

Supplementary Material

The grass is always greener on the other side:
(Unfair) inequality and support for democracy

Fabian Reutzel

Published in the *European Journal of Political Economy*

Online Appendix

AI Estimates of Total & Unfair Inequality

Table A1: Sample Size & Missing Circumstances - *UI* Estimation

Country	ISO	Sample Size				Share of Missing Circumstances				
		All	incl. Outcome	Complete Circ.	Working Age	Urbanity at Birth	Minority	Communist Party	Father's education	Mother's education
Albania	AL	1500	766	763	582	0.34	0.00	0.00	0.00	0.00
Armenia	AM	1527	1145	1074	750	0.00	0.00	0.00	4.53	3.02
Azerbaijan	AZ	1510	680	617	459	0.00	0.00	0.00	9.25	8.07
Bulgaria	BG	1500	1097	1082	680	0.29	0.44	0.00	0.58	0.15
Belarus	BY	1504	798	418	327	0.16	0.31	0.00	2.35	1.73
Czech Republic	CZ	1532	1309	466	314	0.00	0.00	0.00	1.23	0.78
Estonia	EE	1503	1210	1051	616	0.00	0.00	0.00	10.26	4.19
Georgia	GE	1508	1293	1243	869	0.00	0.11	0.00	2.68	1.01
Croatia	HR	1503	1063	1035	727	0.54	0.00	0.00	1.08	0.81
Hungary	HU	1501	1176	1148	719	0.14	0.00	0.00	1.37	0.27
Kyrgyzstan	KG	1500	1220	1203	933	1.16	0.00	0.00	0.32	0.32
Kazakhstan	KZ	1505	1181	1125	928	0.21	0.21	0.00	3.50	2.16
Lithuania	LT	1501	1186	1082	647	0.14	0.14	0.00	8.16	3.94
Latvia	LV	1500	1274	1023	607	0.13	0.13	0.00	17.36	7.21
Moldova	MD	1512	1150	1013	701	8.47	0.13	0.00	2.78	2.28
Montenegro	ME	1503	916	861	617	0.15	4.14	0.00	1.07	1.07
North Macedonia	MK	1499	908	895	577	0.51	0.17	0.00	0.85	0.68
Mongolia	MN	1500	1462	1425	1163	0.17	0.00	0.00	1.51	1.43
Poland	PL	1500	496	492	380	0.00	0.00	0.00	0.52	0.26
Romania	RO	1512	1044	1003	640	0.15	0.00	0.00	3.02	2.26
Serbia	RS	1508	754	743	517	0.38	0.57	0.00	0.57	0.76
Russia	RU	1507	941	890	665	0.57	0.71	0.00	3.84	0.71
Slovenia	SI	1501	1126	1074	654	0.00	0.87	0.00	4.20	1.74
Slovakia	SK	1544	1203	1185	775	0.13	0.00	0.00	1.14	1.02
Tajikistan	TJ	1510	782	764	578	0.17	0.00	0.00	1.53	1.69
Ukraine	UA	1507	931	900	674	0.29	0.29	0.00	2.31	1.15
Uzbekistan	UZ	1506	813	744	615	0.30	0.00	0.00	6.43	5.08
Kosovo	XK	1500	1005	953	711	0.67	0.00	0.00	4.40	4.40

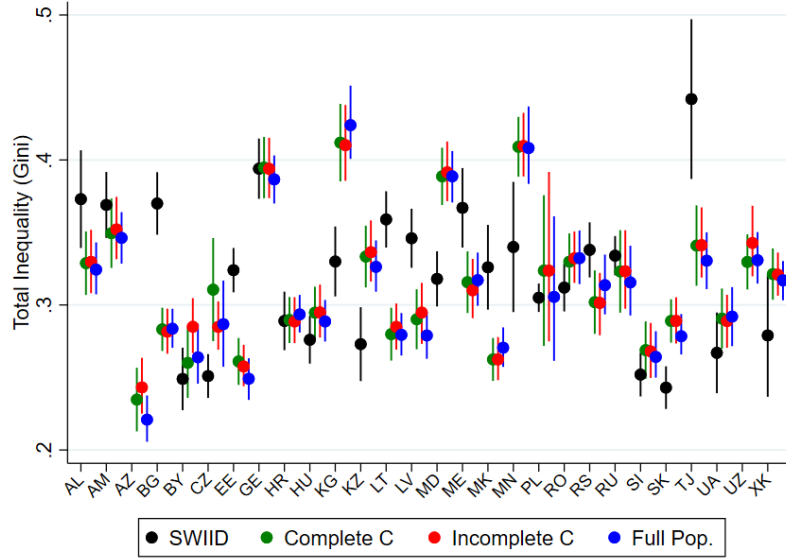
Notes: The table shows (i) the change in the number of observations of step-wise sample restriction procedure: the original dataset (All), individuals for which all consumption items are reported (incl. Outcome, i.e., including those with incomplete circumstance data) and for which additional to outcome data also all circumstance variables are observed (Complete Circ.) and which are aged 25-64 years (Working Age). Further, (ii) the share of missing circumstances is reported in percentage points of the working age sample with outcome data. (Source: [LITS](#)).

Table A2: Summary Statistics - *UI* Estimation

Country	ISO	Urbanity at Birth	Minority	Communist Party	Father's education	Mother's education
Albania	AL	0.55	0.00	0.18	0.29	0.24
Armenia	AM	0.51	0.00	0.18	0.69	0.71
Azerbaijan	AZ	0.64	0.00	0.14	0.72	0.67
Bulgaria	BG	0.71	0.21	0.16	0.54	0.53
Belarus	BY	0.70	0.11	0.28	0.90	0.88
Czech Republic	CZ	0.85	0.32	0.20	0.40	0.36
Estonia	EE	0.71	0.29	0.15	0.64	0.65
Georgia	GE	0.55	0.08	0.18	0.83	0.83
Croatia	HR	0.79	0.00	0.10	0.44	0.38
Hungary	HU	0.76	0.00	0.08	0.42	0.38
Kyrgyzstan	KG	0.29	0.27	0.17	0.74	0.73
Kazakhstan	KZ	0.43	0.44	0.23	0.77	0.76
Lithuania	LT	0.52	0.11	0.08	0.55	0.55
Latvia	LV	0.73	0.31	0.13	0.67	0.67
Moldova	MD	0.34	0.09	0.08	0.44	0.41
Montenegro	ME	0.65	0.49	0.20	0.45	0.37
North Macedonia	MK	0.58	0.31	0.13	0.34	0.25
Mongolia	MN	0.20	0.22	0.35	0.46	0.43
Poland	PL	0.63	0.00	0.00	0.77	0.76
Romania	RO	0.55	0.09	0.15	0.40	0.33
Serbia	RS	0.57	0.06	0.20	0.42	0.35
Russia	RU	0.69	0.08	0.21	0.82	0.82
Slovenia	SI	0.72	0.09	0.08	0.30	0.27
Slovakia	SK	0.75	0.09	0.11	0.30	0.28
Tajikistan	TJ	0.15	0.22	0.12	0.74	0.52
Ukraine	UA	0.55	0.08	0.20	0.85	0.85
Uzbekistan	UZ	0.31	0.14	0.10	0.79	0.69
Kosovo	XK	0.45	0.23	0.00	0.25	0.13

Notes: Displayed figures are portions of the sample exhibiting the binary circumstance. For parental education, the portion of the sample whose mother/father completed at least upper secondary education is reported. Parental communist party membership and ethnic minority status have been excluded for the *UI* estimation in countries with less than 50 respondents exhibiting those characteristics (i.e., Poland, Kosovo) to facilitate reliable inference. (Source: [LiTS](#)).

Figure A1: Comparison Total Inequality I - LiTS & SWIID



Notes: The figure depicts point estimates (dots) and 95% confidence intervals (spikes) for the countries' Gini coefficients of (1) the SWIID database, (2) the estimation sample (i.e., working-age individuals) with complete circumstances, (3) the estimation sample with incomplete circumstances and (4) the full population with complete circumstances (see table A3; Sources: [LiTS](#); [SWIID](#)).

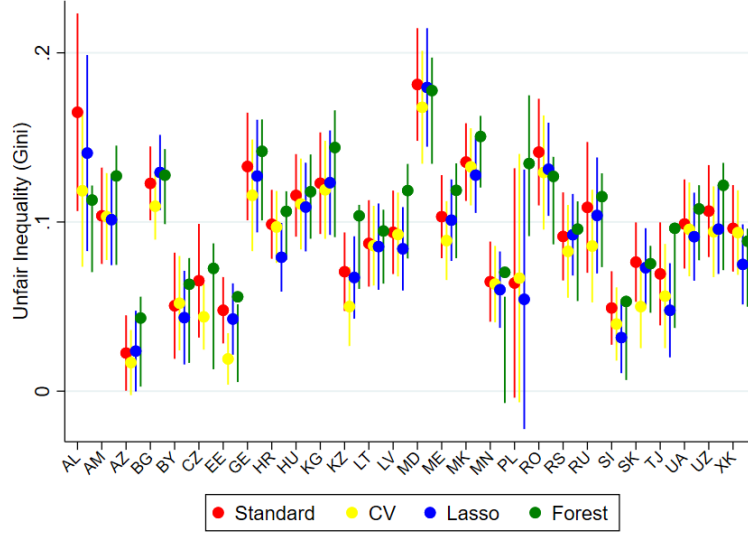
Table A3: Overview Total & Unfair Inequality

Country	Total Inequality I				Unfair Inequality UI					
	SWIID	Full C	Incomplete C	Full Pop.	Standard	CV	Lasso	F Complete	F Incomplete	F Full Pop.
Albania	0.373 [0.339;0.407]	0.329 [0.307;0.351]	0.330 [0.308;0.352]	0.324 [0.307;0.343]	0.165 [0.106;0.223]	0.118 [0.074;0.163]	0.141 [0.083;0.199]	0.113 [0.070;0.122]	0.113 [0.071;0.121]	0.121 [0.088;0.132]
Armenia	0.369 [0.346;0.392]	0.350 [0.326;0.373]	0.352 [0.332;0.375]	0.346 [0.329;0.364]	0.104 [0.075;0.132]	0.103 [0.078;0.129]	0.101 [0.074;0.128]	0.127 [0.075;0.145]	0.125 [0.078;0.142]	0.120 [0.079;0.134]
Azerbaijan	.	0.235 [.;	0.243 [0.225;0.264]	0.221 [0.206;0.238]	0.023 [0.000;0.045]	0.017 [-0.002;0.036]	0.024 [-0.000;0.048]	0.043 [0.003;0.056]	0.061 [0.030;0.080]	0.048 [0.020;0.061]
Bulgaria	0.370 [0.348;0.392]	0.283 [0.268;0.298]	0.282 [0.266;0.297]	0.284 [0.270;0.297]	0.123 [0.101;0.145]	0.109 [0.090;0.129]	0.129 [0.107;0.151]	0.128 [0.099;0.143]	0.128 [0.097;0.145]	0.130 [0.108;0.143]
Belarus	0.249 [0.227;0.271]	0.260 [0.236;0.284]	0.285 [0.267;0.305]	0.264 [0.246;0.287]	0.050 [0.019;0.082]	0.052 [0.024;0.080]	0.043 [0.016;0.071]	0.063 [0.017;0.079]	0.050 [0.009;0.053]	0.076 [0.038;0.090]
Czech Republic	0.251 [0.236;0.266]	0.311 [0.275;0.346]	0.285 [0.269;0.302]	0.287 [0.257;0.317]	0.065 [0.032;0.099]	0.044 [0.025;0.063]	.	0.073 [0.013;0.087]	0.051 [0.016;0.061]	0.087 [0.035;0.105]
Estonia	0.324 [0.309;0.339]	0.261 [0.245;0.277]	0.258 [0.244;0.273]	0.249 [0.235;0.263]	0.048 [0.028;0.067]	0.019 [0.004;0.034]	0.043 [0.022;0.064]	0.056 [0.005;0.051]	0.055 [0.010;0.051]	0.063 [0.028;0.061]
Georgia	0.394 [0.373;0.415]	0.395 [0.374;0.416]	0.394 [0.374;0.415]	0.387 [0.370;0.403]	0.133 [0.101;0.165]	0.116 [0.083;0.149]	0.127 [0.094;0.160]	0.142 [0.101;0.161]	0.139 [0.100;0.155]	0.137 [0.103;0.149]
Croatia	0.289 [0.269;0.309]	0.290 [0.274;0.306]	0.289 [0.274;0.305]	0.294 [0.281;0.307]	0.099 [0.078;0.119]	0.097 [0.076;0.118]	0.079 [0.059;0.099]	0.106 [0.078;0.118]	0.104 [0.074;0.116]	0.105 [0.083;0.118]
Hungary	0.276 [0.260;0.292]	0.295 [0.277;0.313]	0.295 [0.278;0.314]	0.289 [0.275;0.303]	0.116 [0.091;0.140]	0.111 [0.084;0.137]	0.109 [0.083;0.135]	0.118 [0.090;0.140]	0.114 [0.085;0.132]	0.085 [0.059;0.098]
Kyrgyzstan	0.330 [0.306;0.354]	0.412 [0.385;0.439]	0.410 [0.386;0.438]	0.424 [0.401;0.451]	0.123 [0.093;0.153]	0.119 [0.090;0.148]	0.123 [0.092;0.154]	0.144 [0.091;0.166]	0.143 [0.088;0.166]	0.148 [0.104;0.161]
Kazakhstan	0.273 [0.248;0.298]	0.333 [0.312;0.355]	0.336 [0.316;0.358]	0.326 [0.309;0.345]	0.071 [0.047;0.094]	0.050 [0.027;0.073]	0.067 [0.043;0.092]	0.104 [0.060;0.110]	0.106 [0.062;0.115]	0.097 [0.057;0.103]
Lithuania	0.359 [0.340;0.378]	0.280 [0.262;0.298]	0.285 [0.269;0.301]	0.279 [0.265;0.294]	0.087 [0.062;0.113]	0.086 [0.062;0.110]	0.085 [0.060;0.111]	0.095 [0.064;0.107]	0.100 [0.069;0.115]	0.116 [0.093;0.130]
Latvia	0.346 [0.326;0.366]	0.290 [0.269;0.311]	0.295 [0.273;0.315]	0.299 [0.263;0.296]	0.094 [0.069;0.119]	0.093 [0.068;0.117]	0.084 [0.059;0.109]	0.119 [0.078;0.134]	0.111 [0.075;0.123]	0.105 [0.074;0.116]
Moldova	0.318 [0.299;0.337]	0.389 [0.369;0.408]	0.391 [0.372;0.413]	0.389 [0.371;0.406]	0.408 [0.148;0.215]	0.181 [0.134;0.201]	0.180 [0.145;0.215]	0.178 [0.134;0.197]	0.188 [0.132;0.187]	0.194 [0.156;0.208]
Montenegro	0.367 [0.340;0.394]	0.316 [0.294;0.337]	0.310 [0.291;0.332]	0.317 [0.299;0.336]	0.103 [0.079;0.128]	0.089 [0.066;0.112]	0.101 [0.077;0.125]	0.119 [0.079;0.135]	0.117 [0.079;0.133]	0.121 [0.082;0.132]
North Macedonia	0.326 [0.297;0.355]	0.262 [0.248;0.277]	0.262 [0.248;0.278]	0.271 [0.257;0.285]	0.135 [0.112;0.158]	0.133 [0.110;0.155]	0.128 [0.105;0.150]	0.151 [0.120;0.163]	0.150 [0.120;0.161]	0.141 [0.118;0.153]
Mongolia	0.340 [0.295;0.385]	0.409 [0.388;0.430]	0.410 [0.389;0.432]	0.408 [0.383;0.437]	0.065 [0.041;0.088]	0.063 [0.041;0.086]	0.060 [0.037;0.083]	0.070 [-0.007;0.056]	0.074 [0.002;0.066]	0.086 [0.025;0.079]
Poland	0.305 [0.295;0.315]	0.324 [0.272;0.376]	0.324 [0.275;0.392]	0.306 [0.262;0.361]	0.064 [-0.004;0.132]	0.067 [-0.007;0.140]	0.054 [-0.022;0.131]	0.135 [0.092;0.175]	0.134 [0.086;0.175]	0.124 [0.084;0.156]
Romania	0.312 [0.296;0.328]	0.330 [0.310;0.349]	0.332 [0.315;0.351]	0.332 [0.314;0.351]	0.141 [0.110;0.173]	0.129 [0.096;0.163]	0.131 [0.104;0.159]	0.127 [0.087;0.139]	0.131 [0.098;0.143]	0.121 [0.088;0.131]
Serbia	0.338 [0.319;0.357]	0.302 [0.280;0.324]	0.301 [0.279;0.322]	0.314 [0.294;0.335]	0.091 [0.065;0.118]	0.083 [0.055;0.110]	0.092 [0.068;0.117]	0.096 [0.053;0.112]	0.095 [0.052;0.111]	0.114 [0.074;0.129]
Russia	0.334 [0.320;0.348]	0.323 [0.295;0.352]	0.323 [0.297;0.352]	0.316 [0.293;0.341]	0.109 [0.070;0.147]	0.086 [0.052;0.119]	0.104 [0.070;0.138]	0.115 [0.073;0.129]	0.111 [0.066;0.123]	0.119 [0.087;0.133]
Slovenia	0.252 [0.237;0.267]	0.269 [0.249;0.289]	0.268 [0.250;0.288]	0.264 [0.250;0.282]	0.049 [0.027;0.071]	0.040 [0.018;0.061]	0.032 [0.011;0.053]	0.053 [0.007;0.052]	0.054 [0.009;0.058]	0.065 [0.032;0.068]
Slovakia	0.243 [0.228;0.258]	0.289 [0.274;0.304]	0.289 [0.273;0.305]	0.278 [0.266;0.294]	0.076 [0.053;0.100]	0.073 [0.025;0.075]	0.075 [0.050;0.096]	0.074 [0.046;0.086]	0.074 [0.042;0.082]	0.068 [0.042;0.073]
Tajikistan	0.442 [0.387;0.497]	0.341 [0.313;0.369]	0.341 [0.319;0.367]	0.331 [0.311;0.350]	0.069 [0.039;0.100]	0.056 [0.025;0.087]	0.048 [0.020;0.076]	0.096 [0.037;0.097]	0.095 [0.039;0.097]	0.109 [0.066;0.120]
Ukraine	0.267 [0.239;0.295]	0.291 [0.270;0.311]	0.289 [0.270;0.307]	0.292 [0.272;0.312]	0.099 [0.072;0.125]	0.096 [0.068;0.123]	0.091 [0.065;0.117]	0.108 [0.077;0.122]	0.107 [0.082;0.120]	0.107 [0.076;0.117]
Uzbekistan	.	0.330 [0.311;0.349]	0.331 [0.320;0.368]	0.331 [0.315;0.350]	0.106 [0.079;0.134]	0.094 [0.067;0.121]	0.096 [0.069;0.122]	0.122 [0.072;0.135]	0.119 [0.076;0.136]	0.134 [0.090;0.150]
Kosovo	0.279 [.;	0.321 [0.304;0.339]	0.321 [0.306;0.336]	0.317 [0.303;0.330]	0.096 [0.071;0.122]	0.094 [0.069;0.119]	0.075 [0.051;0.099]	0.089 [0.050;0.096]	0.089 [0.055;0.099]	0.078 [0.044;0.089]

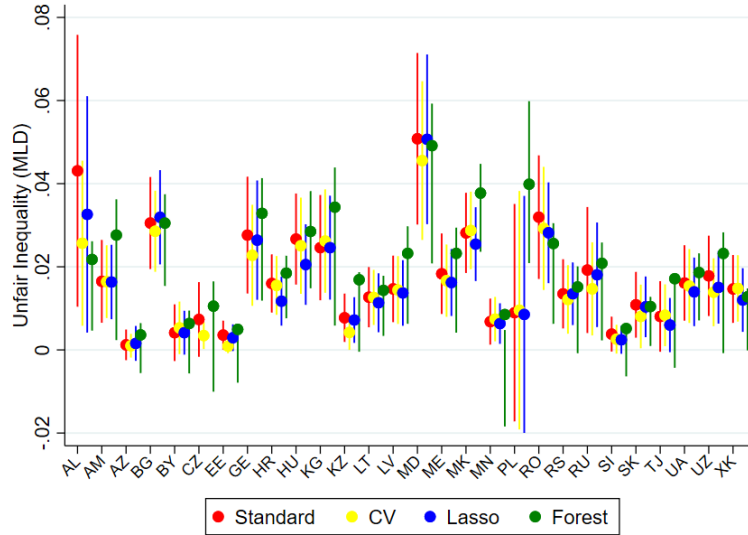
Notes: I is measured by the Gini coefficient in the respective sample indicated in the column header. Estimates of the SWIID database are presented as a benchmark. UI is measured by the Gini coefficient in the counterfactual distribution $\hat{\mu}$ estimated via the methodology indicated in the column header. Forest-based estimates (F) are also provided based on incomplete circumstances (F Incomplete, see section A11) and without the working age sample restriction (F Full Pop.). IR can be obtained by simply subtracting unfair inequality from total inequality, $I - UI$. 95% confidence intervals are derived based on 200 bootstrapped re-samples using the normal approximation method (Sources: LTS; SWIID).

Figure A2: Comparison of UI Estimates by Methodology

(a) Gini



(b) MLD



Notes: The figure depicts point estimates (dots) and 95% confidence intervals (spikes) for the countries' UI using the Gini (panel a) and MLD (panel b) as inequality measure based on the different estimation methodologies presented in section AII: (1) Standard, (2) CV-based interacted model, (3) Lasso, and (4) conditional inference Forest (Sources: [LiTS](#)).

AII Empirical UI Measurement

Measuring ex-ante Inequality of Opportunity (IOp), i.e., our measure of unfair inequality (*UI*), corresponds to computing inequality in an estimated counterfactual distribution $\hat{\mu}$. This counterfactual distribution can be estimated by either a non-parametric or a parametric approach.

The non-parametric estimation as proposed by [Checchi and Peragine \(2010\)](#) follows a two-stage methodology. First, one partitions the sample into types based on all observable circumstances C and then one chooses the arithmetic mean of the outcome of type k , denoted by μ_k , as the value v_k of the opportunity set of type k . Second, the counterfactual μ_i for each individual i belonging to type k is defined as $\mu_i = \hat{\mu}_k$, where $\hat{\mu}_k$ is the sample estimate for μ_k , and the inequality in μ is measured.

The *Standard* parametric ex-ante approach suggested by [Bourguignon et al. \(2007\)](#) and [Ferreira and Gignoux \(2011\)](#) alters the two-step procedure by estimating μ based on the predictions of a reduced form regression. Operationally, this corresponds to first estimating:

$$\ln y_i = \alpha + \beta C_i + \epsilon_i. \quad (1)$$

Second, one uses the estimated parameters $\hat{\beta}$ to parametrically construct an estimate for the distribution of type means $\mu = (\mu_1, \dots, \mu_i, \dots, \mu_N)$:

$$\hat{\mu}_i = \exp(\hat{\alpha} + \hat{\beta} C_i). \quad (2)$$

Such a specification accounts for both the direct and the indirect effect of circumstances since the correlation between C_i and E_i is implicitly captured by β .²

The parametric approach does not directly identify types to predict a counterfactual distribution but linearly approximates the types' average outcomes by the predictions of a regression of circumstances on outcomes. Such estimation procedure is more parsimonious than the non-parametric approach which makes it the methodology of choice for estimation when few observations are available [Ferreira and Gignoux \(2011\)](#). Yet, parsimony

¹The log-linear specification is due to the analogy to the Mincer equation and the standard choice in empirical studies ([Brunori et al., 2019b](#); [Ferreira and Gignoux, 2011](#)).

²The reduced-form outcome generating process is $y_i = \alpha + \gamma C_i + \delta E_i + u_i$. Circumstances may also influence the individual's outcome indirectly through effort, $E_i = \zeta C_i + \nu_i$. Substituting back into the outcome generating process yields $y_i = \beta C_i + \epsilon_i$ where $\beta = \gamma + \delta \zeta$ and $\epsilon_i = \delta \nu_i + u_i$.

comes at the cost of imposing the assumption that the effect of the circumstances on outcome is supposedly fixed and additive.³ By construction, the linear parametric approach explains less inequality than the non-parametric one as the latter draws on the full set of interactions to explain the variability in outcomes. The resulting trade-off between the two approaches has to be balanced given the data availability, i.e., a linear specification might be too restrictive, whereas including the full set of circumstances' interactions might cause very large sampling variance of the estimated counterfactual distribution when the number of observations per type is limited (Brunori et al., 2019b).

IOP estimates have traditionally been proposed as lower bounds due to the downward bias resulting from the partial observability of circumstances that affect the individual outcome (e.g. Ferreira and Gignoux, 2011).⁴ Brunori et al. (2019b) point out that such IOP estimates may suffer from upward bias as a consequence of sampling variance and associated over-fitting. Yet, when the sample size is small relative to the number of types/regressors, upward bias might prevail. Sample size is a major concern with respect to the IOP estimates of the analysis as most cross-country studies use larger samples, e.g., EU-SILC data (Marrero and Rodríguez, 2012; Brunori et al., 2019b) with more than 5000 observations per country. Therefore, the empirical framework tries to address the data limitation by using different methods to construct the counterfactual distribution.

Balancing the two sources of bias and easing the assumption of circumstances' effects being fixed and additive, Brunori et al. (2019b) propose a model selection based on *k*-fold *cross-validation* (CV).⁵ As adjusted by

³The parametric and the non-parametric methods coincide when all explanatory variables are categorical, and the parametric counterfactual distribution is obtained by the prediction of a regression model where y is regressed on all possible combinations of circumstance values. Following Brunori et al. (2019b), the reduced-form estimation can be written as $y_i = \sum_{j=1}^J \sum_{k=1}^{K_j} \chi_{jk} c_{ijk} + u_i$, where c_{ijk} identifies each category of the observable characteristics by means of a dichotomous variable, and χ_{jk} is the corresponding coefficient. Further, for all $j \in \{1, \dots, J\}$, K_j denotes the possible values taken by circumstance C_j and $|K_j|$ describes the cardinality of K_j of C_j . The population can be partitioned into P types, where a type is a selection of values, one for each circumstance, that is, $P = \prod_{j=1}^J |K_j|$. Hence, interacting all values of all regressors with each other yields a model with P dummies which corresponds to estimating the arithmetic mean of y for each type k .

⁴This result follows from the assumption of orthogonality between circumstances and effort (see Roemer, 1998), i.e., enlarging the set of observed circumstances can only increase IOP as it accounts for a further potential source of it.

⁵The *k*-fold cross-validation procedure divides the sample into *k*-folds. Under each model specification, the model parameters are estimated on $k - 1$ folds and the ensuing

[EqualChances.org \(2018\)](#) Project, one first estimates linear models with different levels of circumstance granularity (e.g., parental education coded as high/low or primary/secondary/tertiary education) and selects the appropriate level of granularity by means of CV. Second, using the chosen level of circumstance granularity, all alternatives models with subsets of circumstance interactions between (and including) the linear and the fully interacted specifications are estimated and the best specification is chosen via CV. Such a model selection eases the linearity assumptions and accounts for sampling variance.

Alternatively, [Hufe et al. \(2022\)](#) propose a lower bound estimate based on cross-validated *Lasso* estimations ([Tibshirani, 2011](#)) that select the statistically relevant circumstance parameters $C_i^r \subseteq C_i$ in a way that maximizes the prediction accuracy of the estimated model out-of-sample to correct for the upward bias due to sampling variance in the distribution of type means,

$$\underset{\beta}{\operatorname{argmin}} \underbrace{\sum_i (\ln y_i - \alpha - \sum_j \beta_j C_{ij})^2}_{(1)} + \underbrace{\sum_j \lambda |\beta_j|}_{(2)} .^6 \quad (3)$$

Part (1) of equation (3) is a perfect mirror of the OLS algorithm used for estimating equation (1) while part (2) introduces a penalization term that varies with the absolute value of the estimated coefficient $\hat{\beta}_j$, i.e., the larger the penalization parameter λ , the more parsimonious the model and the lower the variance (i.e., the potential upward bias) in the predictions based on the parameter vector $\hat{\beta}^{Lasso}$. The optimal parameterization of λ is chosen via a 10-fold CV. In turn, circumstance characteristics on which coefficients are not shrunk to zero, C_j^r , are retained to estimate the counterfactual distribution via OLS. Such a model selection provides the most parsimonious parametric specification and, hence, yields a rather conservative estimate of IOp.

The usage of k -fold CV for model selection might imply using an alternative model specification for each country in a given data source and for the same country for different time periods as each time the country's sample differs. Comparing IOp measures across countries, one might compare measures obtained with different specifications which is in contrast with the

predictions are benchmarked against the data points in the k^{th} fold. Repeating this procedure k times, one chooses the model that delivers the lowest average mean-squared prediction error across the k iterations.

⁶Such a procedure is called post-Lasso estimation ([Hastie et al., 2009](#)) and differs from a standard Lasso estimation by estimating the relevant parameters after shrinkage by means of OLS instead of directly using the penalized Lasso parameters.

common practice to use the same model specification for all countries of a unified data source (Brunori et al., 2019b). Yet, given the varying data quality across countries in the used dataset, the increased reliability (lower upward bias) of the estimated IOP measures yields a valid sensitivity check.

As an alternative to the discussed parametric approaches, Brunori et al. (2023) present a more data driven estimation method by using conditional inference regression *forests*, i.e., creating many trees and average over all of these to make predictions. Trees divide the population into non-overlapping groups, $G = \{g_1, \dots, g_m, \dots, g_M\}$ where each group g_m is homogeneous in the expression of some input variables $x = (x^1, \dots, x^J)$. Partitioning is based on recursive binary splitting, i.e., starting by dividing the full sample into two distinct groups according to the value they take in one input variable $x_j \in X$. The process is continued such that one of the two groups is divided into more subgroups (potentially based on another $x_k \in x$), and iterated further. Brunori et al. (2023) follow the conditional inference methodology (Hothorn et al., 2006) to conduct the splits, i.e., trees are grown by a series of permutation tests.^{7,8}

Given all input variables being circumstances only ($x = C$), each resulting group $g_m \in G_M$ can be interpreted as a circumstance type $t_m \in T$. The conditional expectation for observation i is estimated from the mean outcome $\hat{\mu}_m$ of the group g_m of size N_m to which the i^{th} observation is assigned and, in turn, yield the predicted value

$$\hat{f}(x_i) = \hat{\mu}_{m(i)} = \frac{1}{N_m} \sum_{j \in g_m} y_j. \quad (4)$$

The vector of predicted values $\hat{y}^C = (\hat{f}(x_1), \dots, \hat{f}(x_i), \dots, \hat{f}(x_N))$ corresponds to the counterfactual distribution μ . Random forests are a collection of such trees, where each tree $\hat{f}^b()$ is estimated on a random subsample of the population and a number B^* of such trees are estimated in total. Further, only a random subset of circumstances $\{x^p \in x : p \in \bar{P} \subset \{1, \dots, P\}\}$ of size \bar{P}^* is allowed to be used at each splitting point. Yet, they inherit

⁷First, based on univariate tests between each $x^k \in x$ and outcome y , the most related x^k to y is chosen as potential splitting variable x^* . Second, if the dependence between y and x^* is sufficiently strong then a split is made. Whenever x^* can be split in several ways, the sample is split into two subsamples such that the dependence with y is maximized. Such procedure is repeated in each of the two subsamples until no circumstance in any subsample is sufficiently related to y .

⁸Structure and depth of the tree hinge crucially on sample size as well as the permutation tests' critical value to reject the null hypothesis α , i.e., the less stringent the α -requirement, the more splits are detected as significant and the deeper the tree is grown.

some advantages over the usage of a single tree for IOp estimation: (1) averaging over B^* predictions cushions the variance in the estimates of y^C and smooths the non-linear impact of circumstance characteristics; and (2) drawing only on subsets of all circumstance variables increases the likelihood that all observed circumstances with informational content will be identified as the splitting variable x^* at some point which helps to leverage information contained in the set of observed circumstances. Predictions for $\hat{\mu}$ are formed by

$$\hat{f}(x; \alpha^*, \bar{P}^*, B^*) = \frac{1}{B^*} \sum_{b=1}^{B^*} \hat{f}^b(x; \alpha^*, \bar{P}^*). \quad (5)$$

We follow Brunori et al. (2023, 2019a) in fixing $B^* = 200$ and Brunori et al. (2019a) in setting the permutation tests' critical value at $\alpha^* = 0.01$ and $\bar{P}^* = P - 1$.⁹

Such a supervised learning method solves the problem of circumstance selection and specification of a functional form according to which circumstances co-produce the outcome. Further, unlike the parametric approaches, it does not rely on the full set of circumstances to generate individual-level predictions allowing to partially check the importance of missing circumstance variables by comparing IOp measures based on the sample with full and the one with partial circumstance information. Hence, the forest approach is our preferred estimation methodology and the previously presented parametric approaches are only reported as robustness checks.

⁹Fixing $B^* = 200$ reduces computational costs as the marginal gain of drawing an additional subsample in terms of out-of sample prediction accuracy becomes negligible. Given the limited set of C available ($P = 5$), we refrain from trimming, i.e., simultaneously determining both α^* and \bar{P}^* .

AIII Inequality Decomposition

Following [Marrero and Rodríguez \(2023\)](#), the decomposition of total inequality (I) into unfair inequality (UI) and a inequality residual (IR) can be extended by assuming additive decomposability in order to further decompose IR into fair inequality (FI) and non-clearly attributable residual inequality (RI). Moreover, suppose that $UI = Q + V$, where Q is the part of UI that is observable (i.e., the theoretical equivalent to \hat{UI}), and V is the part of UI that cannot be measured. Both terms as well as RI can be expressed as shares of overall inequality, i.e., $Q = qI, V = vI$, and $RI = rI$ where $q, v, r \in [0, 1]$ such that $q + v + r = 1$. On a country-level, we could estimate the association between average democratic support $support_c$ and total inequality I_c (equation (6)) but would like ideally to estimate the association based on fair FI_c and unfair UI_c inequality (equation (7)):

$$support_c = \alpha + \beta_{I1}I_c + \epsilon_c \quad (6)$$

$$support_c = \alpha + \beta_{FI}FI_c + \beta_{UI}UI_c + \epsilon_c . \quad (7)$$

Given the definitions, we can rewrite $\beta_{I1} = [\beta_{FI} + (\beta_{UI} - \beta_{FI})(q_c + v_c) - \beta_{FI}r]$ to establish equivalence between the two expressions. However, given the difficulty of measuring fair inequality, we empirically resort to either jointly including I and UI (equation (8)) or the inequality residual ($IR = FI + RI$) and UI (equation (9)):

$$support_c = \alpha + \beta_{I2}I_c + \beta_QQ_c + \epsilon_c \quad (8)$$

$$support_c = \alpha + \beta_{IR}IR_c + \beta_QQ_c + \epsilon_c . \quad (9)$$

Splitting the hypotheses of section 2 by current regime type, the following conditions can be derived. For democracies, we conjecture $\beta_{UI} < 0$ and $\beta_{FI} \geq 0$, i.e., UI undermines democratic support whereas fair inequality may have no or a potentially positive impact. Hence, we can extract two necessary conditions: while β_{I2} can be positive, negative or zero it must hold that $\beta_{I2} > \beta_{I1}$ and $\beta_Q < 0$. Further, we expect $\beta_{IR} \geq \beta_{I2}$ as the additional part in I compared to IR is Q which given $\beta_{UI} < 0$ would negatively impact β_{I2} . For non-democracies, we hypothesize that UI is increasing support for democracy, $\beta_{UI} > 0$, while the impact of fair inequality is not clear, $\beta_{FI} \geq 0$. Hence, the necessary conditions are $\beta_Q > 0$ and $\beta_{I2} < \beta_{I1}$. Additionally, we expect $\beta_{IR} \leq \beta_{I2}$ as the additional part in I compared to IR is Q which given $\beta_{UI} > 0$ would positively impact β_{I2} .

AIV Regression Analysis

Table A4: Main Results Gini - extended Output

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Total Inequality	2.473 (2.069)	9.249*** (1.710)			3.615 (2.502)	7.087 (9.601)		
Democracy × Total Inequality		-10.975*** (2.323)				-7.081 (10.608)		
Unfair Inequality			0.388 (2.140)	11.397*** (2.235)	-1.852 (2.384)	2.720 (12.368)	1.763 (2.258)	9.807*** (3.382)
Democracy × Unfair Inequality				-14.368*** (2.321)		-5.487 (13.542)		-12.568*** (3.806)
Inequality Residual							3.615 (2.502)	7.087 (9.601)
Democracy × Inequality Residual								-7.081 (10.608)
Consumption Decile	0.018*** (0.006)	0.004 (0.007)	0.018*** (0.006)	0.004 (0.007)	0.018*** (0.006)	0.004 (0.007)	0.018*** (0.006)	0.004 (0.007)
Democracy × Consumption Decile		0.018* (0.010)		0.018* (0.010)		0.018* (0.010)		0.018* (0.010)
Mobility Experience	0.069*** (0.019)	0.025 (0.028)	0.064*** (0.020)	0.026 (0.029)	0.070*** (0.019)	0.027 (0.028)	0.070*** (0.019)	0.027 (0.028)
Democracy × Mobility Experience		0.063* (0.034)		0.056 (0.036)		0.058* (0.035)		0.058* (0.035)
Democracy	-0.119 (0.165)	3.373*** (0.824)	-0.055 (0.170)	1.380*** (0.284)	-0.164 (0.171)	2.665 (2.042)	-0.164 (0.171)	2.665 (2.042)
Female	-0.059** (0.027)	-0.053** (0.024)	-0.060** (0.027)	-0.052** (0.024)	-0.058** (0.027)	-0.052** (0.024)	-0.058** (0.027)	-0.052** (0.024)
Secondary Education	0.067 (0.073)	0.097 (0.075)	0.062 (0.074)	0.087 (0.073)	0.072 (0.072)	0.099 (0.074)	0.072 (0.072)	0.099 (0.074)
Tertiary Education	0.286*** (0.086)	0.349*** (0.085)	0.283*** (0.084)	0.334*** (0.086)	0.292*** (0.085)	0.351*** (0.083)	0.292*** (0.085)	0.351*** (0.083)
Life Satisfaction	0.155*** (0.041)	0.136*** (0.037)	0.152*** (0.041)	0.134*** (0.036)	0.150*** (0.043)	0.130*** (0.037)	0.150*** (0.043)	0.130*** (0.037)
Age	0.009** (0.004)	0.008** (0.004)	0.010** (0.004)	0.008** (0.004)	0.009** (0.004)	0.008** (0.004)	0.009** (0.004)	0.008** (0.004)
Age ²	-0.000*** (0.000)	-0.000*** (0.000)	-0.000*** (0.000)	-0.000*** (0.000)	-0.000*** (0.000)	-0.000*** (0.000)	-0.000*** (0.000)	-0.000*** (0.000)
Minority	-0.205*** (0.060)	-0.212*** (0.060)	-0.205*** (0.066)	-0.239*** (0.060)	-0.209*** (0.061)	-0.226*** (0.055)	-0.209*** (0.061)	-0.226*** (0.055)
log GDP per capita	-0.278 (0.270)	-0.392** (0.195)	-0.331 (0.258)	-0.200 (0.222)	-0.298 (0.268)	-0.334 (0.235)	-0.298 (0.268)	-0.334 (0.235)
GDP per capita Growth	-1.573 (3.549)	0.822 (3.193)	0.615 (3.294)	-0.617 (3.026)	-2.867 (4.117)	-0.960 (3.965)	-2.867 (4.117)	-0.960 (3.965)
Unemployment	0.010 (0.010)	0.004 (0.009)	0.009 (0.010)	0.009 (0.008)	0.012 (0.011)	0.008 (0.008)	0.012 (0.011)	0.008 (0.008)
Gov. Expenditure	-0.004 (0.008)	0.005 (0.008)	-0.004 (0.009)	-0.006 (0.008)	-0.006 (0.009)	-0.001 (0.014)	-0.006 (0.009)	-0.001 (0.014)
New EU Member	0.305** (0.122)	0.101 (0.170)	0.204 (0.141)	0.244** (0.107)	0.400*** (0.140)	0.240 (0.191)	0.400*** (0.140)	0.240 (0.191)
Governance	0.094 (0.179)	-0.011 (0.114)	0.093 (0.165)	-0.067 (0.113)	0.106 (0.171)	-0.024 (0.103)	0.106 (0.171)	-0.024 (0.103)
Constant	1.701 (3.084)	0.433 (2.282)	2.886 (2.974)	0.643 (2.511)	1.802 (3.165)	0.463 (2.363)	1.802 (3.165)	0.463 (2.363)
Number of individuals	21691	21691	21691	21691	21691	21691	21691	21691
Number of countries	23	23	23	23	23	23	23	23
pseudo R^2	0.033	0.043	0.031	0.043	0.033	0.043	0.033	0.043

Notes: This tables reports the regression results of table 1 including the **coefficients of all used control variables**. * $p < .1$, ** $p < .05$, *** $p < .01$ (Sources: [LiTS](#); [WEO](#); [WGI](#); [V-Dem](#))

Table A5: Main Results Gini - Sample incl. North Macedonia & Russia

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Total Inequality	1.481 (2.038)	5.029** (1.965)			1.843 (2.505)	1.444 (1.847)		
Democracy \times Total Inequality		-6.536** (2.827)				-1.576 (2.596)		
Unfair Inequality			0.459 (2.018)	9.473*** (2.054)	-0.638 (2.408)	8.371*** (2.605)	1.205 (2.237)	9.814*** (2.220)
Democracy \times Unfair Inequality				-12.614*** (2.464)		-11.437*** (3.385)		-13.013*** (2.578)
Inequality Residual							1.843 (2.505)	1.444 (1.847)
Democracy \times Inequality Residual								-1.576 (2.596)
Consumption Decile	0.018*** (0.005)	0.007 (0.006)	0.018*** (0.005)	0.007 (0.006)	0.018*** (0.005)	0.007 (0.006)	0.018*** (0.005)	0.007 (0.006)
Democracy \times Consumption Decile		0.016* (0.009)		0.016* (0.009)		0.016* (0.009)		0.016* (0.009)
Mobility Experience	0.068*** (0.017)	0.030 (0.025)	0.066*** (0.019)	0.034 (0.026)	0.069*** (0.017)	0.035 (0.024)	0.069*** (0.017)	0.035 (0.024)
Democracy \times Mobility Experience		0.059* (0.032)		0.050 (0.032)		0.049 (0.032)		0.049 (0.032)
Democracy	-0.145 (0.145)	1.874** (0.950)	-0.096 (0.150)	1.211*** (0.314)	-0.164 (0.168)	1.569** (0.687)	-0.164 (0.168)	1.569** (0.687)
Number of individuals	23348	23348	23348	23348	23348	23348	23348	23348
Number of countries	25	25	25	25	25	25	25	25
pseudo R^2	0.035	0.040	0.035	0.045	0.035	0.045	0.035	0.045

Notes: This tables mirrors the regressions of table 1 but **including North Macedonia and Russia**, two influential outliers, in the sample. * $p < .1$, ** $p < .05$, *** $p < .01$ (Sources: [LiTS](#); [WEO](#); [WGI](#); [V-Dem](#))

Table A6: Main Results Gini - Democracy Index

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Total Inequality	2.658 (2.204)	11.763*** (1.868)			3.954 (2.494)	-7.554 (7.809)		
Democracy Index \times Total Inequality		-0.184*** (0.032)				0.172 (0.142)		
Unfair Inequality			0.229 (2.184)	14.443*** (2.080)	-2.196 (2.174)	23.308** (9.768)	1.759 (2.424)	15.754*** (2.551)
Democracy Index \times Unfair Inequality				-0.255*** (0.035)		-0.435** (0.172)		-0.263*** (0.047)
Inequality Residual							3.954 (2.494)	-7.554 (7.809)
Democracy Index \times Inequality Residual								0.172 (0.142)
Consumption Decile	0.018*** (0.006)	0.007 (0.011)	0.018*** (0.006)	0.007 (0.011)	0.017*** (0.006)	0.007 (0.011)	0.017*** (0.006)	0.007 (0.011)
Democracy Index \times Consumption Decile		0.000 (0.000)		0.000 (0.000)		0.000 (0.000)		0.000 (0.000)
Mobility Experience	0.071*** (0.020)	0.010 (0.048)	0.065*** (0.020)	0.005 (0.043)	0.071*** (0.020)	0.004 (0.044)	0.071*** (0.020)	0.004 (0.044)
Democracy Index \times Mobility Experience		0.001 (0.001)		0.001* (0.001)		0.001* (0.001)		0.001* (0.001)
Democracy Index	-0.007 (0.005)	0.048*** (0.010)	-0.005 (0.005)	0.018*** (0.005)	-0.008* (0.005)	-0.017 (0.027)	-0.008* (0.005)	-0.017 (0.027)
Number of individuals	21691	21691	21691	21691	21691	21691	21691	21691
Number of countries	23	23	23	23	23	23	23	23
pseudo R^2	0.034	0.043	0.032	0.045	0.034	0.046	0.034	0.046

Notes: This tables mirrors the regressions of table 1 but instead of a binary democracy indicator a **continuous democracy index** (V-Dem) is used. * $p < .1$, ** $p < .05$, *** $p < .01$ (Sources: [LiTS](#); [WEO](#); [WGI](#); [V-Dem](#))

Table A7: Main Results MLD - Democracy Index

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Total Inequality (MLD)	2.014 (1.353)	11.435*** (1.465)			2.556* (1.398)	3.046 (5.093)		
Democracy Index \times Total Inequality (MLD)		-0.185*** (0.027)				-0.022 (0.098)		
Unfair Inequality (MLD)			0.597 (5.694)	52.288*** (8.203)	-4.736 (5.357)	41.892* (24.477)	-2.179 (5.083)	44.938** (19.686)
Democracy Index \times Unfair Inequality (MLD)				-0.862*** (0.150)		-0.748* (0.452)		-0.770** (0.359)
Inequality Residual(MLD)							2.556* (1.398)	3.046 (5.093)
Democracy Index \times Inequality Residual(MLD)								-0.022 (0.098)
Consumption Decile	0.018*** (0.006)	0.007 (0.011)	0.018*** (0.006)	0.007 (0.011)	0.018*** (0.006)	0.007 (0.011)	0.018*** (0.006)	0.007 (0.011)
Democracy Index \times Consumption Decile		0.000 (0.000)		0.000 (0.000)		0.000 (0.000)		0.000 (0.000)
Mobility Experience	0.069*** (0.020)	0.013 (0.050)	0.065*** (0.020)	0.013 (0.044)	0.067*** (0.020)	0.014 (0.048)	0.067*** (0.020)	0.014 (0.048)
Democracy Index \times Mobility Experience		0.001 (0.001)		0.001 (0.001)		0.001 (0.001)		0.001 (0.001)
Democracy Index	-0.007 (0.005)	0.019*** (0.005)	-0.005 (0.005)	0.010** (0.004)	-0.009* (0.005)	0.009 (0.008)	-0.009* (0.005)	0.009 (0.008)
Number of individuals	21691	21691	21691	21691	21691	21691	21691	21691
Number of countries	23	23	23	23	23	23	23	23
pseudo R^2	0.034	0.044	0.032	0.045	0.035	0.046	0.035	0.046

Notes: This tables mirrors the regressions of table [A6](#) but with the **mean log deviation (MLD)** as inequality measure.* $p < .1$, ** $p < .05$, *** $p < .01$ (Sources: [LiTS](#); [WEO](#); [WGI](#); [V-Dem](#))

AV Sensitivity Analysis

Table A8: Comparison UI Estimation Methodologies Gini - Results Democracy Indicator

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Total Inequality					7.087 (9.601)	11.709** (5.485)	11.156** (4.363)	15.157** (6.328)				
Democracy \times Total Inequality					-7.081 (10.608)	-13.810** (6.232)	-13.143** (5.486)	-17.411*** (6.646)				
UI Forest	11.397*** (2.235)				2.720 (12.368)				9.807*** (3.382)			
Democracy \times UI Forest	-14.368*** (2.321)				-5.487 (13.542)				-12.568*** (3.806)			
UI Standard		10.967*** (2.236)				-3.743 (7.006)				7.956*** (2.321)		
Democracy \times UI Standard		-12.002*** (3.105)				4.208 (8.193)				-9.602*** (3.290)		
UI CV			10.212*** (2.150)				-3.329 (5.445)				7.437*** (2.020)	
Democracy \times UI CV			-11.699*** (2.971)				3.333 (6.758)				-9.690*** (2.613)	
UI Lasso				10.428*** (2.171)				-10.034 (8.611)				6.134** (2.582)
Democracy \times UI Lasso				-12.044*** (2.975)				10.615 (9.539)				-7.793** (3.201)
Democracy	1.380*** (0.284)	0.973*** (0.354)	0.840** (0.331)	0.882** (0.361)	2.665 (2.042)	3.884*** (1.370)	3.789*** (1.308)	4.385*** (1.370)	2.665 (2.042)	3.885*** (1.370)	4.032*** (1.210)	4.604*** (1.395)
Number of individuals	21691	21691	21691	20418	21691	21691	21691	20418	21691	21691	21691	20418
Number of countries	23	23	23	22	23	23	23	22	23	23	23	22
pseudo R^2	0.043	0.040	0.039	0.040	0.043	0.043	0.043	0.044	0.043	0.043	0.043	0.044

Notes: The dependent variable is binary indicating support for democracy and reported coefficients are based on probit estimations. The regression models correspond to columns 4, 6 and 8 in table 1 and estimation methodologies for the respective inequality concepts as measured by the Gini coefficient vary by column (Forest: 1,5,9; Standard: 2,6,10; CV: 3,7,11; and Lasso: 4,8,12; see section [A11](#) for details). All regressions include individual-level and country-level controls (see section 3). * $p < .1$, ** $p < .05$, *** $p < .01$ (Sources: [LiTS](#); [WEO](#); [WGI](#); [V-Dem](#))

Table A9: Comparison UI Estimation Methodologies Gini - Results Democracy Index

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Total Inequality					-7.554 (7.809)	-1.796 (3.911)	4.756* (2.797)	-1.338 (4.152)				
V-Dem Index \times Total Inequality					0.172 (0.142)	0.048 (0.072)	-0.058 (0.060)	0.022 (0.068)				
UI Forest	14.443*** (2.080)				23.308** (9.768)				15.754*** (2.551)			
V-Dem Index \times UI Forest	-0.255*** (0.035)				-0.435** (0.172)				-0.263*** (0.047)			
UI Standard		17.070*** (2.880)				19.321*** (5.316)				17.526*** (3.089)		
V-Dem Index \times UI Standard		-0.292*** (0.047)				-0.343*** (0.098)				-0.295*** (0.049)		
UI CV			16.033*** (2.859)				11.567*** (4.446)				16.055*** (3.278)	
V-Dem Index \times UI CV			-0.259*** (0.045)				-0.194** (0.080)				-0.254*** (0.047)	
UI Lasso				16.762*** (2.640)				18.365*** (5.784)				16.835*** (2.747)
V-Dem Index \times UI Lasso				-0.293*** (0.040)				-0.321*** (0.096)				-0.295*** (0.039)
V-Dem Index	0.018*** (0.005)	0.015*** (0.005)	0.011** (0.005)	0.013*** (0.005)	-0.017 (0.027)	0.005 (0.015)	0.023* (0.014)	0.009 (0.013)	-0.017 (0.027)	0.005 (0.015)	0.033*** (0.013)	0.012 (0.014)
Number of individuals	21691	21691	21691	20418	21691	21691	21691	20418	21691	21691	21691	20418
Number of countries	23	23	23	22	23	23	23	22	23	23	23	22
pseudo R^2	0.045	0.047	0.044	0.047	0.046	0.047	0.045	0.047	0.046	0.047	0.045	0.047

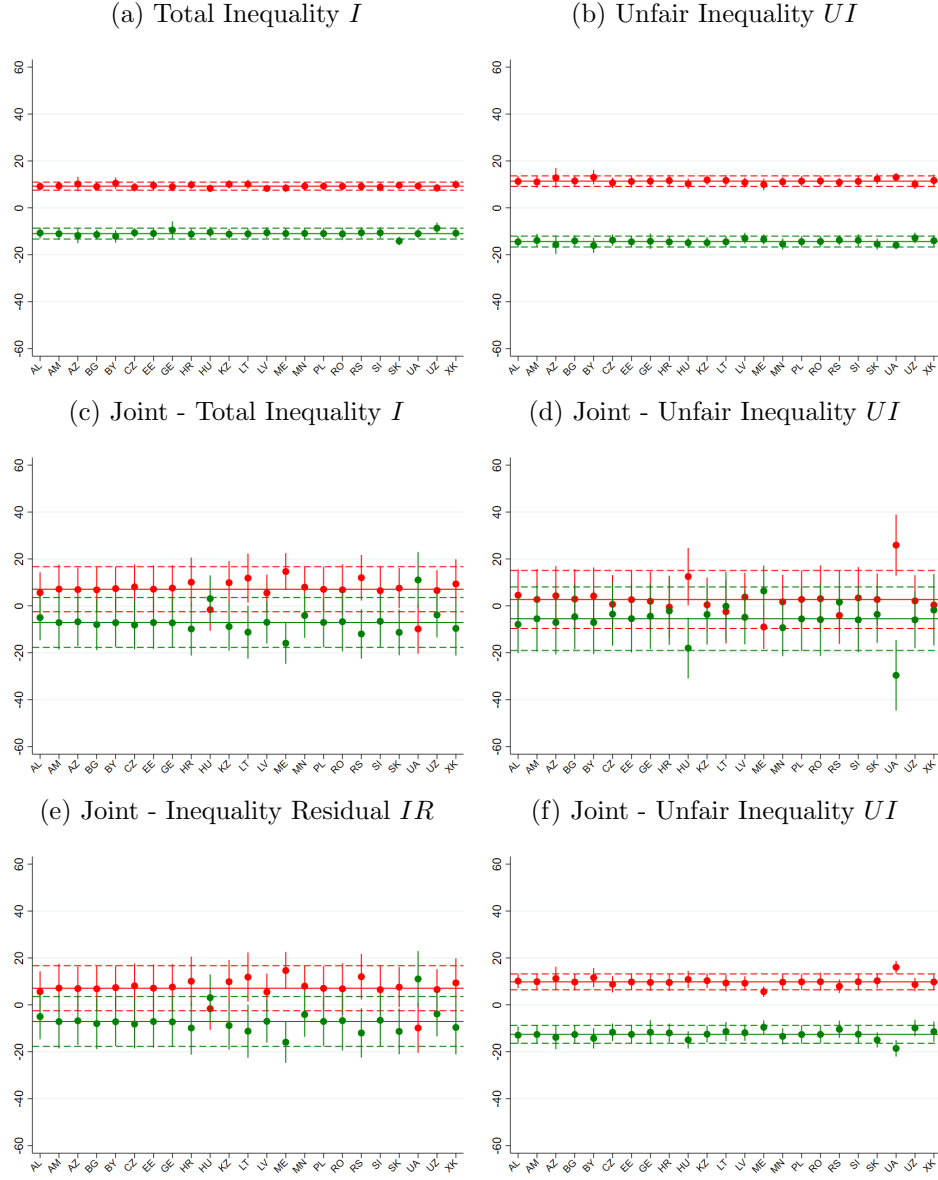
Notes: This tables mirrors the regressions of table [A8](#) but instead of a binary democracy indicator a **continuous democracy index** (V-Dem) is used. * $p < .1$, ** $p < .05$, *** $p < .01$ (Sources: [LiTS](#); [WEO](#); [WGI](#); [V-Dem](#))

Table A10: Full Sample *UI* Estimates

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
I Full Pop.	2.106 (2.048)	8.476*** (1.629)			2.825 (2.523)	1.027 (6.572)		
Democracy \times I Full Pop.		-10.268*** (2.107)				0.038 (8.018)		
UI Full Pop.			0.533 (2.369)	12.808*** (2.213)	-1.517 (2.624)	11.724 (10.383)	1.308 (2.363)	12.751*** (4.309)
Democracy \times UI Full Pop.				-16.691*** (2.560)		-16.245 (11.554)		-16.207*** (4.262)
IR Full Pop.							2.825 (2.523)	1.027 (6.572)
Democracy \times IR Full Pop.								0.038 (8.018)
Consumption Decile	0.018*** (0.006)	0.004 (0.007)	0.018*** (0.006)	0.004 (0.007)	0.018*** (0.006)	0.004 (0.007)	0.018*** (0.006)	0.004 (0.007)
Democracy \times Consumption Decile		0.018* (0.010)		0.018* (0.010)		0.018* (0.010)		0.018* (0.010)
Mobility Experience	0.068*** (0.019)	0.020 (0.028)	0.064*** (0.020)	0.012 (0.026)	0.069*** (0.019)	0.014 (0.026)	0.069*** (0.019)	0.014 (0.026)
Democracy \times Mobility Experience		0.066* (0.034)		0.071** (0.033)		0.071** (0.034)		0.071** (0.034)
Democracy	-0.098 (0.166)	3.149*** (0.745)	-0.053 (0.170)	1.671*** (0.335)	-0.128 (0.168)	1.583 (1.441)	-0.128 (0.168)	1.583 (1.441)
Number of individuals	21691	21691	21691	21691	21691	21691	21691	21691
Number of countries	23	23	23	23	23	23	23	23
pseudo R^2	0.032	0.042	0.031	0.043	0.033	0.043	0.033	0.043

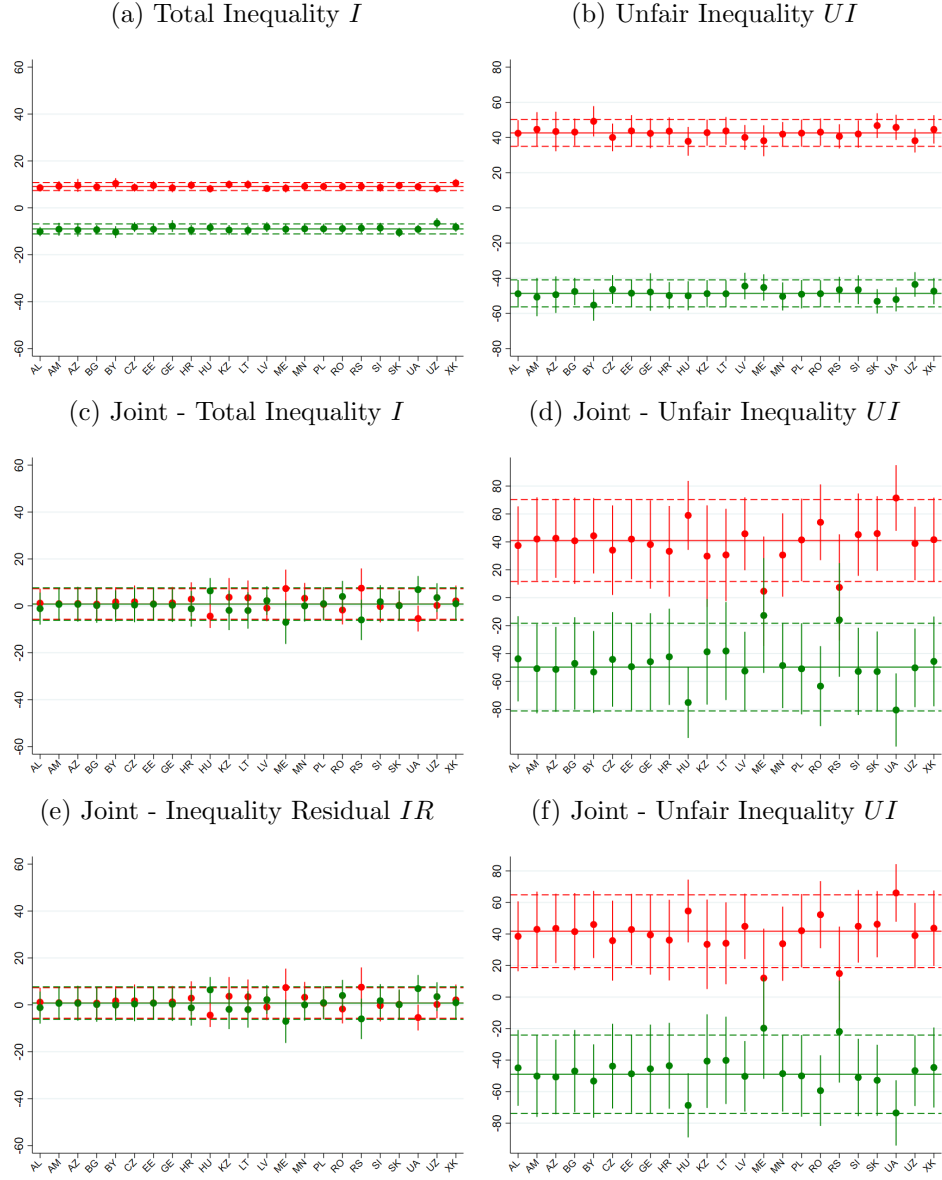
Notes: This tables mirrors the regressions of table 1 but *UI estimates* used are **based on the full sample of the population** (i.e., without working age restriction). * $p < .1$, ** $p < .05$, *** $p < .01$ (Sources: [LiTS](#); [WEO](#); [WGI](#); [V-Dem](#))

Figure A3: Coefficient Robustness - leave one out



Notes: The figures depict the coefficients for the respective inequality measure based on the **Gini coefficient** (red) and its interaction term with the democracy indicator (green) in table 1 (column 2 for (a), 4 for (b), 6 for (c) and (d), 8 for (e) and (f)) where each time one country (indicated on the x-axis) is omitted from the analysis. Like in the main results, Russia and North Macedonia are excluded from the sample. Further displayed as dashed lines are the coefficients' 95% confidence intervals based on the main sample (Sources: [LiTS](#); [WEO](#); [WGI](#); [V-Dem](#)).

Figure A4: Coefficient Robustness - leave one out - MLD



Notes: This figure mirrors the analysis of figure A3 but with the **mean log deviation (MLD)** as inequality measure. (Sources: [LiTS](#); [WEO](#); [WGI](#); [V-Dem](#))

Table A11: Interaction sociotropic and egocentric Dimension

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Total Inequality	9.249*** (1.710)	10.018*** (1.678)			7.087 (9.601)	8.120 (9.675)		
Democracy \times Total Inequality	-10.975*** (2.323)	-10.993*** (2.333)			-7.081 (10.608)	-7.015 (10.608)		
Unfair Inequality			11.397*** (2.235)	10.491*** (2.232)	2.720 (12.368)	1.273 (12.601)	9.807*** (3.382)	9.393*** (3.512)
Democracy \times Unfair Inequality			-14.368*** (2.321)	-14.355*** (2.315)	-5.487 (13.542)	-5.538 (13.559)	-12.568*** (3.806)	-12.553*** (3.824)
Inequality Residual							7.087 (9.601)	8.120 (9.675)
Democracy \times Inequality Residual							-7.081 (10.608)	-7.015 (10.608)
Consumption Decile	0.004 (0.007)	0.045 (0.033)	0.004 (0.007)	-0.013 (0.025)	0.004 (0.007)	0.037 (0.037)	0.004 (0.007)	0.037 (0.037)
Democracy \times Consumption Decile	0.018* (0.010)	0.018** (0.009)	0.018* (0.010)	0.019* (0.011)	0.018* (0.010)	0.020** (0.010)	0.018* (0.010)	0.020** (0.010)
Total Inequality \times Consumption Decile		-0.135 (0.102)				-0.199* (0.109)		
Unfair Inequality \times Consumption Decile				0.168 (0.210)		0.275 (0.213)		0.076 (0.213)
Inequality Residual \times Consumption Decile								-0.199* (0.109)
Mobility Experience	0.025 (0.028)	0.043 (0.132)	0.026 (0.029)	0.046 (0.089)	0.027 (0.028)	0.021 (0.148)	0.027 (0.028)	0.021 (0.148)
Democracy \times Mobility Experience	0.063* (0.034)	0.063* (0.034)	0.056 (0.036)	0.055 (0.038)	0.058* (0.035)	0.057 (0.037)	0.058* (0.035)	0.057 (0.037)
Total Inequality \times Mobility Experience		-0.058 (0.394)				0.080 (0.336)		
Unfair Inequality \times Mobility Experience				-0.187 (0.724)		-0.183 (0.650)		-0.103 (0.795)
Inequality Residual \times Mobility Experience								0.080 (0.336)
Democracy	3.373*** (0.824)	3.376*** (0.828)	1.380*** (0.284)	1.375*** (0.282)	2.665 (2.042)	2.637 (2.038)	2.665 (2.042)	2.637 (2.038)
Number of individuals	21691	21691	21691	21691	21691	21691	21691	21691
Number of countries	23	23	23	23	23	23	23	23
pseudo R^2	0.043	0.043	0.043	0.043	0.043	0.044	0.043	0.044

Notes: The dependent variable is binary indicating support for democracy and reported coefficients are based on probit estimations. **Additional** to the specification of the main analysis (columns 1,3,5; equation (2)), **interaction terms** between the respective **inequality measure** and the **individual's rank in the consumption expenditure distribution and mobility experience** are included (columns 2,4,6). All regressions include individual-level and country-level controls (see section 3). * $p < .1$, ** $p < .05$, *** $p < .01$ (Sources: [LiTS](#); [WEO](#); [WGI](#); [V-Dem](#))

Table A12: Cohort Effects

	(1)	(2)	(3)	(4)	(5)	(6)
Total Inequality	9.298*** (1.704)	9.190*** (1.716)			7.132 (9.584)	7.143 (9.656)
Democracy \times Total Inequality	-11.031*** (2.314)	-10.968*** (2.344)			-7.159 (10.590)	-7.241 (10.652)
Unfair Inequality			11.467*** (2.227)	11.342*** (2.241)	2.729 (12.347)	2.583 (12.403)
Democracy \times Unfair Inequality			-14.411*** (2.318)	-14.279*** (2.316)	-5.450 (13.519)	-5.260 (13.562)
Consumption Decile	0.004 (0.007)	0.003 (0.007)	0.004 (0.007)	0.003 (0.007)	0.004 (0.007)	0.003 (0.007)
Democracy \times Consumption Decile	0.018* (0.010)	0.019* (0.010)	0.018* (0.010)	0.019* (0.010)	0.018* (0.010)	0.019* (0.010)
Mobility Experience	0.025 (0.028)	0.023 (0.028)	0.026 (0.030)	0.025 (0.031)	0.027 (0.028)	0.026 (0.029)
Democracy \times Mobility Experience	0.063* (0.034)	0.066* (0.035)	0.056 (0.036)	0.058 (0.038)	0.059* (0.035)	0.061* (0.037)
born 1985-1976	-0.008 (0.034)	-0.016 (0.053)	-0.005 (0.034)	-0.013 (0.052)	-0.008 (0.034)	-0.016 (0.053)
born 1975-1966	0.029 (0.053)	0.065 (0.058)	0.034 (0.052)	0.066 (0.058)	0.029 (0.053)	0.064 (0.059)
born 1965-1956	-0.066 (0.062)	0.035 (0.114)	-0.058 (0.061)	0.038 (0.114)	-0.063 (0.063)	0.034 (0.114)
born 1955-1946	-0.124* (0.074)	-0.035 (0.145)	-0.113 (0.073)	-0.030 (0.144)	-0.119 (0.073)	-0.036 (0.145)
born <1946	-0.221*** (0.058)	-0.164* (0.089)	-0.215*** (0.057)	-0.161* (0.090)	-0.217*** (0.057)	-0.168* (0.089)
born 1985-1976 \times Democracy		0.010 (0.067)		0.011 (0.067)		0.011 (0.067)
born 1975-1966 \times Democracy		-0.057 (0.062)		-0.050 (0.064)		-0.054 (0.062)
born 1965-1956 \times Democracy		-0.148 (0.109)		-0.141 (0.111)		-0.142 (0.107)
born 1955-1946 \times Democracy		-0.127 (0.161)		-0.119 (0.163)		-0.118 (0.160)
born <1946 \times Democracy		-0.084 (0.103)		-0.080 (0.107)		-0.074 (0.102)
Democracy	3.391*** (0.821)	3.430*** (0.815)	1.386*** (0.284)	1.425*** (0.293)	2.688 (2.039)	2.749 (2.028)
Number of individuals	21691	21691	21691	21691	21691	21691
Number of countries	23	23	23	23	23	23
pseudo R^2	0.043	0.043	0.043	0.044	0.044	0.044

Notes: This tables mirrors the regressions of table 1 but additional to the specification of the main analysis (columns 1, 3, 5 and 7), **interaction terms** between the respective **inequality measure and cohort dummies** are included (columns 2, 4, 6 and 8). * $p < .1$, ** $p < .05$, *** $p < .01$ (Sources: [LiTS](#); [WEO](#); [WGI](#); [V-Dem](#))

Table A13: Poverty Interaction - Absolute Poverty

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Total Inequality	4.117** (1.862)	-144.044** (72.633)	-459.854 (319.978)				5.400*** (1.986)	-100.199 (87.208)	1.166 (406.611)
Total Inequality \times (1-Poverty)		150.431** (73.722)	462.178 (319.041)					108.212 (88.408)	1.011 (410.874)
Democracy \times Total Inequality			557.342* (335.144)						1.224 (447.824)
Democracy \times Total Inequality \times (1-Poverty)			-559.439* (336.649)						1.118 (454.225)
Unfair Inequality				-0.002 (2.508)	-215.658 (362.447)	-1543.896 (1874.570)	-2.638 (2.468)	-296.991 (328.127)	-0.232 ()
Unfair Inequality \times (1-Poverty)					216.528 (364.014)	1546.023 (1872.347)		294.851 (329.445)	-0.611 (9.737)
Democracy \times Unfair Inequality						1943.285 (1840.544)			-0.912 (335.545)
Democracy \times Unfair Inequality \times (1-Poverty)						-1948.647 (1839.601)			-1.064 (344.692)
Poverty	-6.833** (3.448)	43.234* (25.394)	201.985* (107.855)	-3.979 (4.834)	24.240 (48.603)	235.452 (235.844)	-4.927 (4.350)	69.577** (33.712)	46.993 (140.640)
Democracy \times Poverty			-244.132** (112.945)			-294.859 (231.308)			-54.382 (135.842)
Consumption Decile	0.018*** (0.006)	0.018*** (0.006)	0.003 (0.006)	0.018*** (0.006)	0.018*** (0.006)	0.002 (0.007)	0.018*** (0.006)	0.018*** (0.006)	0.003 (0.006)
Democracy \times Consumption Decile			0.020** (0.010)			0.020** (0.010)			0.020** (0.010)
Mobility Experience	0.060*** (0.017)	0.062*** (0.016)	0.029* (0.016)	0.056*** (0.017)	0.055*** (0.017)	0.030* (0.017)	0.060*** (0.017)	0.061*** (0.017)	0.031* (0.017)
Democracy \times Mobility Experience			0.053** (0.025)			0.051* (0.026)			0.049* (0.026)
Democracy	-0.081 (0.170)	-0.131 (0.158)	1.013 (1.499)	-0.023 (0.181)	-0.018 (0.172)	0.874*** (0.209)	-0.146 (0.190)	-0.202 (0.181)	-0.341 (2.226)
Number of individuals	20620	20620	20620	20620	20620	20620	20620	20620	20620
Number of countries	21	21	21	21	21	21	21	21	21
pseudo R^2	0.032	0.033	0.041	0.029	0.029	0.041	0.032	0.035	0.042

Notes: This table augments the main specification (table 1) via controlling for absolute poverty (**headcount ratio** < 1.90 US\$ 2011 PPP) which reduces the sample by two non-democracies (Azerbaijan and Uzbekistan) due to no data availability. Columns 1, 4 and 7 report model specifications without an interaction between inequality measures and a democracy indicator (equation (1)) but controlling for poverty. Columns 2, 5 and 8 include an interaction of the respective inequality measure with poverty à la [Marrero and Rodríguez \(2023\)](#). Columns 3, 6 and 9 include an additional interaction with a democracy indicator. All regressions include individual-level and country-level controls (see section 3). * $p < .1$, ** $p < .05$, *** $p < .01$ (Sources: [LITS](#); [WEO](#); [WGI](#); [V-Dem](#); [PIP](#))

Table A14: Poverty Interaction - Relative Poverty

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Total Inequality	5.105** (2.410)	-40.031 (27.563)	122.196 (82.633)				5.179** (2.558)	-190.073*** (30.304)	-1597.713 (1042.347)
Total Inequality \times (1-Poverty)		54.875 (33.430)	-131.421 (102.016)					241.821*** (38.122)	1980.423 (1280.856)
Democracy \times Total Inequality			-99.085 (65.069)						1436.448 (942.015)
Democracy \times Total Inequality \times (1-Poverty)			105.322 (81.383)						-1777.651 (1155.578)
Unfair Inequality				1.469 (3.223)	-0.235 (52.326)	220.897*** (80.291)	-0.231 (3.050)	199.205*** (53.835)	2153.061* (1243.548)
Unfair Inequality \times (1-Poverty)					1.992 (60.689)	-241.115** (99.564)		-247.455*** (64.961)	-2620.181* (1519.505)
Democracy \times Unfair Inequality						-115.646** (58.498)			-1997.544 (1242.841)
Democracy \times Unfair Inequality \times (1-Poverty)						116.964 (73.150)			2425.729 (1510.409)
Poverty	-3.608** (1.740)	12.754 (9.707)	-40.348 (24.774)	-1.466 (2.605)	-1.245 (7.378)	-25.224*** (6.368)	-3.515 (2.320)	46.203*** (8.031)	322.892 (227.400)
Democracy \times Poverty			27.787 (19.282)			7.144 (6.898)			-282.016 (185.707)
Consumption Decile	0.018*** (0.006)	0.018*** (0.006)	0.004 (0.007)	0.018*** (0.006)	0.018*** (0.006)	0.004 (0.007)	0.018*** (0.006)	0.017*** (0.006)	0.004 (0.007)
Democracy \times Consumption Decile			0.018* (0.010)			0.017* (0.010)			0.017* (0.010)
Mobility Experience	0.069*** (0.019)	0.066*** (0.018)	0.031 (0.028)	0.063*** (0.019)	0.063*** (0.019)	0.020 (0.024)	0.069*** (0.019)	0.061*** (0.017)	0.017 (0.024)
Democracy \times Mobility Experience			0.058* (0.034)			0.064** (0.031)			0.068** (0.032)
Democracy	-0.087 (0.150)	-0.076 (0.135)	-0.960 (3.956)	-0.006 (0.179)	-0.009 (0.199)	1.024 (0.953)	-0.094 (0.165)	-0.102 (0.176)	58.207 (35.390)
Number of individuals	21691	21691	21691	21691	21691	21691	21691	21691	21691
Number of countries	23	23	23	23	23	23	23	23	23
pseudo R^2	0.035	0.037	0.047	0.032	0.032	0.049	0.035	0.046	0.051

Notes: This tables mirrors the regressions of table A13 but with the **share of individuals with less than 60% of median consumption expenditure** as relative poverty measure.* $p < .1$, ** $p < .05$, *** $p < .01$ (Sources: [LITS](#); [WEO](#); [WGI](#); [V-Dem](#))

Table A15: Growth Interaction - 3 Year Annualized Growth

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Total Inequality	2.043 (2.286)	-94.042 (141.030)	362.828** (175.295)				3.877* (2.075)	-632.098** (284.836)	-227.420 (555.074)
Total Inequality × (1-Growth)		99.084 (145.546)	-361.621** (178.659)					661.267** (296.605)	240.307 (568.507)
Democracy × Total Inequality			-255.152** (128.212)						-234.499 (468.335)
Democracy × Total Inequality × (1-Growth)			248.726* (132.135)						245.497 (478.514)
Unfair Inequality				-0.580 (2.410)	-147.788 (94.491)	415.243*** (98.137)	-3.008* (1.783)	253.342 (194.355)	551.143 (456.743)
Unfair Inequality × (1-Growth)					151.076 (96.673)	-411.085*** (99.670)		-271.455 (202.162)	-558.686 (465.487)
Democracy × Unfair Inequality						-540.500*** (181.518)			-578.369 (439.359)
Democracy × Unfair Inequality × (1-Growth)						535.681*** (186.159)			575.139 (446.934)
Growth	12.255*** (3.928)	40.634 (40.861)	-97.130* (52.341)	12.954*** (4.856)	29.937** (12.883)	-31.366*** (9.986)	13.173*** (4.535)	174.440*** (66.322)	21.077 (120.566)
Democracy × Growth			81.595** (39.838)			64.520*** (20.958)			139.989 (98.647)
Consumption Decile	0.017*** (0.006)	0.017*** (0.006)	0.003 (0.007)	0.017*** (0.006)	0.016*** (0.006)	0.003 (0.007)	0.016*** (0.006)	0.017*** (0.006)	0.003 (0.007)
Democracy × Consumption Decile			0.017* (0.010)			0.018* (0.010)			0.018* (0.010)
Mobility Experience	0.068*** (0.018)	0.066*** (0.017)	0.019 (0.023)	0.062*** (0.018)	0.062*** (0.018)	0.022 (0.023)	0.068*** (0.017)	0.061*** (0.016)	0.022 (0.025)
Democracy × Mobility Experience			0.072** (0.032)			0.058* (0.032)			0.054* (0.033)
Democracy	-0.171 (0.147)	-0.135 (0.153)	1.811 (1.469)	-0.132 (0.165)	-0.183 (0.168)	0.142 (0.541)	-0.249 (0.161)	-0.134 (0.175)	-3.368 (3.167)
Number of individuals	21691	21691	21691	21691	21691	21691	21691	21691	21691
Number of countries	23	23	23	23	23	23	23	23	23
pseudo R^2	0.039	0.039	0.048	0.038	0.039	0.050	0.040	0.044	0.053

Notes: Analysis à la [Marrero and Rodríguez \(2023\)](#) analogous to table A13 but instead of poverty using **3 year annualized growth (2013-2015)**. All regressions include individual-level and country-level controls (see section 3). * $p < .1$, ** $p < .05$, *** $p < .01$ (Sources: [LiTS](#); [WEO](#); [WGI](#); [V-Dem](#))

Table A16: Growth Interaction - 5 Year Annualized Growth

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Total Inequality	2.473 (2.069)	-107.976 (66.777)	-121.782 (218.136)				3.615 (2.502)	-314.918*** (45.270)	378.198 (642.967)
Total Inequality × (1-Growth)		115.360* (69.163)	129.567 (222.047)					339.282*** (49.068)	-404.556 (665.507)
Democracy × Total Inequality			88.809 (235.254)						-499.338 (638.037)
Democracy × Total Inequality × (1-Growth)			-95.484 (240.316)						538.444 (659.077)
Unfair Inequality				0.388 (2.140)	-79.394 (98.071)	-132.078 (348.510)	-1.852 (2.384)	40.353 (52.871)	-1069.184 (1097.353)
Unfair Inequality × (1-Growth)					82.491 (101.955)	140.311 (351.453)		-53.997 (55.552)	1108.399 (1120.336)
Democracy × Unfair Inequality						66.851 (314.775)			973.353 (1044.656)
Democracy × Unfair Inequality × (1-Growth)						-74.832 (316.598)			-1016.489 (1064.172)
Democracy × Growth			-42.623 (75.592)			-24.270 (39.639)			20.051 (82.136)
Consumption Decile	0.018*** (0.006)	0.018*** (0.006)	0.004 (0.007)	0.018*** (0.006)	0.018*** (0.006)	0.004 (0.007)	0.018*** (0.006)	0.018*** (0.006)	0.004 (0.007)
Democracy × Consumption Decile			0.017* (0.010)			0.018* (0.010)			0.018* (0.010)
Mobility Experience	0.069*** (0.019)	0.063*** (0.018)	0.014 (0.024)	0.064*** (0.020)	0.064*** (0.020)	0.021 (0.024)	0.070*** (0.019)	0.052*** (0.016)	0.010 (0.023)
Democracy × Mobility Experience			0.076** (0.031)			0.065** (0.032)			0.070** (0.031)
Democracy	-0.119 (0.165)	-0.031 (0.160)	2.293 (1.683)	-0.055 (0.170)	-0.078 (0.160)	1.094*** (0.346)	-0.164 (0.171)	-0.141 (0.158)	-6.967 (4.844)
Growth									
Number of individuals	21691	21691	21691	21691	21691	21691	21691	21691	21691
Number of countries	23	23	23	23	23	23	23	23	23
pseudo R^2	0.033	0.036	0.045	0.031	0.032	0.047	0.033	0.044	0.050

Notes: Analysis à la [Marrero and Rodríguez \(2023\)](#) analogous to table A13 but instead of poverty using **5 year annualized growth (2011-2015)**. All regressions include individual-level and country-level controls (see section 3). * $p < .1$, ** $p < .05$, *** $p < .01$ (Sources: [LiTS](#); [WEO](#); [WGI](#); [V-Dem](#))

Table A17: Growth Interaction- lagged 5 Year Annualized Growth

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Total Inequality	1.183 (1.913)	13.982 (44.621)	136.500*** (22.405)				2.156 (2.749)	-192.143** (96.974)	-560.523 (639.542)
Total Inequality \times (1-Growth)		-13.606 (47.149)	-131.697*** (24.035)					201.478** (100.842)	577.049 (662.617)
Democracy \times Total Inequality			-148.182* (77.366)						605.137 (728.026)
Democracy \times Total Inequality \times (1-Growth)			144.496* (84.302)						-621.564 (754.349)
Unfair Inequality				-0.284 (1.666)	70.268 (56.512)	134.044*** (37.621)	-1.526 (2.433)	251.899* (129.719)	797.808 (731.284)
Unfair Inequality \times (1-Growth)					-73.858 (59.649)	-119.763*** (41.084)		-261.181* (134.427)	-803.654 (757.389)
Democracy \times Unfair Inequality						26.256 (152.178)			-741.274 (884.692)
Democracy \times Unfair Inequality \times (1-Growth)						-46.708 (159.356)			742.835 (912.415)
Growth	-3.223** (1.572)	-6.768 (11.589)	-29.540*** (6.332)	-3.625*** (1.346)	-8.103** (3.169)	-1.041 (3.079)	-3.132** (1.589)	32.624* (18.622)	103.540 (121.693)
Democracy \times Growth			30.465 (25.018)			-18.685 (18.385)			-126.698 (141.854)
Consumption Decile	0.018*** (0.006)	0.018*** (0.006)	0.004 (0.007)	0.018*** (0.006)	0.018*** (0.006)	0.004 (0.007)	0.018*** (0.006)	0.017*** (0.006)	0.004 (0.007)
Democracy \times Consumption Decile			0.017* (0.010)			0.017* (0.010)			0.017* (0.010)
Mobility Experience	0.066*** (0.019)	0.066*** (0.019)	0.009 (0.023)	0.063*** (0.020)	0.063*** (0.020)	0.008 (0.022)	0.067*** (0.019)	0.066*** (0.019)	0.012 (0.023)
Democracy \times Mobility Experience			0.083*** (0.031)			0.082*** (0.030)			0.074** (0.031)
Democracy	-0.088 (0.168)	-0.087 (0.169)	1.720 (2.296)	-0.062 (0.164)	-0.096 (0.167)	2.728*** (0.900)	-0.126 (0.175)	-0.101 (0.172)	5.292 (6.253)
Number of individuals	21691	21691	21691	21691	21691	21691	21691	21691	21691
Number of countries	23	23	23	23	23	23	23	23	23
pseudo R^2	0.035	0.035	0.046	0.035	0.037	0.048	0.036	0.039	0.049

Notes: Analysis à la [Marrero and Rodríguez \(2023\)](#) analogous to table A13 but instead of poverty using **lagged 5 year annualized growth (2006-2010)**. All regressions include individual-level and country-level controls (see section 3). * $p < .1$, ** $p < .05$, *** $p < .01$ (Sources: [LITS](#); [WEO](#); [WGI](#); [V-Dem](#))

Table A18: Country-level Controls - Different GDP per capita Controls

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Total Inequality	7.182 (9.593)	7.362 (9.607)	1.884 (8.815)	0.672 (9.285)				
Democracy \times Total Inequality	-7.159 (10.599)	-7.331 (10.593)	-1.093 (9.915)	0.348 (10.343)				
Unfair Inequality	2.644 (12.348)	2.384 (12.363)	9.976 (11.246)	11.471 (11.692)	9.826*** (3.373)	9.746*** (3.369)	11.861*** (3.190)	12.143*** (3.194)
Democracy \times Unfair Inequality	-5.411 (13.524)	-5.184 (13.519)	-13.193 (12.271)	-14.633 (12.596)	-12.570*** (3.802)	-12.515*** (3.791)	-14.286*** (3.790)	-14.286*** (3.802)
Inequality Residual					7.182 (9.593)	7.362 (9.607)	1.884 (8.815)	0.672 (9.285)
Democracy \times Inequality Residual					-7.159 (10.599)	-7.331 (10.593)	-1.093 (9.915)	0.348 (10.343)
Consumption Decile	0.003 (0.007)	0.003 (0.007)	0.004 (0.007)	0.004 (0.007)	0.003 (0.007)	0.003 (0.007)	0.004 (0.007)	0.004 (0.007)
Democracy \times Consumption Decile	0.018* (0.010)	0.018* (0.010)	0.018* (0.010)	0.017* (0.010)	0.018* (0.010)	0.018* (0.010)	0.018* (0.010)	0.017* (0.010)
Mobility Experience	0.027 (0.028)	0.027 (0.028)	0.025 (0.030)	0.024 (0.030)	0.027 (0.028)	0.027 (0.028)	0.025 (0.030)	0.024 (0.030)
Democracy \times Mobility Experience	0.059* (0.035)	0.059* (0.035)	0.058 (0.038)	0.059 (0.038)	0.059* (0.035)	0.059* (0.035)	0.058 (0.038)	0.059 (0.038)
Democracy	2.681 (2.041)	2.711 (2.038)	1.588 (2.006)	1.279 (2.117)	2.681 (2.041)	2.711 (2.038)	1.588 (2.006)	1.279 (2.117)
log GDP per capita 2015	-0.333 (0.234)				-0.333 (0.234)			
log GDP per capita 2010		-0.349 (0.236)				-0.349 (0.236)		
GDP per capita 2015			-0.000 (0.000)				-0.000 (0.000)	
GDP per capita 2010				0.000 (0.000)				0.000 (0.000)
Number of individuals	21691	21691	21691	21691	21691	21691	21691	21691
Number of countries	23	23	23	23	23	23	23	23
pseudo R^2	0.044	0.044	0.043	0.043	0.044	0.044	0.043	0.043

Notes: This tables mirrors the regressions of table 1 but using **different measures of GDP per capita as control**. * $p < .1$, ** $p < .05$, *** $p < .01$ (Sources: [LITS](#); [WEO](#); [WGI](#); [V-Dem](#))

Table A19: Country-level Controls - Contemporary Controls

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Total Inequality	2.090 (2.034)	9.836*** (2.067)			2.506 (2.237)	7.153 (8.572)		
Democracy × Total Inequality		-11.019*** (2.566)				-7.301 (8.941)		
Unfair Inequality			0.339 (2.119)	12.164*** (2.799)	-0.953 (2.109)	3.372 (10.962)	1.553 (2.411)	10.525*** (3.392)
Democracy × Unfair Inequality				-14.850*** (2.697)		-5.875 (11.487)		-13.176*** (3.679)
Inequality Residual							2.506 (2.237)	7.153 (8.572)
Democracy × Inequality Residual								-7.301 (8.941)
Consumption Decile	0.017*** (0.006)	0.004 (0.007)	0.017*** (0.006)	0.004 (0.007)	0.017*** (0.006)	0.004 (0.007)	0.017*** (0.006)	0.004 (0.007)
Democracy × Consumption Decile		0.017* (0.010)		0.018* (0.010)		0.017* (0.010)		0.017* (0.010)
Mobility Experience	0.070*** (0.019)	0.021 (0.028)	0.063*** (0.020)	0.023 (0.030)	0.070*** (0.019)	0.024 (0.029)	0.070*** (0.019)	0.024 (0.029)
Democracy × Mobility Experience		0.071** (0.033)		0.063* (0.035)		0.066* (0.035)		0.066* (0.035)
Democracy	-0.134 (0.160)	3.379*** (0.913)	-0.047 (0.147)	1.418*** (0.299)	-0.163 (0.183)	2.766 (1.769)	-0.163 (0.183)	2.766 (1.769)
Number of individuals	21691	21691	21691	21691	21691	21691	21691	21691
Number of countries	23	23	23	23	23	23	23	23
pseudo R^2	0.033	0.043	0.031	0.043	0.033	0.044	0.033	0.044

Notes: This tables mirrors the regressions of table 1 but using **contemporary (2015) macro economic controls**. * $p < .1$, ** $p < .05$, *** $p < .01$ (Sources: [LiTS](#); [WEO](#); [WGI](#); [V-Dem](#))

Table A20: Country-level Controls - No Controls

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Total Inequality	2.090* (1.243)	9.498*** (1.691)			1.596 (1.026)	2.828 (6.044)		
Democracy × Total Inequality		-9.124*** (1.832)				-2.391 (6.091)		
Unfair Inequality			2.978 (1.978)	13.782*** (2.373)	2.104 (1.830)	10.271 (8.336)	3.700* (2.247)	13.099*** (3.030)
Democracy × Unfair Inequality				-14.192*** (2.805)		-10.830 (8.447)		-13.220*** (3.375)
Inequality Residual							1.596 (1.026)	2.828 (6.044)
Democracy × Inequality Residual								-2.391 (6.091)
Consumption Decile	0.017*** (0.006)	0.004 (0.007)	0.017*** (0.005)	0.004 (0.007)	0.017*** (0.006)	0.004 (0.007)	0.017*** (0.006)	0.004 (0.007)
Democracy × Consumption Decile		0.018* (0.009)		0.018* (0.009)		0.018* (0.010)		0.018* (0.010)
Mobility Experience	0.059*** (0.021)	0.017 (0.040)	0.054** (0.022)	0.030 (0.038)	0.061*** (0.021)	0.028 (0.038)	0.061*** (0.021)	0.028 (0.038)
Democracy × Mobility Experience		0.061 (0.047)		0.044 (0.045)		0.049 (0.046)		0.049 (0.046)
Democracy	-0.014 (0.139)	2.709*** (0.518)	0.015 (0.136)	1.342*** (0.265)	-0.000 (0.131)	1.733 (1.134)	-0.000 (0.131)	1.733 (1.134)
Number of individuals	21691	21691	21691	21691	21691	21691	21691	21691
Number of countries	23	23	23	23	23	23	23	23
pseudo R^2	0.025	0.036	0.024	0.037	0.026	0.037	0.026	0.037

Notes: This tables mirrors the regressions of table 1 but **without macro economic controls**. * $p < .1$, ** $p < .05$, *** $p < .01$ (Sources: [LiTS](#); [WEO](#); [WGI](#); [V-Dem](#))

Table A21: Country-level Controls - Lasso Controls Selection

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Total Inequality	2.514 (2.078)	3.114 (2.038)			3.657 (2.510)	7.182 (9.593)		
Democracy \times Total Inequality		-0.566 (0.490)				-7.159 (10.599)		
Unfair Inequality			0.414 (2.152)	11.121*** (2.143)	-1.854 (2.390)	2.644 (12.348)	1.803 (2.269)	9.826*** (3.373)
Democracy \times Unfair Inequality				-14.060*** (2.455)		-5.411 (13.524)		-12.570*** (3.802)
Inequality Residual							3.657 (2.510)	7.182 (9.593)
Democracy \times Inequality Residual								-7.159 (10.599)
Consumption Decile	0.017*** (0.006)	0.017*** (0.006)	0.017*** (0.006)		0.017*** (0.006)	0.003 (0.007)	0.017*** (0.006)	0.003 (0.007)
Democracy \times Consumption Decile				0.022*** (0.007)		0.018* (0.010)		0.018* (0.010)
Mobility Experience	0.069*** (0.019)	0.071*** (0.019)	0.064*** (0.020)	0.029 (0.029)	0.070*** (0.019)	0.027 (0.028)	0.070*** (0.019)	0.027 (0.028)
Democracy \times Mobility Experience				0.053 (0.036)		0.059* (0.035)		0.059* (0.035)
Democracy	-0.118 (0.164)		-0.054 (0.169)	1.311*** (0.315)	-0.164 (0.170)	2.681 (2.041)	-0.164 (0.170)	2.681 (2.041)
Female	-0.059** (0.027)	-0.060** (0.027)	-0.060** (0.027)	-0.053** (0.024)	-0.058** (0.027)	-0.052** (0.024)	-0.058** (0.027)	-0.052** (0.024)
No/Primary Education	-0.069 (0.074)	-0.064 (0.074)	-0.065 (0.075)	-0.079 (0.075)	-0.074 (0.073)	-0.098 (0.074)	-0.074 (0.073)	-0.098 (0.074)
Tertiary Education	0.222*** (0.045)	0.222*** (0.045)	0.223*** (0.043)	0.249*** (0.045)	0.222*** (0.046)	0.254*** (0.041)	0.222*** (0.046)	0.254*** (0.041)
Life Satisfaction	0.155*** (0.041)	0.154*** (0.040)	0.151*** (0.041)	0.133*** (0.036)	0.149*** (0.043)	0.131*** (0.037)	0.149*** (0.043)	0.131*** (0.037)
Age ²	-0.000*** (0.000)	-0.000*** (0.000)	-0.000*** (0.000)	-0.000*** (0.000)	-0.000*** (0.000)	-0.000* (0.000)	-0.000*** (0.000)	-0.000* (0.000)
Communist Experience	0.100*** (0.027)	0.101*** (0.027)	0.099*** (0.027)	0.101*** (0.028)	0.101*** (0.027)	0.085** (0.037)	0.101*** (0.027)	0.085** (0.037)
Minority	-0.204*** (0.060)	-0.209*** (0.057)	-0.204*** (0.066)	-0.235*** (0.057)	-0.208*** (0.061)	-0.226*** (0.054)	-0.208*** (0.061)	-0.226*** (0.054)
log GDP per capita	-0.276 (0.270)	-0.280 (0.266)	-0.329 (0.259)	-0.273* (0.140)	-0.295 (0.269)	-0.333 (0.234)	-0.295 (0.269)	-0.333 (0.234)
GDP per capita Growth	-1.604 (3.545)	-1.248 (3.641)	0.620 (3.294)	-0.982 (2.702)	-2.900 (4.114)	-0.966 (3.965)	-2.900 (4.114)	-0.966 (3.965)
Unemployment	0.010 (0.010)	0.011 (0.010)	0.009 (0.010)	0.007 (0.007)	0.012 (0.011)	0.008 (0.008)	0.012 (0.011)	0.008 (0.008)
Gov. Expenditure	-0.004 (0.008)	-0.003 (0.008)	-0.004 (0.009)	-0.006 (0.008)	-0.006 (0.009)	-0.000 (0.014)	-0.006 (0.009)	-0.000 (0.014)
New EU Member	0.306** (0.122)	0.318*** (0.118)	0.202 (0.142)	0.239** (0.104)	0.401*** (0.141)	0.240 (0.191)	0.401*** (0.141)	0.240 (0.191)
Governance	0.092 (0.179)	0.109 (0.172)	0.092 (0.165)		0.105 (0.171)	-0.024 (0.102)	0.105 (0.171)	-0.024 (0.102)
Age						0.002 (0.005)		0.002 (0.005)
Constant	1.938 (3.094)	1.768 (3.028)	3.142 (2.971)	1.745 (1.494)	2.046 (3.173)	0.663 (2.360)	2.046 (3.173)	0.663 (2.360)
Number of individuals	21691	21691	21691	21691	21691	21691	21691	21691
Number of countries	23	23	23	23	23	23	23	23
pseudo R^2	0.033	0.034	0.031	0.043	0.033	0.044	0.033	0.044

Notes: This tables mirrors the regressions of table 1 but **control variables are selected via Lasso** (Tibshirani, 2011). Displayed results are based on reestimate models with the selected controls (post-Lasso procedure).* $p < .1$, ** $p < .05$, *** $p < .01$ (Sources: [LiTS](#); [WEO](#); [WGI](#); [V-Dem](#))

Table A22: Bootstrapped Standard Errors

	(1)	(2)	(3)	(4)	(5)	(6)
Total Inequality	2.496 (3.885)	9.288 (6.297)			3.641 (7.240)	7.182 (42.588)
Democracy \times Total Inequality		-10.996 (7.391)				-7.159 (44.450)
Unfair Inequality			0.398 (4.303)	11.432 (11.651)	-1.856 (8.115)	2.644 (56.613)
Democracy \times Unfair Inequality				-14.398 (11.817)		-5.411 (55.068)
Consumption Decile	0.017*** (0.005)	0.003 (0.007)	0.017*** (0.005)	0.003 (0.007)	0.017*** (0.006)	0.003 (0.008)
Democracy \times Consumption Decile		0.018* (0.009)		0.018* (0.010)		0.018* (0.009)
Mobility Experience	0.069*** (0.018)	0.025 (0.032)	0.064*** (0.019)	0.026 (0.034)	0.070*** (0.018)	0.027 (0.032)
Democracy \times Mobility Experience		0.064* (0.038)		0.056 (0.040)		0.059 (0.037)
Democracy	-0.119 (0.463)	3.379 (2.453)	-0.055 (0.445)	1.384 (1.397)	-0.165 (0.471)	2.681 (8.621)
Number of individuals	21691	21691	21691	21691	21691	21691
Number of countries	23	23	23	23	23	23
pseudo R^2	0.033	0.043	0.031	0.043	0.033	0.044
p -value Wald test β^{Ineq}	0.258	0.001	0.867	0.008	0.461	0.039

Notes: This tables mirrors the regressions of table 1 but provides **standard errors derived via score-based cluster bootstrapping** (Kline and Santos, 2012, see footnote 28 for details). Further, p -values for Wald-type tests for the (joint) exclusion of the coefficient of the respective inequality measure(s) based on such bootstrapping (200 repetitions) are reported. * $p < .1$, ** $p < .05$, *** $p < .01$ (Sources: LiTS; WEO; WGI; V-Dem)

AVI Multilevel Model

Following the notation of [Steenbergen and Jones \(2002\)](#), level 1 is the individual and level 2 is the country. Multilevel modeling accounts for observations being nested by explicitly modeling the proportion of variance that is attributable to within-cluster and between-cluster variation. The associated assumption of normally distributed random effects, though, imposes a structure on the data generating process unlike the model-free clustered standard errors. However, such an assumption may not be met in practice and the model structure also does not address the uncertainty of level 2 measures. Yet, multi-level modeling helps to address the country sample selection problem, i.e., outliers in country-level measures are captured by the random effect intercept.

Considering the most simple case with a varying intercept due to a country-level random effect ν_c and no cross-level interaction between levels (i.e., individual-level effects do not depend on country-level variables, e.g., the effect of an individual's education on her support for democracy is independent of the country's level of *UI*), as employed by [Ritter and Solt \(2019\)](#), a multi-level model to determine the effect of country-level *UI* on individual-level support for democracy consists of level 1 equation

$$support_{ic} = \alpha_{0c} + \alpha_{1c}X_{ic} + \epsilon_{ic} \quad (10)$$

and level 2 equation

$$\alpha_{0c} = \beta_{00} + \beta_{01}I_c + \beta_{02}Z_c + \nu_{c0}. \quad (11)$$

Assuming that the effect of individual-level predictors is fixed ($\alpha_{1c} = \beta_{10}$, i.e., no interaction between level 2 and level 1 predictors), substituting equation (11) in equation (10) yields

$$support_{ic} = \beta_{00} + \beta_{01}I_c + \beta_{02}Z_c + \beta_{10}X_{ic} + \nu_{c0} + \epsilon_{ic}. \quad (12)$$

Table A23: Multilevel Model - Democracy Indicator

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Total Inequality	1.867** (0.871)	3.218*** (0.955)			2.934** (1.344)	1.147 (4.369)		
Democracy \times Total Inequality		-4.428*** (1.113)				-1.649 (4.726)		
Unfair Inequality			1.396 (1.181)	4.262*** (1.187)	-1.320 (1.374)	2.724 (5.618)	1.614* (0.890)	3.871** (1.703)
Democracy \times Unfair Inequality				-5.678*** (1.351)		-3.772 (5.961)		-5.421*** (1.822)
Consumption Decile	0.001 (0.002)	0.001 (0.002)	0.001 (0.002)	0.001 (0.002)	0.001 (0.002)	0.001 (0.002)	0.001 (0.002)	0.001 (0.002)
Democracy \times Consumption Decile	0.007*** (0.003)	0.007*** (0.003)	0.007*** (0.003)	0.007*** (0.003)	0.007*** (0.003)	0.007*** (0.003)	0.007*** (0.003)	0.007*** (0.003)
Mobility Experience	0.006 (0.005)	0.006 (0.005)	0.006 (0.005)	0.006 (0.005)	0.006 (0.005)	0.006 (0.005)	0.006 (0.005)	0.006 (0.005)
Democracy \times Mobility Experience	0.026*** (0.006)	0.026*** (0.006)	0.026*** (0.006)	0.026*** (0.006)	0.026*** (0.006)	0.026*** (0.006)	0.026*** (0.006)	0.026*** (0.006)
Democracy	-0.049 (0.088)	1.397*** (0.376)	-0.043 (0.088)	0.562*** (0.158)	-0.050 (0.090)	0.896 (0.915)	-0.050 (0.090)	0.896 (0.914)
Number of individuals	21691	21691	21691	21691	21691	21691	21691	21691
Number of countries	23	23	23	23	23	23	23	23
Level 1 R^2	0.031	0.053	0.027	0.054	0.026	0.049	0.026	0.049
Level 2 R^2	0.023	0.409	-0.031	0.423	-0.049	0.337	-0.049	0.337

Notes: This tables mirrors the regressions of table 1 but based on the multi-level model structure presented in section [AVI](#). Standard errors are in parentheses. * $p < .1$, ** $p < .05$, *** $p < .01$ (Sources: [LiTS](#); [WEO](#); [WGI](#); [V-Dem](#))

Table A24: Multilevel Model - Democracy Index

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Total Inequality	2.116** (0.903)	4.224*** (0.996)			3.278** (1.374)	-3.306 (4.670)		
Democracy Index \times Total Inequality		-0.063*** (0.019)				0.080 (0.086)		
Unfair Inequality			1.499 (1.173)	5.003*** (1.096)	-1.366 (1.318)	8.847* (5.378)	1.912* (1.005)	5.540*** (1.284)
Democracy Index \times Unfair Inequality				-0.085*** (0.020)		-0.165* (0.096)		-0.085*** (0.023)
Inequality Residual							3.161** (1.390)	-3.306 (4.670)
Democracy Index \times Inequality Residual								0.080 (0.086)
Consumption Decile	0.002 (0.003)	0.002 (0.003)	0.002 (0.003)	0.002 (0.003)	0.002 (0.003)	0.002 (0.003)	0.002 (0.003)	0.002 (0.003)
Democracy Index \times Consumption Decile	0.000* (0.000)	0.000* (0.000)	0.000* (0.000)	0.000* (0.000)	0.000* (0.000)	0.000* (0.000)	0.000* (0.000)	0.000* (0.000)
Mobility Experience	-0.003 (0.007)	-0.002 (0.007)	-0.003 (0.007)	-0.002 (0.007)	-0.003 (0.007)	-0.002 (0.007)	-0.003 (0.007)	-0.002 (0.007)
Democracy Index \times Mobility Experience	0.001*** (0.000)	0.001*** (0.000)	0.001*** (0.000)	0.001*** (0.000)	0.001*** (0.000)	0.001*** (0.000)	0.001*** (0.000)	0.001*** (0.000)
Democracy Index	-0.003 (0.002)	0.015** (0.006)	-0.002 (0.002)	0.005** (0.002)	-0.002 (0.003)	-0.011 (0.017)	-0.003 (0.003)	-0.011 (0.017)
Number of individuals	21691	21691	21691	21691	21691	21691	21691	21691
Number of countries	23	23	23	23	23	23	23	23
Level 1 R^2	0.031	0.052	0.027	0.056	0.027	0.053	0.027	0.053
Level 2 R^2	0.031	0.396	-0.037	0.467	-0.040	0.414	-0.040	0.414

Notes: This tables mirrors the regressions of table [A6](#) but based on the multi-level model structure presented in section [AVI](#). Standard errors are in parentheses. * $p < .1$, ** $p < .05$, *** $p < .01$ (Sources: [LiTS](#); [WEO](#); [WGI](#); [V-Dem](#))

References

- Bank, W. (2024). Poverty and Inequality Platform (PIP).
- Bourguignon, F., Ferreira, F. H. G., and Menéndez, M. (2007). Inequality of opportunity in brazil. *Review of Income and Wealth*, 53(4):585–618.
- Brunori, P., Hufe, P., and Mahler, D. (2023). The Roots of Inequality: Estimating Inequality of Opportunity from Regression Trees and Forests. *Scandinavian Journal of Economics*, 125(4):900–32.
- Brunori, P., Palmisano, F., and Peragine, V. (2019a). Inequality of opportunity in sub-Saharan Africa. *Applied Economics*, 51(60):6428–6458.
- Brunori, P., Peragine, V., and Serlenga, L. (2019b). Upward and downward bias when measuring inequality of opportunity. *Social Choice and Welfare*, 52(4):635–661.
- Checchi, D. and Peragine, V. (2010). Inequality of opportunity in Italy. *The Journal of Economic Inequality*, 8(4):429–450.
- EqualChances.org (2018). Methodological Note for the Equalchances.org database on equality of opportunity and social mobility.
- European Bank for Reconstruction and Development (EBRD) and World Bank (2018). Life in Transition Survey 2016 (LiTS III).
- Ferreira, F. H. G. and Gignoux, J. (2011). The measurement of inequality of opportunity: Theory and an application to latin america. *Review of Income and Wealth*, 57(4):651–657.
- Hastie, T., Tibshirani, R., and Friedman, J. (2009). *The Elements of Statistical Learning: Data Mining, Inference, and Prediction*. Springer, Heidelberg.
- Hothorn, T., Hornik, K., and Zeileis, A. (2006). Unbiased recursive partitioning: A conditional inference framework. *Journal of Computational and Graphical Statistics*, 15(3):651–674.
- Hufe, P., Peichl, A., and Weishaar, D. (2022). Lower and upper bound estimates of inequality of opportunity for emerging economies. *Social Choice and Welfare*, 58(3):395–427.
- International Monetary Fund (2020). World Economic Outlook database.

- Kaufmann, D. and Kraay, A. (2019). Worldwide Governance Indicators (WGI) project.
- Kline, P. and Santos, A. (2012). A score based approach to wild bootstrap inference. *Journal of Econometric Methods*, 1(1):23–41.
- Marrero, G. A. and Rodríguez, J. G. (2012). Inequality of opportunity in Europe. *Review of Income and Wealth*, 58(4):597–621.
- Marrero, G. A. and Rodríguez, J. G. (2023). Unfair inequality and growth. *The Scandinavian Journal of Economics*, 125(4):1056–1092.
- Ritter, M. and Solt, F. (2019). Economic Inequality and Campaign Participation. *Social Science Quarterly*, 100(3):678–688.
- Roemer, J. E. (1998). *Theories of Distributive Justice*. Harvard University Press, Boston, MA.
- Solt, F. (2020). Measuring income inequality across countries and over time: The standardized world income inequality database. *Social Science Quarterly*, 101(3):1183–1199.
- Steenbergen, M. R. and Jones, B. S. (2002). Modeling multilevel data structures. *American Journal of Political Science*, pages 218–237.
- Tibshirani, R. (2011). Regression shrinkage and selection via the lasso: A retrospective. *Journal of the Royal Statistical Society: Series B (Statistical Methodology)*, 73(3):273–282.
- Varieties of Democracy (V-Dem) Institute (2018). Methodology: V8.