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# Other-Regarding Preferences and Redistributive Politics

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# What motivates people to support redistributive policy proposals?

- Short or long run economic self-interest (Meltzer & Richard 1981)
- Other reasons discussed in the political economy literature
  - beliefs about social mobility (Piketty, 1995 ; Bénabou & Ok, 2001 ; Alesina-Stantcheva-Teso 2018)
  - Actual or perceived inequality (Benabou 2000) & perceived intergenerational justice (Alesina-Stantcheva et al. 2018)
  - beliefs about sources of wealth & poverty (e.g. Fong 2001; Alesina & Angeletos 2005, Benabou and Tirole 2006)
  - personal history of misfortune (Giuliano & Spilimbergo, 2013)
  - mistrust in politicians and the government (Kuziemko-Norton-Saez-Stantcheva 2015)
  - beliefs about the prevailing income distribution and relative income standing (Cruces/Perez-Truglia/Tetaz 2013; Karadja-Mollerström-Seim 2017)
  - Risk aversion (Gärnter-Mollerström-Seim 2017)

# Other-regarding preferences?

- Other-regarding preferences (ORPs) rarely taken into account explicitly although they directly capture individuals' preferences for distributional outcomes (exceptions: Fisman-Jakiela-Kariv 2017, Kerschbamer-Müller 2020)
- Considerable lab evidence indicates the existence of
  - Altruistic concern for social welfare («total pie») and the worse off (e.g., Charness-Rabin 2002, Fisman-Kariv-Markovits 2017)
  - Inequality aversion (e.g. Fehr-Schmidt 1999; Dawes et al. 2007)

# Questions asked in this paper

1. **How do ORPs generally influence the demand for redistribution in theory?**
   - Incorporate ORPs into classic Meltzer & Richard model
2. **What are the key properties of ORPs in a broad sample of the Swiss (N= 815) population and how are they distributed?**
   - Measure the type, the strengths, and the shares of the different types of ORPs (e.g. altruism, inequality aversion, selfishness) in our sample
3. **Do we find a significant empirical role for ORPs?**
   - controlling for all key determinants of preferences for redistribution mentioned in the literature
   - Is this role consistent with the predictions of the theory?

# Questions continued

4. **How large is the quantitative role of ORPs relative to other factors?**

5. **Are different types of ORPs associated with differences in the nature of the support for redistribution?**

   - Do inequality averse individuals support different types of redistribution compared to individuals with a social welfare concern?

# We study these questions in the context of four redistributive national plebiscites in Switzerland

- **For a fair tax code (Nov 2010)**
  - Increase taxes for the rich (41% yes)
- **1:12 initiative (Nov 2013)**
  - Cap the ratio between lowest and highest salary paid in each company to 1:12 (34% yes)
  - We ask for 1:20
- **Minimum wage (May 2014)**
  - Introduce a minimum wage of CHF 4000 per month (≈ CHF 22 per hour) – 24% yes
  - We ask for CHF 3000 minimum wage
- **Unconditional basic income (June 2016)**
  - Introduce a universal basic income (23% yes)

# Advantages of Swiss set-up for studying role of other-regarding preferences

## 1. Separates redistributive proposals from other policy goals

- In representative democracies people can only vote for parties or candidates that represent whole bundles of policy goals (migration, abortion, foreign policy, etc.)
- In Swiss setting people vote on specific redistributive proposal & and we can relate their response to specific proposal to their other-regarding preferences

## 2. In national plebiscites voters decide about a concrete change in the constitution

- Voters know that exactly this change and nothing else will be implemented in case of majority support
- Limits backdoor negotiations and implicit promises that increase costs of redistribution $\Rightarrow$ mitigates general distrust in politics
- Lack of trust in politics (politicians) a major obstacle to redistribution in the US (Kuziemko, Norton, Saez, Stantcheva 2015)
  - Voters who favor redistribution in principle may not support it under mistrust-inducing institutional/cultural environments

# Advantages of Swiss set-up continued

## 3. National plebiscites are associated with intense public discussions about the costs and benefits of the proposal

- These discussions are consequential – public opinion often shifts substantially during the 6 months prior to a referendum
- Most people consume political information from national TV that is obliged to inform impartially
- No partisan media like e.g. Fox News or "The Sun"
- Asking a Swiss citizen about a specific previous redistributive proposal likely evokes a memory of the discussed costs and benefits
  - Increases the likelihood of "informed choices" in our survey

## 4. Validation of subjects' answers

- Do subjects' responses in survey correlate across regions with actual voting patterns

# What does theory predict? (Dimick et al. 2016)

- Consider a simple, «classic», redistribution policy as, e.g., in Meltzer & Richard (1981) or Alesina & Angeletos (2005)
  - Linear tax $\tau$ on income $y_i$ that is redistributed lump-sum via a transfer T to everybody
  - Quadratic redistribution cost of $(\frac{1}{2})\tau^2$
  - Consumption of *i* is given by $c_i = (1-\tau)y_i + T$

- Inequality averse individuals utility function:

$$V_i = c_i - \underbrace{\alpha \frac{1}{n-1} \sum_{j \neq i} \max(c_j - c_i, 0)}_{\text{disadvantageous ineqality aversion}} - \underbrace{\beta \frac{1}{n-1} \sum_{j \neq i} \max(c_i - c_j, 0)}_{\text{advantageous inequality aversion}}$$

**« behindness aversion »** **« aheadness aversion »**

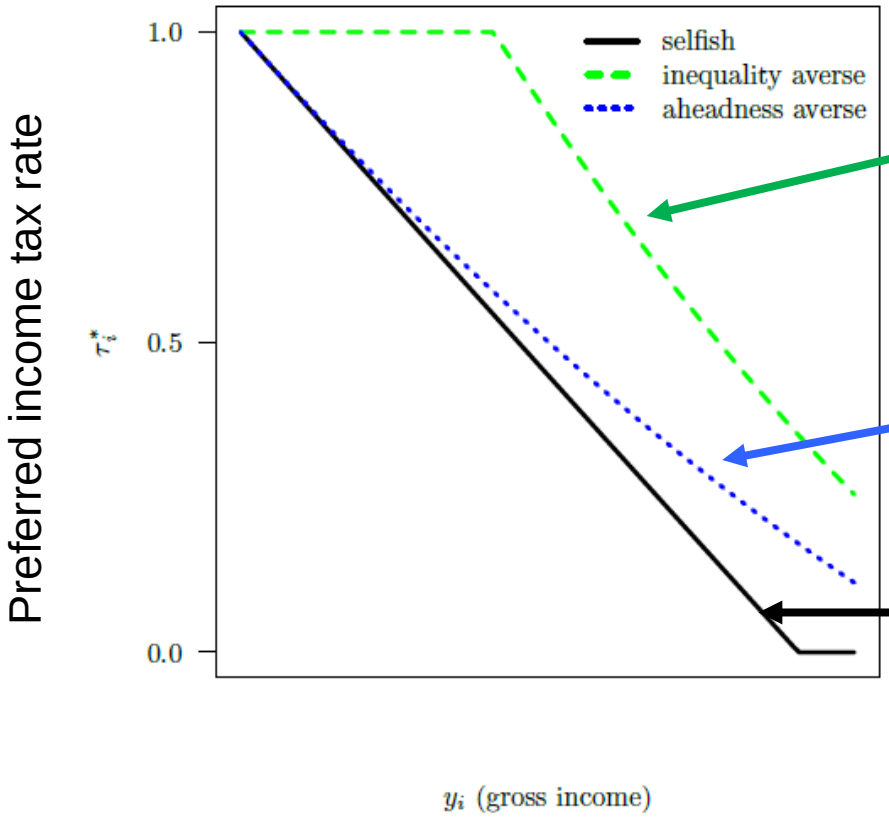
# Preferences for redistributive taxation

- The solution for the preferred redistributive tax is given by

$$\tau_i^* = 1 - \frac{1}{\bar{y}}\left(y_i - \alpha\frac{1}{n-1}\sum_{j\neq i}\max(y_j - y_i, 0) - \beta\frac{1}{n-1}\sum_{j\neq i}\max(y_i - y_j, 0)\right)$$

- Selfish individuals ($\alpha = \beta = 0$) favor taxation at low incomes where they benefit from redistribution
- Inequality averse individuals ($\alpha > 0;\ \beta > 0$) generally favor higher taxation but their preferred tax rate also declines with income
- At low incomes their preferred tax rates are quite similar

# Theoretical role of other-regarding preferences




**Inequality averse**
$\alpha > 0;\ \beta > 0$

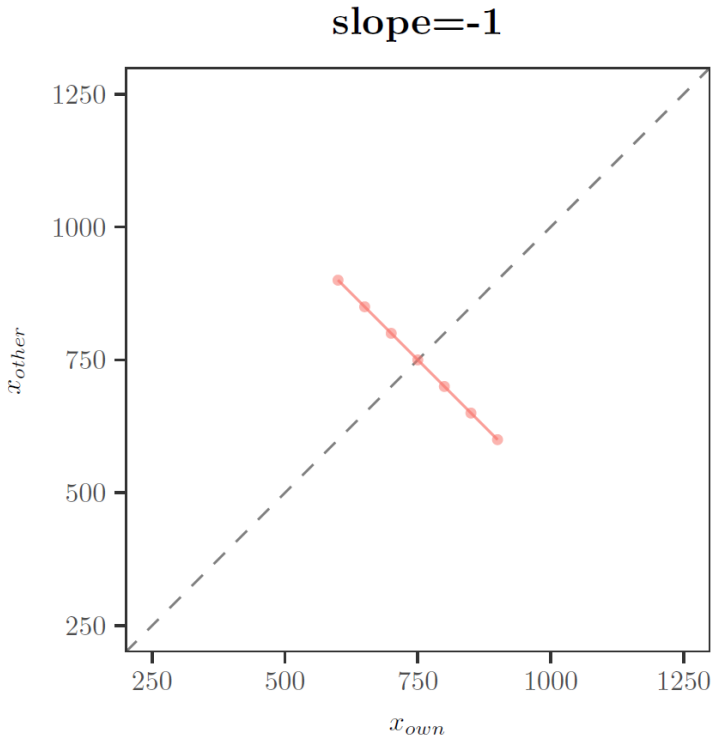
**No behindness aversion**
$\alpha = 0;\ \beta > 0$

**Selfish**
$\alpha = 0;\ \beta = 0$

- Inequality aversion increases the demand for redistribution by mitigating the effect of income on preferences for redistributive taxation
- At low incomes the impact of inequality aversion is small

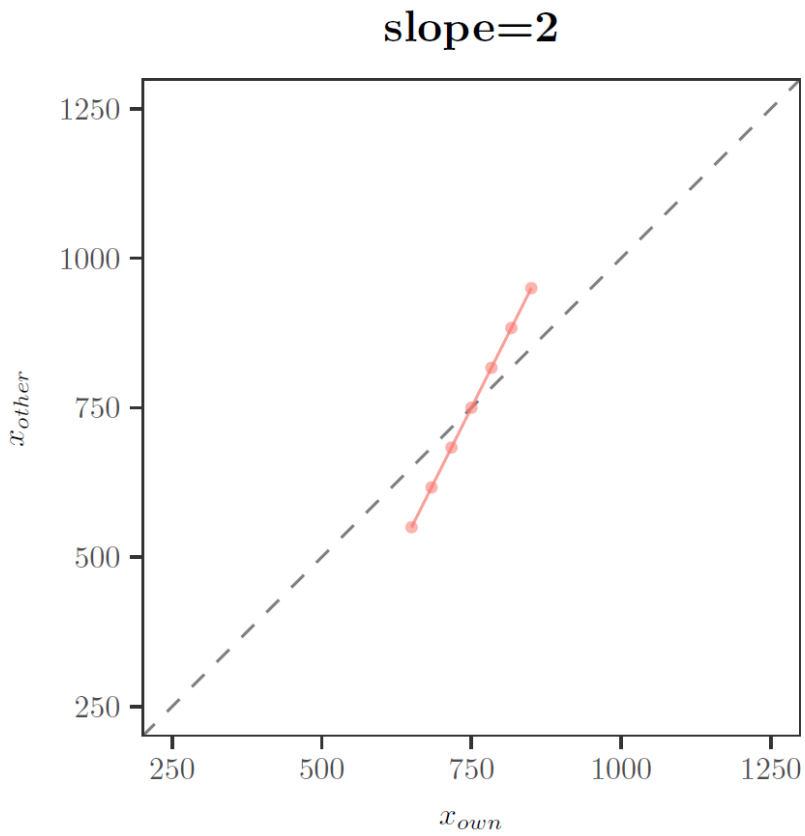
# How do we measure other-regarding preferences? Online Survey (N = 815)

- Subjects choose one of 7 available allocations of money (between themselves and another anonymous participant)




# Measuring Other-Regarding Preferences

Are people willing to pay to avoid disadvantageous inequality?



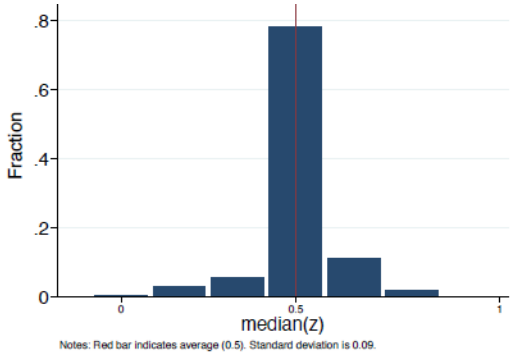
# Identifying the distribution of other-regarding preferences (based on the center bundle)

- Non-parametric Bayesian clustering algorithm
  («Dirichlet Process Means»; like K-means with a penalty for additional clusters)
  - No assumptions on utility functions
  - No assumptions on number of existing types
  - No assumptions on utility noise («errors»)

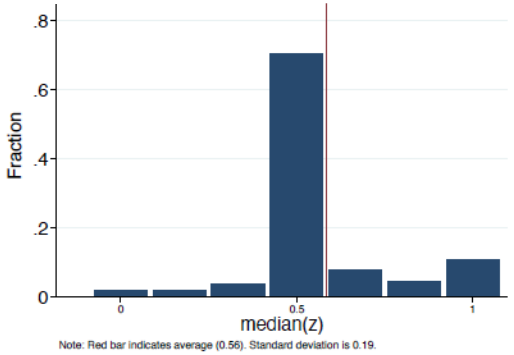
  - Validate the identified type-distribution out-of-sample.
    - Do the types identified in the center bundle behave as predicted in the north and the south bundle?

# Which social preference types does DP-means identify?

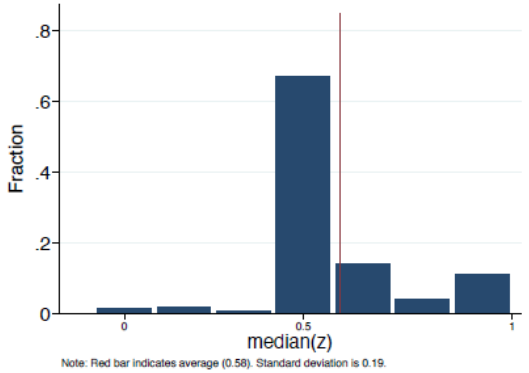
Figure 3: Distribution of individuals' median choices for each preference type.



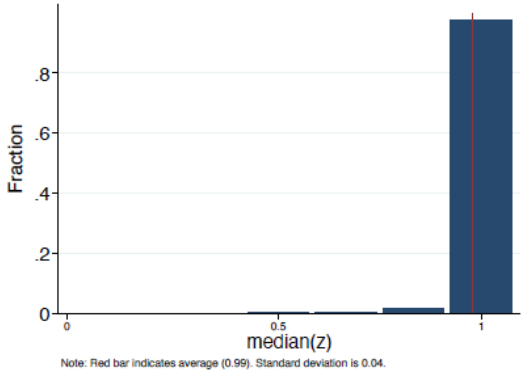

(a) Negatively sloped budget lines




(b) Positively sloped budget lines




(c) Negatively sloped budget lines




(d) Positively sloped budget lines

z = 1: maximize own payoff
z = 0.5: equality
z = 0: minimize own payoff

**Inequality averse**
$\alpha > 0;\ \beta > 0$
**50.8%**

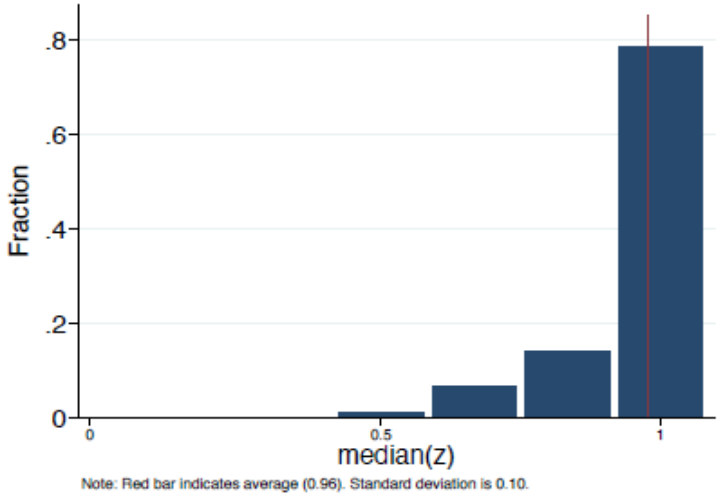
**Altruistic social welfare concerns**
$\alpha = 0;\ \beta > 0$
**34.4%**

**Selfish**

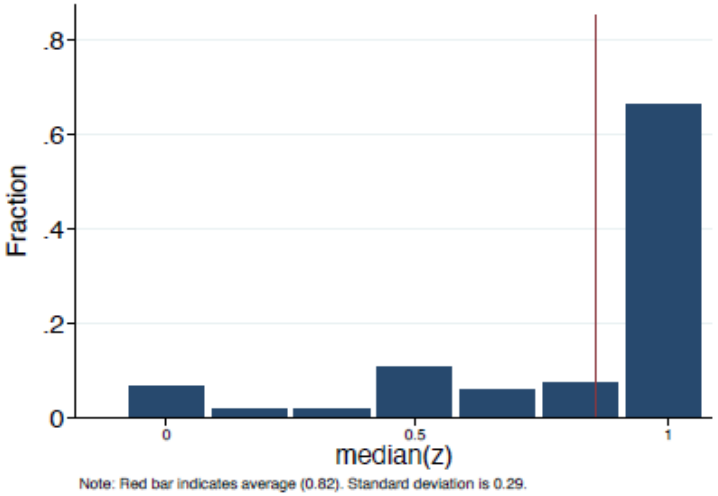
$\alpha = 0;\ \beta = 0$

**14.8%**

z = 1: maximize own payoff
z = 0.5: equality
z = 0: minimize own payoff




(e) Negatively sloped budget lines




(f) Positively sloped budget lines

**Compare to students samples**

**Is there important heterogeneity beyond the three types?**

# How do we measure support for redistribution? Online survey

*In May 2014, Switzerland voted on the introduction of a minimum wage of CHF 22 per hour, i.e. approximately CHF 4'000 per month (before tax). This referendum wanted to make sure that companies pay each of their employees at least CHF 22 per hour worked. Suppose that next weekend another referendum takes place in which the minimum wage is set to CHF 16.50 per hour, i.e. approximately CHF 3'000 per months (before taxes).*

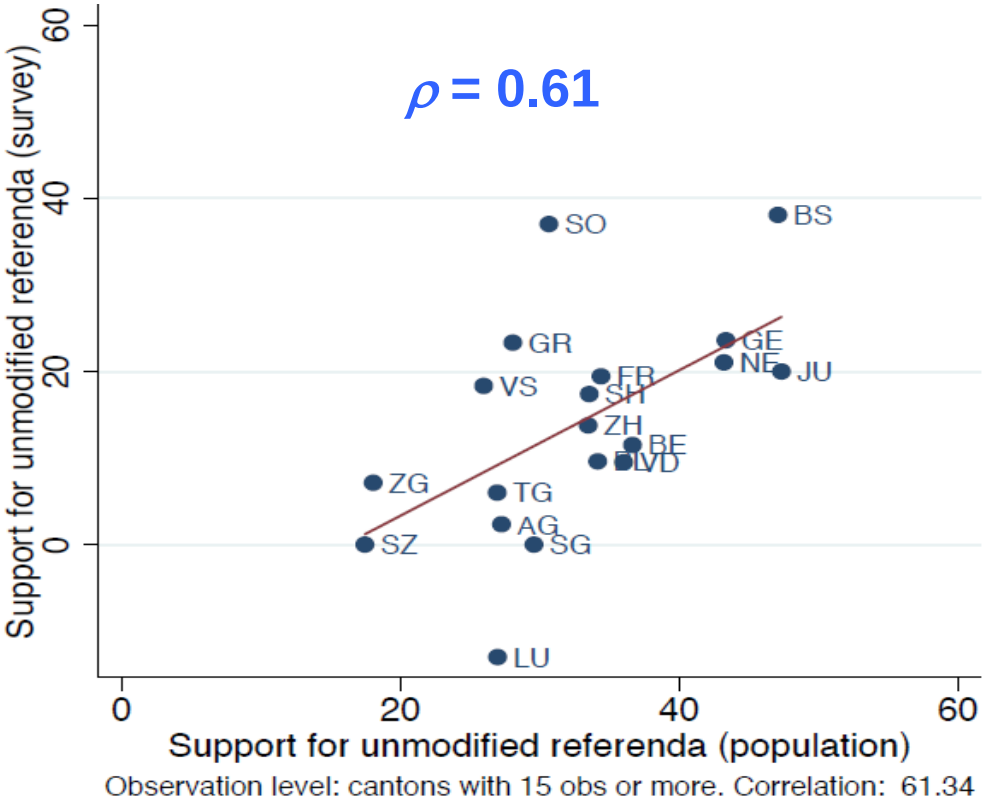
*Would you support the introduction of a minimum wage of CHF 16.50 per hour or would you reject this referendum?*

*[support or rather support coded as +1; don't know = 0; rather reject or reject = -1*

*Construction of aggregate support index over all plebiscites by dividing the summed up responses by 4*

# Validation of political support measure

- Aggregate support measure from our survey correlates positively with support in actual referendum across cantons and municipalities
- Aggregate support also correlates with self-remembered past voting behavior in actual referendum
- Aggregate support measure is a strong predictor of donations to civic organizations that support redistribution



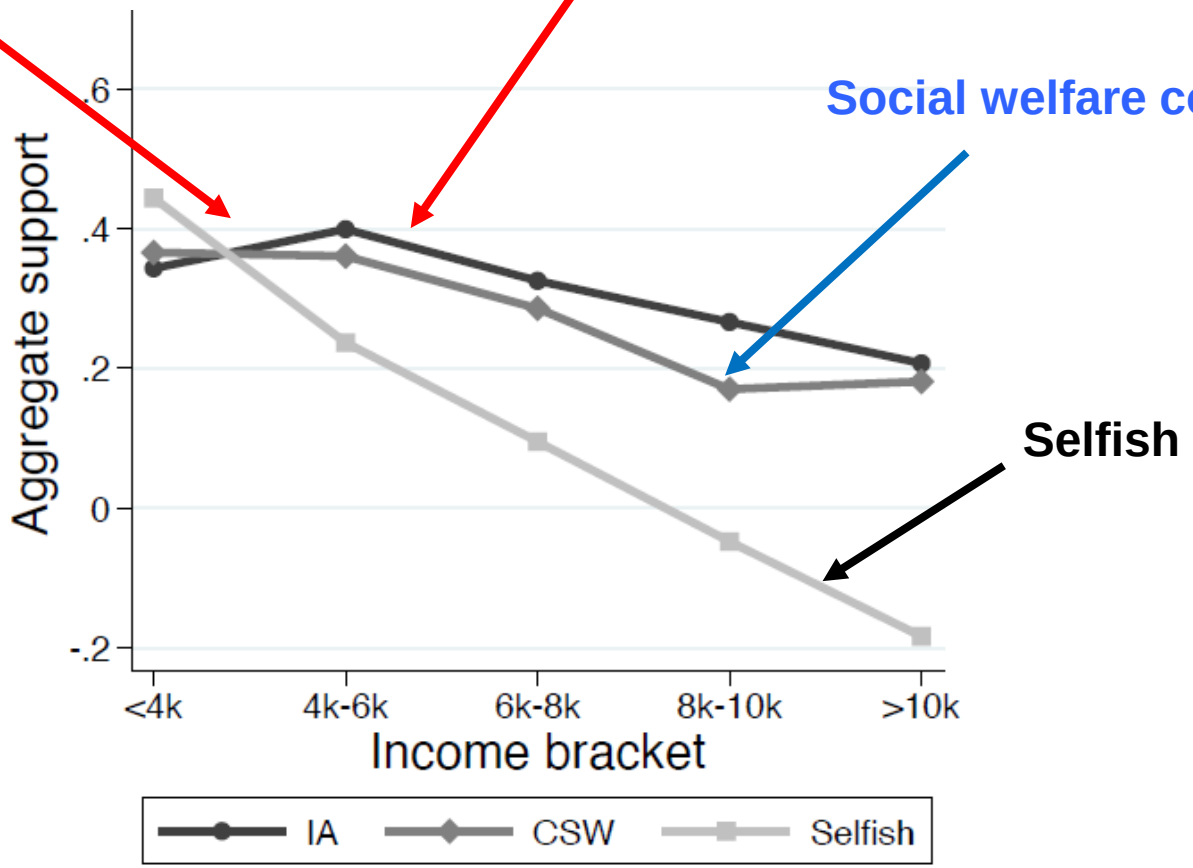
# Do other-regarding preferences increase support for redistribution (raw data)?

ORPS much less important at lower incomes

Inequality averse

Social welfare concern

Selfish



# Other-regarding preferences play a large role

**Difference between selfish and other-regarding individuals in standard deviations of political support**

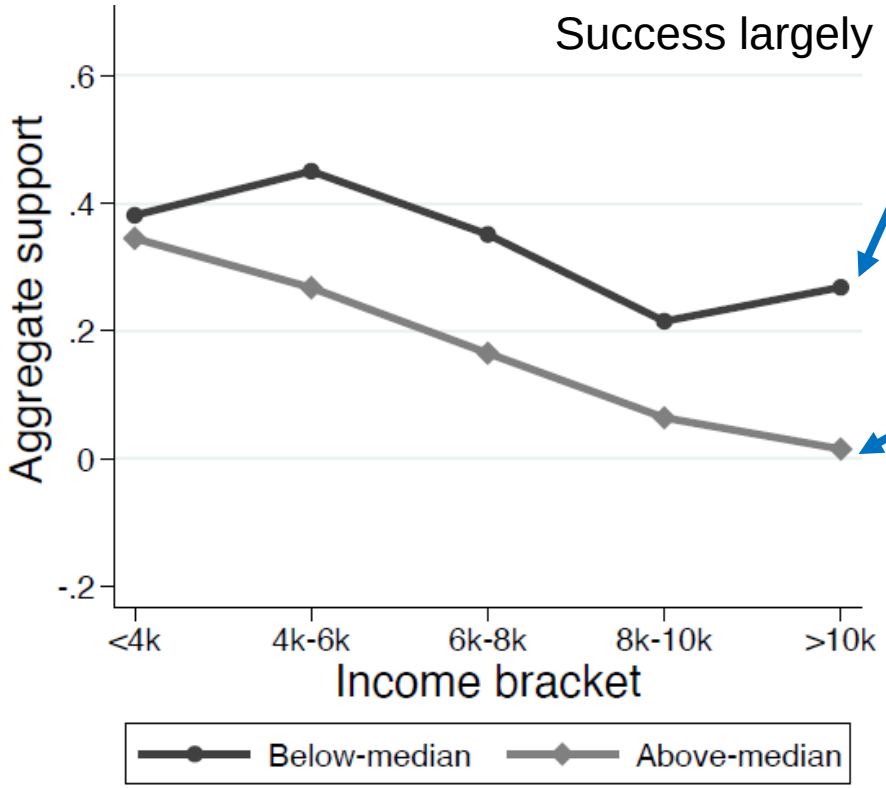
| Effect Size in Standard Deviations | Income categories | | | | |
|---|---|---|---|---|---|
| | < 4k | 4k – 6k | 6k – 8k | 8k – 10k | > 10k |
| Inequality Aversion | - 0.19 | 0.30 | 0.44 | 0.49 | 0.57 |
| Social Welfare Concern | - 0.15 | 0.23 | 0.35 | 0.34 | 0.52 |

# 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

# Impact of beliefs about role of effort for individual success

Belief that effort plays a minor role
Success largely not under Individual's control



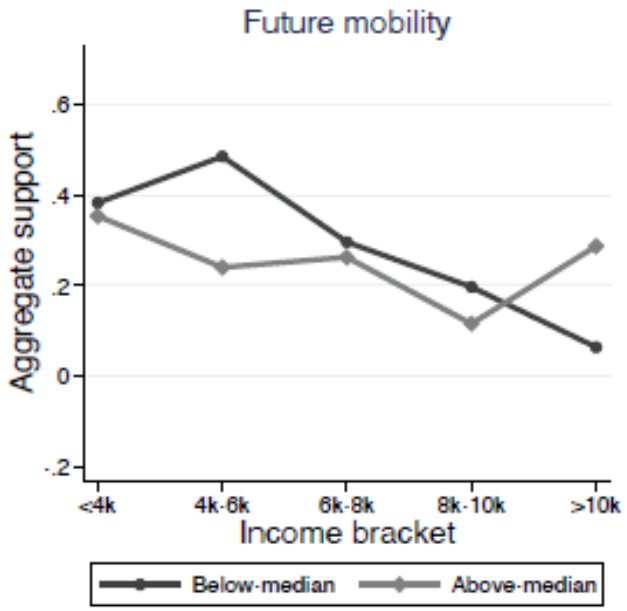

Belief that effort plays a large role
Success largely under Individual's control

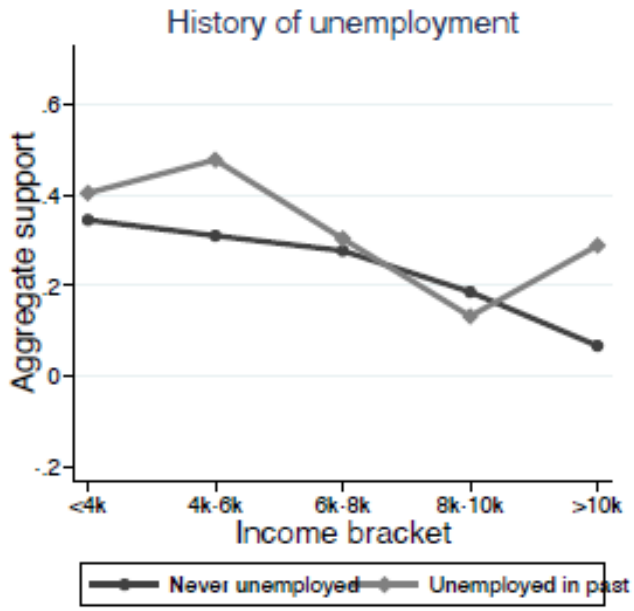
# Role of belief that effort is important as source of individual success

**Success is largely not under individuals' control minus it is largely under indivuals' control**

| Effect Size in Standard Deviations | Income categories | | | | |
|---|---|---|---|---|---|
| | < 4k | 4k – 6k | 6k – 8k | 8k – 10k | > 10k |
| Effort is important for individuals' success | - 0.08 | - 0.35 | - 0.25 | - 0.16 | - 0.19 |

# Role of future income mobility and history of unemployment



# Econometric Model

M1: $$AS_{ic} = \beta_0 + \beta_1 IA_i + \beta_2 SW_i + \beta_3 Y_i + \Gamma X_i + \varphi_c + \varepsilon_{ic}$$

*for below/above median income earners*

M2: $$AS_{ic} = \beta_0 + \beta_1 IA_i + \beta_2 SW_i + \beta_3 Y_i + \beta_4 IA_i \times Y_i + \beta_2 SW_i \times Y_i + \Gamma X_i + \varphi_c + \varepsilon_{ic}$$

- Baseline category: selfish type
- Income categories: -2, -1, 0 (= median category), +1, +2; implying that we measure the effect of IA and SW at the median income category

$X_i$ : vector of individual-level controls

- All regressions control for socio-demographics (incl. age, age2, education, occupation, language, current employment status) and canton FE ($\varphi_c$)
- Belief about causes of individual success
- Past unemployment
- Belief about future income mobility & perceived past mobility
- Perceived inequality, trust in the government
- Other preferences (impatience, risk, general trust in strangers, reciprocity)

# Empirical Estimates

## (for below/above median income population)
## Aggregate Support as Dep. Var.

| | <6k | >6k |
|---|---|---|
| | (1) | (2) |
| Social welfare concerns | 0.058 | 0.246** |
| | (0.098) | (0.117) |
| Inequality averse | 0.031 | 0.349*** |
| | (0.091) | (0.108) |
| Income: above-median | | |
| Male | -0.020 | -0.005 |
| | (0.064) | (0.084) |
| Age | -0.006 | 0.022 |
| | (0.015) | (0.023) |
| Have been unemployed in past | 0.057 | 0.014 |
| | (0.065) | (0.080) |
| Beliefs about future mobility: upwardly mobile (dummy) | -0.022 | 0.089 |
| | (0.065) | (0.078) |
| Perceived past mobility: upwardly mobile (dummy) | 0.063 | 0.011 |
| | (0.061) | (0.073) |
| Perceived inequality (share top/share bottom, z) | 0.000 | 0.032 |
| | (0.028) | (0.040) |
| Mistrust in politicians (1-4) | 0.085** | 0.069 |
| | (0.043) | (0.060) |
| Success under individuals' control (risk, effort, education) | -0.149*** | -0.123* |
| | (0.048) | (0.074) |
| Success determined by external factors (luck, inheritance) | 0.140*** | 0.070 |
| | (0.043) | (0.049) |

43% of a SD in Agg. Supp.

61% of a SD in Agg. Supp.

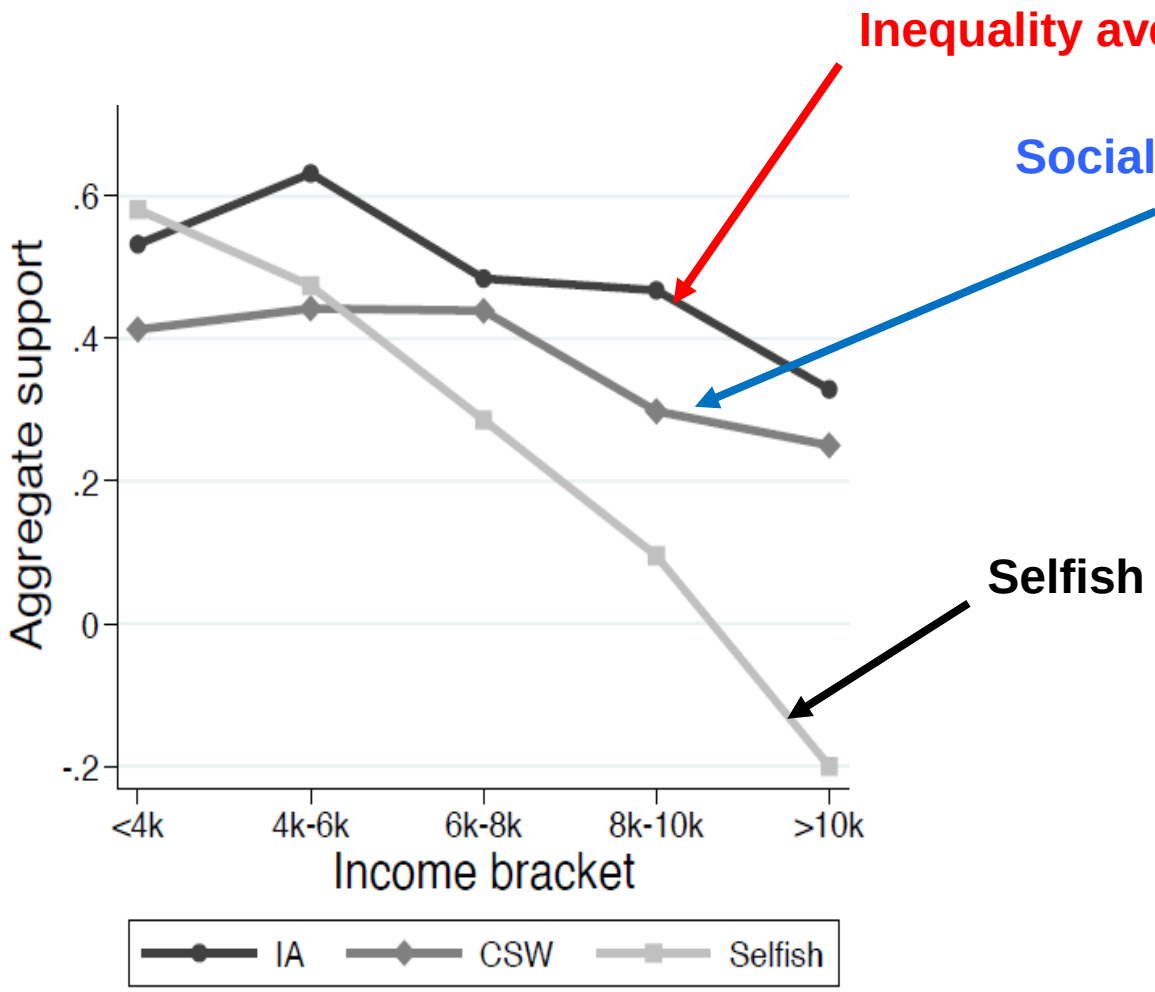
Can we better understand the properties of individuals' support for redistribution by taking into account different types of social preferences?

# Social preference in reduce the «incomes of the rich» referenda?

- The **1:12 initiative** was explicitly launched to constrain top incomes that are perceived to be outrageously high
  - Clear egalitarian focus might have particular appeal for inequality averse individuals
  - Social welfare types have less reason to support income reductions for the rich merely for the sake of higher equality

- Similar for the "**fair taxes" initiative** for which higher taxation of the very rich was a main motivation.
  - Clear egalitarian fairness-driven focus
  - Individuals who don't care about inequality per se have less reason to support this initiative

# ORPs in «reduce the income of the rich» referenda



# Social preference in «reduce the incomes of the rich» referenda

| | 1 to 20 | | Fair Taxes | |
|---|---|---|---|---|
| | <6k | >6k | <6k | >6k |
| Social welfare concerns | 0.107 | 0.227 | -0.122 | 0.324** |
| | (0.150) | (0.165) | (0.139) | (0.163) |
| Inequality averse | 0.147 | 0.321** | 0.055 | 0.470*** |
| | (0.143) | (0.159) | (0.130) | (0.156) |
| Male | 0.018 | -0.201 | -0.028 | 0.231* |
| | (0.089) | (0.128) | (0.093) | (0.133) |
| Age | -0.023 | -0.005 | 0.005 | 0.028 |
| | (0.021) | (0.033) | (0.020) | (0.031) |
| Have been unemployed in past | 0.169* | -0.001 | -0.075 | -0.021 |
| | (0.098) | (0.119) | (0.097) | (0.113) |
| Beliefs about future mobility: upwardly mobile (dummy) | -0.027 | 0.173 | 0.036 | 0.053 |
| | (0.098) | (0.119) | (0.099) | (0.120) |
| Perceived past mobility: upwardly mobile (dummy) | 0.141 | 0.062 | 0.116 | 0.015 |
| | (0.094) | (0.108) | (0.097) | (0.107) |
| Perceived inequality (share top/share bottom, z) | 0.010 | 0.110* | -0.010 | -0.002 |
| | (0.047) | (0.058) | (0.040) | (0.054) |
| Mistrust in politicians (1-4) | -0.023 | 0.123 | 0.095 | 0.061 |
| | (0.061) | (0.082) | (0.059) | (0.080) |
| Success under individuals' control (risk, effort, education) | 0.001 | -0.151 | -0.114 | -0.155 |
| | (0.082) | (0.108) | (0.077) | (0.107) |
| Success determined by external factors (luck, inheritance) | 0.114* | -0.023 | 0.196*** | 0.122* |
| | (0.062) | (0.071) | (0.063) | (0.071) |
| Above-median estimation of absolute number of poor in CH | -0.101 | -0.057 | 0.124 | -0.054 |
| | (0.090) | (0.107) | (0.087) | (0.100) |

# Conclusions

1. We take advantage of Swiss direct democracy to study the role of social preferences for actual redistributive proposals
   - Broad discussions before referenda increases likelihood that subjects make "informed choices"
   - Voting measures validated with actual voting patterns and charitable donations

2. We measure ORPs in a broad population sample and identify nonparametrically three fundamentally distinct types of ORPs
   - Inequality averse, social welfare concerns, selfish
   - Within-type heterogeneity has little explanatory power (except for the social welfare type

# Conclusions continued

3. ORPs are a key (income-dependent) predictor of voting behavior in theory and a quantitatively important predictor empirically
   - Both social preference types are associated with a substantial increase in aggregate support for redistribution.
   - Social preferences are particularly relevant among the more affluent people who have selfish reasons to oppose redistribution

4. The fundamental characteristics of ORPs (altruistic concern for social welfare vs inequality aversion) have implications for the type of redistributive proposal that people support!
   - Proposals to increase taxes on the rich are particularly attractive to inequality averse respondents

5. Taking into account other-regarding preferences provides a deeper understanding of the political support for redistribution