SUPPLEMENTARY MATERIAL

Young People's Attitudes towards Democracy and Political Participation: Evidence from a Cross-European Study

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Appendix 1: Description of predictors and controls in the regression models

Predictors

- Age group: categorical variable that captures the age group the respondent belongs to. We first create the variable Age from the question 'Please state your date of birth' (dd/mm/yyyy format; Age=2018 − yyyy). Then we split respondents in three groups (1= 18-24 years-old; 2= 25-34 years-old, 3= 35+ years-old), following the very survey design— with booster samples for young people.
- Attitudes of opposition to democracy: it measures the degree of agreement with five statements (1= strongly disagree; 5= strongly agree), namely 'in democracy, the economic system runs bad'; 'democracies are indecisive and have too much quibbling'; 'democracies aren't good at maintaining order'; 'democracy may have problems but it's better than any other form of government' (rev.); 'the votes of migrant minorities should count for less' (0.13 < Pearson's r < 0.51). The PCA offers a one solution component (Eigenvalue= 2.30; Cronbach's alpha= 0.69), accounting for 46% of the total variation.

Controls: socio-demographics and grievances;

- Sex: 'What sex were you assigned at birth, on your birth certificate?' (1= female; 0= male).
- Education: 'What is the highest level of education that you have completed?' It is recoded into a three-point categorical indicator (1= 'lower secondary school' or less; 2= 'A-levels' or equivalent; 3= university education).
- Residency type (rural/urban): 'Which of the following best describes the area in which you live?' (5-point ordinal scale: 1= 'farm or home in the countryside'; 2= 'country village'; 3= 'town or small city'; 4= 'suburbs or outskirts of a big city'; 5= 'a big city').
- Citizenship (country of residence). We have recoded the question 'What country do you live in? a) France; b) Germany; c) Greece; d) Italy; e) Poland; f) Spain; g) Sweden; h) Switzerland; i) UK; j) other country— specify' into a dummy variable (1= country citizen, 0= not a country citizen).
- Social class: 'Please tell us which one of the following options best describes the sort of paid work you do. If you are not in paid work now, please tell us what you did in your last paid employment: (1- Professional or higher technical work - work that requires at least degree-level; 2- Manager or Senior Administrator (e.g. company director, finance manager); 3- Clerical (e.g. clerk, secretary); 4- Sales or Services (e.g.

commercial traveler, shop assistant, nursery nurse) ; 5- Foreman or Supervisor of other Workers (e.g. building site foreman, supervisor); 6- Skilled Manual Work (e.g. plumber, electrician, fitter); 7- Semi-Skilled or Unskilled Manual Work (e.g. machine operator, assembler, postman) and 8- Other (e.g. farming, military). Recoding: Upper class (1-2); middle class (3-4-5-8); lower/working class (6-7). Additionally, we checked our social class variables against the chief parent social class variables with a strong correlation in between these (63%).

- Material deprivation: whether 'you have experienced real financial difficulties (e.g., could not afford food, rent, electricity) in the past 12months' (1=yes; 0=no).

• Controls: social capital

- Meeting friends: 'During the past month, how often have you met socially with friends not living in your household?' (four-point ordinal scale; 1= 'less than once a month'; 2= 'once or twice a month'; 3= 'every week'; 4= 'almost every day').

• Controls: political attitudes

- Left–right ideology: 'People sometimes talk about the Left and the Right in politics. Where would you place yourself on the following scale where 0 means 'Left' and 10 means 'Right'?' (eleven-point scale).

- Political discussion friends: 'When you get together with friends, family, colleagues and/or classmates, how frequently would you say that you discuss political matters on a scale where 0 means 'Never' and 10 means 'Frequently'?' (eleven-point scale).

• Country-fixed effects

- Country: 'What country do you live in?' (1= France; 2= Germany; 3= Greece; 4= Italy; 5= Poland; 6= Spain; 7= Sweden; 8= Switzerland; 9= UK).

• Aggregate-level controls

- Real GDP 2018 – adjusted for cross-country differences in cost of living and inflation. Normalized coefficients: France= 0.41; Germany= 0.46; Greece= 0.01; Italy= 0.29; Poland= 0; Spain= 0.25; Sweden= 0.62; Switzerland= 1; UK= 0.40.

- 2018 Civic Policy Index, accounting for policy framework variation enhancing or hindering both social inclusion and involvement of young people. France= 0.75; Germany= 0.625; Greece= 0.25; Italy= 0.5; Poland= 0.375; Spain= -0.5; Sweden= 0.625; Switzerland= 0.5; UK= 0.625. Data source: EURYKA (2018).

Appendix 2

Figure A1: Items of attitudes of opposition to democracy by country
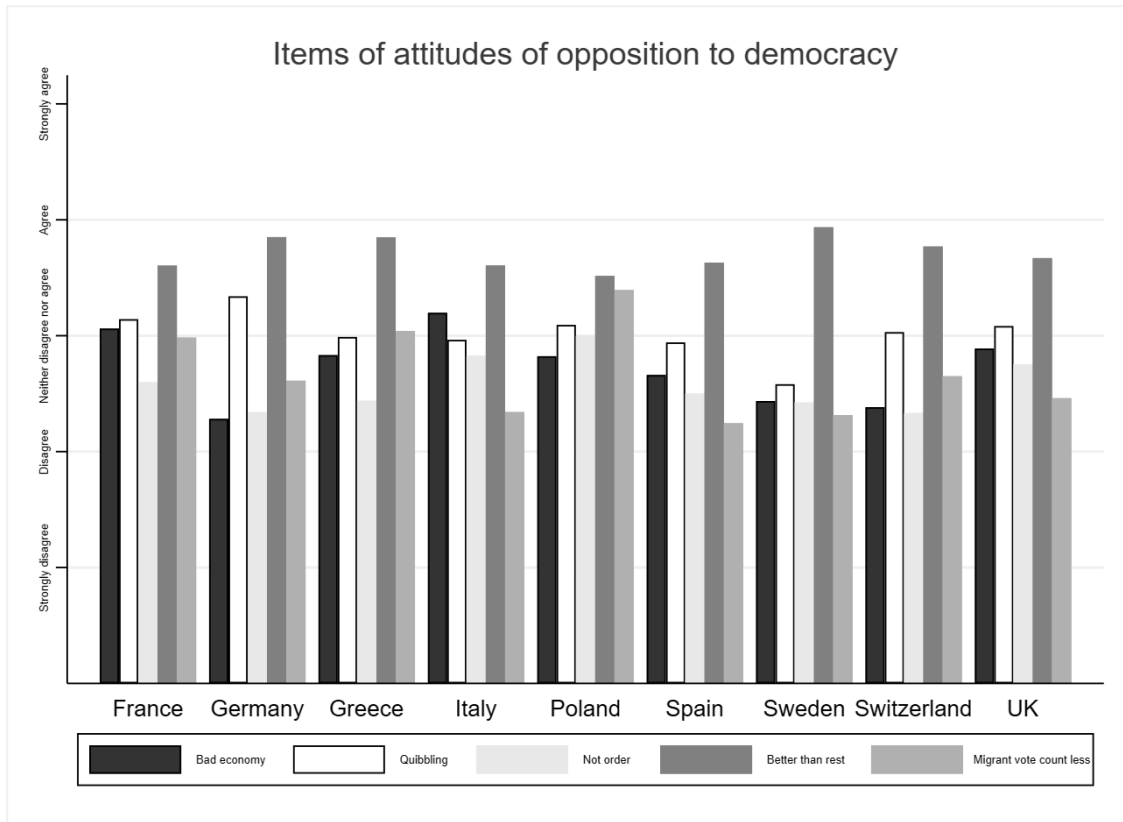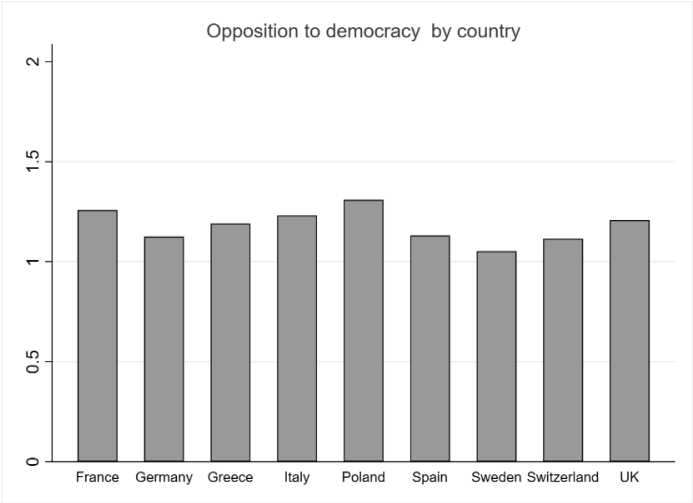
Opposition to democracy by country

Figure A2: Average values of the weighted opposition to democracy scale by country
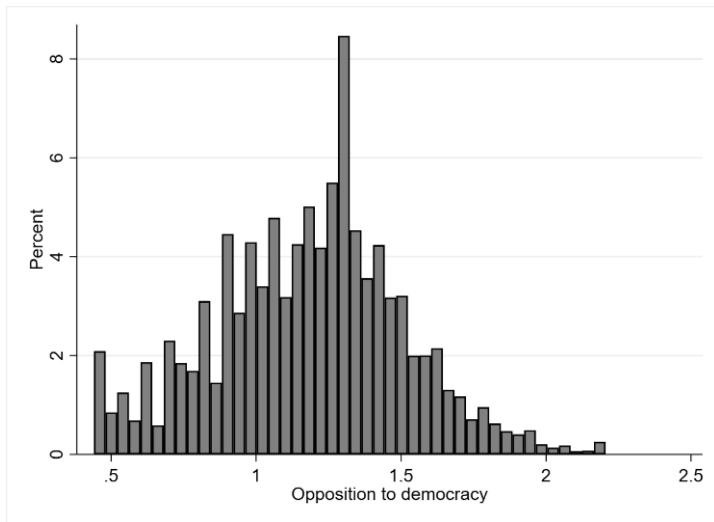
Figure A3: Histogram of opposition to democracy scale
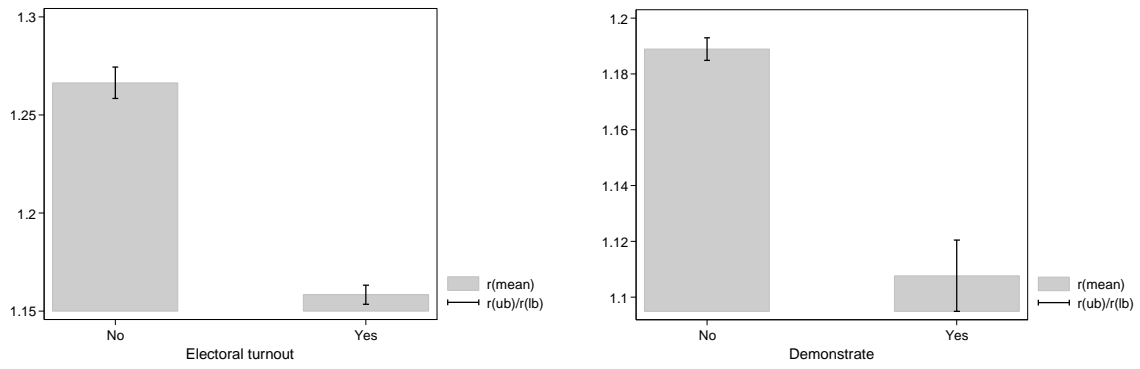
Figure A4: Average opposition to democracy by electoral turnout (left) and joining a demonstration (right).

Variable	Mean	S.D.	N	Min	Max
Turnout	0.8	0.4	23368	0	1
Demonstrating	0.1	0.3	27446	0	1
Opposition to democracy	1.2	0.3	27446	0.4	2.2
Age group	1.9	0.8	27446	1	3
Sex	0.5	0.5	27446	0	1
Education	2.1	0.7	27446	1	3
Citizenship	1.0	0.2	27446	0	1
Residency type (rural/urban)	3.6	1.2	27446	1	5
Upper class	.20	0.7	6078	0	1
Middle class	.38	0.7	11906	0	1
Working class	.21	0.7	6497	0	1
Left–right ideology	4.9	2.4	27446	0	10
Political discussion friends	4.8	2.7	27446	0	10
Meeting friends	2.7	0.9	27446	1	4
Civic Policy index	0.4	0.4	27446	-0.5	0.8
GDP	0.4	0.3	27446	0.0	1.0

Table A1: Descriptive statistics

	Contrast Estimate	S.E.	P value
(35+ years-old vs 25 to 34 years-old)	-0.087	0.006	<0.0001
(35+ years-old vs 18 to24 years-old)	-0.033	0.008	0.0001
(25 to 34 years-old vs 18 to 24 years-old)	0.054	0.009	<0.0001

Table A2: Pairwise contrast in ANOVA analysis of opposition to democracy, Tukey method.

Results are averaged over socio-demographic controls.

Contrast	Estimate	S.E.	P. value
(35+ years-old vs 18 to24 years-old)	0.1805	0.21	0.6662
(35+ years-old vs 25 to 34 years-old)	0.0306	0.14	0.9753
(18 to 24 years-old vs 25 to 34 years-old)	-0.1498	0.24	0.7991

Table A3: Group mean comparison results (moderating association between age group and opposition to democracy) on electoral turnout, Tukey method. Results are averaged over socio-demographic controls.

Contrast	Estimate	SE	P. value
(35+ years-old vs 18 to 24 years-old)	-0.0251	0.235	0.9937
(35+ years-old vs 25 to 34 years-old)	-0.0816	0.181	0.8938
(18 to 24 years-old vs 25 to 34 years-old)	-0.0565	0.275	0.9771

Table A4: Group mean comparison results (moderating association between age group and opposition to democracy) on joining a demonstration, Tukey method. Results are averaged over socio-demographic controls.

Contrast	Estimate	S.E	P value
(25 to 34 vs 18 to 24 years-old)	0.054	0.009	0.000
(35 to 49 vs 18 to 24 years-old)	0.001	0.008	0.887
(50 to 64 vs 18 to 24 years-old)	-0.047	0.008	0.000
(65+ vs 18 to 24 years-old)	-0.059	0.009	0.000

Table A5: Pairwise contrast in ANOVA analysis of opposition to democracy, Sidak method with observed data entries to account for the age-group subset unbalance. Results are averaged over socio-demographic controls.

	Turnout										Demonstration									
	M1		M2		M3		M4		M5		M6		M7		M8		M9		M10	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Opposition to democracy	-1.011***	(0.08)	-0.894***	(0.09)	-0.923***	(0.1)	-1.008***	(0.12)	-0.901***	(0.13)	-0.916***	(0.12)	-0.872***	(0.12)	-0.425***	(0.12)	-0.927***	(0.16)	-0.441**	(0.16)
18 to 24 (age group)	-1.106***	(0.05)	-1.029***	(0.06)	-1.034***	(0.06)	-0.969***	(0.19)	-0.813***	(0.21)	0.453***	(0.06)	0.456***	(0.07)	0.423***	(0.07)	0.478*	(0.21)	0.395+	(0.23)
25 to 34 (age group)	-0.681***	(0.05)	-0.668***	(0.05)	-0.661***	(0.05)	-0.731***	(0.18)	-0.623**	(0.19)	0.116	(0.06)	0.057	(0.06)	0.0757	(0.07)	0.0198	(0.23)	-0.0174	(0.23)
Sex (female)			-0.189**	(0.06)	-0.103	(0.06)			-0.103	(0.06)			-0.0932	(0.07)	-0.0164	(0.07)			-0.0158	(0.07)
Secondary education			0.289***	(0.08)	0.216**	(0.08)			0.215**	(0.08)			0.209*	(0.1)	0.114	(0.1)			0.114	(0.1)
Tertiary education			0.391***	(0.09)	0.265**	(0.1)			0.264**	(0.1)			0.258*	(0.11)	0.116	(0.12)			0.116	(0.12)
Middle class			-0.0343	(0.08)	0.0269	(0.08)			0.0259	(0.08)			-0.0866	(0.1)	-0.0619	(0.1)			-0.0614	(0.1)
Working class			-0.219*	(0.09)	-0.142	(0.09)			-0.143	(0.09)			0.105	(0.12)	0.14	(0.12)			0.14	(0.12)
Citizenship			1.469***	(0.2)	1.535***	(0.19)			1.534***	(0.19)			0.148	(0.18)	0.139	(0.19)			0.14	(0.19)
Residency type (rural/urban)			-0.0334	(0.03)	-0.0477	(0.03)			-0.0479	(0.03)			0.210***	(0.03)	0.187***	(0.03)			0.187***	(0.03)
Material deprivation			-0.308***	(0.07)	-0.297***	(0.07)			-0.297***	(0.07)			0.105	(0.09)	0.102	(0.08)			0.102	(0.08)
Left–right ideology					0.529***	(0.12)			0.529***	(0.12)					-1.524***	(0.17)			-1.524***	(0.17)
Political discussion friends					0.138***	(0.01)			0.138***	(0.01)					0.171***	(0.02)			0.171***	(0.02)
Meeting friends					0.0311	(0.03)			0.0309	(0.03)					0.216***	(0.04)			0.216***	(0.04)
Opposition to democracy*18 to 24							-0.112	(0.15)	-0.18	(0.17)							-0.0223	(0.19)	0.0251	(0.2)
Opposition to democracy*25 to 34							0.0387	(0.14)	-0.0306	(0.15)							0.084	(0.2)	0.0816	(0.2)
Constant	3.119***	(0.14)	1.621***	(0.28)	0.693*	(0.29)	3.115***	(0.17)	0.668*	(0.31)	-1.174***	(0.17)	-2.199***	(0.3)	-3.391***	(0.34)	-1.162***	(0.2)	-3.376***	(0.35)
N	23368		21413		21413		23368		21413		27446		24481		24481		27446		24481	
Pseudo R2	0.062		0.078		0.1		0.062		0.1		0.081		0.09		0.14		0.081		0.14	
Country-fixed effects	yes		yes		yes		yes		yes		yes		yes		yes		yes		yes	
AIC	21576.6		20219.4		19734.4		21580		19737.7		16033.9		15202		14387.5		16037.6		14391.3	
BIC	21673.3		20378.8		19917.8		21692.9		19937		16132.5		15364.1		14573.9		16152.7		14593.9	

+ p<0.1, *p<.05, **p<.01, ***p<.001.

Table A6: Logit regression (log odds), DV: turnout (models 1 to 5) and joining a demonstration (models 6 to 10).

Electoral turnout	M1 Coef.	SE	M2 Coef.	SE	M3 Coef.	SE	M4 Coef.	SE
Opposition to democracy	-0.923***	0.17	-0.901***	0.22	-0.923***	0.17	-0.901***	0.22
18 to 24 (age group)	-1.034***	0.11	-0.813*	0.39	-1.034***	0.11	-0.813*	0.39
25 to 34 (age group)	-0.661***	0.08	-0.623	0.33	-0.661***	0.08	-0.623	0.33
Sex (female)	-0.103	0.07	-0.103	0.07	-0.103	0.07	-0.103	0.07
Secondary education	0.216***	0.06	0.215***	0.06	0.216***	0.06	0.215***	0.06
Tertiary education	0.265**	0.10	0.264**	0.10	0.265**	0.10	0.264**	0.10
Middle class	0.0269	0.11	0.0259	0.11	0.0269	0.11	0.0259	0.11
Working class	-0.142	0.13	-0.143	0.13	-0.142	0.13	-0.143	0.13
Citizenship	1.535***	0.10	1.534***	0.10	1.535***	0.10	1.534***	0.10
Residency type (rural/urban)	-0.0477	0.04	-0.0479	0.04	-0.0477	0.04	-0.0479	0.04
Material deprivation	-0.297**	0.10	-0.297**	0.10	-0.297**	0.10	-0.297**	0.10
Left–right ideology	0.529***	0.12	0.529***	0.12	0.529***	0.12	0.529***	0.12
Political discussion friends	0.138***	0.01	0.138***	0.01	0.138***	0.01	0.138***	0.01
Meeting friends	0.0311	0.03	0.0309	0.03	0.0311	0.03	0.0309	0.03
Opposition to democracy*18 to 24			-0.18	0.26			-0.18	0.26
Opposition to democracy*25 to 34			-0.0306	0.28			-0.0306	0.28
Constant	0.693*	0.31	0.668	0.36	0.693*	0.31	0.668	0.36
Structural Var. GDP	1.58E-34	1.78E+34	2.25E-37	6.52E+36				
Constant ~ variation	2.12E-34	4.25E+34	4.94E-34	4.16E+34	1.46E-33	1.18E+33	1.04E-34	1.35E+34
Structural Var. Civic Pol. Index					1.43E-34	3.26E+34	4.75E-35	1.74E+34
N	21413		21413		21413		21413	
Log pseudolikelihood	-9844.22		-9843.84		-9844.22		-9843.84	
AIC	19704.4		19703.7		19704.4		19703.7	
BIC	19768.2		19767.5		19768.2		19767.5	

+ p<0.1, *p<.05, **p<.01, ***p<.001.

Table A7: Multilevel Logistic regression (log odds), DV: turnout (models 1 to 2) controlling for GDP; models 3 to 4, controlling for policy civic index.

	M1			**M2**			**M3**			**M4**	
Demonstration	**Coef.**	**SE**		**Coef.**	**SE**		**Coef.**	**SE**		**Coef.**	**SE**
Opposition to democracy	-0.425*	0.20		-0.441	0.24		-0.425*	0.20		-0.441	0.24
18 to 24 (age group)	0.423**	0.14		0.395*	0.18		0.423**	0.14		0.395*	0.18
25 to 34 (age group)	0.0757	0.15		-0.0174	0.29		0.0757	0.15		-0.0174	0.29
Sex (female)	-0.0164	0.11		-0.0158	0.11		-0.0164	0.11		-0.0158	0.11
Secondary education	0.114	0.10		0.114	0.10		0.114	0.10		0.114	0.10
Tertiary education	0.116	0.09		0.116	0.09		0.116	0.09		0.116	0.09
Middle class	-0.0619	0.09		-0.0614	0.09		-0.0619	0.09		-0.0614	0.09
Working class	0.14	0.17		0.14	0.17		0.14	0.17		0.14	0.17
Citizenship	0.139	0.20		0.14	0.20		0.139	0.20		0.14	0.20
Residency type (rural/urban)	0.187**	0.06		0.187**	0.06		0.187**	0.06		0.187**	0.06
Material deprivation	0.102	0.12		0.102	0.12		0.102	0.12		0.102	0.12
Left–right ideology	-1.524***	0.46		-1.524***	0.46		-1.524***	0.46		-1.524***	0.46
Political discussion friends	0.171***	0.03		0.171***	0.03		0.171***	0.03		0.171***	0.03
Meeting friends	0.216***	0.03		0.216***	0.03		0.216***	0.03		0.216***	0.03
Opposition to democracy*18 to 24				0.0251	0.12					0.0251	0.12
Opposition to democracy*25 to 34				0.0816	0.29					0.0816	0.29
Constant	-3.391***	0.67		-3.376***	0.65		-3.391***	0.67		-3.376***	0.65
Structural Var. GDP	5.31E-40	7.22E+39		7.98E-33	5.62E+33						
Constant ~ variation	2.23E-33	4.19E+33		7.16E-34	8.06E+34		1.42E-33	5.61E+33		1.54E-36	2.43E+36
Structural Var. Civic Pol. Index							3.97E-35	1.13E+34		5.52E-36	1.08E+34
N	24481			24481			24481			24481	
Log pseudolikelihood	-7168.8			-7168.7			-7170.74			-7170.64	
AIC	14353.6			14353.4			14357.5			14357.3	
BIC	14418.4			14418.2			14422.3			14422.1	

*+ p<0.1, *p<.05, **p<.01, ***p<.001.*

Table A8: Multilevel Logistic regression (log odds), DV: joining a demonstration (models 1 to 2) controlling for GDP and (models 3 to 4) controlling for Civic Policy index.