The profile of inequality and trust in public institutions: a worldwide perspective

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Motivations

- Increasing concerns with high (and often increasing) level of inequality and its consequences

- While inequality has been on the rise, institutional trust has been slowly deteriorating over time (see OECD 2017)

- Relevance of institutional trust for the suitability of social contract

- Persistent need for policymakers to better understand the determinants of - and thus the role of inequality on - institutional trust against the background of increasing populist voting (Algan et al. 2017)

Motivations

- Existing literature on the relationship between these two phenomena is scant (some exceptions are Palmisano and Sacchi 2021, Gould and Hijzen 2016, Belabed and Hake 2018)

- Traditionally interpersonal trust-inequality nexus is analysed estimating a coefficient on a single inequality statistic in a regression, alongside other explanatory variables (Barone and Mocetti 2015)

- However, a rooted consensus that it is not simply aggregate inequality that matters when evaluating its consequences on the society

- Shading light on its whole profile might disclose a more complex relationship as inequality experienced at different parts of the distribution can play a different role in the economy

Aims

- Assessing the role of inequality on institutional trust by implementing a granular perspective of inequality

- Inequality between income groups vs inequality within different income groups

Testable hypotheses

Hypothesis 1 Higher aggregate inequality is associated with institutional trust but we remain agnostic on the sign of the association

Hypothesis 2 Different components of aggregate inequality affect institutional trust differently

- Different attitudes towards different inequalities (unacceptable vs acceptable inequalities)
- Judgement criterion for public institutions' actions (Bouckaert and van de Walle, 2003)
- Identification vs incentive effect
- Cooperation

Empirical analysis

$$ITrust_{i,c,t} = \alpha + \beta \boldsymbol{Ineq}_{c,t} + \gamma \boldsymbol{X_{i,t}} + \rho \boldsymbol{Y_{c,t}} + \mu_c + \tau_t + \varepsilon_{i,t}$$

- i individual, c country, t year, with some gaps leading to an unbalanced panel

- $ITrust_{i,c,t}$ individual trust in the national government

- $\boldsymbol{Ineq}_{c,t}$ is (the list of) our main independent variable(s), namely income inequality for the whole distribution or subgroups: inequality within percentiles 1 to 40, 41 to 80, and 81 to 100, and inequality between these three percentile groups, using Gini indices

- $\boldsymbol{X_{i,t}}$ individual control variables. (*Gender*, *Age*, *Education*, *Employment*), $\boldsymbol{Y_{c,t}}$ country controls (*GDP per capita, Urban, Unemployment*)

- country (μ_c) and time (τ_t) dummies; $\varepsilon_{i,t}$ is the error term

Data

- Aggregate inequality variables: WIID, GINI and MLD

- Profile of inequality data: computed on the base of WIID information on countries' percentile distributions

- Trust variables: IVS (WVS-EVS), trust in national government (82 countries, from 1981-2020)

- Individual control variables: IVS (WVS-EVS)

- Country control variables: WDI (World Bank)

Results: profile of inequality and institutional trust

	Dependent Variable: institutional trust					
	(1)	(2)	(3)	(4)	(5)	(6)
Aggregate inequality	0.0202***	0.0162***	0.0150***			
	(0.00112)	(0.00118)	(0.00130)			
Inequality Between				-0.0254***	-0.0182**	-0.0275***
				(0.00689)	(0.00710)	(0.00736)
Inequality (1-40)				0.00178	-1.97e-05	0.00437*
				(0.00224)	(0.00226)	(0.00234)
Inequality (41-80)				0.0867***	0.0729***	0.0760***
				(0.00892)	(0.00936)	(0.0100)
Inequality (81-100)				0.0191***	0.0125***	0.0151***
				(0.00323)	(0.00334)	(0.00336)
Individual level controls						
Female		-0.00216	-0.000961		-0.00263	-0.00125
		(0.00368)	(0.00386)		(0.00368)	(0.00386)
Age		-0.00373***	-0.00345***		-0.00368***	-0.00348***
		(0.000642)	(0.000674)		(0.000642)	(0.000674)
Age squared		6.35e-05***	6.09e-05***		6.30e-05***	6.14e-05***
		(6.90e-06)	(7.23e-06)		(6.90e-06)	(7.23e-06)
Employment status:						
-Part time		-0.000739	0.000414		0.000236	0.00117
		(0.00690)	(0.00714)		(0.00690)	(0.00714)
- Self employed		-0.00796	-0.0113		-0.00829	-0.0117*
		(0.00673)	(0.00710)		(0.00672)	(0.00710)
-Retired		0.00134	0.000666		0.00169	0.000125
		(0.00717)	(0.00753)		(0.00717)	(0.00753)
-Housewife		0.0248***	0.00848		0.0253***	0.00870
		(0.00673)	(0.00718)		(0.00673)	(0.00718)
-Students		0.0230***	0.0399***		0.0234***	0.0397***
		(0.00852)	(0.00900)		(0.00852)	(0.00900)
-Unemployed		-0.0443***	-0.0412***		-0.0427***	-0.0409***
		(0.00704)	(0.00740)		(0.00704)	(0.00740)
-Other		-0.0526***	-0.0580***		-0.0513***	-0.0571***
		(0.0126)	(0.0132)		(0.0126)	(0.0132)
Education level:						
-Middle		-0.0691***	-0.0603***		-0.0680***	-0.0593***
		(0.00481)	(0.00504)		(0.00481)	(0.00504)
-Upper		-0.0573***	-0.0410***		-0.0565***	-0.0402***
		(0.00531)	(0.00556)		(0.00531)	(0.00556)
Country level controls						
GDP per capita			8.29e-06***			9.94e-06***
			(1.86e-06)			(1.87e-06)
Unemployment			-0.0105***			-0.00523***
			(0.00141)			(0.00154)
Urban population			0.0310***			0.0325***
			(0.00182)			(0.00181)
Country FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
N Observations	250,439	241,346	213,435	250,439	241,346	213,435
R-squared	0.161	0.161	0.172	0.161	0.161	0.172
p>F	0.000	0.000	0.000	0.000	0.000	0.000

Results: profile of inequality and institutional trust by level of development

	High income		Upper-middle icome		Lower-middle and low income	
	Dependent variable: institutional trust					
	(1)	(2)	(3)	(4)	(5)	(6)
Gini	-0.0163***		-0.00307		0.630***	
	(0.00300)		(0.00218)		(0.0251)	
Inequality Between		0.126***		-0.0563*		-4.105***
		(0.0154)		(0.0311)		(0.172)
Inequality (1-40)		-0.0650***		-0.00859*		1.304***
		(0.00609)		(0.00441)		(0.0637)
Inequality (41-80)		-0.296***		0.209***		6.225***
		(0.0240)		(0.0328)		(0.256)
Inequality (81-100)		-0.00392		-0.0105		0.121***
		(0.00530)		(0.0196)		(0.0108)
Individual level controls	YES	YES	YES	YES	YES	YES
Country level controls	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Country FE	YES	YES	YES	YES	YES	YES
Observations	108,991	108,991	79,209	79,209	25,235	25,235
R-squared	0.117	0.120	0.220	0.221	0.219	0.219
p>F	0.000	0.000	0.000	0.000	0.000	0.000

Results: profile of inequality and institutional trust by preferences for redistribution

	Dependent variable: institutional trust			
	Governments tax the rich and subsidize the poor			
	Against		In favor	
	(1)	(2)	(3)	(4)
Aggregate Inequality	0.00995**		0.0143***	
	(0.00440)		(0.00146)	
Inequality Between		-0.0113		-0.0194**
		(0.0338)		(0.00823)
Inequality (1-40)		0.0158		0.00298
		(0.0128)		(0.00267)
Inequality (41-80)		0.0770		0.0579***
		(0.0523)		(0.0113)
Inequality (81-100)		-0.00454		0.0143***
		(0.0134)		(0.00384)
Individual level controls	YES	YES	YES	YES
Country level controls	YES	YES	YES	YES
Year FE	YES	YES	YES	YES
Country FE	YES	YES	YES	YES
Observations	45,106	45,106	168,329	168,329
R-squared	0.213	0.213	0.165	0.165
p>F	0.000	0.000	0.000	0.000

Results: profile of inequality and interpersonal trust

	Dependent variable: Trust in people you know		Dependent variable: Trust in people met for the first time	
	(1)	(2)	(3)	(4)
Aggregate Inequality	-0.0123***		-0.0200***	
	(0.00214)		(0.00236)	
Inequality Between		0.114***		0.00667
		(0.0157)		(0.0180)
Inequality (1-40)		-0.0566***		-0.0285***
		(0.00566)		(0.00668)
Inequality (41-80)		-0.218***		-0.105***
		(0.0243)		(0.0275)
Inequality (81-100)		-0.0326***		0.0123*
		(0.00628)		(0.00723)
Individual level controls	YES	YES	YES	YES
Country level controls	YES	YES	YES	YES
Year FE	YES	YES	YES	YES
Country FE	YES	YES	YES	YES
Observations	129,374	129,374	127,010	127,010
R-squared	0.197	0.197	0.191	0.192
p>F	0.000	0.000	0.000	0.000

Robustness checks

- Concerning the main explanatory variables: we consider an alternative indicator of inequality (MLD) both in the individual and country level regression

- Concerning the outcome variables: we consider trust in political parties and trust in national parliament

- We add time trend

- We perform jackknife test

Conclusions

<u>Contributions</u>

✓ Highlight the potential limitation of investigating the effect of income distribution on trust - and more generally on social capital - using a single inequality index

- Positive effect of aggregate inequality mostly explained by positive impact of within group inequality especially at the top. Inequality between groups acts in the opposite direction

✓ Distinction between institutional and interpersonal trust. Although the two tend to be positively correlated, their origins (and their consequences) may be different

✓ Complementary database with the profile of inequality

Conclusions

Identification

✓ Addressing identification in not straightforward (some of the issues: data are cross section; four different variables would need to be instrumented)

✓ Thus, we do not pretend to infer causality from our results

Thank you