

# Online Supplementary Materials. Explaining the “democratic malaise” in unequal societies: Inequality, external efficacy and political trust

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# 1 ESS survey items

The following ESS-items were used in the analyses:

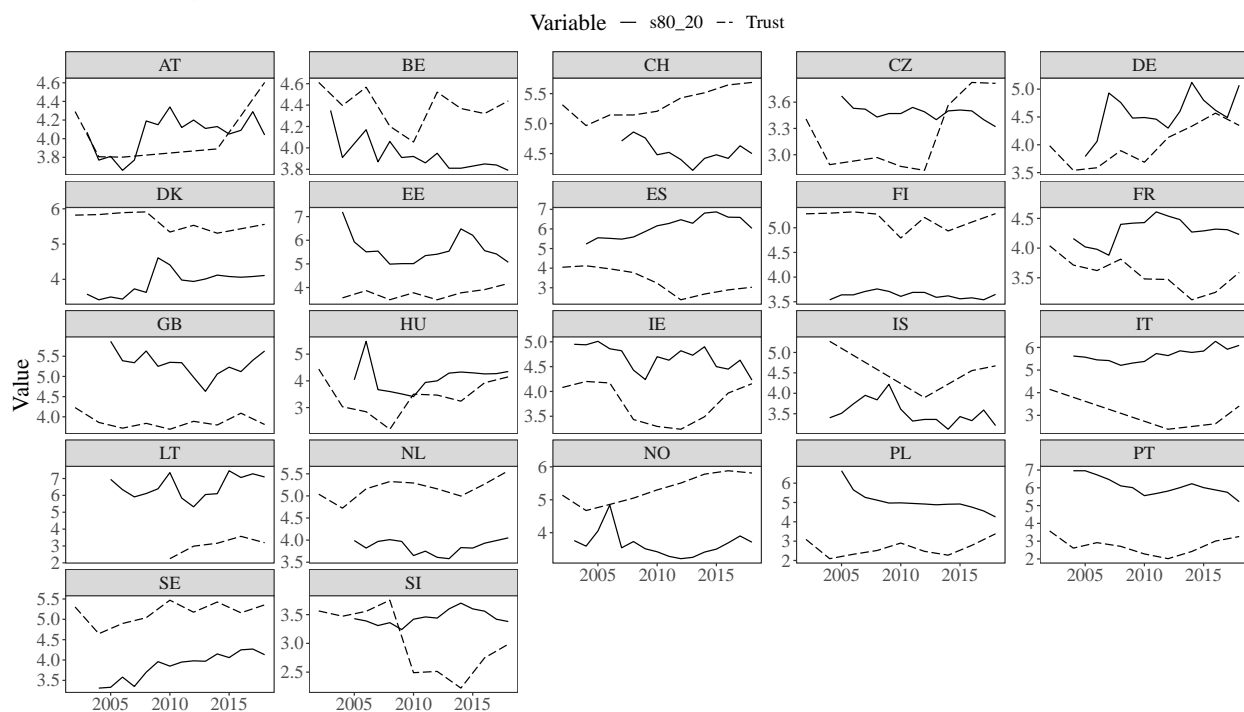
Construct (Variable)	Item name	Question	Measurement (original)	Measurement (analysis)
Trust in parliament	trstprl	Using this card, please tell me on a score of 0-10 how much you personally trust each of the institutions I read out. 0 means you do not trust an institution at all, and 10 means you have complete trust. Firstly... [country]'s parliament?	Scale 0 (No trust at all) to 10 (Complete trust)	Mean index of political trust: trstprl, trstplt, trsprt, range 0:10
Trust in politicians	trstplt	Using this card, please tell me on a score of 0-10 how much you personally trust each of the institutions I read out. 0 means you do not trust an institution at all, and 10 means you have complete trust. Firstly... politicians?	Scale 0 (No trust at all) to 10 (Complete trust)	See trstprl
Trust in parties	trstprt	Using this card, please tell me on a score of 0-10 how much you personally trust each of the institutions I read out. 0 means you do not trust an institution at all, and 10 means you have complete trust. Firstly... political parties?	Scale 0 (No trust at all) to 10 (Complete trust)	See trstprl
External efficacy	psppsgv(a)	How much would you say the political system in [country] allows people like you to have a say in what the government does?	psppsgva: Scale 1 (Not at all) to 5 (A great deal)	Mean index of external efficacy: psppgv, psppgva, psppi(a), psppi(b), normalized to range 0:10
External efficacy	psppi(a)	And how much would you say the political system in [country] allows people like you to have an influence on politics?	psppsgv: Scale 1 (Not at all) to 10 (A great deal) psppi(a): Scale 1 (Not at all) to 5 (A great deal) psppi(b): Scale 1 (Not at all) to 10 (A great deal)	See psppsgv(a)
Political ideology	lrscle	In politics people sometimes talk of 'left' and 'right'. Using this card, where would you place yourself on this scale, where 0 means the left and 10 means the right?	Scale 0 (Left) to 10 (Right)	Main analysis dichotomization:  Left (0-2) vs. Center/Right (3-10)

Construct (Variable)	Item name	Question	Measurement (original)	Measurement (analysis)
				Robustness tests: Left (0-3); Left (0-4)
Household income	hinctnta	Using this card, please tell me which letter describes your household's total income, after tax and compulsory deductions, from all sources? If you don't know the exact figure, please give an estimate. Use the part of the card that you know best: weekly, monthly or annual income.	Scale 1 (1st decile) to 10 (10th decile)	Income quantiles + "Missing" category
Highest level of education	eiscd	What is the highest level of education you have successfully completed?	European survey version of ISCED (International Standard Classification of Education)	5 category collapsed ISCED Schema:
			0 Not possible to harmonise into ES-ISCED	ISCED I
			1 ES-ISCED I less than lower secondary	ISCED II
			2 ES-ISCED II, lower secondary	ISCED III
			3 ES-ISCED IIb, lower tier upper secondary	ISCED IV
			4 ES-ISCED IIIa, upper tier upper secondary	ISCED V-VI
			5 ES-ISCED IV, advanced vocational, sub-degree	
			6 ES-ISCED V1, lower tertiary education, BA level	

Construct (Variable)	Item name	Question	Measurement (original)	Measurement (analysis)
			7 ES-ISCED V2, higher tertiary education, >= MA level 55 Other	
Gender	gndr	CODE SEX, respondent	1 Male 2 Female	As original
Status Seeking	ipsuces	Now I will briefly describe some people. Please listen to each description and tell me how much each person is or is not like you. Use this card for your answer. Being very successful is important to her/him. She/he hopes people will recognise her/his achievements.	Scale 1 (Very much like me) to 6 (not like me at all)	Mean index of reverse-coded items: ipsuces, ipshabt, iprspot (range: 1-6)
Status Seeking	ipshabt	[...] It's important to her/him to show her/his abilities. She/he wants people to admire what she/he does.	see ipsuces	see ipsuces
Status Seeking	iprspot	[...] It is important to her/him to get respect from others. She/he wants people to do what she/he says.	see ipsuces	see ipsuces
Social Trust	ppltrst	Using this card, generally speaking, would you say that most people can be trusted, or that you can't be too careful in dealing with people? Please tell me on a score of 0 to 10, where 0 means you can't be too careful and 10 means that most people can be trusted.	Scale 0 (No trust at all) to 10 (Complete trust)	Mean index of social trust: ppltrst, pplfair, pplhlp, range 0:10
Social Trust	pplfair	Using this card, do you think that most people would try to take advantage of you if they got the chance, or would they try to be fair?	see ppltrst	see ppltrst
Social Trust	pplhlp	Would you say that most of the time people try to be helpful or that they are mostly looking out for themselves?	see ppltrst	see ppltrst

## 2 Trends in political trust and income inequality

Trends in Political Trust and Inequality  
in 22 European Countries (2002 – 2018)



Data: Eurostat, ESS rounds 1–9. Design weights applied.

# Inequality and Trust 2002 - 2018

Country	S80/S20			Political Trust			<i>Pearson's r</i>
	2004-2008	2008-2012	2012-2018	2002-2008	2008-2012	2012-2018	
AT	0.42	0.010	-0.160	0.018 <sup>1</sup>	0.044	0.735	0.564
BE	0.15	-0.110	-0.160	-0.194	0.319	-0.082	0.171
CH	0.15 <sup>2</sup>	-0.460	0.100	0.177	0.284	0.258	-0.629
CZ	-0.24 <sup>3</sup>	0.060	-0.170	0.081	-0.146	0.993	-0.293
DE	0.97 <sup>3</sup>	-0.460	0.770	0.354	0.236	0.217	0.622
DK	0.21	0.310	0.170	0.076	-0.380	0.027	-0.918
EE	-2.21	0.420	-0.340	-0.078	-0.003	0.687	-0.245
ES	0.36	0.880	-0.440	-0.345	-1.391	0.641	-0.931
FI	0.22	-0.070	-0.040	-0.018	-0.068	0.078	0.243
FR	0.24	0.140	-0.310	0.099	-0.342	0.117	-0.166
GB	-0.24 <sup>3</sup>	-0.650	0.650	-0.023	0.050	-0.079	-0.376
HU	-0.44 <sup>3</sup>	0.400	0.350	-0.842	1.278	0.683	0.017
IE	-0.51	0.390	-0.590	-0.767	-0.196	0.917	-0.128
IS	0.44	-0.480	-0.150	-0.689 <sup>4</sup>	-0.689 <sup>4</sup>	0.777	0.125
IT	-0.41	0.430	0.450	-0.705 <sup>5</sup>	-0.705 <sup>5</sup>	1.026	0.453
LT	-0.84 <sup>3</sup>	-0.790	1.770	0.000 <sup>6</sup>	0.740 <sup>6</sup>	0.206	-0.162
NL	0.02 <sup>3</sup>	-0.400	0.440	0.602	-0.164	0.409	0.546
NO	0.14	-0.520	0.500	0.377	0.458	0.305	-0.427
PL	-1.52 <sup>3</sup>	-0.200	-0.670	0.422	-0.043	0.909	-0.778
PT	-0.85	-0.290	-0.600	0.098	-0.692	1.244	-0.081
SE	0.39	0.280	0.150	0.393	0.136	0.180	0.796
SI	-0.07 <sup>3</sup>	0.080	-0.060	0.279	-1.239	0.473	-0.690

<sup>1</sup>Missing values between 2008 and 2012. Changes calculated based on interpolations between 2006 and 2014.

<sup>2</sup>Time series begins in 2007

<sup>3</sup>Time series begins in 2005

<sup>4</sup>Changes before 2012 calculated based on interpolations between 2004 and 2012.

<sup>5</sup>Changes before 2012 calculated based on interpolations between 2002 and 2012.

<sup>6</sup>No values before 2010. Change 2008-2012 is change between 2010-2012.

Sources: Eurostat (S80/S20), European Social Survey (political trust, own calculations with design weights applied).

### 3 Economic Performance Index

As described in more detail in the paper by Khramov and Lee (2013), the economic performance index (EPI) is constructed as a parsimonious measure of the general economic performance of a country. The index is composed of the following four variables: “the inflation rate, as a measure of the economy’s monetary stance; the unemployment rate as a measure of the economy’s production stance; the budget deficit as a percentage of total GDP as a measure of the economy’s fiscal stance; and the change in real GDP as a measure of the aggregate performance of the entire economy” (Khramov and Lee 2013:3). The index is constructed in such a way that the current performance on each segment of the economy is compared with a desirable benchmark. These benchmarks are 0 percent for inflation, 4.75 percent for unemployment, 0 percent government deficit and 4.75 percent GDP growth. The optimal EPI score is normalized to 100 percent and the score for each country-year is calculated with the following formula:

$$\text{Weighted EPI} = 100\% - W_{Inf} \cdot |\text{Inf}(\%) - \text{I}^*| - W_{Unem} \cdot (\text{Unem}(\%) - \text{U}^*) - W_{Def} \cdot (\text{Def/GDP}(\%) - \text{Def/GDP}^*) + W_{GDP} \cdot (\Delta\text{GDP}(\%) - \Delta\text{GDP}^*)$$

In the weighted EPI, each component is weighted by its inverse standard deviation, while the raw EPI gives equal weight to each component. However, as the authors of the EPI also note, in developed economies there are only small differences between the raw and weighted scores.

The data for the construction of the EPI were taken from the World Bank’s World Development Indicators database and the International Monetary Fund’s World Economic Outlook Database (Latest download: 12.12.2022).

Table 3: Macroeconomic indicators and data sources

Source	Indicator	Name
WDI	NY.GDP.PCAP.PP.CD	GDP per capita, PPP (current international \$)
WDI	NY.GDP.PCAP.KD.ZG	GDP per capita growth (annual %)
WDI	SL.UEM.TOTL.ZS	Unemployment, total (% of total labor force)
WDI	FP.CPI.TOTL.ZG	Inflation, consumer prices (annual %)
IMF	GGXCNL_NGDP	General Government Net Lending/Borrowing, % of GDP

## 4 Robustness tests: Jackknife results

Tabular summary of Jackknife estimation

Model	All			Left			Right		
	Total	Direct	Indirect	Total	Direct	Indirect	Total	Direct	Indirect
AT	-0.25*	-0.118	-0.131***	-0.445**	-0.323**	-0.122	-0.231*	-0.099	-0.132***
BE	-0.239*	-0.117	-0.122***	-0.431**	-0.317**	-0.114	-0.214†	-0.087	-0.127***
CH	-0.237*	-0.112	-0.126**	-0.442**	-0.327**	-0.115	-0.208†	-0.081	-0.127***
CZ	-0.249*	-0.121	-0.128**	-0.442***	-0.328**	-0.114	-0.219*	-0.091	-0.128***
DE	-0.245*	-0.127	-0.118***	-0.386*	-0.294*	-0.093	-0.231*	-0.106	-0.125***
DK	-0.232*	-0.112	-0.12***	-0.433***	-0.333**	-0.101	-0.214*	-0.091	-0.124***
ES	-0.276*	-0.149	-0.126**	-0.345*	-0.308*	-0.038	-0.265*	-0.129	-0.136**
EE	-0.36**	-0.211†	-0.149**	-0.547***	-0.429***	-0.117	-0.328*	-0.174	-0.154***
FI	-0.229*	-0.105	-0.124***	-0.442**	-0.327**	-0.115	-0.207†	-0.08	-0.127***
FR	-0.233*	-0.113	-0.12***	-0.421**	-0.312**	-0.109	-0.215*	-0.088	-0.127***
GB	-0.188*	-0.073	-0.116**	-0.434**	-0.307*	-0.127	-0.15	-0.032	-0.119***
HU	-0.223*	-0.106	-0.117**	-0.438*	-0.327**	-0.111	-0.205†	-0.086	-0.119***
IE	-0.197†	-0.077	-0.12**	-0.455***	-0.338**	-0.118	-0.156	-0.033	-0.123***
IS	-0.231*	-0.107	-0.124***	-0.434**	-0.322**	-0.112	-0.21†	-0.081	-0.129***
IT	-0.223*	-0.102	-0.121***	-0.42***	-0.313**	-0.108	-0.199†	-0.075	-0.123***
LT	-0.283*	-0.123	-0.16***	-0.488***	-0.262†	-0.227***	-0.267†	-0.117	-0.151***
NL	-0.252*	-0.138	-0.114**	-0.476***	-0.363**	-0.113	-0.235*	-0.118	-0.116***
NO	-0.224*	-0.105	-0.119***	-0.434**	-0.335**	-0.099	-0.198†	-0.078	-0.12***
PL	-0.195*	-0.066	-0.129***	-0.437**	-0.301**	-0.136	-0.16†	-0.03	-0.13***
PT	-0.231*	-0.096	-0.136***	-0.366*	-0.26*	-0.106	-0.216†	-0.073	-0.142***
SI	-0.236*	-0.113	-0.123***	-0.425**	-0.32***	-0.105	-0.205†	-0.081	-0.124***
SE	-0.236*	-0.11	-0.126***	-0.426**	-0.316**	-0.11	-0.216*	-0.087	-0.129***

†  $p > 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ , \*\*\* $p < 0.001$ . Rows are causal mediation models based on 1000 simulations.

## References

Khramov, Vadim, and John R. Lee. 2013. “The Economic Performance Index (EPI): An Intuitive Indicator for Assessing a Country’s Economic Performance Dynamics in an Historical Perspective.” In *Working Paper No.13/214*. IMF. <https://www.imf.org/external/pubs/ft/wp/2013/wp13214.pdf>.