

**The Origins of Redistributive Policy Preferences:
Political Socialization with and without a Welfare State**

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Online Appendix

This appendix includes descriptive data, as well as a number of additional diagnostic tests discussed in the text. Contents are as follows:

- Appendix Table A1 includes basic descriptive statistics for all items used in regression models.
- Appendix Table A2 includes the mean values for the redistribution index annually, alongside the number of available cases.
- Appendix Table A3 includes results from likelihood ratio tests of the null hypothesis that each model in Table 2 is not a significant improvement over the previous model(s).
- Appendix Table A4 includes selected results from Model 4 in Table 2, but where the dependent variables include each of the four items used in the index, separately.
- Appendix Table A5 includes selected results from Model 4 in Table 2, but where the dependent variable is the index constrained to at least two items (as in the text), at least three items, and at least four items.
- Appendix Table A6 includes selected results from Model 3 in Table 2, but using different socialization ages.
- Appendix Table A7 includes selected results from Model 4 in Table 2, but with interactions of current macroeconomic variables with income. Appendix Figure A7 plots predicted values based on these results.
- Appendix Table A8 includes results from models of redistribution support, allowing for interactions between current macroeconomic variables and the welfare-state measure. Figure A8 illustrates the impact of the interaction.
- Appendix Table A9 includes selected results from models in Table 2, but using a different dependent variable capturing preferences on spending and taxation (rather than redistribution directly). Appendix Figure A8 then plots the predicted random cohort effects on tax/spending question.

In most tables we include just the most critical results, that is, results excluding the coefficients for demographic and regional variables. Demographics are included throughout, however; and full results are available upon request. Results are discussed in text, particular in the Robustness Checks section.

Appendix Table A1. Descriptive Statistics: Variables (1986-2010)

	Mean	Std. Dev.	Min	Max
<u>Dependent Variables</u>				
Redistribution index	56.34	19.26	0	100
Government should redistribute income	6.18	55.41	-100	100
Ordinary people do not get nation's wealth	30.58	45.63	-100	100
More spending on welfare	11.53	50.25	-100	100
Welfare benefits too generous	-3.65	55.79	-100	100
More tax & spend	0.55	0.50	0	1
<u>Socialization context:</u>				
Unemployment	0.04	0.03	0.01	0.14
GDP growth	0.02	0.01	-0.04	0.05
War cohort	0.12	0.32	0	1
<u>Current context:</u>				
Unemployment	0.05	0.03	0.03	0.10
GDP growth	0.02	0.02	-0.02	0.05
<u>Individual-Level Covariates</u>				
Age	48.48	18.06	17	97
Birth year	1949.99	19.00	1900	1990
Female	0.56	0.50	0	1
Married	0.58	0.49	0	1
Union member	0.22	0.41	0	1
Religious denomination	0.53	0.50	0	1
Own house	0.69	0.46	0	1
University degree	0.26	0.44	0	1
Labor Force Status:				
Working	0.53	0.50	0	1
Unemployed	0.05	0.22	0	1
Not working (e.g. retired)	0.42	0.49	0	1
Region				
Scotland	0.09	0.29	0	1
Nth. England	0.26	0.44	0	1
Midlands	0.17	0.37	0	1
Wales	0.06	0.23	0	1
Sth. England	0.32	0.47	0	1
London	0.10	0.30	0	1

Appendix Table A2. Mean redistribution index over time

Survey Year	Mean Redist. Index	N (obs)
1986	61.0	1297
1987	59.9	2463
1989	61.4	2583
1990	62.2	2401
1991	61.4	2664
1993	60.2	2535
1994	58.6	2893
1995	59.9	3086
1996	58.7	3048
1998	55.8	2482
1999	54.7	2412
2000	55.1	2960
2001	55.6	2769
2002	55.0	2852
2003	58.9	3556
2004	51.4	2566
2005	52.0	3512
2006	52.9	3706
2007	52.2	3513
2008	53.6	3916
2009	55.6	2862
2010	50.5	2703

Appendix Table A3. Model Comparison (Dep. Var: Redistribution preference index)

		LogLik Ratio Test (Prob > χ^2)		
Model		To pure APC	To demog.	To context
1	Pure APC			
2	Demographics	0.000		
<u>Context Model</u>				
3	Socializ. + current context	0.000	0.000	
4	Welfare exists	0.000	0.000	0.019

Note: Entries are model fit statistics of cross-classified random effects models based on estimates presented in Table 1.

Appendix Table A4. Linear HAPC models of single items used in redistribution index

	DV1	DV2	DV3	DV4
	Redistribute	Workwealth	Morewelfare	Welfarefeet
Intercept	26.76 (15.73)	57.18 *** (11.54)	2.63 (18.04)	47.44 * (19.90)
<u>Individual Fixed Effects</u>				
Age	-0.17 (0.14)	-0.16 (0.10)	0.18 (0.15)	-0.66 (0.16)
Included	Gender, married, union mem., house, degree, religion, income, region, LFS			
<u>Socialization context</u>				
Unemployment	-0.40 (0.54)	-0.47 (0.24)	-0.95 (0.50)	-3.19 ** (1.22)
GDP growth	2.59 ** (0.87)	1.24 ** (0.45)	2.42 ** (0.86)	2.74 (1.76)
Welfare Expanse	0.27 (0.93)	-0.62 (0.59)	0.52 (0.97)	-2.07 (1.58)
Welfare X unempl.	-0.04 (0.07)	0.01 (0.03)	-0.02 (0.06)	0.23 (0.15)
Welfare X GDP growth	-0.39 ** (0.15)	-0.13 (0.07)	-0.33 * (0.14)	-0.40 (0.31)
War	-1.18 (3.08)	-0.72 (1.28)	-4.89 (2.77)	-10.88 (7.05)
<u>Current context</u>				
Unemployment	1.62 ** (0.55)	0.27 (0.39)	3.12 ** (0.85)	4.23 *** (0.62)
GDP growth	0.13 (0.55)	-0.30 (0.34)	0.73 (0.90)	0.61 (0.60)
<u>Variance Components</u>				
Cohort (1916-2005)	3.34 *** (0.68)	1.09 (0.36)	2.93 *** (0.65)	8.06 *** (1.43)
Period (1983-2010)	4.38 *** (0.76)	2.57 *** (0.45)	6.91 *** (1.29)	4.56 *** (0.96)
N (obs)	53,314	50,785	42,371	42,388

*Significance levels: * p<.05, ** p<.01 *** p<.001. Data: British Social Attitude Survey (1986-2010). Note: Entries are OLS-coefficients estimated by a mixed generalized linear model.*

Appendix Table A5. Linear HAPC models of redistribution index with various constraints

	At least 1 item	At least 3 items	all 4 items
Intercept	66.59 *** (5.98)	63.27 *** (6.48)	63.14 *** (6.68)
<u>Individual Fixed Effects</u>			
Age	-0.07 (0.05)	-0.08 (0.05)	-0.08 (0.06)
Included	Gender, married, union mem., house, degree, religion, income, region, LFS		
<u>Socialization context</u>			
Unemployment	-0.60 * (0.28)	-0.61 * (0.30)	-0.59 (0.31)
GDP growth	1.07 ** (0.41)	1.34 ** (0.47)	1.22 * (0.48)
Welfare Expanse	-0.12 (0.40)	-0.02 (0.44)	-0.06 (0.45)
Welfare X unempl.	0.02 (0.03)	0.02 (0.04)	0.02 (0.04)
Welfare X GDP growth	-0.15 * (0.07)	-0.18 * (0.08)	-0.17 * (0.08)
War	-1.80 (1.60)	-2.22 (1.75)	-2.15 (1.76)
<u>Current context</u>			
Unemployment	0.91 *** (0.24)	1.21 *** (0.25)	1.32 *** (0.27)
GDP growth	0.02 (0.26)	0.14 (0.26)	0.22 (0.26)
<u>Variance Components</u>			
Cohort (1916-2005)	1.81 ** (0.33)	1.97 *** (0.37)	1.97 *** (0.37)
Period (1983-2010)	2.05 *** (0.35)	1.96 *** (0.38)	1.94 *** (0.39)
N (obs)	54,821	41,257	38,217

Significance levels: * $p < .05$, ** $p < .01$ *** $p < .001$. *Data:* British Social Attitude Survey (1986-2010). *Note:* Entries are OLS-coefficients estimated by a mixed generalized linear model.

Appendix Table A6. Linear HAPC models on redistribution preference index using different socialization ages

<i>Socialization age:</i>	Age 10-15	Age 15-20	Age 20-25	Age 25-30	Age 30-35
Intercept	65.790 *** (5.384)	66.416 *** (5.688)	65.759 *** (5.986)	65.475 *** (6.282)	62.072 *** (6.527)
<u>Individual Fixed Effects</u>					
Age	-0.073 ** (0.050)	-0.074 ** (0.050)	-0.074 ** (0.050)	-0.079 ** (0.050)	-0.063 ** (0.050)
Included	Gender, married, union mem, own house, degree, religion, income, lab force stat.				
<u>Socialization context</u>					
Unemployment	-0.461 ** (0.130)	-0.460 ** (0.143)	-0.385 * (0.159)	-0.202 (0.172)	0.099 (0.156)
GDP growth	0.627 (0.295)	0.467 (0.336)	0.364 (0.415)	0.280 (0.436)	0.321 (0.371)
Welfare Expanse	-0.277 (0.270)	-0.293 (0.274)	-0.232 (0.274)	-0.195 (0.282)	-0.058 (0.281)
War	-2.321 (1.561)	-1.794 (1.604)	-1.768 (1.908)	-3.100 (2.058)	-4.096 * (1.794)
<u>Current context</u>					
Unemployment	0.912 *** (0.237)	0.912 *** (0.237)	0.913 *** (0.237)	0.903 *** (0.237)	0.937 *** (0.239)
GDP growth	0.009 (0.254)	0.009 (0.254)	0.009 (0.255)	0.010 (0.254)	0.009 (0.257)
<u>Variance Components</u>					
Cohort (1916-2005)	1.893 *** (0.366)	2.043 *** (0.370)	2.261 *** (0.398)	2.365 *** (0.425)	1.896 ** (0.371)
Period (1983-2010)	2.039 *** (0.352)	2.040 *** (0.352)	2.044 *** (0.353)	2.036 *** (0.352)	2.062 *** (0.356)
N (obs)	54,563	54,563	54,563	54,097	52,808

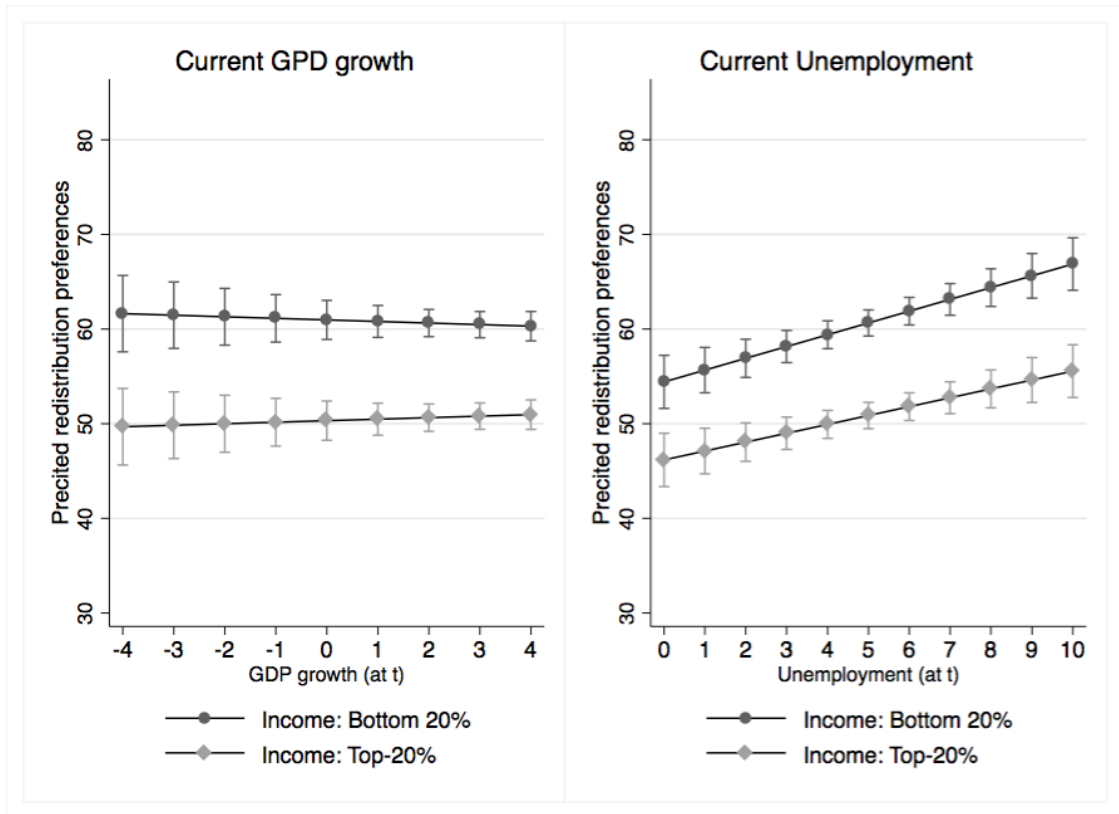
Significance levels: * $p < .05$, ** $p < .01$ *** $p < .001$. *Data:* British Social Attitude Survey (1983-2010). *Note:* Entries are OLS-coefficients estimated by a mixed generalized linear model. Dependent variable: redistribution preference index.

Appendix Table A7. Linear HAPC models of redistribution index, interactions current macroeconomic variables with income

	Interaction: Current... x income	
	Unemployment	GDP growth
Intercept	73.412 *** (5.704)	75.127 *** (5.701)
<u>Individual Fixed Effects</u>		
Age	-.076 (0.050)	-.075 (0.050)
Income	-2.057 *** (0.136)	-2.664 *** (0.105)
Included	Gender, married, union mem., house, degree, religion, income, region, LFS	
<u>Current context</u>		
Unemployment	1.137 *** (0.246)	0.914 *** (0.238)
GDP growth	.009 (0.255)	-.228 (0.267)
<u>Interactions: Income x</u>		
Unemployment (current)	-0.078 *** (0.023)	
GDP growth (current)		0.082 ** (0.026)
<u>Socialization context</u>		
Unemployment	-0.478 ** (0.146)	-0.471 ** (.144)
GDP growth	0.496 (0.340)	0.485 (0.338)
Welfare Expanse	-0.306 (0.275)	-0.307 (0.275)
War	-1.830 (1.628)	-1.825 (1.618)
<u>Variance Components</u>		
Cohort (1916-2005)	2.075 *** (0.376)	2.061 *** (0.373)
Period (1983-2010)	2.046 *** (0.354)	2.049 *** (0.354)
N (obs)	54,563	54,563

Significance levels: * $p < .05$, ** $p < .01$ *** $p < .001$. *Data:* BSA Survey (1986-2010). *Note:* Entries are OLS coefficients estimated by a mixed generalized linear model. Income is measured by using quintiles as a 5-point interval-level measure.

Appendix Figure A7. Predicted redistribution preferences by current GDP growth and current unemployment by income (including 95% C.I.)



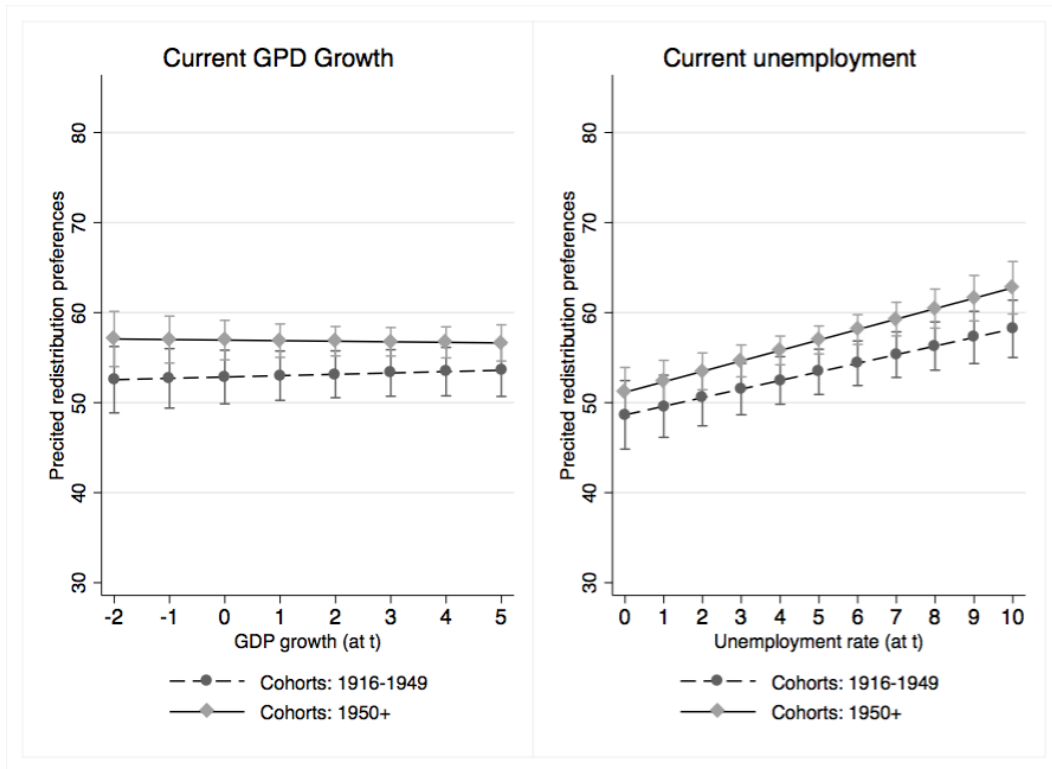
Appendix Table A8. Linear HAPC models of redistribution index, interactions current macroeconomic variables with pre-post-welfare cohorts

	Interaction: Current.... x welfare cohorts	
	Unemployment	GDP growth
Intercept	56.294 *** (3.299)	55.067 *** (3.344)
<u>Individual Fixed Effects</u>		
Age	0.018 (0.027)	0.016 (0.028)
Included	Gender, married, union mem., house, income, degree, religion, LFS, region	
<u>Current context</u>		
Unemployment	0.924 *** (0.247)	1.103 *** (0.2420)
GDP growth	-0.008 (0.281)	0.150 (0.290)
<u>Socialization context</u>		
Unemployment	-0.299 * (0.124)	-0.310 * (0.128)
GDP growth	0.216 (0.293)	0.235 (0.300)
Welfare Expanse	2.304 (1.597)	4.099 * (1.597)
<u>Interaction</u>		
Current unemployment x welfare expansion	0.247 ** (0.077)	
Current GDP growth x welfare expansion		-0.212 * (0.088)
<u>Variance Components</u>		
Cohort (1916-2005)	1.692 ** (0.334)	1.740 ** (0.342)
Period (1983-2010)	2.259 *** (0.368)	2.271 *** (0.370)
N (obs)	54,563	54,563

*Significance levels: * p<.05, ** p<.01 *** p<.001. Data: BSA Survey (1986-2010).*

Note: Entries are OLS coefficients estimated by a mixed generalized linear model.

Appendix Figure A8. Predicted redistribution preferences by current GDP growth and current unemployment over cohorts (including 95% C.I.)



**Appendix Table A9. Logistic HAPC models on tax and spending:
cross-classified random effects**

	MODEL 1 Pure APC	MODEL 2 Demographics	MODEL 3 Combi Context	MODEL 4 Welfare exists
Intercept	0.092 (0.146)	0.270 (0.166)	0.514 (0.695)	-0.253 (0.382)
Age	-0.001 (0.002)	-0.001 (0.002)	0.000 (0.006)	0.007 (0.003)
Included		Gender, married, union mem, own house, degree, religion, income, lab force stat.		
<u>Current context</u>				
Unemployment			0.021 (0.035)	0.035 (0.034)
GDP growth			-0.007 (0.037)	-0.009 (0.038)
<u>Socialization context</u>				
Unemployment			-0.057 *** (0.012)	-0.051 ** (0.017)
GDP growth			0.069 * (0.029)	0.073 * (0.029)
War (at c)			-0.260 (0.137)	-0.153 (0.139)
Welfare state				0.623 ** (0.239)
Welfare x unempl.				-0.001 (0.028)
Welfare x GDP growth				-0.176 * (0.079)
<u>Variance Components</u>				
Cohort (1916-2005)	0.247 *** (0.044)	0.280 *** (0.050)	0.174 *** (0.034)	0.137 *** (0.028)
Period (1983-2010)	0.335 *** (0.051)	0.337 *** (0.051)	0.332 *** (0.051)	0.341 *** (0.051)
N (obs)	54,656	54,656	54,656	54,656

Significance levels: * $p < .05$, ** $p < .01$ *** $p < .001$. *Data:* British Social Attitude Surveys (1986-2010).
Note: Entries are logistic regression coefficients estimated by a mixed generalized linear model. Standard errors in parentheses.

Appendix Figure A9. Predicted random cohort effects on tax/spending question (including 95% C.I.)

