Online Appendix

Unequal Democracies:

Public Policy, Responsiveness, and Redistribution in an Era of Rising Economic Inequality

Edited by

Noam Lupu
Jonas Pontusson

Chapter 2

Table 2.A1: *Average marginal effects of income-group preferences on policy change, 2-year windows*

	Pooled	Germany	Netherlands	Norway	Sweden
P10 support	0.074	-0.123	0.143	0.292**	-0.047
P50 support	0.157**	0.059	0.197+	0.350**	-0.009
P90 support	0.347**	0.395*	0.457**	0.420**	0.121*

Note: $^{+}$ *p < 0.10,* * *p < 0.05,* ** *p < 0.01*

Table 2.A2: *Average marginal effects of income-group preferences on policy change, 4-year windows*

	Pooled	Germany	Netherlands	Norway	Sweden
P10 support	0.163**	-0.145	0.308**	0.369**	0.023
P50 support	0.253**	0.009	0.380**	0.453**	0.058
P90 support	0.443**	0.348*	0.613**	0.538**	0.207**

Table 2.A3: *Combined models of the effects of income-group preferences on policy change (2-year windows)*

	P10 & P90	P50 & P90	P10 & P50	All
P10 support	-0.509**	-	-0.676**	-0.385**
	(0.080)		(0.149)	(0.148)
P50 support	-	-0.611**	0.793**	-0.188
		(0.101)	(0.147)	(0.185)
P90 support	0.767**	0.910**	-	0.838**
	(0.081)	(0.103)		(0.105)
Country dummies	Yes	Yes	Yes	Yes
Constant	0.409**	0.390**	0.495**	0.406**
	(0.042)	(0.041)	(0.041)	(0.042)
N	1958	1958	1958	1958
Adjusted R^2	0.192	0.189	0.161	0.192

Note: $^+ p < 0.10,$ $^* p < 0.05,$ $^{**} p < 0.01$

Table 2.A4: Average marginal effects of P90-P10 preference gaps on policy change, controlling for P50 support (2-year windows)

	Pooled	Germany	Netherlands	Norway	Sweden
P90-P10 gap	0.666**	0.954**	0.653**	0.492**	0.432**
	(0.077)	(0.184)	(0.155)	(0.142)	(0.083)
P50 support	0.221**	0.234	0.276*	0.353**	0.031
	(0.049)	(0.156)	(0.109)	(0.071)	(0.049)
Country dummies	Yes	No	No	No	No
Constant	0.429**	0.415**	0.074	0.053	0.142**
	(0.040)	(0.093)	(0.053)	(0.033)	(0.029)
N	1958	266	291	557	844
Adjusted R^2	0.190	0.073	0.061	0.057	0.026

Note: $^+ p < 0.10$, $^* p < 0.05$, $^{**} p < 0.01$

Table 2.A5: Average marginal effects of P90-P50 preference gaps on policy change, controlling for P50 support (2-year windows)

	Pooled	Germany	Netherlands	Norway	Sweden
P90-P50 gap	0.910**	1.529**	1.133**	0.691**	0.432**
	(0.103)	(0.327)	(0.225)	(0.208)	(0.099)
P50 support	0.299**	0.366*	0.397**	0.401**	0.071
	(0.051)	(0.165)	(0.115)	(0.071)	(0.051)
Country dummies	Yes	No	No	No	No

Constant	0.390**	0.345**	0.018	0.030	0.113**
	(0.041)	(0.099)	(0.054)	(0.031)	(0.028)
N	1958	266	291	557	844
Adjusted R^2	0.189	0.068	0.089	0.056	0.020

Note: $^+ p < 0.10,$ $^* p < 0.05,$ $^{**} p < 0.01$

Table 2.A6: *Average marginal effects of P50-10 preference gaps on policy change, controlling for P50 support (2-year windows)*

	Pooled	Germany	Netherlands	Norway	Sweden
P50-P10 gap	0.676**	1.422**	0.357	0.477*	0.356*
	(0.149)	(0.346)	(0.320)	(0.228)	(0.179)
P50 support	0.117*	0.035	0.177	0.318**	-0.042
	(0.050)	(0.150)	(0.109)	(0.074)	(0.051)
Country dummies	Yes	No	No	No	No
Constant	0.495**	0.533**	0.118*	0.064+	0.157**
	(0.041)	(0.089)	(0.055)	(0.035)	(0.031)
N	1958	266	291	557	844
Adjusted R^2	0.161	0.042	0.009	0.043	0.003

Note: $^+ p < 0.10,$ $^* p < 0.05,$ $^{**} p < 0.01$

Table 2.A7: *Policy responsiveness when the preferences of two groups align and the third group diverges (2-year windows)*

	Middle and high incomes align			Low and middle incomes align		
P10 support	-0.257	-	-	-0.039	-	-

	(0.287)			(0.134)	
P50 support	-	0.421*	-	-	0.004	-
		(0.202)			(0.137)	
P90 support	-	-	0.494*	-	-	0.589**
			(0.191)			(0.153)
Country dummies	Yes	Yes	Yes	Yes	Yes	Yes
Constant	0.720**	0.351*	0.307+	0.530**	0.509**	0.183
	(0.194)	(0.169)	(0.166)	(0.101)	(0.102)	(0.112)
N	115	115	115	426	426	426
Adjusted R^2	0.170	0.193	0.213	0.121	0.121	0.166

Note: $^+$ $p<0.1$, * $p<0.05$, ** $p<0.01$. See text for the criteria used to identify the two samples.

Table 2.A8: *Linear probability models interacting the P90-P10 gap with Left government (4-year windows)*

	Pooled	Pooled (w/o NO)	Germany	Nether-lands	Sweden	Norway
P90-P10 gap	0.791**	0.904**	0.893**	1.420**	1.017**	-0.080
	(0.144)	(0.157)	(0.341)	(0.402)	(0.186)	(0.335)
Left government	-0.043	-0.083+	-0.165	-0.145	-0.101*	0.076
	(0.036)	(0.043)	(0.107)	(0.214)	(0.041)	(0.058)
P90-P10 × Left government	-0.193	-0.446+	0.167	-2.672*	-0.811**	1.158*
	(0.218)	(0.244)	(0.597)	(1.253)	(0.243)	(0.485)
P50 support	0.319**	0.258**	0.198	0.470**	0.097+	0.465**
	(0.051)	(0.066)	(0.165)	(0.114)	(0.056)	(0.074)

Country dummies	Yes	Yes	No	No	No	No
Constant	0.459**	0.514**	0.566**	0.103	0.204**	0.007
	(0.047)	(0.054)	(0.108)	(0.090)	(0.044)	(0.047)
N	1839	1282	222	291	769	557
Adjusted R^2	0.184	0.214	0.061	0.080	0.044	0.092

Note: $^+ p<0.1$, $^* p<0.05$, $^{**} p<0.01$. *In the German data, the 4-year window is only coded until 2013 (N=222); in the Swedish Data, it is only coded until 2010 (N=769).*

Table 2.A9: *Linear probability models interacting the P90-P50 gap with Left government (4-year windows)*

	Pooled	Pooled (w/o NO)	Germany	Nether-lands	Sweden	Norway
P90-P50 gap	1.182**	1.340**	1.386*	1.881**	1.272**	-0.109
	(0.186)	(0.205)	(0.595)	(0.557)	(0.220)	(0.437)
Left government	-0.041	-0.081+	-0.140	-0.193	-0.106**	0.081
	(0.036)	(0.044)	(0.101)	(0.220)	(0.039)	(0.058)
P90-P50 × Left	-0.462+	-0.791**	0.324	-2.788	-1.164**	1.654*
government	(0.264)	(0.285)	(0.979)	(1.807)	(0.265)	(0.660)
P50 support	0.399**	0.347**	0.327+	0.587**	0.138*	0.520**
	(0.052)	(0.069)	(0.176)	(0.118)	(0.058)	(0.074)
Country dummies	Yes	Yes	No	No	No	No
Constant	0.417**	0.466**	0.484**	0.059	0.181**	-0.023
	(0.047)	(0.055)	(0.112)	(0.089)	(0.041)	(0.045)
N	1839	1282	222	291	769	557
Adjusted R^2	0.184	0.217	0.059	0.095	0.050	0.088

Note: $^+ p<0.1$, $^* p<0.05$, $^{**} p<0.01$. In the German data, the 4-year window is only coded until 2013 (N=222); in the Swedish Data, it is only coded until 2010 (N=769).

Table 2.A10: *Linear probability models interacting the P90-P10 gap with Left government measured as dummy for Left prime minister (2-year windows)*

	Pooled	Pooled (w/o NO)	Germany	Nether-lands	Sweden	Norway

	Pooled	Pooled	Germany	Nether-	Sweden	Norway
P90-P10 gap	0.816**	0.890**	1.136**	0.854**	0.620**	-0.076
	(0.112)	(0.117)	(0.231)	(0.182)	(0.131)	(0.431)
Left government	-0.058*	-0.070*	-0.059	-0.133**	-0.069*	-0.002
	(0.026)	(0.028)	(0.088)	(0.047)	(0.032)	(0.058)
P90-P10 × Left government	-0.340*	-0.590**	-0.417	-0.964**	-0.568**	0.906+
	(0.162)	(0.170)	(0.462)	(0.283)	(0.175)	(0.501)
P50 support	0.152**	0.132*	0.151	0.294**	-0.038	0.178+
	(0.054)	(0.064)	(0.159)	(0.107)	(0.054)	(0.104)
Country dummies	Yes	Yes	No	No	No	No
Constant	0.502**	0.523**	0.497**	0.091	0.203**	0.129*
	(0.043)	(0.048)	(0.097)	(0.055)	(0.039)	(0.062)
N	1478	1225	253	273	699	253
Adjusted R^2	0.202	0.243	0.069	0.102	0.029	0.039

Note: + $p<0.1$, * $p<0.05$, ** $p<0.01$. Survey items for which government partisanship changed in year $t+1$ or $t+2$ have been excluded.

Table 2.A11: *Linear probability models interacting the P90-P50 gap with Left government measured as dummy for Left prime minister (2-year windows)*

	Pooled	Pooled	Germany	Nether-	Sweden	Norway

		(w/o NO)		lands		
P90-P50 gap	1.154**	1.268**	1.829**	1.373**	0.807**	-0.076
	(0.151)	(0.155)	(0.408)	(0.253)	(0.162)	(0.602)
Left government	-0.061*	-0.072*	-0.043	-0.137**	-0.072*	-0.004
	(0.026)	(0.028)	(0.079)	(0.049)	(0.031)	(0.059)
P90-P50 × Left	-0.545**	-0.857**	-0.706	-1.177**	-0.776**	1.284+
government	(0.207)	(0.207)	(0.709)	(0.407)	(0.200)	(0.730)
P50 support	0.224**	0.222**	0.295+	0.413**	0.002	0.209*
	(0.056)	(0.067)	(0.169)	(0.111)	(0.057)	(0.103)
Country dummies	Yes	Yes	No	No	No	No
Constant	0.467**	0.476**	0.417**	0.040	0.184**	0.115+
	(0.044)	(0.049)	(0.102)	(0.055)	(0.037)	(0.062)
N	1478	1225	253	273	699	253
Adjusted R^2	0.202	0.245	0.064	0.125	0.040	0.036

Note: $^+ p<0.1$, $^* p<0.05$, $^{**} p<0.01$. *Survey items for which government partisanship changed in year t+1 or t+2 have been excluded.*

Table 2.A12: *Linear probability models interacting the P50-P10 gap with Left government (2-year windows)*

	Pooled	Pooled (w/o NO)	Germany	Nether-lands	Sweden	Norway
P50-P10 gap	0.640*	0.773**	1.636**	0.730	0.087	-0.090
	(0.249)	(0.281)	(0.545)	(0.606)	(0.296)	(0.426)
Left government	0.009	0.002	-0.021	0.078	-0.008	0.024
	(0.030)	(0.037)	(0.094)	(0.158)	(0.027)	(0.052)

P50-P10 × Left government	0.068	-0.101	-0.418	-1.449	0.441	0.957
	(0.375)	(0.432)	(1.008)	(2.063)	(0.383)	(0.681)
P50 support	0.118*	0.042	0.026	0.178	-0.044	0.322**
	(0.050)	(0.063)	(0.152)	(0.110)	(0.051)	(0.074)
Country dummies	Yes	Yes	No	No	No	No
Constant	0.490**	0.536**	0.550**	0.098	0.163**	0.049
	(0.044)	(0.050)	(0.101)	(0.075)	(0.036)	(0.043)
N	1958	1401	266	291	844	557
Adjusted R^2	0.160	0.187	0.035	0.005	0.003	0.042

Note: $^+ p<0.1$, $^* p<0.05$, $^{**} p<0.01$

Table 2.A13: *Average marginal effects of P90-P10 preference gaps on policy change, controlling for P50 support, economic and welfare policies only (2-year windows)*

	Pooled	Germany	Netherlands	Norway	Sweden
P90-P10 gap	0.521**	1.010**	0.339	0.157	0.482*
	(0.119)	(0.229)	(0.217)	(0.280)	(0.187)
P50 support	0.314**	0.480*	0.351+	0.336*	0.119
	(0.081)	(0.212)	(0.191)	(0.153)	(0.097)
Country dummies	Yes	No	No	No	No

Constant	0.366**	0.266*	0.020	0.086	0.141**
	(0.062)	(0.127)	(0.086)	(0.073)	(0.054)
N	681	135	117	161	268
Adjusted R^2	0.146	0.094	0.026	0.017	0.018

Note: $^+$ $p<0.1$, * $p<0.05$, ** $p<0.01$

Table 2.A14: *Average marginal effects of P90-P50 preference gaps on policy, controlling for P50 support, economic and welfare policies only (2-year windows)*

	Pooled	Germany	Netherlands	Norway	Sweden
P90-P50 gap	0.702**	1.563**	0.671*	0.338	0.440*
	(0.150)	(0.428)	(0.333)	(0.340)	(0.180)
P50 support	0.374**	0.631**	0.441*	0.364*	0.165
	(0.085)	(0.233)	(0.206)	(0.155)	(0.105)
Country dummies	Yes	No	No	No	No
Constant	0.336**	0.186	-0.022	0.072	0.106+
	(0.064)	(0.139)	(0.091)	(0.073)	(0.056)
N	681	135	117	161	268
Adjusted R^2	0.148	0.089	0.043	0.021	0.016

Note: $^+$ $p<0.1$, * $p<0.05$, ** $p<0.01$

Table 2.A15: *Average marginal effects of P50-P10 preference gaps on policy, controlling for P50 support, economic and welfare policies only (2-year windows)*

	Pooled	Germany	Netherlands	Norway	Sweden
P50-P10 gap	0.369	1.422**	0.154	-0.268	0.021
	(0.225)	(0.432)	(0.418)	(0.511)	(0.351)
P50 support	0.200*	0.226	0.256	0.318*	0.052
	(0.077)	(0.200)	(0.174)	(0.151)	(0.101)
Country dummies	Yes	No	No	No	No
Constant	0.435**	0.412**	0.066	0.089	0.151*
	(0.060)	(0.118)	(0.078)	(0.073)	(0.061)
N	681	135	117	161	268
Adjusted R^2	0.122	0.050	0.004	0.017	-0.006

Note: $^{+}$ $p<0.1$, * $p<0.05$, ** $p<0.01$

Table 2.A16: *Linear probability models interacting the P90-P50 gap with Left government, economic and welfare policies only (2-year windows)*

	Pooled	Germany	Netherlands	Norway	Sweden
P90-P50 gap	0.949**	1.383+	1.858**	0.220	1.254**
	(0.225)	(0.773)	(0.583)	(0.688)	(0.271)
Left government	-0.098+	-0.069	-0.389	-0.138	-0.196**
	(0.051)	(0.120)	(0.268)	(0.107)	(0.062)
P90-P50 × Left	-0.397	0.507	-3.907*	0.319	-1.295**
government	(0.327)	(1.069)	(1.840)	(1.065)	(0.348)
P50 support	0.374**	0.636**	0.509*	0.360*	0.168
	(0.085)	(0.235)	(0.202)	(0.155)	(0.102)
Country dummies	Yes	No	No	No	No
Constant	0.391**	0.207	0.078	0.154	0.239**
	(0.069)	(0.153)	(0.127)	(0.096)	(0.071)
N	681	135	117	161	268
Adjusted R^2	0.152	0.078	0.058	0.020	0.077

Note: $^+ p < 0.1$, $^* p < 0.05$, $^{**} p < 0.01$

Table 2.A17: *Linear probability models interacting the P90-P10 gap with Left government, economic and welfare policies only (2-year windows)*

	Pooled	Germany	Netherlands	Norway	Sweden
P90-P10 gap	0.630**	0.930*	1.099*	0.210	1.206**
	(0.185)	(0.423)	(0.453)	(0.557)	(0.262)
Left government	-0.097+	-0.130	-0.265	-0.135	-0.212**

	(0.050)	(0.132)	(0.266)	(0.107)	(0.064)
P90-P10 × Left	-0.130	0.436	-2.459+	-0.064	-1.210**
government	(0.299)	(0.656)	(1.268)	(0.829)	(0.367)
P50 support	0.310**	0.482*	0.403*	0.330*	0.127
	(0.080)	(0.218)	(0.193)	(0.153)	(0.095)
Country dummies	Yes	No	No	No	No
Constant	0.419**	0.312*	0.084	0.167^{+}	0.276**
	(0.068)	(0.150)	(0.126)	(0.096)	(0.072)
N	681	135	117	161	268
Adjusted R^2	0.148	0.087	0.030	0.014	0.067

Note: $^{+}$ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$

Table 2.A18: *Interactions between preferences differences and left governments for different issue areas and time periods (2-year windows)*

|	Econ. issues, ≤1997	Econ. issues, >1997	Other issues, ≤1997	Other issues, >1997	Econ. issues, ≤1997	Econ. issues, >1997	Other issues, ≤1997	Other issues, >1997
P90-P50 gap	0.490	1.108**	1.098**	1.722**	-	-	-	-
	(0.312)	(0.299)	(0.327)	(0.292)				
P90-P10 gap	-	-	-	-	0.288	0.672**	0.869**	1.094**
					(0.252)	(0.250)	(0.254)	(0.225)
Left	-0.237*	-0.062	0.090	-0.024	-0.226*	-0.067	0.087	-0.020
government	(0.092)	(0.064)	(0.056)	(0.061)	(0.091)	(0.064)	(0.055)	(0.060)
P90-P50 × Left	-0.444	-0.234	0.096	-1.432**	-	-	-	-
government	(0.488)	(0.420)	(0.454)	(0.456)				
P90-P10 × Left	-	-	-	-	-0.339	0.048	-0.020	-0.817*
government					(0.477)	(0.371)	(0.352)	(0.396)
P50 support	0.232*	0.470**	0.311**	0.141	0.202*	0.369**	0.206*	0.055
	(0.101)	(0.125)	(0.082)	(0.095)	(0.097)	(0.117)	(0.081)	(0.094)
Country dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Constant	0.035	0.315**	0.073	0.504**	0.046	0.364**	0.135*	0.548**
	(0.063)	(0.087)	(0.057)	(0.071)	(0.063)	(0.085)	(0.061)	(0.070)
N	276	405	605	672	276	405	605	672
Adjusted R^2	0.069	0.164	0.095	0.253	0.064	0.156	0.106	0.248

Note: $^+ p<0.1$, $^* p<0.05$, $^{**} p<0.01$

Figure 2.A1: *Average marginal effects of support for policy change by income on the probability of policy change, linear probability models accounting for preference overlap (2-year windows)*
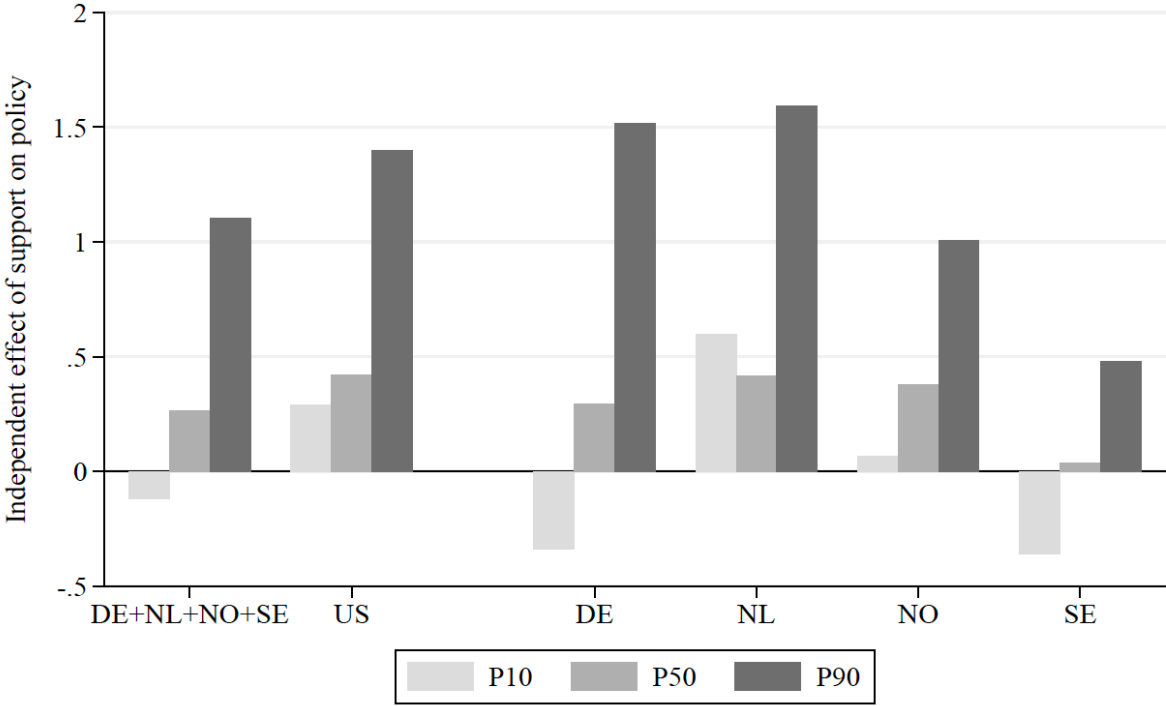
Figure 2.A2: *Predicted probabilities of policy change by time period, conditional on the P90-P10 preference gap and government partisanship (2-year windows)*

Economic / welfare issues

Other issues
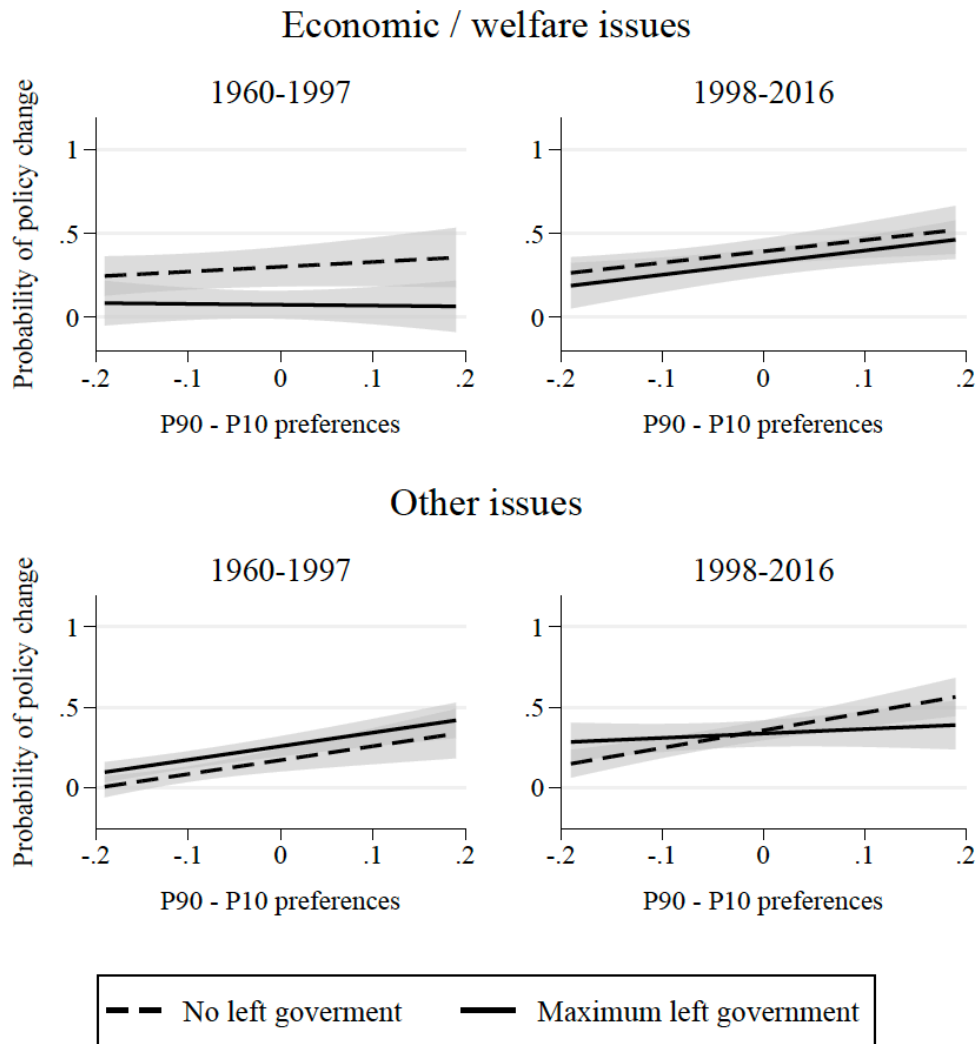
Chapter 3

Appendix 3.A: A simple model of class interests

We begin by assuming that all government spending is for redistributive purposes, and the aim for each class is therefore simply to maximize net income. In the case of M this means that it wants to unilaterally set taxes and transfers to maximize its own net income:

(A1) $$y_M^{net} = y_M + t \cdot (y_H - \tfrac{1}{2} \cdot \alpha \cdot t \cdot y_H)$$

where t is the tax rate and α is a measure of the efficiency loss from taxation – including the possible loss of income and revenue because of capital flight. We rule out the possibility of regressive transfers so that M cannot tax L and transfer to itself. By a similar logic, H cannot tax M and use the proceeds for itself. The lowest class L, however, is unconstrained to tax both M and H (if it has the political power to do so). Non-regressivity is a standard assumption in all models of redistribution in advanced democracies, and there is no country-year observation in our sample where it does not hold empirically.[1] The specific form of the utility function is for mathematical convenience.

The tax rate on H that maximizes M's net income is:

$$t_M^{H*} = \frac{1}{\alpha}.$$

We see that the optimal tax rate depends only on the efficiency losses of taxation, not on the income of either M or H. M does not want to tax itself for purely redistributive reasons, so

$$t_M^{M*} = 0.$$

---

[1] A simple justification for this assumption builds on Acemoglu and Robinson's (2006) model of democracy. For democracy to be a credible commitment to redistribution, net transfers under democracy cannot be regressive. Stable democracy requires such a credible commitment, and since advanced democracies are stable, it stands to reason that the assumption is satisfied (see Iversen and Soskice 2006 for a further discussion). But again, for our purposes it suffices that there are no instances of regressive net transfers in our data.

At *M*'s optimal tax rate, *M*'s net income is:

$$y_M^{net*} = y_M + T_M = y_M + \frac{1}{\alpha} \cdot (y_H - \frac{1}{2} \cdot y_H) = y_M + \frac{1}{2} \cdot \frac{y_H}{\alpha} \ .$$

where T_M is the net transfer to *M*. Correspondingly, *H*'s net income is:

$$y_H^{net} = y_H + T_H = y_H - t \cdot (y_H + \frac{1}{2} \cdot \alpha \cdot t \cdot y_H) = y_H - \frac{3}{2} \cdot \frac{y_H}{\alpha} \ .$$

Note that *H*'s loss is greater than *M*'s gain because of the efficiency cost of taxation, which reduces *H*'s income without raising *M*'s income by the same amount.

We can conveniently express the (observed) transfer to *M* as a proportion of *H*'s net income:

(A2)
$$\tau_H^{M*} = \frac{T_M}{y_H^{net}} = \frac{\frac{1}{2} \cdot \frac{y_H}{\alpha}}{y_H - \frac{3}{2} \cdot \frac{y_H}{\alpha}} = \frac{1}{2\alpha - 3} \ .$$

This implies (H1) in the main text. (H2: *M*'s transfer rate is rising in top-end income) follows because an increase in y_H will increase T_M (the numerator) while T_M will only increase the net income of *M* (the denominator) by a fraction of that increase.

To account for insurance motives, we consider simple welfare function where transfers to *L* have some insurance value to *M*, and where *M* will spend a portion of net income (including transfers from *H*) on benefits, *b*, that go to *L* :

(A3)
$$W_M = (1 - p) \cdot u \left[(1 - t_M) \cdot y_M^{net} \right] + p \cdot u \left[y_L + b \right],$$

where *p* is the probability of *M* falling into the *L* group, *b* is an insurance benefit, and *u* is a standard concave utility function with $u' > 0$ and $u'' < 0$. The benefit *b* is paid out of taxes on the net income of *M*, which includes transfers from *H*. We ignore efficiency costs because they add nothing new to the results we have already presented (they will always reduce spending). If

benefits are restricted to those who have made past contributions, but where contributions are compulsory for M (i.e., like a tax), any member of M will choose a benefit rate :

(A4)
$$b = \frac{1-p}{p} \cdot t_M \cdot y_M^{net},$$

which yields M's preferred tax rate:

(A5)
$$t_M^{M*} = p \cdot \left(1 - \frac{y_L}{y_M}\right).$$

This implies (H3) (L's transfer rises as bottom-end inequality rises).

To see this, note that for each insured M-member, the expected payout in the future period is $p \cdot b$. The per insured expected cost in each period is $(1-p) \cdot t_M \cdot y_M^{net}$. With a balanced budget and no discounting these numbers are identical in expectation, which gives the above expression for b.

H4 (transfer rates are falling in capital mobility) follows directly from (A2) and (A3) since capital flight can be conceived as an inefficiency of taxation and captured by α.

Appendix 3.B: Allocating the Value of Services and the Cost of Taxation to Each Income Group

As explained in the main text, we include the value of services in the net "extended" income (disposable cash income + the net (after tax) value of services) of the income groups using estimates computed from the OECD/EU database on the distributional impact of in-kind services (OECD 2011, ch. 8). The estimates include the value of education, health care, social housing, elderly care, and early childhood education and care, and are measured as a share of disposable income. For a detailed description of these data, see Verbist, Förster, and Vaalavuo (2012).

Before adding the value of services to the disposable income of the income groups, we made the following adjustments. First, because of missing data for Switzerland we assigned it the average value of countries belonging to the conservative welfare state cluster (Germany, Austria, Italy, and France). Second, country-specific estimates are only publicly available for the overall population. We therefore adjusted the value of services to reflect our working household sample by the ratio of the OECD average value for the working age population (18-65 years) to the overall population, lowering the value by roughly 20 percent in all countries (using estimates from Verbist, Förster, and Vaalavuo 2012, 33-34). Third, the OECD/EU estimates of the value of services are only calculated for 2007 and not all countries have data for 2007 in the LIS database. We therefore matched the OECD/EU estimates to the year closest to 2007 for Australia (2008), Belgium (1997), and Sweden (2005). To get time-varying estimates, we adopted a production cost approach and imputed the value of services in years other than the base-year (2007 or the year closest to it) assuming that the ratio of the value of services/transfers moves proportional to the ratio of spending on services/transfers.[2] Specifically, we multiplied the country-specific estimates of the value of services as a share of disposable income by total disposable income and divided by total transfers received. Then, this ratio of the value of services/transfers from the base-year was multiplied by the ratio of spending on services/transfers indexed to 1 in the base-year, using OECD data on spending on services and transfers. Finally, we multiplied the ratio of the value of services/transfers by total transfers received to get the total gross value of services for each country-year.

---

[2] This is a standard approach to estimate the value of services. The OECD/EU estimates are also calculated using a production cost approach with the exception of social housing, where the value is calculated from the prevailing market rents (Verbist, Förster, and Vaalavuo 2012, 13).

The total gross value of services is distributed to each income group's cash disposable income using an allocation key computed from the OECD/EU database on the distributional impact of in-kind services.[3] The allocation key is only calculated for 2007 but the distributive impact of services is fairly stable over time and seems to be driven almost entirely by changes in level of spending (Verbist, Förster, and Vaalavuo 2012, 60). We therefore assign the country and quintile specific values from 2007 to all years.[4] The quintile specific values are recalculated to fit our deciles using the ratio of the value of services for the first quintile (q1) to the value of services for q1+q2 as a weight for the first decile (d1) and the inverse for d2 and so on. At the top, we assign an equal weight of the value of q5 to d9 and d10. This ensures that services also have a redistributive effect between deciles within a quintile and that it becomes less redistributive towards the upper end of the income distribution, just as the quintile-specific estimates suggest (see Verbist, Förster, and Vaalavuo 2012, 35).

Finally, we need to allocate the costs of transfers and services to the income deciles' disposable income. The costs are paid for by tax revenues that primarily come from taxation of income, capital, property and wealth, and consumption. Income taxes are accounted for in the LIS data. We treat business taxes as neutral with respect to the income classes and simply add it to government revenues. Remaining costs are covered by (i) property and wealth taxes, which are paid almost exclusively by households in the absolute top of the income distribution and we therefore add it to the tax burden of the top income decile, and (ii) consumption taxes, which we assume are paid in proportion to each income decile's consumption share and allocate accordingly.

---

[3] We thank Verbist, Förster, and Vaalavuo (2012) for providing us with these data.
[4] Again, data are missing for Switzerland, which is assigned the mean of countries belonging to the conservative welfare state cluster (Germany, Austria, Italy, and France).

We rely on OECD data to include revenues from taxation of capital, and property and wealth (OECD Revenue Statistics Database). Data on consumption shares are from the Eurostat Household Budget Survey for EU member states (and Norway) and from national statistics bureaus for non-EU countries (Australia, Canada, Iceland, Switzerland, and the United States). In most countries consumption shares are quite stable over time but data are not available for every country-year. We linearly inter- and extrapolate the series to maintain a full sample. In total, we extrapolate five observations, at most nine years back in time (UK:1988→1979) and three years into the future (Norway 2010→2013). Our results do not change when excluding the extrapolated observations.

Appendix 3.C

Table 3.C1: Determinants of Net Transfers to *M* as a Percentage of *H*'s Net Extended Income, Weighed by .5 of *L*'s Transfer Rate

	(1)	(2)	(3)
	Transfer rate *M* with .5 weight to *L*'s Transfer Rate (%)		
P90/P50	-1.55	-2.89	1.99
	(4.70)	(4.33)	(4.07)
P50/P10	2.94*	3.42*	2.23*
	(0.68)	(0.71)	(0.75)
Trade openness (ln)	-2.30	-1.09	0.61
	(2.36)	(2.39)	(2.80)
Capital market openness	-3.59	-1.26	1.03
	(2.17)	(2.17)	(2.03)
Government partisanship (right)	-5.68*	-5.70*	-4.07*
	(1.75)	(2.03)	(1.24)
Labor force participation		-0.21+	-0.20
		(0.10)	(0.12)
Unemployment		-0.07	0.16
		(0.14)	(0.10)
Real GDP growth		-0.23	-0.13
		(0.17)	(0.12)
Trend			-0.22
			(0.20)
Trend^2			0.00
			(0.00)
Constant	21.76*	32.11*	7.77
	(6.65)	(8.81)	(17.78)
R-squared	0.35	0.39	0.52
N	110	110	104
N of countries	18	18	18

Notes: * $p<0.05$, + $p<0.1$. Standard errors clustered by country in parentheses. All models include country fixed effects.

Table 3.C2: Determinants of Net Transfers to *M* as a Percentage of *M*'s Net Income

	(1)	(2)	(3)	(4)
	Transfer rate *M* (%) as a share of *M*'s Net Income			
P90/P50	13.97*	10.38	8.11	10.53
	(5.85)	(7.69)	(5.82)	(7.45)
P50/P10	2.44	1.99	2.83+	2.07
	(1.53)	(1.49)	(1.44)	(1.39)
Trade openness (ln)		4.36	6.35+	3.09
		(3.45)	(3.43)	(4.79)
Capital market openness		-0.75	2.78	4.06
		(2.41)	(3.89)	(3.63)
Government partisanship (right)		-6.94*	-7.07*	-5.94*
		(2.15)	(2.36)	(1.69)
Labor force participation			-0.35	-0.22
			(0.21)	(0.19)
Unemployment			-0.10	-0.04
			(0.23)	(0.21)
Real GDP growth			-0.34	-0.16
			(0.21)	(0.17)
Trend				-0.45
				(0.31)
Trend^2				0.01
				(0.01)
Constant	-28.01*	-36.27*	-18.06	-15.20
	(10.46)	(14.07)	(17.06)	(28.97)
R-squared	0.32	0.44	0.48	0.52
N	110	110	110	110

Notes: * $p<0.05$, + $p<0.1$. Standard errors clustered by country in parentheses. All models include country fixed effects.

Figure 3.C1: Real Extended Income Growth, Comparing the Equal-Split and Individualized Series

Real post-tax income growth (base 100=1980)

Equal-split approach — Individualized series

Overall average   Middle 20%   Bottom 20%
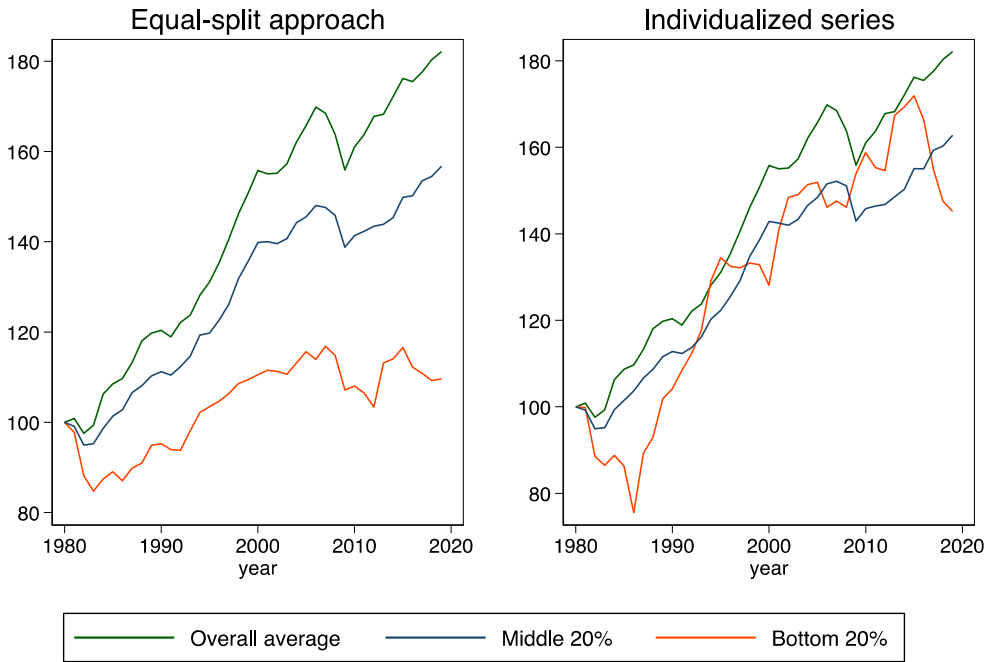
Chapter 7

Appendix 7.A: Additional information about the Spanish context

      Local elections in Spain are held simultaneously in all municipalities every four years. In 13 out of 17 regions, local and regional elections are held on the same day, and in 1999 they also coincided with European Parliament elections. Turnout rates in local elections have ranged between 63 and 70 percent, compared to a range between 69 and 80 percent in national elections, suggesting that local and regional elections are relevant for voters.

      As mentioned in the main text, the electoral system and number of councilors depend on population size. Municipalities over 250 inhabitants use a proportional electoral rule with the D'Hondt method and closed lists. Because we only include municipalities with more than 1,000 inhabitants in our analysis, all observations use this electoral system. Municipalities with less than 250 inhabitants elect councilors using open lists. Table S1 presents the number of elected councilors by population size. All municipalities included in our analyses have 9 councilors or more, and hence are of sufficient size to estimate meaningful indicators of average characteristics of council members:

Table 7.A1: Number of local councilors by population size

Population	Number of councilors
Up to 100 inhabitants	3
101 to 250	5
251 to 1,000	7
1,001 to 2,000	9
2,001 to 5,000	11
5,001 to 10,000	13
10,001 to 20,000	17
20,001 to 50,000	21
50,001 to 100,000	25
100,001 onwards	One more councilor for every 10,000 inhabitants adding one when the numbers are even

Appendix 7.B: Additional description of data on local politicians

As described in the text, our dataset contains some information about the occupation of local council members, although it is too noisy and incomplete to be used in the paper. Table S2 describes the occupational background of council members in Spain by education level. Most councilors with high level of education have a background in professional occupation such as education, health, law or science. By contrast, most politicians with a low level of education work in industry or agriculture, and a remarkable number are pensioners. The case of directors and managers is interesting, because councilors with this occupational background vary widely in their educational level, with the sample being split quite equally in three parts.

**Table 7.B1: Occupational background by education level**

	Primary	Secondary	Tertiary	Total
Qualified work in industry and construction	1,842	1,054	92	2,988
Directors and managers	2,089	2,239	1,793	6,121
Administrative employees	600	1,720	863	3,183
Public servants	289	629	805	1,723
Pensioners	1,623	486	310	2,419
Housework	963	433	145	1,541
Machine operators	876	363	40	1,279
Cultural professionals	12	23	103	138
Education professionals	43	258	3,175	3,476
Health professionals	14	66	1,177	1,257
Law professionals	10	49	1,173	1,232
Qualified workers in agriculture and fishing	3,183	1,152	188	4,523
Service workers	988	1,014	254	2,256
Non-skilled workers	998	312	56	1,366
Scientific professionals	36	167	1,513	1,716
Support technicians and professionals	47	360	225	632
Other	573	536	205	1,314
Unemployed	223	161	142	526
Missing	3,174	3,020	2,97	9,164

Appendix 7.C: The education of citizens and politicians over time

Are politicians more highly educated than citizens in Spain? And has the difference increased over time? The dataset about the education of local politicians provided by the Ministry of Finance contains data for councilors elected between 1979 and 2007. This allows us to examine the evolution of the education of politicians since the start of the democratic period. The only source of information about citizens that covers the whole period is the Census, which is collected every ten years. Based on census data, de la Fuente Moreno and Doménech, (2016) calculate the average years of education of the population aged 25 or older. Although the categories coded by the census and by our dataset are slightly different, the estimates of average education in both samples are comparable. We apply linear interpolation in order to fill the missing information between the election years for the politicians' series and between the census years for the citizens' series.

Figure 10.A1 presents the average education years for both groups. Two conclusions can be drawn from this analysis. First, the education gap between both populations is substantial at about four years of education. Second, the gap is constant over time.

Figure 7.C1: The education of citizens and politicians 1979-2011
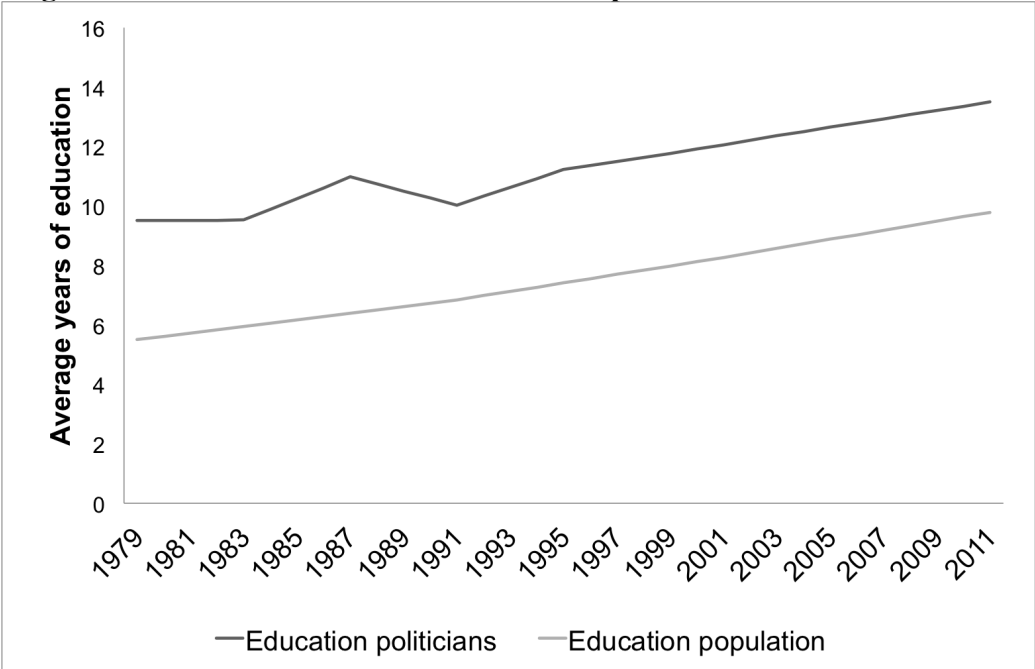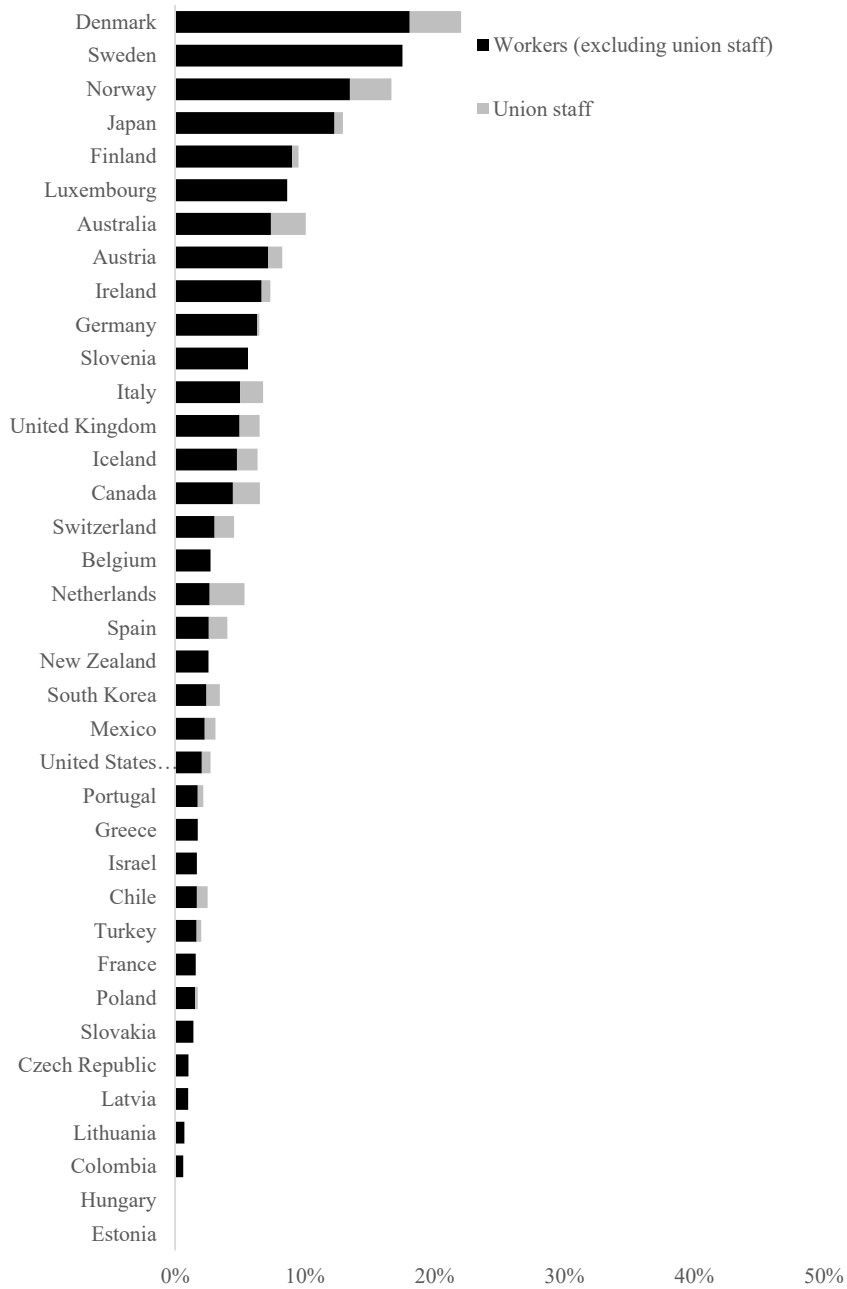
Appendix 8.A: Additional Analyses

Figure 8.A1: Working-Class Representation in the OECD (Separating Union Staff)

Source: Carnes et al. (2021)

Figure 8.A2: Worker Representation, by District Magnitude and the Number of Seats in the National Legislature

District Magnitude (Excluding IL, NL, and SK)

Number of Seats in Legislature (Full Sample)
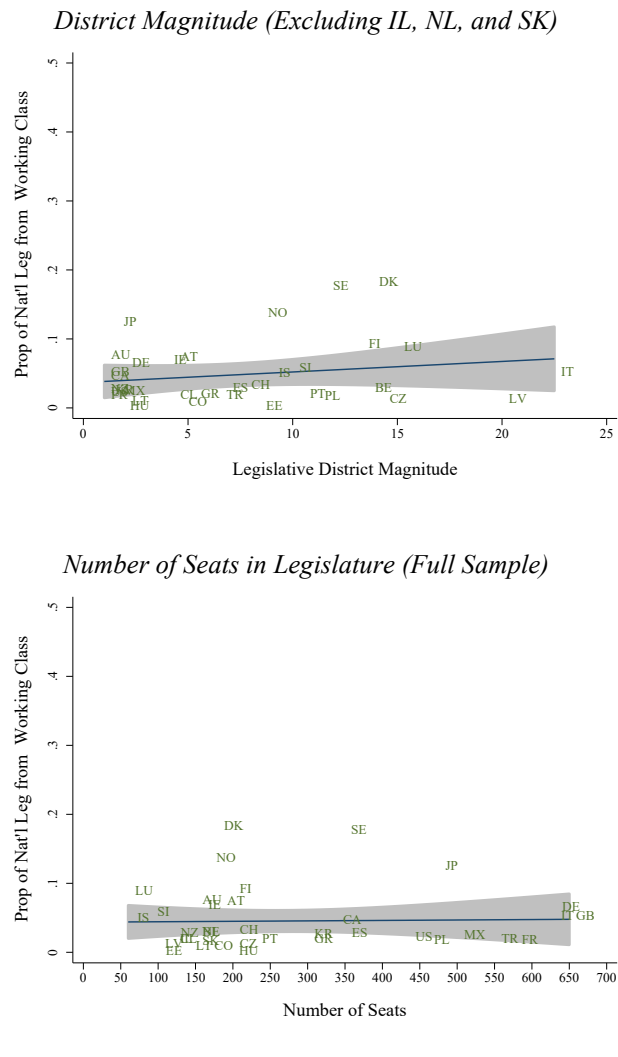
Sources: Carnes et al. (2021), V-Dem (Coppedge et al. 2021)

Appendix 8.B: Definitions of Working-Class Jobs, by Dataset

Authors' data collection dataset

Occupations were coded according to ISCO 08 categories. We defined working-class jobs as ISCO codes in categories 4 (clerical support workers), 5 (service and sales workers), 7 (craft and related trades workers), 8 (plant and machine operators and assemblers), and 9 (elementary occupations). We also counted legislators in the 6 category (skilled farm workers) if they were clearly farm workers and not farm owners/managers (counting all legislators in the 6 category did not substantively alter our findings). We counted retirees as professionals unless the jobs they retired from were listed as working-class jobs, we counted students as professionals (reasoning that people who went from college into elected politics were not working-class people) and we count all other occupations (including unemployed [64 cases] and housewife [17 cases]) as non-worker occupations--that is, we only coded someone as having a working-class job if they were positively identified as such.

ILO Labor Market dataset

We defined working-class jobs as ISCO codes in categories 4 (clerical support workers), 5 (service and sales workers), 6 (skilled agricultural, forestry and fishery workers), 7 (craft and related trades workers), 8 (plant and machine operators and assemblers), and 9 (elementary occupations).

This approach is essentially an aggregation of the categories that Oesch classifies as skilled manual, low-skilled manual, skilled clerks, unskilled clerks, skilled service, and low-skilled service, in keeping with our goal of studying people employed in manual labor, service industry, and clerical jobs.

This approach is also essentially an aggregation of the Erikson-Goldthorpe categories that combine Clerical Routine Non-manual Workers and Sales and Service Routine Non-manual Workers, Skilled Manual Workers, and Semi- and Unskilled Manual Workers and Agricultural Labourers.

Chapter 9

Table 9.A1: Measures of Satisfaction with the System

	Variable	Question wording	Original scale
1	psppipla	And how much would you say that the political system in [country] allows people like you to have an influence on politics?	1 Not at all; 2 Very little; 3 Some; 4 A lot; 5 A great deal
2	psppsgva	How much would you say the political system in [country] allows people like you to have a say in what the government does?	1 Not at all; 2 Very little; 3 Some; 4 A lot; 5 A great deal
3	frprtpl	How much would you say that the political system in [country] ensures that everyone has a fair chance to participate in politics?	1 Not at all; 2 Very little; 3 Some; 4 A lot; 5 A great deal
4	gvintcz	How much would you say that the government in [country] takes into account the interests of all citizens?	1 Not at all; 2 Very little; 3 Some; 4 A lot; 5 A great deal
5	stfdem	And on the whole, how satisfied are you with the way democracy works in [country]?	0-10: 0=Extremely dissatisfied; 10=Extremely satisfied
6	clsprty	Is there a particular political party you feel closer to than all the other parties?	1 Yes; 2 No
7	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?	0-10: 0=No trust at all; 10=Complete trust
8	trstprt	[Same as 7] ...political parties?	0-10: 0=No trust at all; 10=Complete trust
9	trstprl	[Same as 7] ...[country]'s parliament?	0-10: 0=No trust at all; 10=Complete trust

Source: ESS Round 9 (2018)

Chapter 11

Figure 11.A1: Association between Economic News Tone and Disposable Income Growth for each Income Quintile.
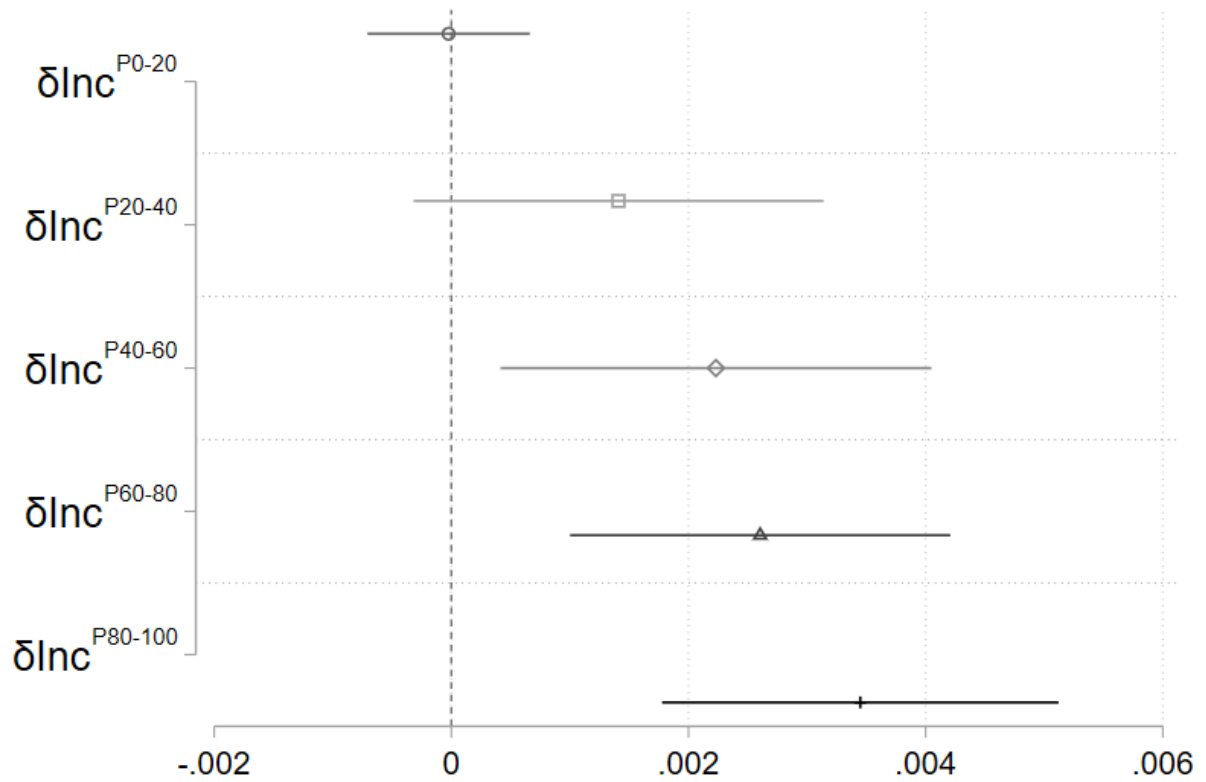
Notes: Each estimate comes from a separate model, with only one quintile's growth rate included in each model.
Sources: World Inequality Database; Kayser and Peress (2021)

Table 11.A1: Associations between Economic Tone and Top-1% Income Share by Country. Models Specified as Described in the Main Text

	Coef.	SE	P	N	Min(Year)	Max(Year)
AUS	1.489	0.398	0.000	152	1988	2013
AUT	0.716	1.314	0.586	52	2005	2013
CAN	1.337	0.280	0.000	247	1978	2013
CHE	1.771	1.061	0.095	121	1994	2013
DEU	17.288	9.425	0.067	25	2009	2013
ESP	1.419	2.286	0.535	103	1997	2013
FRA	1.925	1.528	0.208	150	1991	2013
GBR	0.874	0.302	0.004	218	1985	2013
IRL	0.398	0.368	0.279	102	1993	2013
ISR	-1.312	1.134	0.247	154	1990	2013
ITA	3.407	2.436	0.162	94	1993	2013
JPN	0.698	0.356	0.050	220	1981	2013
LUX	-2.083	0.677	0.002	19	2009	2013
NZL	0.441	0.300	0.142	120	1997	2013
PRT	1.834	1.394	0.188	61	1998	2013
USA	0.667	0.317	0.035	223	1980	2013

Notes: Regressions include quarterly and newspaper fixed effects, newspaper trends, and 4 lags of economic tone, with panel-corrected standard errors.

Table 11.A2: Associations between Economic Tone and Income Growth by Quintile for 16 Countries (Results plotted in Figures 11.1 and 11.7)

	Pre-tax	Disposable
δInc_t^{P0-20}	-0.0006	-0.0007
	(0.0015)	(0.0005)
δInc_t^{P20-40}	0.0011	0.0030
	(0.0022)	(0.0035)
δInc_t^{P40-60}	0.0007	-0.0046
	(0.0014)	(0.0058)
δInc_t^{P60-80}	-0.0010	0.0025
	(0.0013)	(0.0031)
$\delta Inc_t^{P80-100}$	0.0030***	0.0039***
	(0.0006)	(0.0010)
Constant	0.1472***	-0.5422
	(0.0280)	(0.5480)
Observations	2061	1168

Notes: Regressions include quarterly and newspaper fixed effects, newspaper trends, and 4 lags of economic tone, with panel-corrected standard errors.
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 11.A3: Associations Between Economic Tone and Pre-Tax Income Growth for Top-Income Groups, Controlling for Bottom- and Middle-Income Growth (Results plotted in Figure 11.5)

	(1)	(2)	(3)	(4)
δInc_t^{P0-20}	0.0003	0.0002	0.0002	0.0001
	(0.0002)	(0.0002)	(0.0002)	(0.0002)
δInc_t^{P40-60}	0.0004	0.0006	0.0009*	0.0011**
	(0.0004)	(0.0004)	(0.0004)	(0.0004)
$\delta Inc_t^{P90-100}$	0.0022***			
	(0.0004)			
$\delta Inc_t^{P95-100}$		0.0018***		
		(0.0003)		
$\delta Inc_t^{P99-100}$			0.0010***	
			(0.0002)	
$\delta Inc_t^{P99.9-100}$				0.0004**
				(0.0001)
Constant	0.1461***	0.1444***	0.1441***	0.1470***
	(0.0278)	(0.0277)	(0.0279)	(0.0286)
Observations	2061	2061	2061	2061

Notes: Regressions include quarterly and newspaper fixed effects, newspaper trends, and 4 lags of economic tone, with panel-corrected standard errors.
$^{*}\, p < 0.05, \, ^{**}\, p < 0.01, \, ^{***}\, p < 0.001$

Table 11.A4: Associations between Economic Tone and Disposable Income Growth for Top-Income Groups, Controlling for Bottom- and Middle-Income Growth (Results plotted in Figure 11.8)

	(1)	(2)	(3)	(4)
δInc_t^{P0-20}	-0.0006	-0.0006	-0.0004	-0.0003
	(0.0004)	(0.0004)	(0.0004)	(0.0004)
δInc_t^{P40-60}	0.0017	0.0023*	0.0026*	0.0026*
	(0.0011)	(0.0011)	(0.0011)	(0.0011)
$\delta Inc_t^{P90-100}$	0.0027***			
	(0.0007)			
$\delta Inc_t^{P95-100}$		0.0020***		
		(0.0005)		
$\delta Inc_t^{P99-100}$			0.0007*	
			(0.0003)	
$\delta Inc_t^{P99.9-100}$				0.0001
				(0.0001)
Constant	-0.6244	-0.6630	-0.7096	-0.6967
	(0.5334)	(0.5321)	(0.5576)	(0.5883)
Observations	1168	1168	1168	1168

Notes: Regressions include quarterly and newspaper fixed effects, newspaper trends, and 4 lags of economic tone, with panel-corrected standard errors.
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 11.A5: Associations between Economic Tone and Pre-Tax Income Growth for Top-Income Groups, Controlling for Bottom- and Broad-Middle-Income Growth (Results plotted in Figure 11.6)

	(1)	(2)	(3)	(4)
δInc_t^{P0-20}	0.0003	0.0002	0.0001	-0.0001
	(0.0002)	(0.0002)	(0.0002)	(0.0002)
δInc_t^{P20-90}	0.0006			
	(0.0006)			
$\delta Inc_t^{P90-100}$	0.0022***			
	(0.0004)			
δInc_t^{P20-95}		0.0011		
		(0.0006)		
$\delta Inc_t^{P95-100}$		0.0016***		
		(0.0003)		
δInc_t^{P20-99}			0.0022***	
			(0.0006)	
$\delta Inc_t^{P99-100}$			0.0008***	
			(0.0002)	
$\delta Inc_t^{P20-99.9}$				0.0034***
				(0.0007)
$\delta Inc_t^{P99.9-100}$				0.0002
				(0.0001)
Constant	0.1464***	0.1451***	0.1455***	0.1480***
	(0.0279)	(0.0278)	(0.0280)	(0.0285)
Observations	2061	2061	2061	2061

Notes: Regressions include quarterly and newspaper fixed effects, newspaper trends, and 4 lags of economic tone, with panel-corrected standard errors.
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 11.A6: Associations between Economic Tone and Disposable Income Growth for Top-Income Groups, Controlling for Bottom- and Broad-Middle-Income Growth (Results plotted in Figure 11.9)

	(1)	(2)	(3)	(4)
δInc_t^{P0-20}	-0.0006	-0.0006	-0.0006	-0.0006
	(0.0004)	(0.0004)	(0.0004)	(0.0004)
δInc_t^{P20-90}	0.0020			
	(0.0011)			
$\delta Inc_t^{P90-100}$	0.0027^{***}			
	(0.0007)			
δInc_t^{P20-95}		0.0029^{**}		
		(0.0011)		
$\delta Inc_t^{P95-100}$		0.0018^{***}		
		(0.0005)		
δInc_t^{P20-99}			0.0045^{***}	
			(0.0012)	
$\delta Inc_t^{P99-100}$			0.0006^{*}	
			(0.0003)	
$\delta Inc_t^{P20-99.9}$				0.0057^{***}
				(0.0012)
$\delta Inc_t^{P99.9-100}$				-0.0000
				(0.0001)
Constant	-0.6067	-0.6196	-0.5958	-0.4897
	(0.5388)	(0.5384)	(0.5482)	(0.5326)
Observations	1168	1168	1168	1168

Notes: Regressions include quarterly and newspaper fixed effects, newspaper trends, and 4 lags of economic tone, with panel-corrected standard errors.
$^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

Table 11.A7: Associations between Economic Tone and Pre-Tax Income Growth by Quintile, excluding the United States

	(1)
δInc_t^{P0-20}	-0.0010
	(0.0016)
δInc_t^{P20-40}	0.0016
	(0.0024)
δInc_t^{P40-60}	0.0007
	(0.0015)
δInc_t^{P60-80}	-0.0012
	(0.0013)
$\delta Inc_t^{P80-100}$	0.0031***
	(0.0007)
Constant	0.1448***
	(0.0285)
Observations	1838

Notes: Regressions include quarterly and newspaper fixed effects, newspaper trends, and 4 lags of economic tone, with panel-corrected standard errors.
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 11.A8: Associations between Economic Tone and Pre-Tax Income Growth for Top-Income Groups, Controlling for Bottom and Middle Income Growth, Excluding the United States

	(1)	(2)	(3)	(4)
δInc_t^{P0-20}	0.0003	0.0002	0.0002	0.0001
	(0.0002)	(0.0002)	(0.0002)	(0.0002)
δInc_t^{P40-60}	0.0004	0.0006	0.0009*	0.0010**
	(0.0004)	(0.0004)	(0.0004)	(0.0004)
$\delta Inc_t^{P90-100}$	0.0023***			
	(0.0004)			
$\delta Inc_t^{P95-100}$		0.0018***		
		(0.0004)		
$\delta Inc_t^{P99-100}$			0.0010***	
			(0.0002)	
$\delta Inc_t^{P99.9-100}$				0.0004**
				(0.0001)
Constant	0.1446***	0.1429***	0.1430***	0.1468***
	(0.0283)	(0.0282)	(0.0284)	(0.0292)
Observations	1838	1838	1838	1838

Notes: Regressions include quarterly and newspaper fixed effects, newspaper trends, and 4 lags of economic tone, with panel-corrected standard errors.
$^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

Table 11.A9: Mechanism Tests, Excluding the United States

	(1)	(2)	(3)	(4)	(5)	(6)
$\Delta IncShare_t^{P99-100}$	0.8424***	0.5001**	0.7057***	0.6270**	0.3467	0.8476***
	(0.2178)	(0.1918)	(0.1973)	(0.2154)	(0.1941)	(0.2177)
$\Delta IncShare_t^{P99-100}$ $\times Ideology$						0.0911
						(0.0869)
δGDP		0.0384***			0.0266***	
		(0.0045)			(0.0040)	
$\Delta Unemp_t$			-0.0748***		-0.0550***	
			(0.0113)		(0.0109)	
$\delta Market\ Cap.$				0.0039***	0.0033***	
				(0.0007)	(0.0006)	
Constant	0.1460***	0.1415***	0.1547***	0.1167***	0.1250***	0.1463***
	(0.0286)	(0.0265)	(0.0270)	(0.0273)	(0.0249)	(0.0287)
Observations	1838	1838	1838	1727	1727	1838

Notes: Regressions include quarterly and newspaper fixed effects, newspaper trends, and 4 lags of economic tone, with panel-corrected standard errors.
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Chapter 13

Table 13.A1: Parties Placed by Respondents in Terms of Their Social Policy Priorities

Denmark	Germany	Ireland	Italy	Netherlands	Spain	Sweden	United Kingdom
Socialdemokraterne	Union (CDU/CSU)	Fine Gael	Movimento 5 Stelle (M5S)	Volkspartij voor Vrijheid en Democratie (VVD)	Partido Popular (PP)	Sveriges socialdemokratiska arbetareparti (SAP)	Conservative and Unionist Party
Dansk Folkeparti (DF)	Sozialdemokratische Partei Deutschlands (SPD)	Fianna Fáil	Partito Democratico (PD)	Partij voor de Vrijheid (PVV)	Partido Socialista Obrero Español (PSOE)	Moderata samlingspartiet (M)	Labour Party
Venstre, Danmarks Liberale Parti	Die Linke	Sinn Féin	Lega Nord (LN)	Christen-Democratisch Appèl (CDA)	Unidos Podemos	Sverigedemokraterna (SD)	Liberal Democrats
Enhedslisten – De Rød-Grønne	Bündnis 90/Die Grünen	Labour Party	Forza Italia (FI)	Democraten 66 (D66)	Ciudadanos (Cs)	Miljöpartiet (MP)	
Liberal Alliance	Alternative für Deutschland (AFD)			GroenLinks (GL)		Centerpartiet (C)	
	Freie Demokratische Partei (FDP)			Socialistische Partij (SP)		Vänsterpartiet (V)	
				Partij van de Arbeid (PvdA)		Liberalerna (L)	

Table 13.A2: Social Class as a Determinant of Perceived Systemic Congruence

	Perceived systemic congruence
Middle class	-0.171*
	(0.073)
Small business owners	-0.137
	(0.128)
Skilled working class	-0.335***
	(0.064)
Unskilled working class	-0.487***
	(0.089)
Female	0.000
	(0.051)
Age	-0.005**
	(0.002)
Union member	-0.114*
	(0.057)
Country-FE	✓
Constant	5.359***
	(0.125)
Observations	6520
R^2	0.033

Standard errors in parentheses
$^{+}p < 0.10$, $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

Table 13.A3: Social Class as a Determinant of Party and System Proximity

	Party proximity consumption	Party proximity investment	Party proximity migration	System proximity consumption	System proximity investment	System proximity migration
Middle class	0.509	-0.079	-0.781*	1.037**	-0.317	-1.122***
	(0.357)	(0.216)	(0.326)	(0.365)	(0.216)	(0.327)
Small business owners	1.259*	-0.919*	0.238	1.739**	-0.897*	-0.786
	(0.632)	(0.382)	(0.577)	(0.645)	(0.382)	(0.578)
Skilled working class	2.265***	-1.118***	-1.176***	3.116***	-1.441***	-1.907***
	(0.316)	(0.191)	(0.289)	(0.323)	(0.191)	(0.289)
Unskilled working class	3.377***	-1.696***	-1.664***	4.519***	-2.154***	-2.575***
	(0.438)	(0.264)	(0.400)	(0.447)	(0.265)	(0.400)
Female	-0.210	0.336*	-0.590**	-0.480$^+$	0.341*	-0.063
	(0.248)	(0.150)	(0.227)	(0.253)	(0.150)	(0.227)
Age	0.100***	-0.062***	-0.016*	0.096***	-0.060***	-0.012$^+$
	(0.008)	(0.005)	(0.007)	(0.008)	(0.005)	(0.007)
Union member	0.409	-0.160	-0.337	0.552$^+$	-0.446**	0.234
	(0.280)	(0.169)	(0.256)	(0.286)	(0.169)	(0.256)
Country-FE	✓	✓	✓	✓	✓	✓
Constant	-1.985**	2.368***	-3.134***	-1.523*	2.342***	-3.980***
	(0.613)	(0.370)	(0.559)	(0.625)	(0.370)	(0.561)
Observations	6533	6533	6533	6533	6533	6533
R^2	0.070	0.070	0.029	0.080	0.081	0.029

Standard errors in parentheses
$^+ p < 0.10$, $^* p < 0.05$, $^{**} p < 0.01$, $^{***} p < 0.001$

Table 13.A4: Income as a Determinant of Party and System Proximity

	Party prox. consumption	Party prox. investment	Party proximity migration	System prox. consumption	System prox. investment	System prox. migration
4th quintile	0.345	-0.101	-0.388	0.769*	-0.351	-0.486
	(0.358)	(0.219)	(0.354)	(0.365)	(0.219)	(0.354)
3rd quintile	0.842*	-0.539*	-0.067	1.292***	-0.780***	-0.244
	(0.361)	(0.221)	(0.357)	(0.368)	(0.221)	(0.357)
2nd quintile	1.892***	-1.124***	-0.413	2.558***	-1.499***	-0.620^{+}
	(0.375)	(0.229)	(0.370)	(0.382)	(0.229)	(0.370)
1st quintile	2.491***	-1.390***	-0.813*	3.187***	-1.854***	-0.812*
	(0.370)	(0.226)	(0.366)	(0.378)	(0.227)	(0.366)
Female	-0.335	0.345*	-0.366	-0.540*	0.347*	0.039
	(0.230)	(0.141)	(0.227)	(0.235)	(0.141)	(0.227)
Age	0.125***	-0.073***	-0.033***	0.122***	-0.070***	-0.034***
	(0.007)	(0.004)	(0.007)	(0.007)	(0.004)	(0.007)
Union member	0.178	-0.089	-0.089	0.389	-0.382*	0.367
	(0.261)	(0.160)	(0.258)	(0.266)	(0.160)	(0.258)
Country-FE	✓	✓	✓	✓	✓	✓
Constant	-2.942***	2.862***	-2.701***	-2.344***	2.738***	-3.527***
	(0.550)	(0.336)	(0.543)	(0.560)	(0.336)	(0.543)
Observations	7778	7778	7778	7778	7778	7778
R^2	0.072	0.067	0.020	0.077	0.077	0.017

Standard errors in parentheses
$^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 13.A5: Social Class as a Determinant of Party and System Proximity Across Policy Fields

|	Party prox. pension	Party prox. unemployment	Party proximity childcare	Party prox. tertiary education	Party prox. ALMP	Party prox. benefits for migrants	System prox. pension	System prox. unemployment	System prox. childcare	System prox. tertiary education	System prox. ALMP	System prox. benefits for migrants
Middle class	0.486 (0.725)	0.465 (0.407)	0.090 (0.431)	-0.183 (0.405)	-0.068 (0.374)	-0.781* (0.326)	1.019 (0.738)	1.055** (0.409)	0.004 (0.431)	-0.872* (0.401)	-0.084 (0.373)	-1.122*** (0.327)
Small business owners	0.933 (1.282)	1.433* (0.720)	-0.624 (0.763)	-1.530* (0.716)	-0.507 (0.661)	0.238 (0.577)	1.799 (1.306)	1.679* (0.724)	-0.618 (0.762)	-1.623* (0.709)	-0.451 (0.660)	-0.786 (0.578)
Skilled working class	2.478*** (0.642)	1.931*** (0.361)	-0.866* (0.382)	-1.554*** (0.359)	-0.762* (0.331)	-1.176*** (0.289)	3.639*** (0.654)	2.592*** (0.363)	-0.924* (0.382)	-2.520*** (0.355)	-0.879** (0.331)	-1.907*** (0.289)
Unskilled working class	3.488*** (0.888)	3.132*** (0.499)	-1.989*** (0.529)	-2.356*** (0.496)	-0.600 (0.458)	-1.664*** (0.400)	4.882*** (0.905)	4.155*** (0.502)	-2.109*** (0.528)	-3.682*** (0.491)	-0.671 (0.458)	-2.575*** (0.400)
Female	0.938$^+$ (0.504)	-1.323*** (0.283)	1.145*** (0.300)	0.119 (0.281)	-0.328 (0.260)	-0.590** (0.227)	0.268 (0.513)	-1.228*** (0.284)	1.175*** (0.299)	0.083 (0.278)	-0.235 (0.259)	-0.063 (0.227)
Age	0.237*** (0.016)	-0.036*** (0.009)	-0.079*** (0.010)	-0.093*** (0.009)	-0.013 (0.008)	-0.016* (0.007)	0.243*** (0.016)	-0.052*** (0.009)	-0.074*** (0.010)	-0.092*** (0.009)	-0.013 (0.008)	-0.012$^+$ (0.007)
Union member	1.458* (0.568)	-0.657* (0.319)	-0.103 (0.338)	-0.240 (0.317)	-0.105 (0.293)	-0.337 (0.256)	1.116$^+$ (0.579)	-0.011 (0.321)	-0.211 (0.338)	-0.909** (0.314)	-0.219 (0.293)	0.234 (0.256)
Country-FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Constant	-5.934*** (1.244)	1.322$^+$ (0.698)	4.162*** (0.740)	3.772*** (0.695)	-0.405 (0.641)	-3.134*** (0.559)	-5.092*** (1.267)	1.582* (0.702)	4.478*** (0.739)	3.224*** (0.687)	-0.636 (0.641)	-3.980*** (0.561)
Observations	6533	6533	6533	6533	6533	6533	6533	6533	6533	6533	6533	6533
R^2	0.063	0.030	0.028	0.046	0.007	0.029	0.069	0.040	0.029	0.064	0.011	0.029

Figure 13.A1: Income differences in Proximity to Preferred Party and the Party System (coefficients indicate differences to the fifth income quintile)
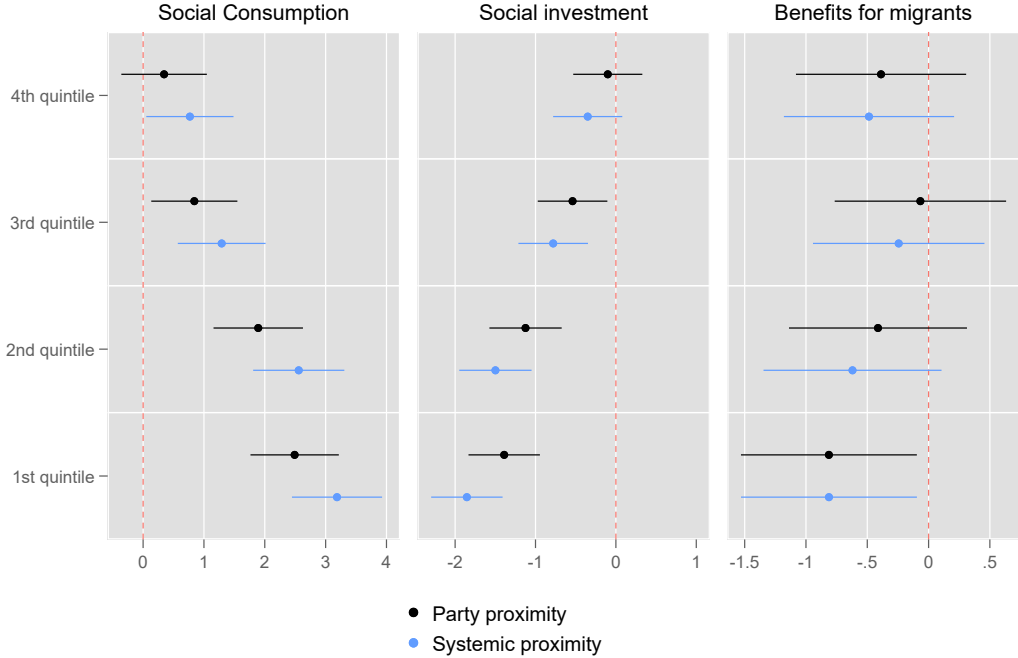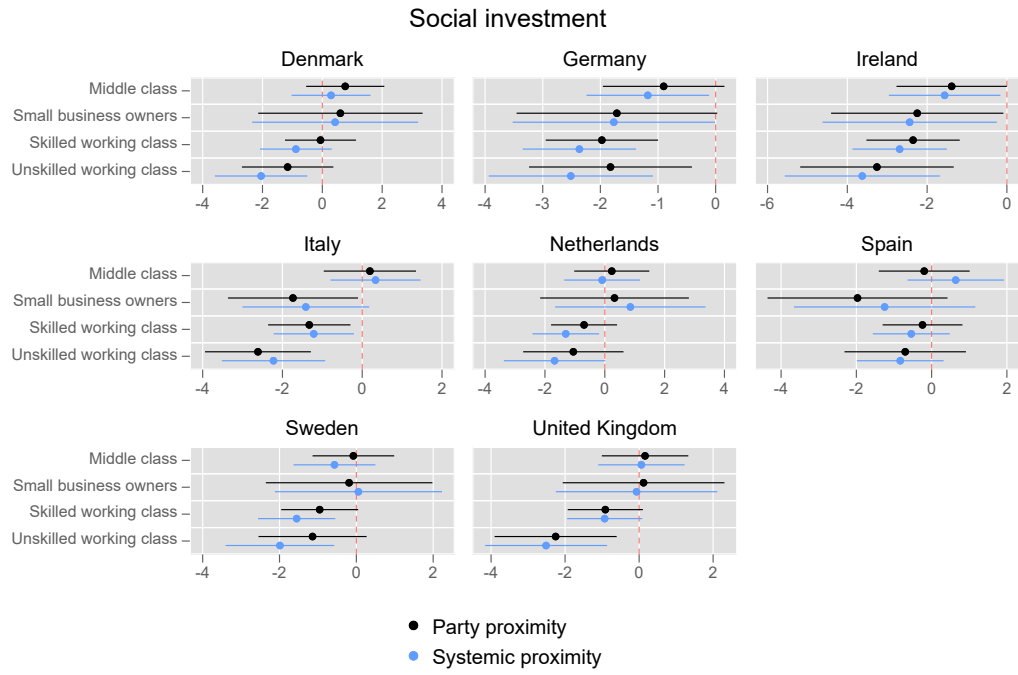
Figure 13.A2: Income Differences in Proximity to Preferred Party and the Party System (coefficients indicate differences to the fifth income quintile)

- ● Party proximity
- ● Systemic proximity
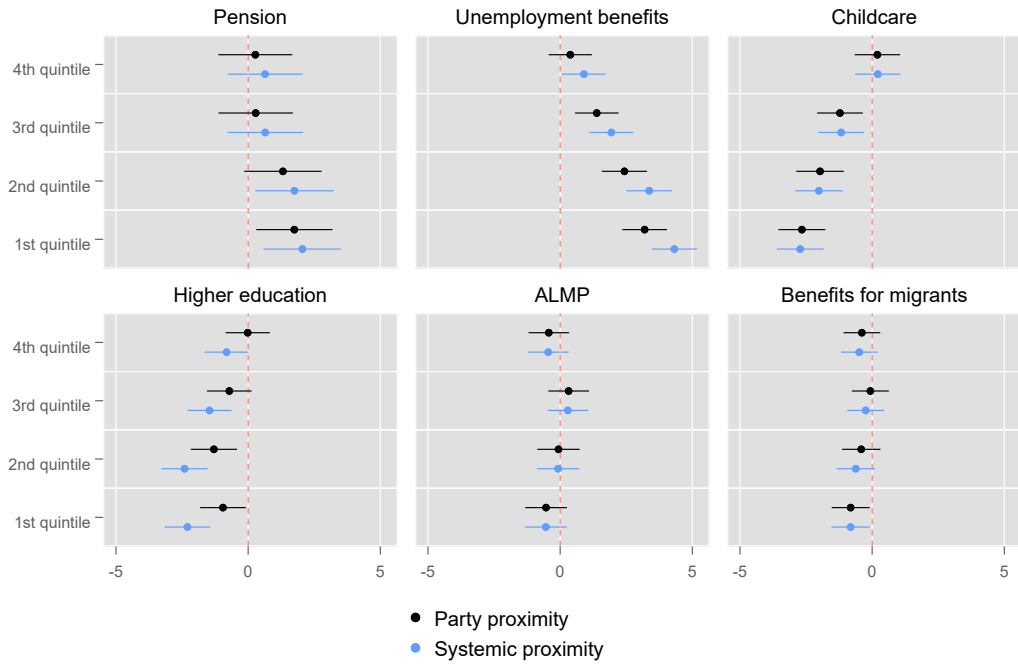
Figure 13.A3: Social Class Differences in Subjective Proximity to Preferred Party and the Party System on Social Consumption, by Country

Social consumption
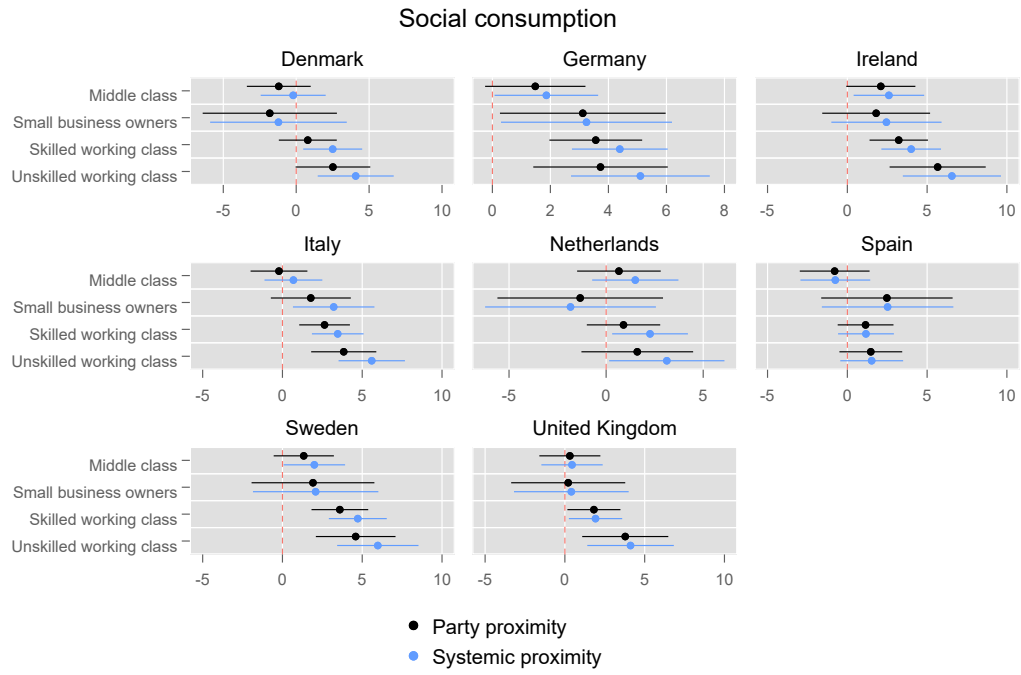
Figure 13.A4: Social Class Differences in Subjective Proximity to Preferred Party and the Party System on Social Investment, by Country

Social investment

Figure 13.A5: Social Class Differences in Subjective Proximity to Preferred Party and the Party System on Benefits for Migrants, by Country

Benefits for migrants

● Party proximity
● Systemic proximity
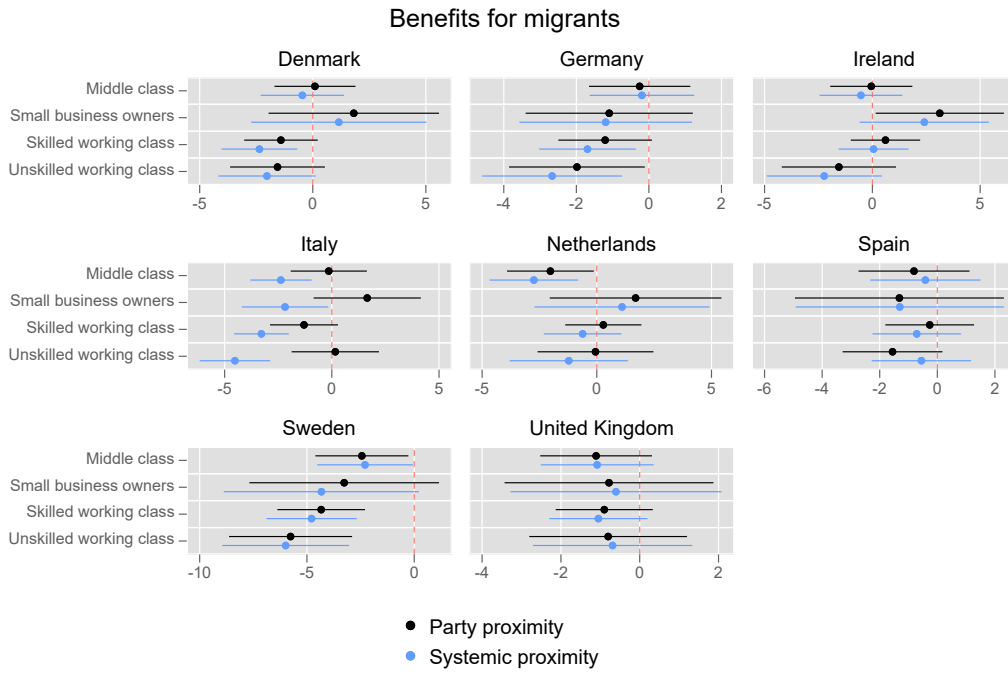
References

Acemoglu, Daron, and James A. Robinson. 2006. *Economic Origins of Dictatorship and Democracy*. New York: Cambridge University Press.

Carnes, Nicholas, Noam Lupu, Miriam Golden, Eugenia Nazrullaeva, and Stephane Wolton. 2021. "Global Legislator Database," https://doi.org/10.7910/DVN/U1ZNVT, Harvard Dataverse, V1.

Coppedge, Michael, John Gerring, Carl Henrik Knutsen, Staffan I. Lindberg, Jan Teorell, David Altman, Michael Bernhard, Agnes Cornell, M. Steven Fish, Lisa Gastaldi, Haakon Gjerløw, Adam Glynn, Allen Hicken, Anna Lührmann, Seraphine F. Maerz, Kyle L. Marquardt, Kelly McMann, Valeriya Mechkova, Pamela Paxton, Daniel Pemstein, Johannes von Römer, Brigitte Seim, Rachel Sigman, Svend-Erik Skaaning, Jeffrey Staton, Aksel Sundtröm, Eitan Tzelgov, Luca Uberti, Yi-ting Wang, Tore Wig, and Daniel Ziblatt. 2021. "V-Dem Codebook v11." Varieties of Democracy (V-Dem) Project.

Iversen, Torben, and David Soskice. 2006. "Electoral Institutions and the Politics of Coalitions: Why Some Democracies Redistribute More Than Others." *American Political Science Review* 100(2): 165–81.

Kayser, Mark A., and Michael Peress. 2021. "Does the Media Cover the Economy Accurately? An Analysis of Sixteen Developed Democracies." *Quarterly Journal of Political Science* 16(1): 1–33.

Verbist, Gerlinde, Michael F. Förster, and Maria Vaalavuo. 2012. "The Impact of Publicly Provided Services on the Distribution of Resources: Review of New Results and Methods." OECD Social, Employment and Migration Working Papers No. 130.