Современное экономическое образование и
исследования для российского общества, бизнеса и государства

РЭШ 20 лет
Российская
экономическая
школа

Preferences for redistribution in transition countries

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New Economic School

Motivation

- Public attitudes towards inequality and demand for redistribution shapes social policy

- Large literature on determinants of demand for redistribution (Meltzer and Richard 81, Alesina and Angelotos 05)

- Transitional countries are considered as a homogeneous group (e.g., Dallinger 09)

- Role of institutions in shaping demand for redistribution is limited to inequality measures

Research questions

- What are the individual and institutional determinants of demand for redistribution in transitional economies?

  - The role of personal experience
  - The role of democratic and governance institutions

- Direct redistribution and indirect (public spending priorities) measures

Literature on determinants

- Individual determinants
  - Self-interest/rational choice for a degree of redistribution favorable to the individual (Meltzer and Richard 81, Jaegar 06)
    - Attitudes towards risk related to demand for social insurance (Sinn 95, Alesina and La Ferrara 05)
  - Social preferences (for justice or equity) and reciprocity (Deutsch 85, Sinn 95, Barr 92, Bowles and Ginitis 2000)
  - Beliefs about the causes of prosperity and poverty (Kluegel and Smith 86, Piketty 95, Fong 01, Alesina and La Ferrara 05)
  - Prospect of upward mobility, expectations about future welfare, 'tunnel effect' (Hirschman 73, Ravallion and Lokshin 2000, Benabou and Ok 01)

- Country-level institutional determinants
  - Level of inequality (median voter hypothesis in democracies, Meltzer and Richard 81)
  - The role of 'redistributive ethics' and social justice (Kluegel and Miyano 95, Bowles and Ginitis 2000, Luebker 04,)
  - Welfare regimes (liberal, conservative) shape the level of public support, cultural mediators (Esping-Andersen 90)

Data

- EBRD & Worldbank *Life in Transition Survey* (LiTS) 2010
    - Representative sample of 1000 individuals in each of 35 countries (1500 in 6 countries), face-to-face interviews (EBRD Transition Report , 2011)
- Dependent variable:

    2010: Incomes should be made more equal vs We need larger income differences as incentives for individual effort (10-scale ladder)
- Variables proxying institutional quality:
    - Various democracy indices from Polity IV and Worldbank
    - Worldbank Governance Indicators: government effectiveness, rule of law, control of corruption, regulatory quality
    - Inequality measures (calculated on LiTS micro data)

Demand for more equal income distribution (increase in redistribution) (2010)

(3.16) Now I'd like you to tell me your views on various issues. How would you place your views on this scale?

1 means you agree completely with the statement on the left; 10 means you agree completely with the statement on the right; and if your views fall somewhere in between, you can choose any number in between.
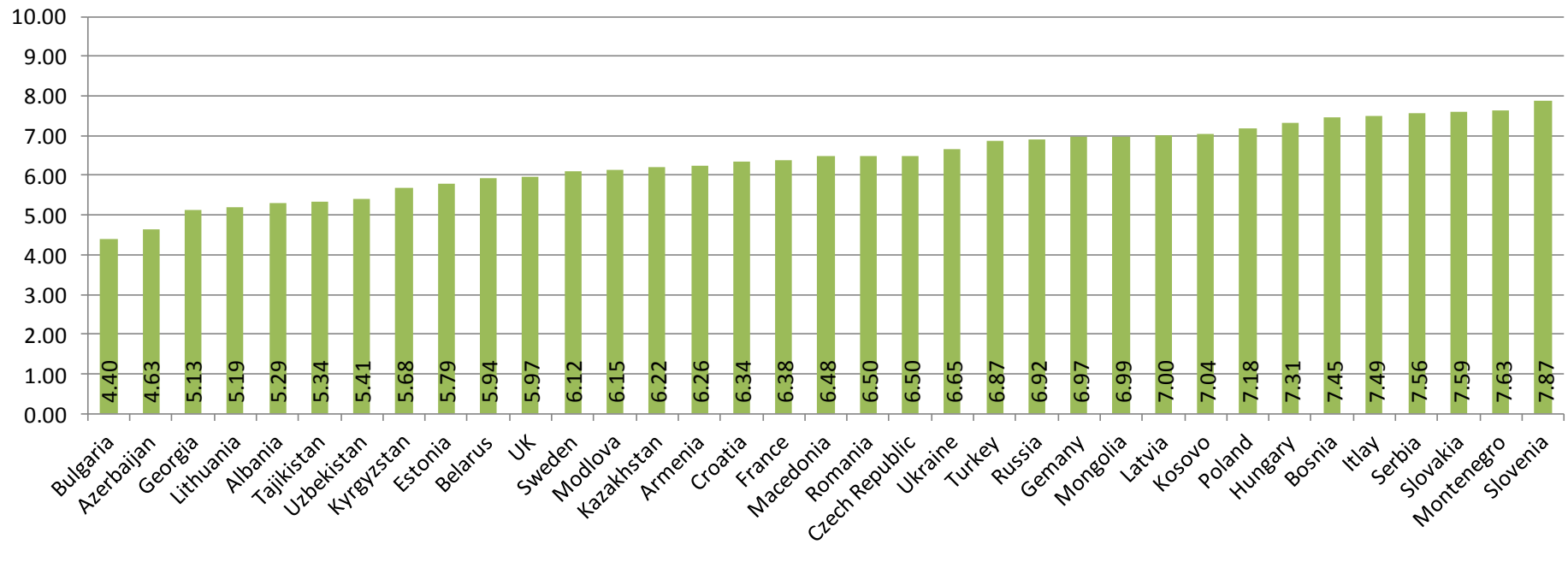
SINGLE CODE FOR EACH

SHOW CARD

|												
a	Incomes should be made more equal	1	2	3	4	5	6	7	8	9	10	We need larger income differences as incentives for individual effort
b	Private ownership of business and industry should be increased	1	2	3	4	5	6	7	8	9	10	Government ownership of business and industry should be increased
c	Competition is good. It stimulates people to work hard and develop new ideas	1	2	3	4	5	6	7	8	9	10	Competition is harmful. It brings out the worst in people
d	People should obey the law without exception	1	2	3	4	5	6	7	8	9	10	There are times when people have good reasons to break the law
e	As citizens, we should be more active in questioning the actions of our authorities	1	2	3	4	5	6	7	8	9	10	In our country today, we should show more respect for our authorities

Don't know: code 97

Demand for more equal income distribution (increase in redistribution), 2010

Preferences for redistribution, LiTS, 2010
1- Need larger income differences for individual effort
10 - Incomes should be made more equal

Country	Value
Bulgaria	4.40
Azerbaijan	4.63
Georgia	5.13
Lithuania	5.19
Albania	5.29
Tajikistan	5.34
Uzbekistan	5.41
Kyrgyzstan	5.68
Estonia	5.79
Belarus	5.94
UK	5.97
Sweden	6.12
Modlova	6.15
Kazakhstan	6.22
Armenia	6.26
Croatia	6.34
France	6.38
Macedonia	6.48
Romania	6.50
Czech Republic	6.50
Ukraine	6.65
Turkey	6.87
Russia	6.92
Gemany	6.97
Mongolia	6.99
Latvia	7.00
Kosovo	7.04
Poland	7.18
Hungary	7.31
Bosnia	7.45
Itlay	7.49
Serbia	7.56
Slovakia	7.59
Montenegro	7.63
Slovenia	7.87

Institutional Quality Across Countries

Average Degree of Democracy and Regulatory Quality Across Countries

■ Democracy index (0 to 10, avg. 1991-2004)
■ Regulatory Quality (-2.5 to +2.5, avg. 1996-2005)
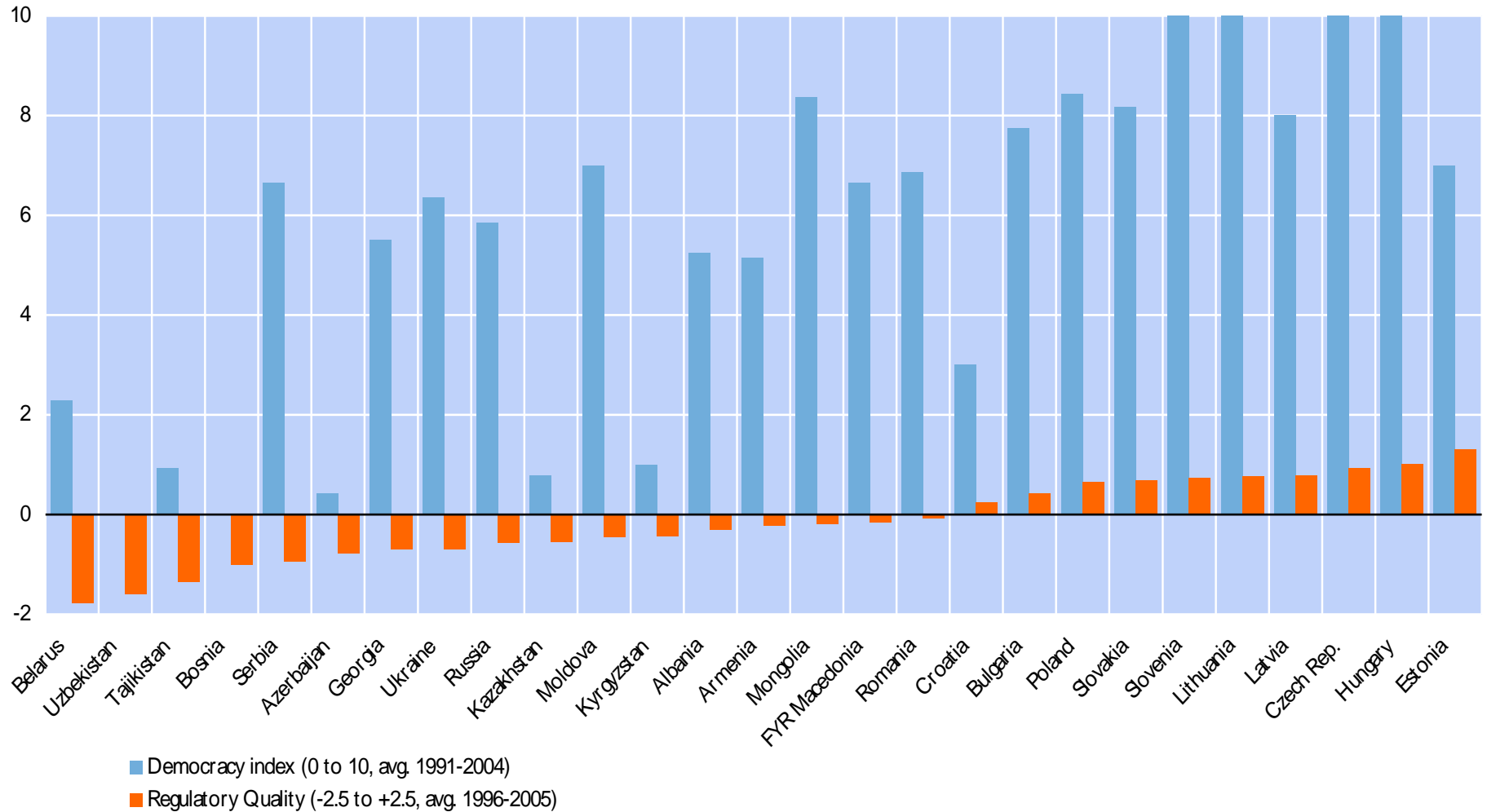
Source: Polity IV dataset, Worldbank.

Individual determinants

- Human capital:
  - Age (proxy for experience)
  - Education
  - Health
- Variables proxying market-relevant skills:
  - Had successful business start-up
  - Professional or top manager
- Assets:
  - Household per capita consumption (log level or decile group)
  - Ownership of a house or an apartment
- Income mobility:
  - Self-reported income position now and 4 years ago
  - Expectations about income position in 4 years
- Employment status today and employment history last 12 months
- Hardships: crisis strongly affected household
- Perception on the causes of success and poverty
  - (1) effort and hard work OR (2) intelligence and skills RATHER THAN (3) political connections OR (4) breaking the law is the most important factor to succeed in life in the country now;
  - (2) laziness and lack of willpower RATHER THAN (1) being unlucky OR (3) injustice in society OR (4) the needy are an inevitable part of modern life is the main reason why there are some people in need in the country today.
- Willingness to take risks

Methodology

(1) Country fixed effects for getting direct individual effects in an average institutional environment

$$R_i = \alpha + \beta_1 E_i + \gamma_1 P_i + \delta' X_i + \varphi_c + \varepsilon i$$

– R_i ... support for redistribution; E_i ... vector of human capital variables

– P_i ... vector of variables indicating individuals perceptions on causes of prosperity and poverty ; X_i ... vector of other individual control variables; φ_c ... country fixed effect

– β_1 and γ_1 ... effects of human capital and perceptions evaluated at the average level of the institutional environment

– εi standard errors adjusted for clustering at the level of primary sampling units (PSUs)

(2) OLS with control for level of institution (one at a time) in the country and basic country- level controls instead of country fixed effects

(3) Multinomial probit for priority spending question (seven-category response)

Table A2: Summary Statistics, 2010

Variable	# of obs.	Mean	SD	Min	Max
Preferences for redistribution	30942	6.59	2.95	1	10
First priority for extra governmental spendings	31081	2.81	1.58	1	7
Age	32294	45.70	17.34	18	99
Gender (Male==1)	32295	0.33	0.47	0	1
The occupation in 2010 requires high skills	32295	0.11	0.32	0	1
Primary education	32286	0.08	0.27	0	1
Secondary education	32286	0.67	0.47	0	1
Tertiary education	32286	0.25	0.43	0	1
Self-reported poor health status	32128	0.14	0.35	0	1
Ownership of a house or apartment	32295	0.88	0.33	0	1
Self-accessed difference in hh wealth ranking b/w 2010 and 2006	31369	-0.26	1.37	-9	9
Expectations on self-accessed wealth ranking of hh in 4 years	26558	4.77	2.16	1	10
Log of per capita household consumption	32294	5.66	0.69	0.88	7.85
Wealth (deciles of per capita household consumption)	32294	5.48	2.87	1	10
Had successful business start-up	32292	0.07	0.25	0	1
Crisis strongly affected hh	30117	0.15	0.36	0	1
Perceptions: Effort and hard work or intelligence and skills are major success fact	30051	0.74	0.44	0	1
Perceptions: Laziness or lack of will power are major poverty factor	29408	0.24	0.43	0	1
Marital status (married)	32079	0.58	0.49	0	1
Self-reported willigness to take risks	30968	4.45	2.58	1	10
Household size	32295	2.82	1.55	1	10
Children in hh	32295	0.37	0.48	0	1
Works now	32295	0.54	0.50	0	1
Self-employed or entrepreneur now	32293	0.07	0.26	0	1
Works for wages in state sector now	32275	0.20	0.40	0	1
Unemployment (actively looking for a job at the moment)	32295	0.05	0.22	0	1
Location==metropolitan	32295	0.13	0.33	0	1
Location==rural	32295	0.37	0.48	0	1
Location==urban (excluding metropolitan)	32295	0.50	0.50	0	1

Results: direct redistribution, Individual determinants

Table 1. Preferences towards redistribution, 2010: Direct Individual Effects, OLS, robust, clustered on psu

	In favor of decrease in income differences	
Human capital		
Age: age group 35-44 -comparison group		
Age18-24	-0.0182	-0.0182
	[0.21]	[0.21]
Age25-34	0.0538	0.0518
	[0.83]	[0.79]
Age45-54	0.0602	0.0587
	[0.89]	[0.87]
Age55-64	-0.0694	-0.0653
	[0.86]	[0.81]
Age65+	0.142	0.1402
	[1.58]	[1.56]
Education: secondary education is comparison group		
Tertiary education	-0.3912	-0.3852
	[6.40]***	[6.29]***
Primary education	0.1132	0.1075
	[1.44]	[1.37]
Professional or top manager	0.0626	0.0649
	[0.81]	[0.84]
Self-reported poor health status	0.0682	0.0678
	[0.94]	[0.94]
Had successful business start-up	-0.2946	-0.2905
	[3.49]***	[3.44]***

	In favor of decrease in income differences	
Assets		
Log of hh pc monthly consumption, PPP	-0.2804	
	[4.62]***	
Decile of pc consumption within a country		-0.0725
(1-poorest 10%; 10-richest 10%)		[6.50]***
Difference in self-reported income position now and 4 years ago	0.0144	0.014
	[0.78]	[0.75]
Self-reported expectations about income position of hh in 4 years	-0.1051	-0.1044
(1-poorest 10%; 10-richest 10%)	[6.33]***	[6.29]***
Ownership of a house or apartment	0.0844	0.0847
	[1.14]	[1.15]
Hardships and perceptions		
Crisis strongly affected hh	0.1308	0.1303
	[1.90]*	[1.89]*
Effort/hwork or intelligence/skills major success factors	-0.1618	-0.1621
	[2.42]**	[2.42]**
Laziness/lack of will power major poverty factor	-0.2129	-0.2134
	[3.28]***	[3.28]***

	In favor of decrease in income differences	
Other individual-level controls		
Gender (Male compared to Female)	0.022	0.0213
	[0.47]	[0.46]
Self-reported willingness take to risks	-0.0844	-0.0839
(1-not at all; 10-very much willing)	[6.62]***	[6.60]***
Marital status (Married compared to the rest)	-0.0406	-0.041
	[0.84]	[0.85]
Household size	-0.0645	-0.0702
	[2.71]***	[2.98]***
Have children in household	-0.1116	-0.1216
	[1.87]*	[2.03]**
Employed during last 12 months	0.0118	0.0143
	[0.18]	[0.22]
Employed as self-employed last 12 months	-0.0081	-0.0076
	[0.08]	[0.08]
Work for wages in state sector last 12 months	-0.0474	-0.0473
	[0.65]	[0.65]
Unemployed	0.0823	0.081
	[0.90]	[0.89]
Location="Metropolitan area"-comparison group		
=Rural	0.2829	0.2788
	[1.76]*	[1.74]*
=Urban	-0.0205	-0.0187
	[0.13]	[0.12]
Country dummies	Yes	Yes
Constant	9.407	8.0644
	[21.79]***	[33.54]***
Observations	20787	20787
R-squared	0.14	0.14

Robust t statistics in brackets

* significant at 10%; ** significant at 5%; *** significant at 1%

Results:
Institutional determinants

Table 2. Effects of institutions in favor of redistribution, 2010

	In favor of DECREASE in income differences
Estimation model:	**OLS**
Specification:	Cluster by PSU
	Coefficients

Democratic institutions

(1) Democracy index

0.1061

[5.23]***

(2) Voice & accountability

0.1715

[2.02]**

(3) Controls on executives

0.1732

[4.74]***

Governance institutions

(4) Government Effectivness

0.133

[1.08]

(5) Rule of law

0.224

[2.36]**

(6) Control of corruption

0.4428

[3.71]***

(7) Regulatory quality

-0.1524

[1.64]

	In favor of DECREASE in income differences
Estimation model:	**OLS**
Specification:	Cluster by PSU
	Coefficients

Controls: Inequality measures

(8) Theil Index	4.1437
	[2.69]***
(9) Ratio 90/10	0.1547
	[2.27]**
(10) Ratio 75/25	0.6652
	[2.23]**
Number of observations	19342

* significant at 10%; ** significant at 5%; *** significant at 1%.

 The first column indicates 7 separate regressions run for each model.

Results:
Indirect measure

First priority for extra governmental spendings
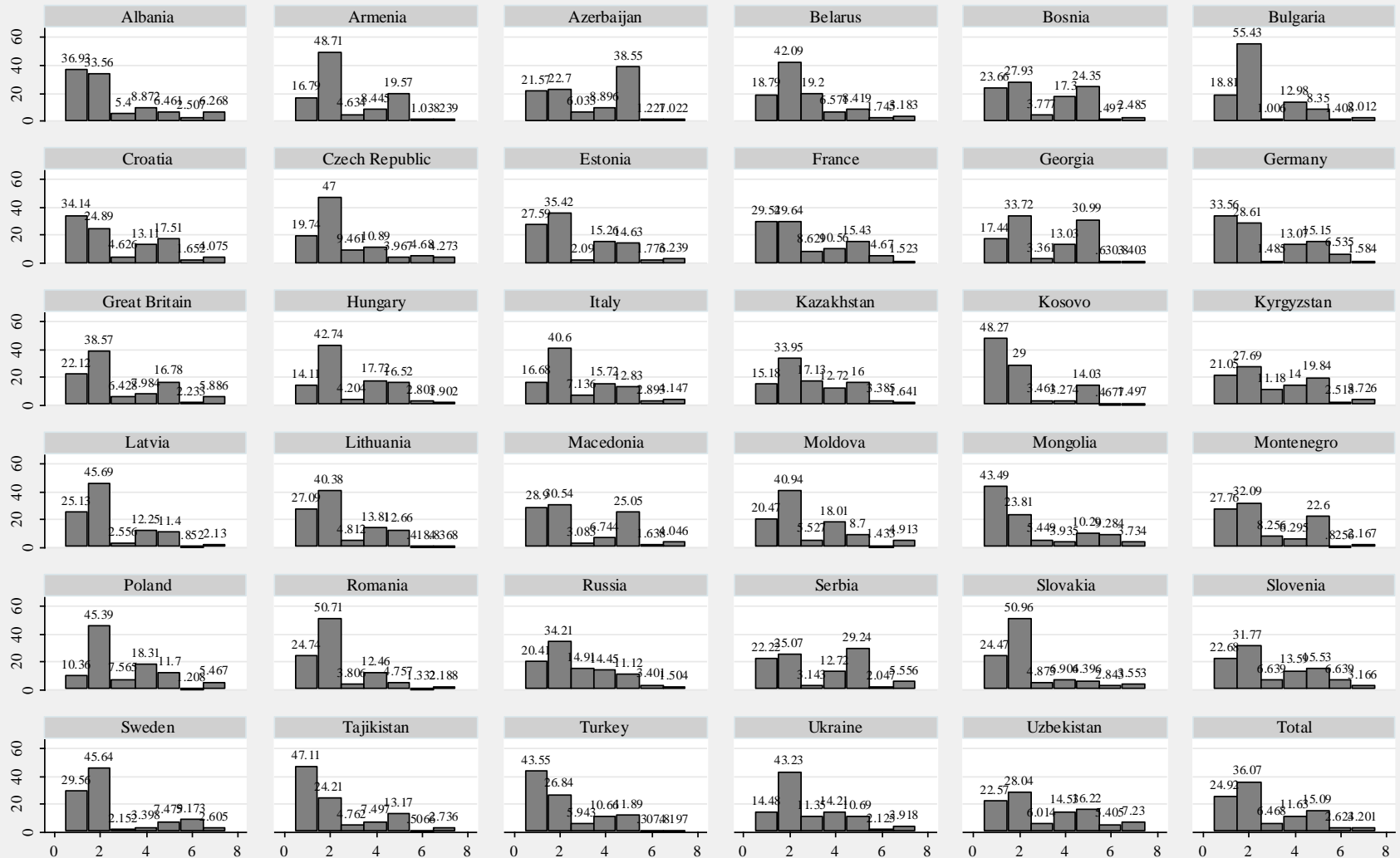
q3051 - In your opinion, which of these fields should be the first priority for

Graphs by country

1 Education; 2 Healthcare; 3 Housing; 4 Pensions; 5 Assistance to the poor; 6 Environment; 7 Public infrastructure

Table 3. The first priority for extra government spending, 2010

	Multinomial probit, robust, clustered on psu						
	Education	Healthcare	Housing	Pensions	Assisting to the poor	Environment	Public infrastructure
Human capital							
Age: age group 35-44 -comparison group							
Age18-24	0.0517	-0.0345	0.0169	-0.0476	0.0079	0.005	0.0007
	[3.96]***	[2.23]**	[2.89]***	[4.73]***	[0.79]	[1.54]	[0.16]
Age25-34	-0.0267	0.0113	0.0223	-0.0154	0.0094	0.0056	-0.0065
	[2.56]**	[0.93]	[5.04]***	[1.94]*	[1.16]	[2.25]**	[1.89]*
Age45-54	-0.0381	0.0065	-0.004	0.0225	0.0107	0.002	0.0004
	[3.34]***	[0.50]	[0.75]	[3.02]***	[1.27]	[0.70]	[0.13]
Age55-64	-0.0625	0.0263	-0.014	0.0615	-0.0127	0.0012	0.0003
	[4.66]***	[1.80]*	[2.05]**	[8.07]***	[1.29]	[0.33]	[0.07]
Age65+	-0.0769	0.0577	-0.0173	0.079	-0.0386	-0.0026	-0.0012
	[5.00]***	[3.52]***	[2.19]**	[9.69]***	[3.28]***	[0.62]	[0.22]
Education: secondary education is comparison group							
Tertiary education	0.0855	-0.0341	-0.0076	-0.0198	-0.0371	0.0049	0.0083
	[9.51]***	[3.29]***	[1.77]*	[3.24]***	[4.51]***	[2.24]**	[2.86]***
Primary education	-0.0484	-0.0122	0.0008	0.0295	0.0357	0	-0.0054
	[3.79]***	[0.91]	[0.12]	[4.88]***	[3.83]***	[0.01]	[1.11]
Professional or top manager	0.0432	-0.0085	0.0021	-0.0173	-0.0144	-0.0028	-0.0023
	[3.61]***	[0.62]	[0.39]	[1.91]*	[1.38]	[1.08]	[0.66]
Self-reported poor health status	-0.0622	0.0602	-0.0045	0.0217	-0.0038	-0.002	-0.0094
	[4.78]***	[4.68]***	[0.71]	[4.24]***	[0.42]	[0.59]	[2.02]**
Had successful business start-up	0.0179	-0.0102	-0.0092	-0.0126	0.0099	0.0001	0.0042
	[1.39]	[0.68]	[1.42]	[1.41]	[0.96]	[0.02]	[1.10]

	Education	Healthcare	Housing	Pensions	Assisting to the poor	Environment	Public infrastructure
Assets							
Log of hh pc monthly consumption, PPP	0.0215	0.0127	-0.0009	-0.0111	-0.035	0.0046	0.0083
	[2.49]**	[1.44]	[0.25]	[2.48]**	[5.52]***	[2.38]**	[3.19]***
Decile of pc consumption within a country							
(1-poorest 10%; 10-richest 10%)							
Difference in self-reported hh income position now and 4 years ago	0.0023	0.0008	0	-0.0004	-0.0032	0.0015	-0.001
	[0.81]	[0.27]	[0.03]	[0.25]	[1.49]	[2.04]**	[1.15]
Self-reported exectations about hh income position in 4 years	0.0072	0.0025	0.0013	-0.0045	-0.0077	0.0006	0.0005
(1-poorest 10%; 10-richest 10%)	[3.25]***	[1.06]	[1.28]	[3.49]***	[4.42]***	[0.99]	[0.73]
Ownership of a house or apartment	-0.0084	0.0474	-0.0463	0.0201	-0.0156	-0.0012	0.0041
	[0.72]	[3.54]***	[9.44]***	[2.50]**	[1.80]*	[0.49]	[1.02]
Hardships and perceptions							
Crisis strongly affected hh	0.0119	-0.0007	0.0011	-0.0032	0.0023	-0.0055	-0.0059
	[1.11]	[0.06]	[0.22]	[0.58]	[0.29]	[1.90]*	[1.69]*
Effort/hwork or intelligence/skills major success factors	0.0254	0.0092	-0.0055	-0.0036	-0.0186	-0.0017	-0.0053
	[2.69]***	[0.89]	[1.34]	[0.70]	[2.55]**	[0.75]	[1.77]*
Laziness/lack of will power major poverty factor	0.0105	0.025	-0.0031	-0.0085	-0.0282	0.0008	0.0034
	[1.16]	[2.51]**	[0.76]	[1.66]*	[3.67]***	[0.36]	[1.21]

	Education	Healthcare	Housing	Pensions	Assisting to the poor	Environment	Public infrastructure
Other individual-level controls							
Gender (Male compared to Female)	0.0125	-0.0327	0.0078	-0.0049	0.0012	0.0043	0.0118
	[1.70]*	[4.13]***	[2.43]**	[1.22]	[0.22]	[2.36]**	[5.09]***
Self-reported willingness take to risks	0.0075	-0.0064	-0.0001	-0.0025	0.0008	0.0001	0.0005
(1-not at all; 10-very much willing)	[4.51]***	[3.45]***	[0.14]	[2.72]***	[0.65]	[0.22]	[1.03]
Marital status (Married compared to the rest)	0.0019	0.0153	-0.0043	-0.0131	-0.0095	0.0015	0.0081
	[0.25]	[1.74]*	[1.12]	[3.01]***	[1.53]	[0.75]	[3.01]***
Household size	0.0113	-0.008	0.0012	-0.0032	-0.0022	0.0005	0.0004
	[3.36]***	[2.06]**	[0.71]	[1.54]	[0.86]	[0.56]	[0.35]
Have children in household	0.0087	-0.0064	0.0007	-0.0227	0.0164	0.0027	0.0006
	[0.93]	[0.62]	[0.17]	[3.64]***	[2.38]**	[1.05]	[0.20]
Employed during last 12 months	-0.0408	0.0341	0.0135	-0.0309	0.0131	0.0023	0.0086
	[3.84]***	[2.94]***	[2.97]***	[4.73]***	[1.59]	[0.84]	[2.43]**
Employed as self-employed last 12 months	-0.0224	-0.0089	-0.0111	0.0281	0.0031	0.0047	0.0066
	[1.53]	[0.55]	[1.73]*	[3.08]***	[0.28]	[1.37]	[1.41]
Work for wages in state sector last 12 months	0.0308	0.0002	-0.0026	-0.009	-0.016	0.0037	-0.0072
	[2.71]***	[0.02]	[0.54]	[1.12]	[1.85]*	[1.41]	[2.04]**
Unemployed	-0.0241	0.0091	0.0044	-0.0281	0.0344	0.0039	0.0004
	[1.61]	[0.54]	[0.65]	[3.03]***	[3.40]***	[1.01]	[0.08]
Location="Metropolitan area"-comparison group							
=Rural	0.0114	-0.0102	-0.0121	-0.0084	0.0161	-0.0004	0.0037
	[0.69]	[0.54]	[1.32]	[0.93]	[1.20]	[0.10]	[0.68]
=Urban	0.0128	-0.01	-0.0092	0.0051	0.0002	-0.0012	0.0023
	[0.78]	[0.52]	[1.01]	[0.57]	[0.01]	[0.28]	[0.42]
Country dummies				Yes			
Constant	-0.2247	0.2854	-0.003	0.0557	0.0639	-0.063	-0.1143
	[3.48]***	[4.18]***	[0.11]	[1.65]*	[1.25]	[4.02]***	[5.68]***
Observations				20707			

Absolute value of z statistics in brackets

* significant at 10%; ** significant at 5%; *** significant at 1%

Table 4. Effects of institutions, first priority for governmental spendings, 2010

Dependent variable	The first priority for public expenditure is						
	Education	Healthcare	Housing	Pensions	Assisting to the poor	Environment	Public infrastructure
Estimation model and specification:	Multinomial probit, robust, clustered on psu						
	Marginal effects	*Marginal effects*	*Marginal effects*	*Marginal effects*	*Marginal effects*	*Marginal effects*	*Marginal effects*
Democratic institutions							
(1) Democracy index	0.0088	0.0092	-0.0075	-0.0032	-0.0103	0.0013	0.0017
	[4.04]***	[4.03]***	[7.59]***	[3.11]***	[6.11]***	[2.12]**	[2.84]***
(2) Voice & accountability	0.0386	0.0414	-0.0403	-0.0056	-0.0478	0.0055	0.0082
	[4.43]***	[3.99]***	[9.15]***	[1.13]	[6.34]***	[1.83]*	[2.77]***
(3) Controls on executives	0.0206	0.014	-0.0147	-0.007	-0.016	0.0002	0.003
	[5.26]***	[3.42]***	[8.85]***	[4.00]***	[5.27]***	[0.19]	[2.64]***
Governance institutions							
(4) Government Effectivness	0.045	0.041	-0.0471	-0.0023	-0.0585	0.013	0.009
	[3.50]***	[2.75]***	[6.80]***	[0.31]	[4.78]***	[3.13]***	[2.20]**
(5) Rule of law	0.0345	0.0406	-0.0403	0.0004	-0.0515	0.0106	0.0056
	[3.42]***	[3.56]***	[7.40]***	[0.08]	[5.82]***	[2.91]***	[1.61]
(6) Control of corruption	0.0402	0.028	-0.0509	0.0055	-0.0476	0.0124	0.0124
	[3.27]***	[2.00]**	[8.08]***	[0.75]	[4.11]***	[2.65]***	[3.12]***
(7) Regulatory quality	0.0335	0.0598	-0.0391	-0.0055	-0.0501	0.0007	0.0007
	[3.35]***	[5.09]***	[7.20]***	[1.03]	[5.70]***	[0.25]	[0.21]

Dependent variable	The first priority for public expenditure is						
	Education	Healthcare	Housing	Pensions	Assisting to the poor	Environment	Public infrastructure
<u>Controls: Inequality measures</u>							
(8) Theil Index	0.7693	0.1158	-0.0009	-0.371	-0.4058	0.0109	-0.1183
	[4.78]***	[0.63]	[0.01]	[4.01]***	[3.16]***	[0.20]	[2.04]**
(9) Ratio 90/10	0.0327	0.0095	-0.0012	-0.0153	-0.0194	-0.0019	-0.0045
	[4.51]***	[1.17]	[0.34]	[3.76]***	[3.54]***	[0.86]	[1.74]*
(10) Ratio 75/25	0.1274	0.0457	-0.0005	-0.0713	-0.0665	-0.0062	-0.0285
	[4.19]***	[1.33]	[0.03]	[4.25]***	[2.74]***	[0.65]	[2.69]***
Number of observations	19856	19856	19856	19856	19856	19856	19856

* significant at 10%; ** significant at 5%; *** significant at 1%.

The first column indicates 7 separate regressions run for each model (one regression for each institutional variable).

Summary of results: individual effects

- Transitional countries are not homogeneous with respect to demand for redistribution
- Self-interest motives are confirmed as proxied by age, education, health and income
- Experience of positive changes in income position positively affects demand for redistribution
- Successful experience with business start-up strengthens demand for higher income inequality
- Personal experience of severe economic hardships increases demand for state involvement into redistribution
- The role of perceptions of the cause of prosperity and poverty is confirmed
- Risk aversion significantly increases demand for more equal income distribution

Summary of results: institutional effects

- Higher inequality as measured by Theil index increases demand for redistribution

- Better democratic institutions are correlated with higher demand for redistribution. The result is robust across the measures used.

  - a one standard deviation increase in democracy measure increases demand for redistribution by 16-36 percentage points depending on the measure.

- The better are the governance institutions as measured by the rule of law and control of corruption indexes, the higher is demand for redistribution. The result is not robust to the measures used.

To do list

- Robustness checks: multi-level structure of data, hence Generalized Linear Latent and Mixed Model (GLLAMM)
- Individual-institution interactions