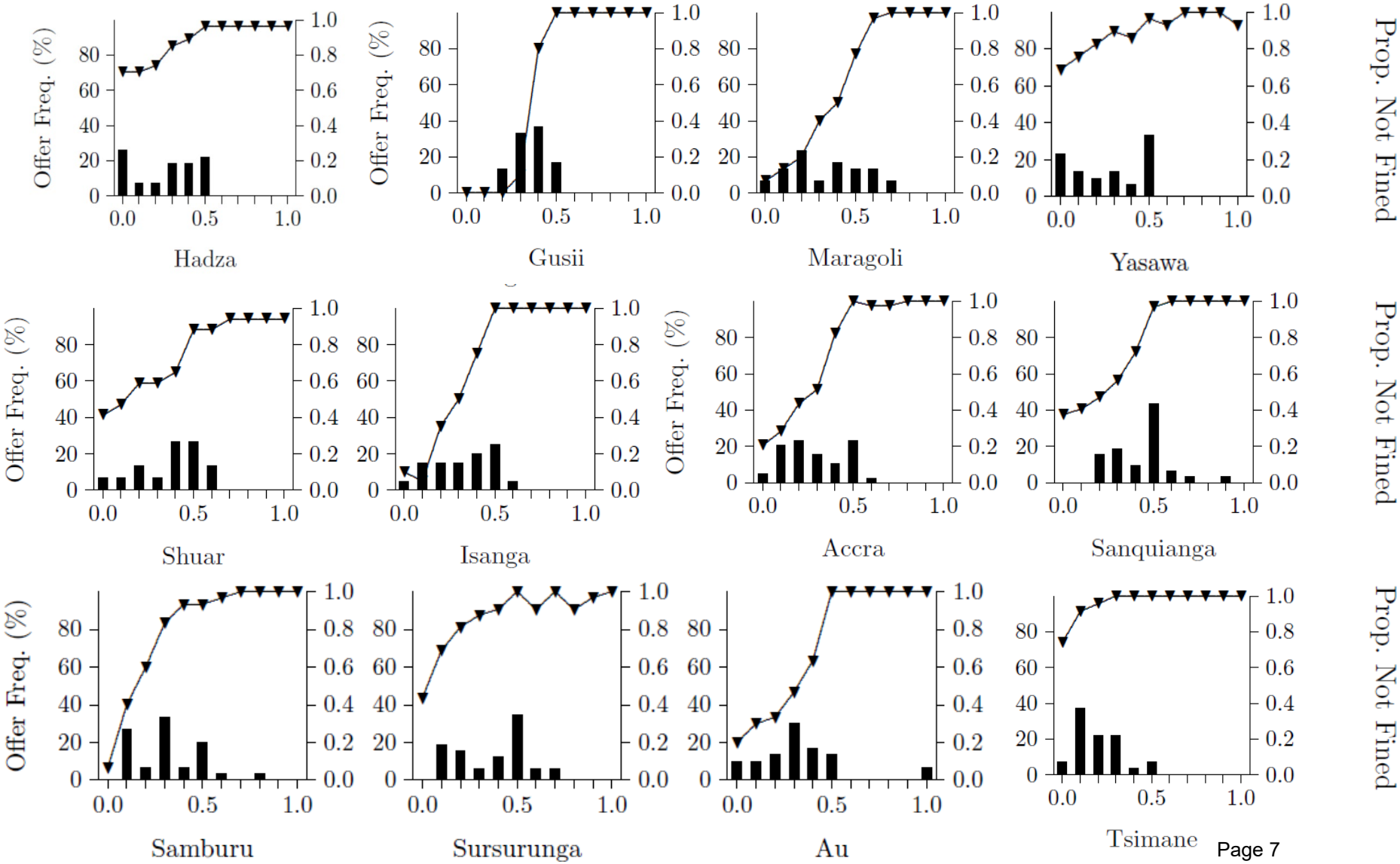
- An impartial third party observes the interaction between 2 other parties, e.g., a dictator's transfer to the passive recipient in a dictator game
- Third party has the opportunity to impose sanctions on dictator but *sanctioning is costly for 3rd party*
- Sanctioning indicates inappropriate or norm-violating behavior of the dictator

- **Do 3rd parties punish deviations from equal sharing?**



Egalitarian ethos across 12 small-scale societies?

(Henrich et al. 2006)



Summarizing the Major Facts

1. In all societies, selfish deviations from «equal sharing» are the key trigger for individuals' willingness to sanction
   - **In all societies, the egalitarian distribution norm appears to play also a key role**

2. Some heterogeneity in the **strength** of punishment **across societies**

3. **Within all societies** individuals' willingness to sanction selfish deviations from equality is **heterogenous**
   - Not all people in a society punish selfish deviations – but those who do start punishing when selfish deviation from the equality norm occurs

Do preferences for fairness & equality also play a role in other important experimental games?

- Rejections of low positive offers & enforcement of large responder shares in the ultimatum game (Güth et al 1982)
- Positive giving rates in dictator games (Forsythe et al 1994)
- Positive correlation between effort & wages in gift exchange game (Fehr et al 1993)
- Positive back-transfers in the trust game (Berg et al 1994)
- Punishment of free-riders & enforcement of high cooperation levels in public good games with a punishment opportunity (Fehr & Gächter 2000)
- Expected cooperation of others induces individuals to cooperate more (Fischbacher, Gächter & Fehr 2001)
- Positive cooperation levels in the 1-shot prisoners' dilemma & 1-shot cooperation games (with free-riding as dominant selfish strategy)

Important Caveat

- Other types of social preferences *also* play a role in several of these games
  - Preferences for positive & negative reciprocity (Rabin, Dufwenberg & Kirchsteiger, Falk & Fischbacher)
  - Guilt aversion (Dufwenberg & Charness)
  - Altruism, surplus-maximization (Andreoni, Charness-Rabin)
  - Prosocial self-image concerns (Benabou & Tirole)

- However, the desire for fairness & equality often appears to be one key component of the deviation from pure self-interest

Puzzling Evidence

Social preferences sometimes have little influence on behavior

- Quick convergence to prices close to competitive equilibrium (predicted under full selfishness) in competitive double auctions (Smith 1962) and posted offer markets (Davis & Holt 1993)
- Convergence to very low cooperation rates in one-shot repeated cooperation games (Ambrus & Pathak 2011)
- Very uneven (unfair) outcomes markets with responder competition (Fischbacher et al. 2012)
- Very uneven (unfair) offers in markets with proposer competition (Roth et al. 1991)
- In 3-player ultimatum games (proposer-reponder-receiver) the passive receiver typically receives extremely low offers (Güth & van Damme 1998)
- Minimum winning coalitions exploit the other members of legislative committees by enforcing very uneven outcomes under closed amendment rules

Why do social preferences sometimes have NO influence on behavior?

- Based on theoretical models of inequality aversion (e.g. Fehr & Schmidt 1999) or inequality aversion combined with reciprocity (Falk & Fischbacher 2006) the following holds:
  - In a population with heterogeneous social preferences the rules of the game (i.e., the institutional environment) often have a decisive influence on
    - whether prosocial types dominate the equilibrium outcome or
    - whether selfish types dominate the equilibrium outcome
  - Institutional environment affects whether the selfish types behave prosocially or whether the social preference types behave selfishly
  - Institutions have important – often overlooked – function in the presence of heterogenous social preferences

Preliminary Summary

- Rich anthropological evidence suggests that humans lived under extremely egalitarian conditions for most of their time
  - Egalitarian conditions were sustained by a strong «egalitarian ethos» that was enforced through effective leveling mechanisms

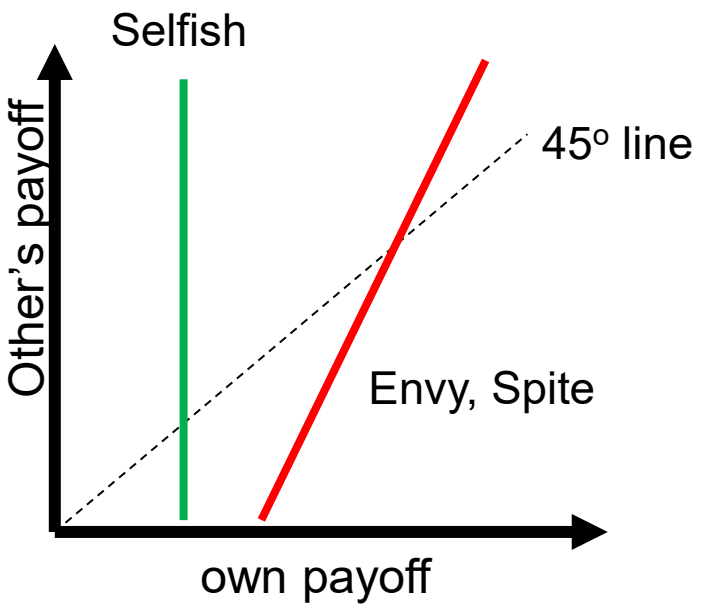
- Egalitarian ethos can still be observed in individuals' behavior in contemporary small scale societies

- Quest for distributional equality also appears to play a prominent role in many experimental games conducted with student populations

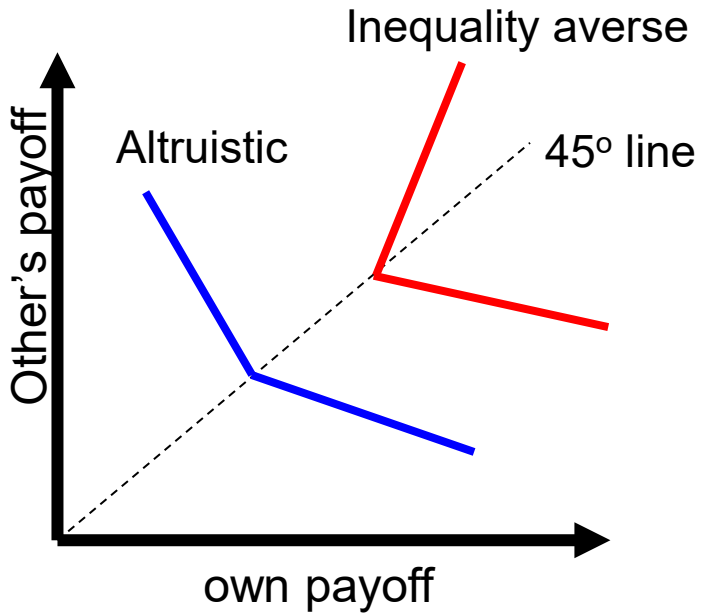
- However, the **quest for fairness & equality** – and social preferences in general – are always characterized by **strong heterogeneity across individuals**

Distributional preferences in broad samples of Western populations
What are their fundamental properties?

Selfishness, Envy, Spite

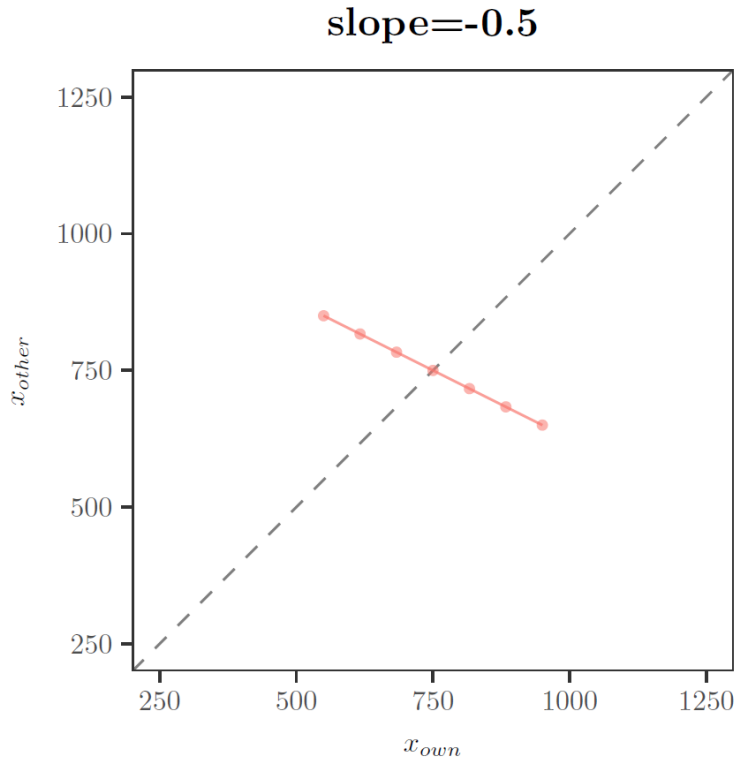


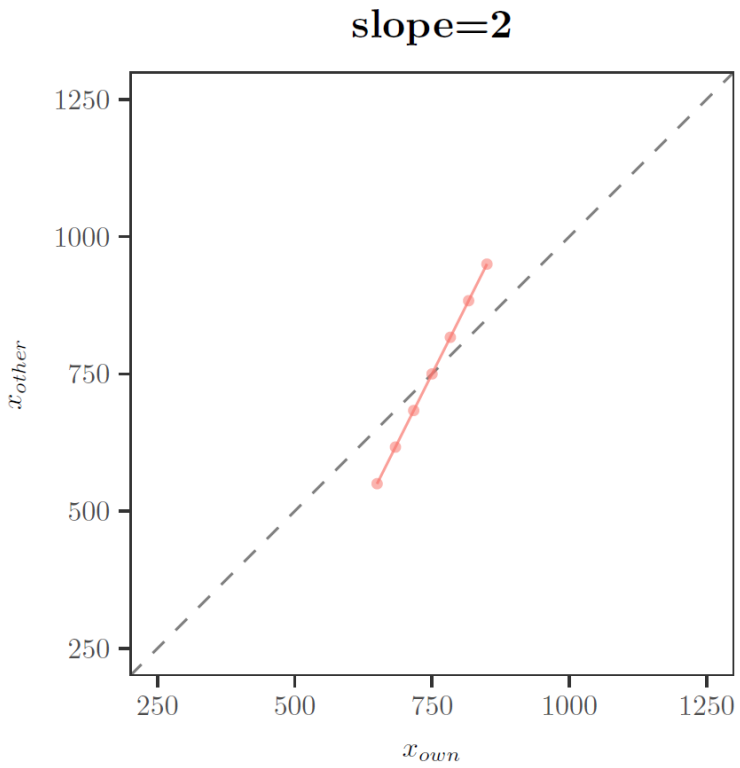
Altruism & Inequality Aversion



Measuring distributional preferences

(with experiment with real money at stake)



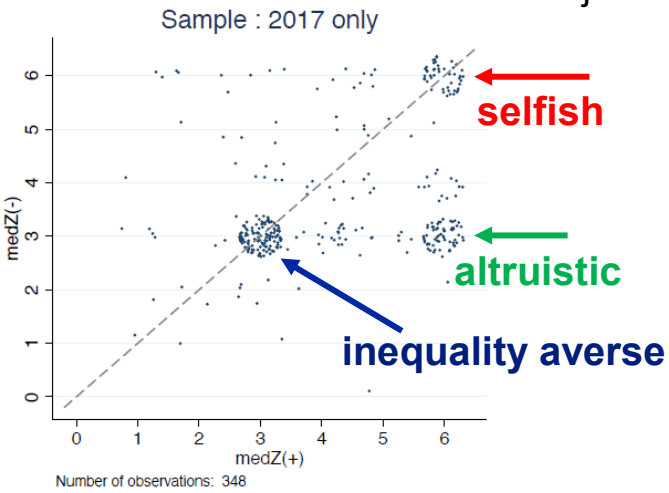


Distribution of Social Preferences in CH

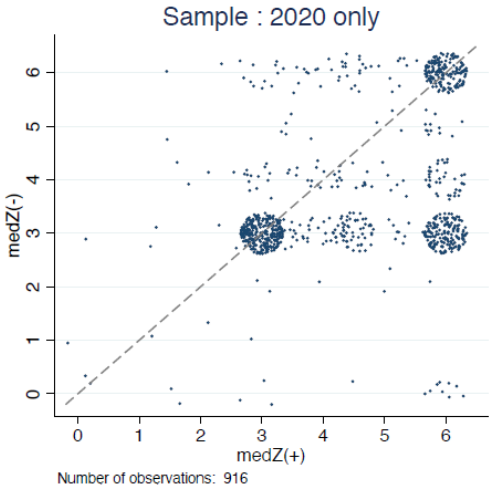
(data taken from Fehr-Epper-Senn, WP 2022)

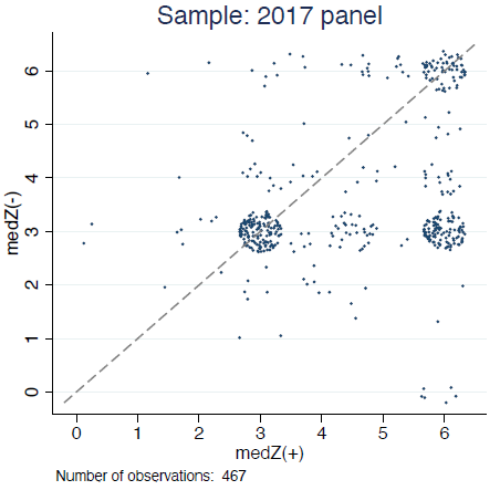
each subject is a dot
jittered

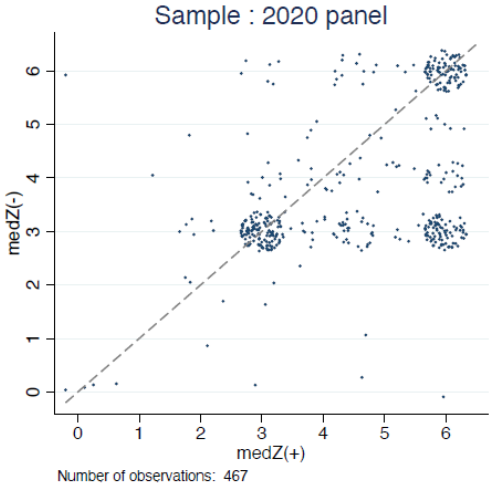
2017



2020



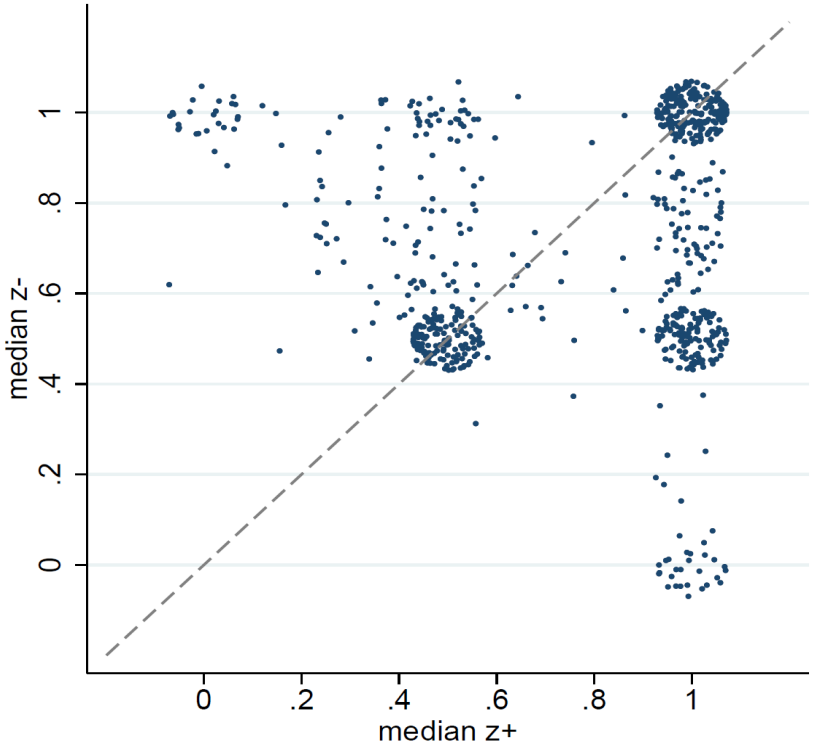




Distribution of Social Preferences in Denmark

(3600 individuals age 32- 42, 2017)

(Epper/Fehr/Fehr-Duda/Kreiner/Dreyer-Lassen/Peterson/Rasmussen AER 2020)

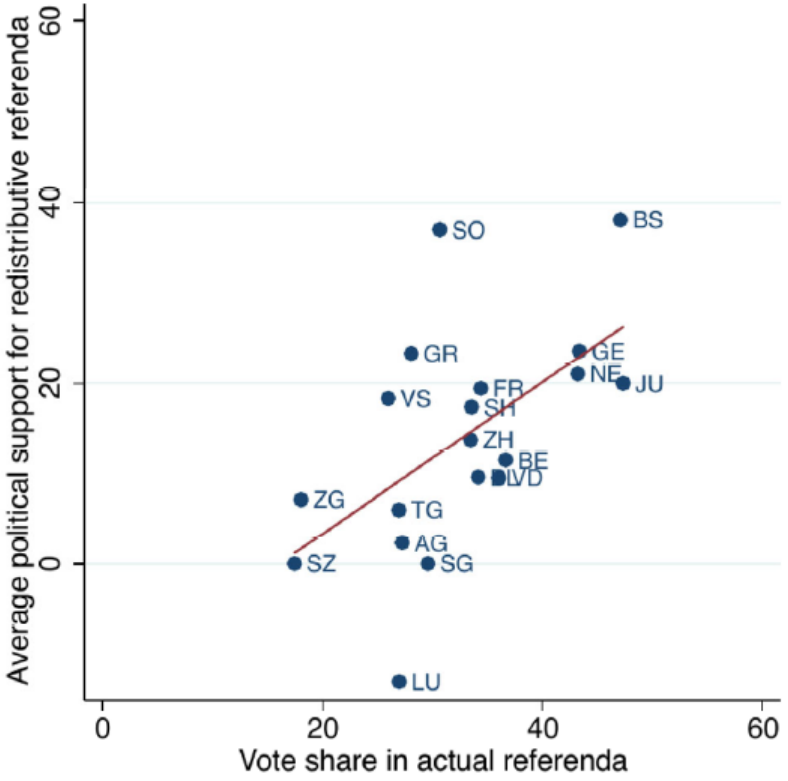


- Typically three big clusters emerge
  - Inequality averse
  - Altruistic
  - Selfish
- Applying rigorous clustering methods also yields 3 clusters

Do distributional preferences explain support for redistributive voting?

(studied in Swiss direct democratic set-up – Fehr/Epper/Senn WP 2021)

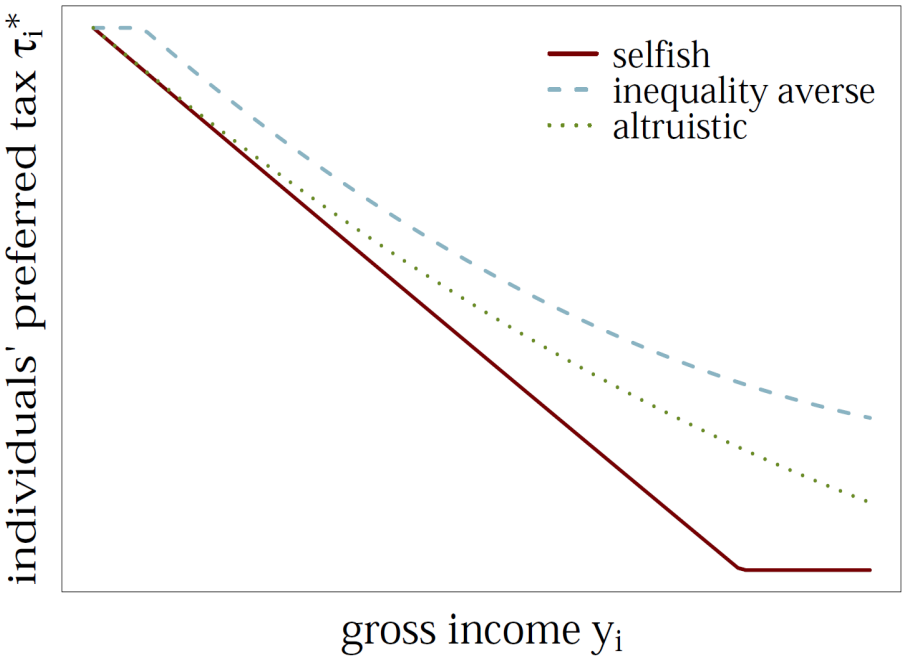
- We study determinants of support for four strongly redistributive policy measures that were up for voting in a referendum in CH
- Measure Ss support for redistributive proposals
- Validate our support measure with the actual cantonal vote shares (see slide)
- Controlling for a host of covariates, **do social preferences predict support for redistributive policy measures?**



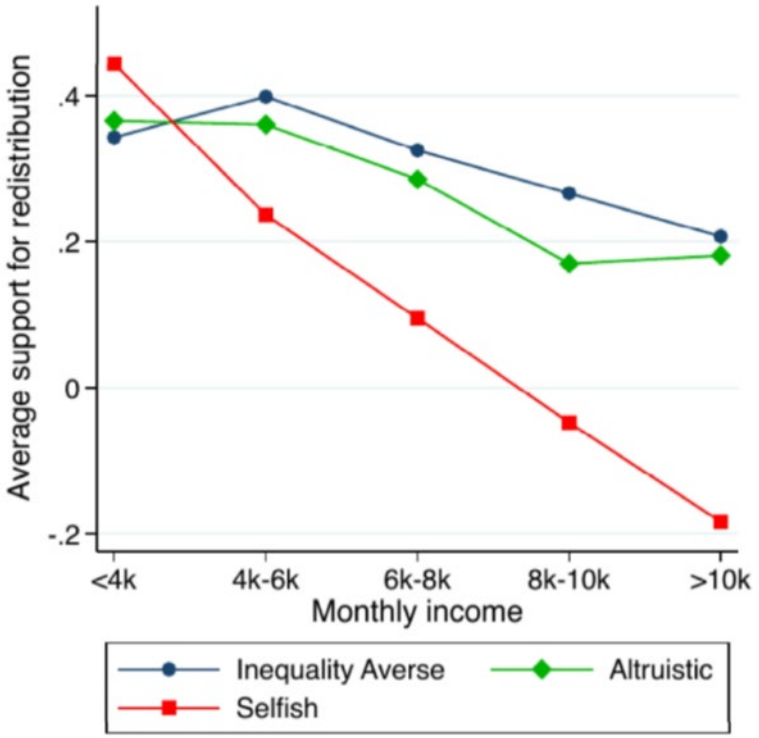
Distributional preferences & redistributive voting

Fehr/Epper/Senn WP 2021

Social preference augmented Meltzer-Richards Model



The empirical role of distributional preferences



Other controls

- **Effects remain large after controlling for factors below**
- Cantonal fixed effects, age, age squared, language, married, education level
- Full-time, part-time, unemployed, out for labor force, past unemployment
- Risk aversion, patience, negative & positive reciprocity, general trust in strangers
- Beliefs in future income mobility, past income mobility
- Individual effort vs. luck as determinants of individual success
- Perceived inequality, perceived extent of poverty
- Mistrust in politicians

Luck versus effort generated inequality

- Strong evidence that inequality due to effort/performance is much more acceptable than inequality due to mere luck (e.g., Cappelen et al. 2007; Almas et al. 2010)
  - Efficiency cost of redistribution much smaller influence on demand for redistribution compared to fairness concerns
- Subjects who believe that luck (effort) is important for individuals' economic success are more in favor of (opposed to) politically enforced redistribution (e.g. Fong 2001; Alesina & Giuliano 2011)
- In previous research, subjects' beliefs in luck versus effort as key for economic success is **one of the strongest and most robust predictors of support for redistribution**

Fair versus unfair inequality & self-interest

- Research by Almas/Cappelen/Tungodden suggests:
  - Luck-generated inequality viewed as rather unfair
  - Effort generated inequality viewed as more fair

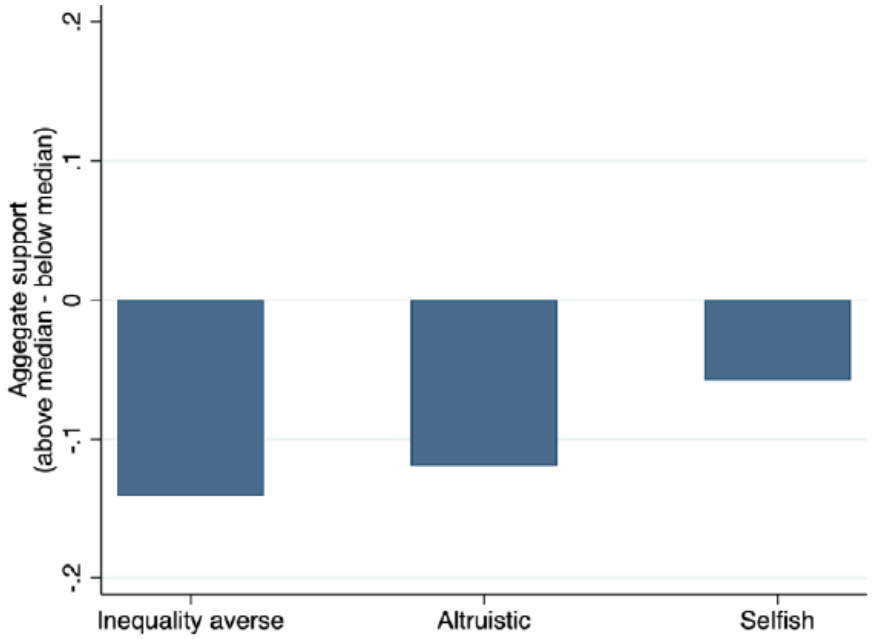
- Why should purely self-interested individuals, who do not care about other's well-being, intrinsically care about fairness?

- **Are other-regarding preferences a pre-requisite for these beliefs to matter for redistribution?**

Are social preferences a prerequisite for the impact of effort beliefs on the demand for redistribution?

Impact of effort belief on demand for redistribution conditional on preference type

Fehr/Epper/Senn WP 2021



- Effort believes are statistically irrelevant for selfish individuals

The causal impact of correcting exaggerated beliefs about income inequality

(Epper-Fehr-Henkel-Senn mimeo 2022)

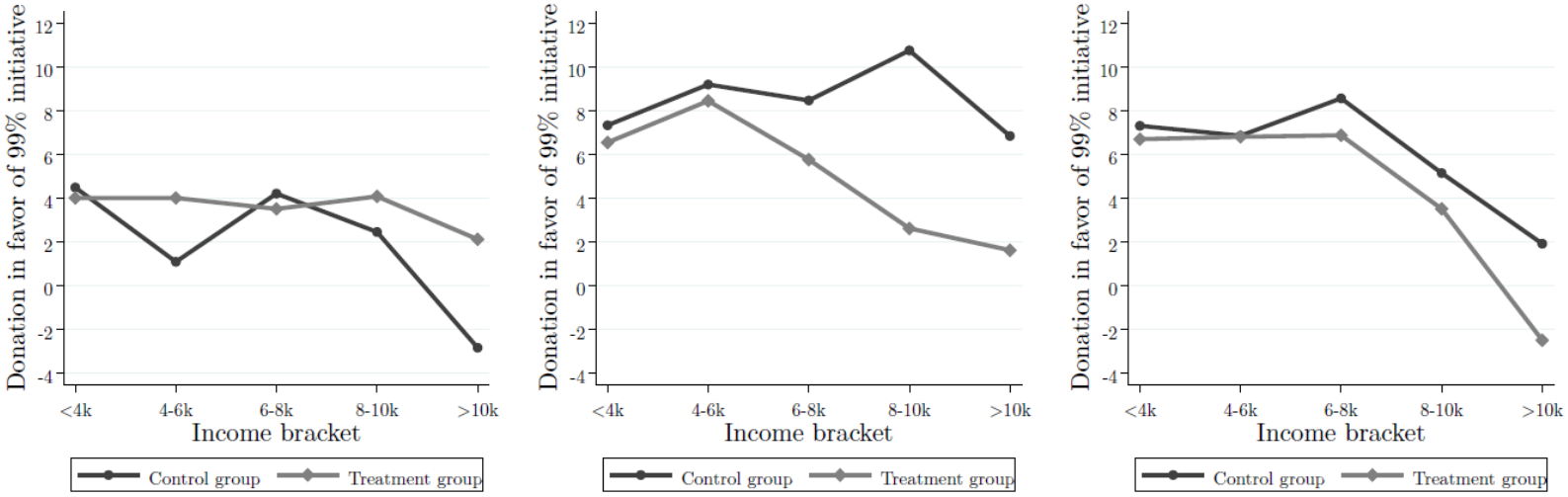
- Preregistered hypothesis:
- It's primarily inequality averse individuals with high (above-median) incomes that reduce their demand for redistribution
- Rationale:
- Both selfish & inequality averse individuals *low-income individuals* have a selfish reason for redistribution that is unaffected by information about inequality
- But inequality averse high-income individuals should reduce their demand for redistribution if their false beliefs are correctd

- Preregistered RCT in the context of the 99% initiative in CH
- Above an income/wealth threshold income from wealth (dividends, interest, etc.) should be taxed at a 50% higher rate than labor income

Do primarily inequality averse individuals change their demand for redistribution?

(Epper-Fehr-Henkel-Senn mimeo 2022)

Control group: Subjects have uncorrected, **exaggerated beliefs** about income inequality
Treatment group: Subjects have largely **correct beliefs** about prevailing income inequality



(a) Selfish type (b) Inequality-averse type (c) Altruistic type

Notes: The y-scale indicates the donation amount towards an organization in favor of the 99% initiative, with donations towards an organization that opposes the 99% initiative coded as negative values (i.e. the values can range from -20 CHF to 20 CHF).

Summary

1. Rich anthropological evidence suggests that humans lived under extremely egalitarian conditions for most of their time

2. Egalitarian ethos can still be observed in individuals' behavior in contemporary small scale societies – and shows up in many experiments with student subject pools

3. Distributional preferences in representative broad population samples can often be characterized by parsimonious type distribution

   - Our samples exhibit three global types: **inequity averse, altruistic, selfish**
     - More generosity in advantageous domain is strongly correlated with more desire for equality in disadvantageous domain

4. Inequality aversion (and altruism) appear to play a major role in the political demand for redistribution

   - Inequality aversion almost nullifies the impact of income on the demand for redistribution

   - It is primarily the inequality averse that respond to information about actual inequality

5. Subjects' beliefs in luck/effort as a determinant of individuals' success is a major determinant of the demand for redistribution
   - Yet, the relevance of these beliefs is predicated on the existence of other-regarding preferences
   - For self-interested individuals these beliefs appear irrelevant for their demand for redistribution

Overall Lessons for Positive & Normative Economics

- Support for policies with redistributive implications cannot be understood without taking other-regarding peferences into account
- Given the ample evidence that large shares of the population have other-regarding preferences, normative political economy (e.g., optimal tax theory) should take these preferences into account
  - Conclusions about optimal taxes may substantially differ if individuals' altruism and inequality aversion is taken into account
  - Same holds true if individuals care about «equality of opportunity», i.e., if the source of income inequality («luck vs effort») affects individuals' utilities