

Demand for redistribution: Perceptions of inequality vs. “objective” inequality

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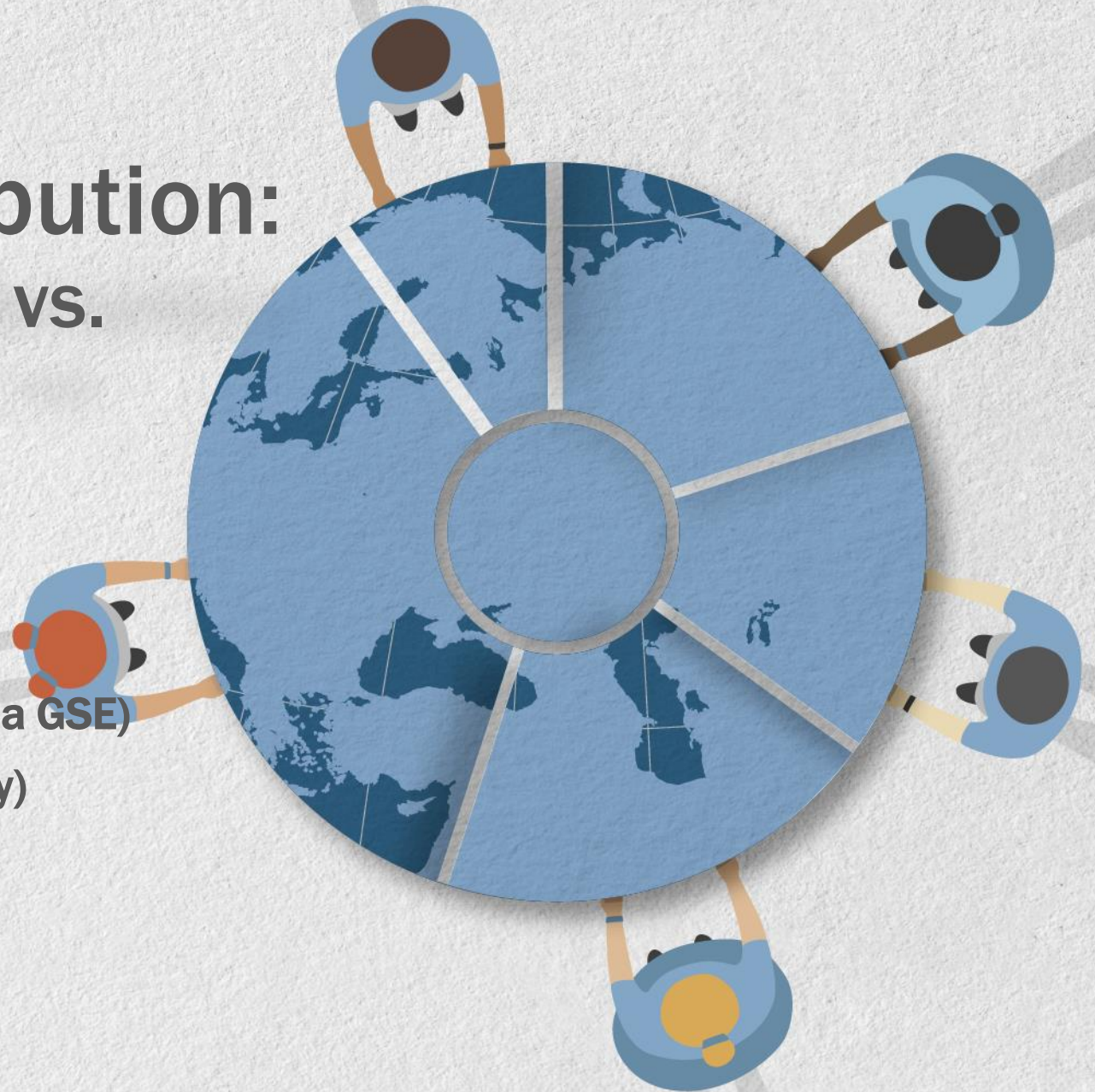
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This paper's contribution (1)

- Literature on demand for redistribution assumes (objective) inequality as main explaining factor (Meltzer and Richard; 1981).
- Empirical literature however has had a hard time bringing that model to the data
 - New hypotheses (overview: Alesina & Giuliano, 2011): mobility, expected future income, perceptions of fairness, own objective situation, cultural norms, ...
- This paper's contribution:
 - Demand for redistribution depends on perceptions of inequality, rather than objective inequality
 - Note: similar literature Niehues (2014) and Gimpelson and Treisman (2015) find that redistributive preferences depend rather on perceived inequality than actual Gini. And Cruces et al. (2013) and Zilinsky (2014) find that having accurate information about Gini changes individuals' demand for redistribution.

This paper's contribution (2)

- Literature on perceptions has focused on the ability of individuals to correctly predict income distribution or the place they occupy within it
- This paper's contribution:
 - Can we explain how individuals form inequality perceptions?
 - Although one can explain the gap as misperceptions, but we argue that perceptions might also be shaped by the concept of inequality that individuals have and that goes beyond Gini.
 - We examine the importance of the context as well as individual characteristics to explain heterogeneity of inequality perceptions

The paper focuses on the gap between subjective perceptions & objective measurements of inequality, and how this explains the demand for redistribution.

Main Conclusions

- We find a gap between objective and subjective inequality
- We argue that inequality perceptions might be shaped by the concept of inequality individuals have and that goes beyond Gini.
- We find that perceptions of inequality are influenced by: absolute inequality, poverty, opportunities (education) as well as mobility (dynamics), fairness, ...

→ Perceptions embed the theories that have been advanced to explain preferences for redistribution

Main findings

- Perceptions depend on the context: uncertainties in the labor market (unemployment), Gini, poverty, & government expenditures in education.
- It also depends on individual characteristics: higher social status (education or income) correlates positively with perceiving own country as more equal; while the opposite is true for female or being older.
- Demand for redistribution shows similar pattern as inequality perceptions
- To be done: we will shed some light on whether reported demand for redistribution translates into pressure to the electoral processes.

Motivation I

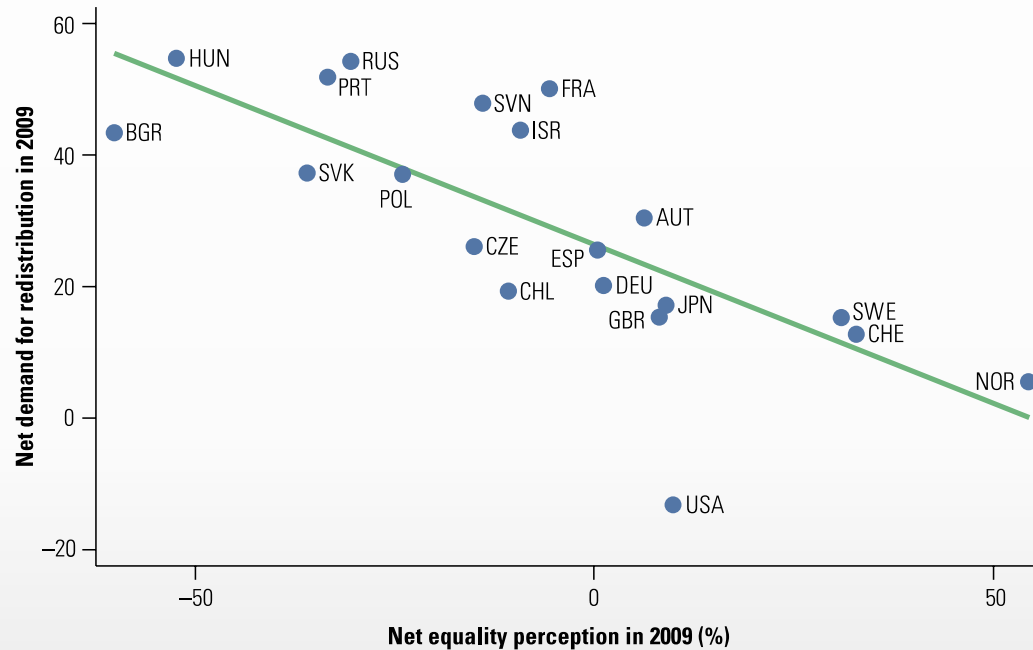


Figure: Net equality perception and Demand for redistribution
R2 with constant = 0.55

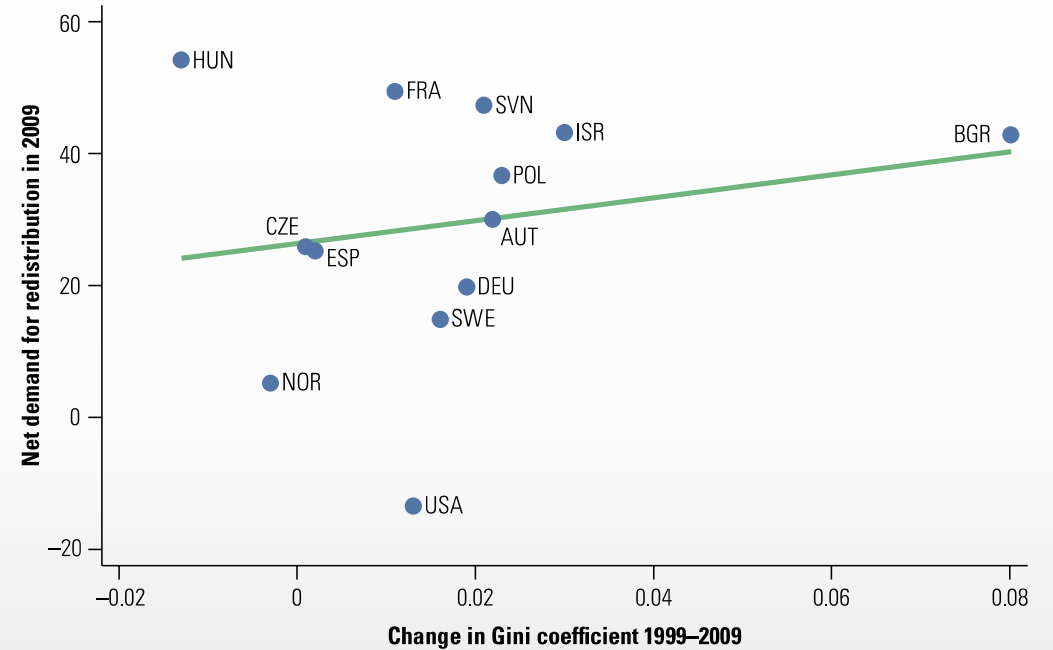


Figure: Δ GINI and Demand for redistribution
R2 with constant = 0.04

→ interesting to understand how individuals form inequality perceptions

Motivation II

- Inequality perceptions stronger relation with other context variables :

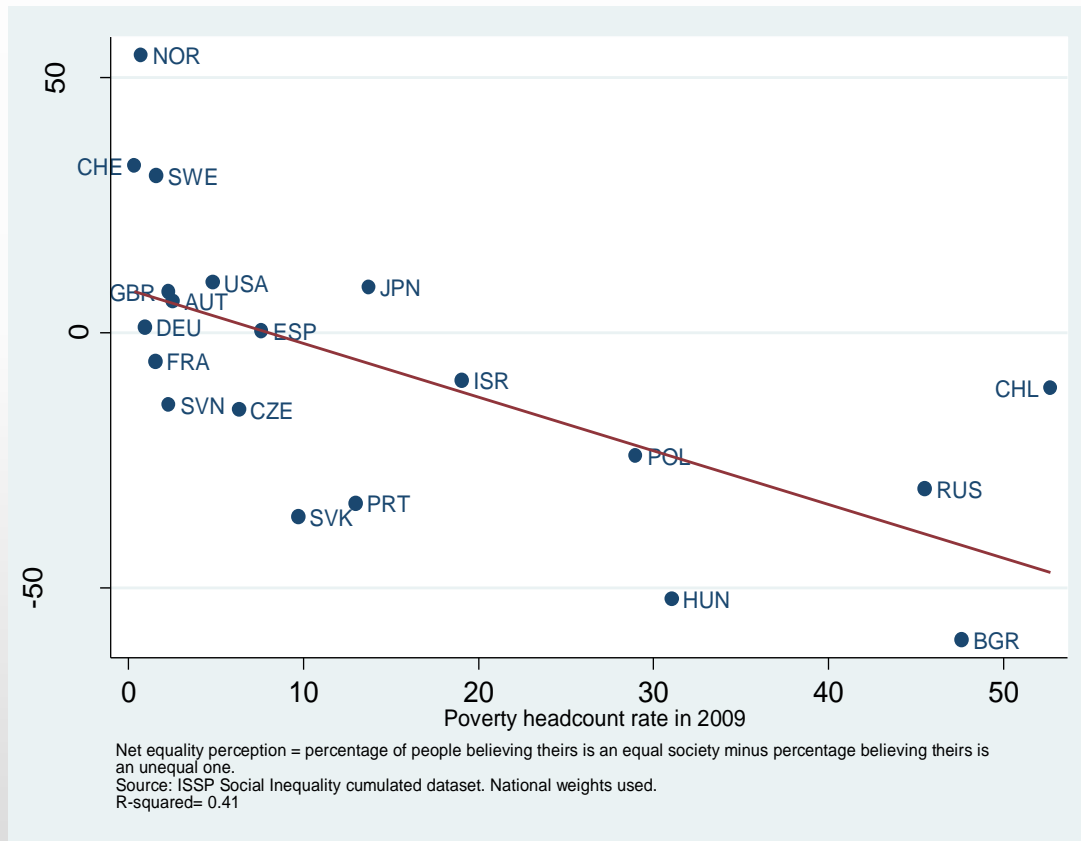


Figure: Net equality perception and poverty rate
R2 with constant = 0.41

Empirical strategy

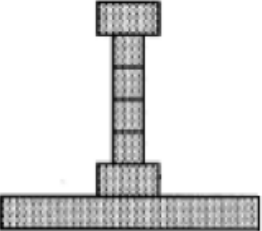
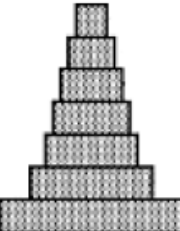
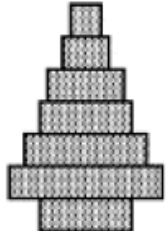
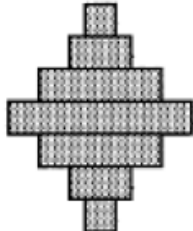
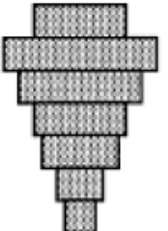
- We regress inequality perceptions on key context variables (unemployment, poverty, gini, and expenditures) and individual characteristics
- And we regress demand for redistribution with the same variables, and inequality.
- Limitations:
 - We do not yet have a real model for the formation of perceptions
 - both perceptions & preferences are subjective → endogeneity

Data

- ISSPs Social Inequality surveys: Inequality perceptions & individual characteristics
 - 21 countries (18 countries for some specifications): Australia, Austria, Bulgaria, Canada*, Chile, Czech Republic*, France, Germany, Great Britain, Hungary, Japan, Norway, Poland*, Portugal, Russia, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, and USA.
 - In a robustness check we exclude from the regression those countries (*) that are only one year in our data.
- Gini from the World Panel Income Distribution dataset (WPID) by Lakner and Milanovic (2013)
- Unemployment rate, government consumption & poverty from WDI

Measure of perceived inequality

Q14. 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> ..

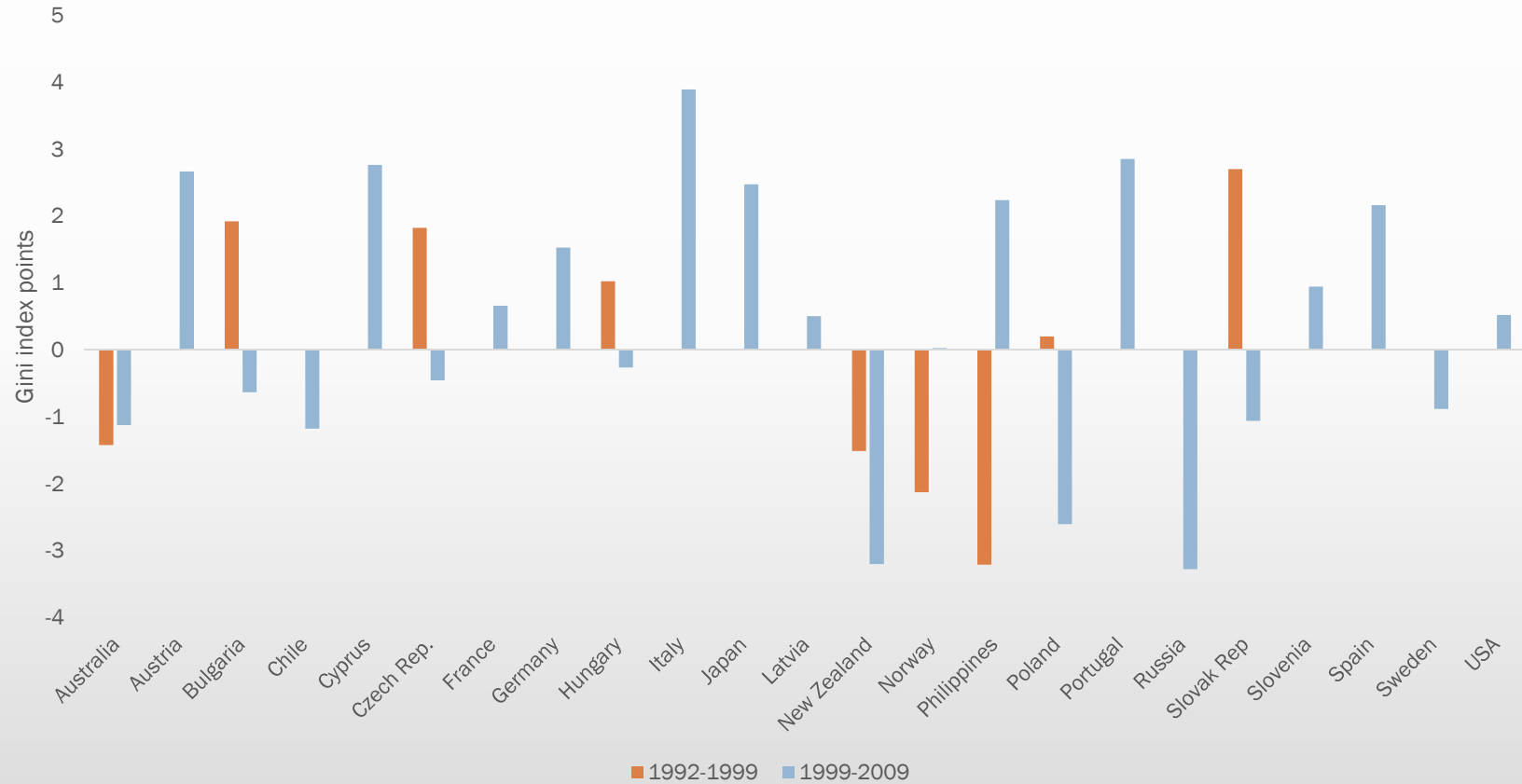
				
Type A A small elite at the top, very few people in the middle and the great mass of people at the bottom.	Type B A society like a pyramid with a small elite at the top, more people in the middle, and most at the bottom.	Type C A pyramid except that just a few people are at the bottom.	Type D A society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

- Average perception is 2.354 (sd=1.087).
- Average gini perception is 32.694 (sd= 7.764,)

- We drop Type E: unclear whether E is more or less equal than D
- Robustness check: transform to Gini: 0.42; 0.35; 0.30; and 0.20 for type D (Gimpelson and Treisman (2017))

Measure of perceived inequality

Change in average perceived inequality, 1992-2009



Measure of demand for redistribution

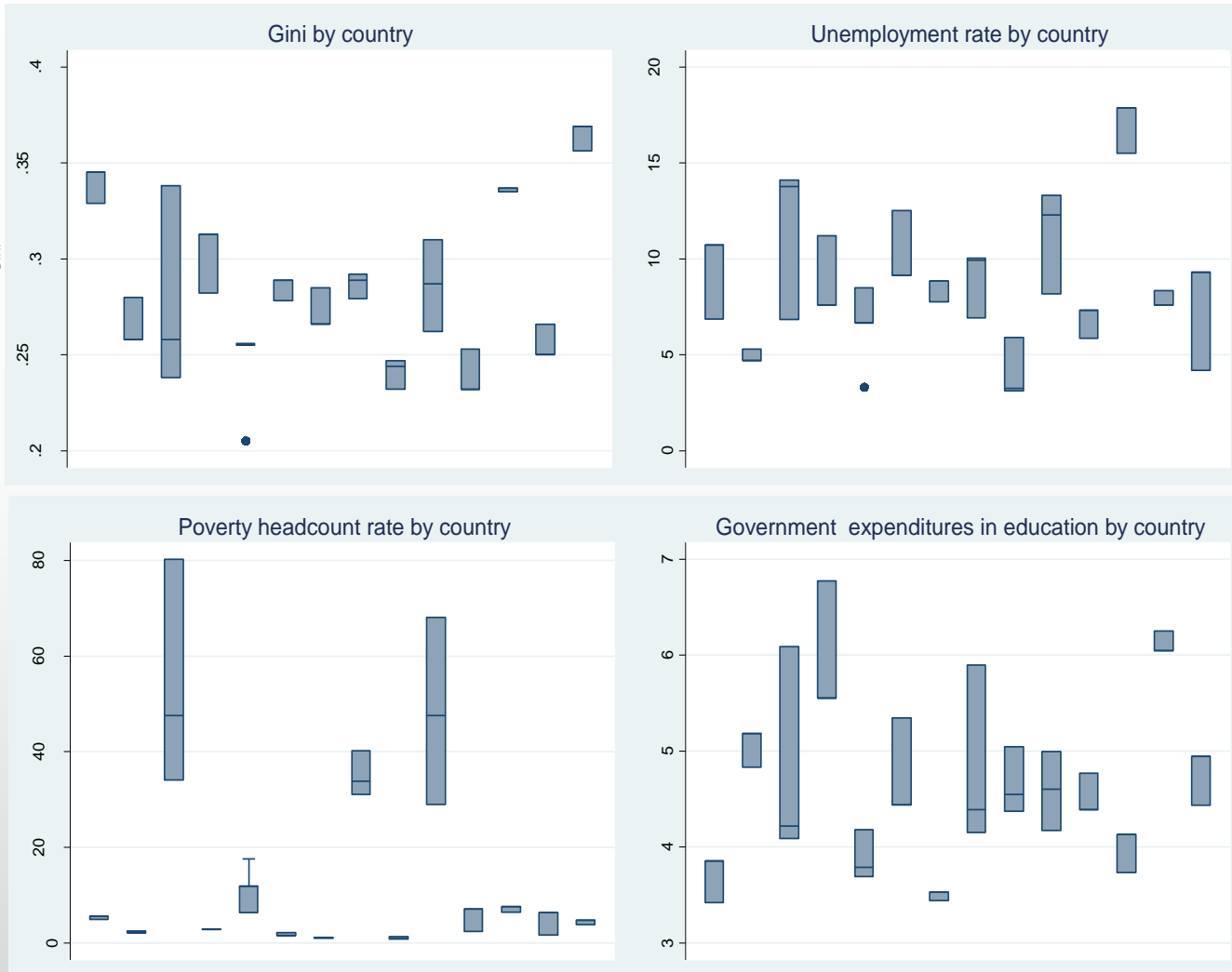
- “It is the responsibility of the government to reduce income differences between people with high incomes and those with low incomes”.
- Answers range from 1 (strongly disagree) to 5 (strongly agree).
- Average is 3.732
- Information on demand for redistribution is available for more countries & years, we only use those country-years for which equality perceptions is also available.

Measure of demand for redistribution

Change in net demand for redistribution, 1992-2009



Time country variation



Our variation is not driven by few countries or certain episodes, except for poverty.

Empirical specification I

$$EqPerc_{itr} = \alpha_1 + \beta_1 UR_{tr} + \beta_2 P_{tr} + \beta_3 Gini_{tr} + \beta_4 Exp_{tr} + \beta_5 X_{itr} + \delta_t + \mu_r + \varepsilon_{itr}$$

- individual i , in year t , and country r .
- UR , P , $Gini$, Exp represent the country context,
- X_{itr} set of individual characteristics
- Country & year fixed effects (δ_t and μ_r) and the usual error term (ε_{itr}).
- $EqPerc$ is run with OLS: 1 to 4 or imputed GINI (i.e., 0.42, 0.35, 0.30, and 0.20).
- Since context variables are clustered at the country level, and given that the number of clusters (countries) is small, we show country level bootstrap p-values.

Empirical specification II

$$DRed_{itr} = \alpha_2 + g_1 UR_{tr} + g_2 P_{tr} + g_3 Exp_{tr} + g_4 EqPer_{itr} + g_4 X_{itr} + \delta_t + \mu_r + \varepsilon_{itr}$$

- Allows to see the effect of perceptions on demand for redistribution, and to see whether explanatory variables differ between the two equations.
- Demand for redistribution and inequality perceptions are bound to depend on same characteristics (e.g, political opinions, non-cognitive skills, the media individual reads) → endogeneity.
- Endogeneity not yet well solved. First attempt: include political ideology (right-left).

Results I: Inequality perceptions

Dep. var.: Perceived Gini index

Unemployment rate	0.248 ^{***} (0.064) [0.01] ^{***}
Gini	0.170 ^{***} (0.044) [0.01] ^{***}
Poverty headcount rate	0.026 [*] (0.013) [0.05] ^{**}
Govt. exp. in education	-0.650 ^{**} (0.294) [0.05] ^{**}

- 1 sd increase in unemployment rate increases gini perception by 0.82 points (3.32×0.248), about a 11% of one standard deviation of gini perceptions (sd=7.7).
- 1 sd increase in gini (0.053) increases gini perceptions by 0.91 points (0.170×0.053), about a 12% of one standard deviation of gini perceptions.
- 1 sd increase in poverty rate increases gini perception by 0.53 points (0.026×20.40), about a 5% of one standard deviation of gini perceptions.
- 1 sd increase in education expenditures reduces inequality perceptions by 0.56 (-0.650×0.868) about a 4% of one standard deviation of gini perceptions.

Results II: Inequality perceptions

Born after 1970	ref.	Up to secondary education	ref.	Lowest income group	ref.	
Born 1946-1970	0.741 ^{***} (0.145) [0.01] ^{***}		Higher secondary	-0.821 ^{***} (0.164) [0.01] ^{***}	2nd income group	-0.327 ^{***} (0.113) [0.02] ^{**}
Born before 1946	0.990 ^{***} (0.209) [0.01] ^{***}		University	-1.882 ^{***} (0.218) [0.01] ^{***}	3rd income group	-0.509 ^{***} (0.136) [0.02] ^{**}
Missing	1.698 ^{***} (0.484) [0.01] ^{***}	Missing	-0.729 ^{**} (0.317) [0.06] ^{**}	4th income group	-0.964 ^{***} (0.143) [0.01] ^{***}	
Female	0.202 ^{**} (0.082) [0.02] ^{**}			Highest income gr	-1.569 ^{***} (0.259) [0.01] ^{***}	

Observations	46894
R ²	0.234

Others not included: employment status, rural residence,...

Demand for redistribution: perceptions

Results III: demand for redistribution

Dep. Var: Demand for redistribution			
	(1)	(2)	(3)
Perceived Gini	0.020	0.021	0.022
	(0.002)	(0.001)	(0.001)
	[0.01]***	[0.01]***	[0.01]***
Gini (objective)		-0.816	
		(1.578)	
		[0.47]	
Left-right ideol.			-0.245
			(0.033)
			[0.01]***
R ²	0.19	0.19	0.23

Results IV: demand for redistribution

- Individual characteristics have similar effect on demand for redistribution than on perceptions.
- The effect remains after controlling for perceived inequality.

Concluding remarks

- Demand for redistribution depends on perceptions of inequality, rather than objective inequality
- Perceptions of inequality depends on the context as well as on individuals' characteristics
- Perceptions embed a concept of inequality that does not necessary reflect the gini
- Next step: from demand to political behavior.