

Attitudes toward Refugees in Contemporary Europe: A Longitudinal Perspective on Cross-national Differences

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Appendix

Note: All code provided at <https://dx.doi.org/10.17605/OSF.IO/RPN92>

Figure A1: Trends of country-level predictors

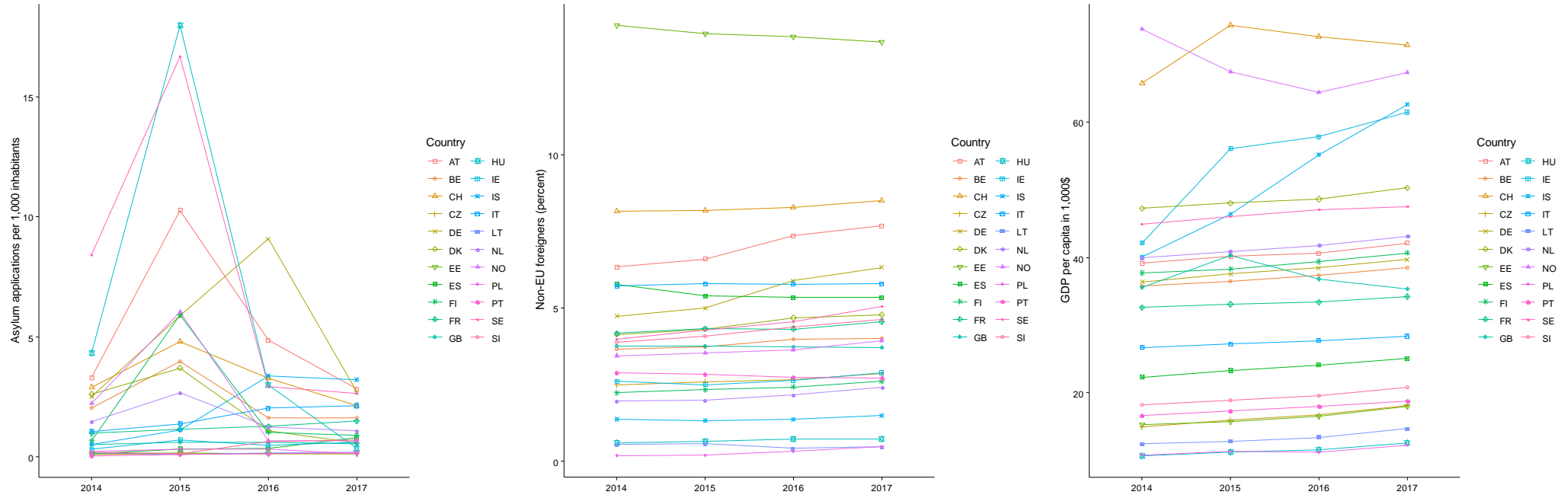


Figure A2: Aggregate trends of individual-level moderators (standardized)

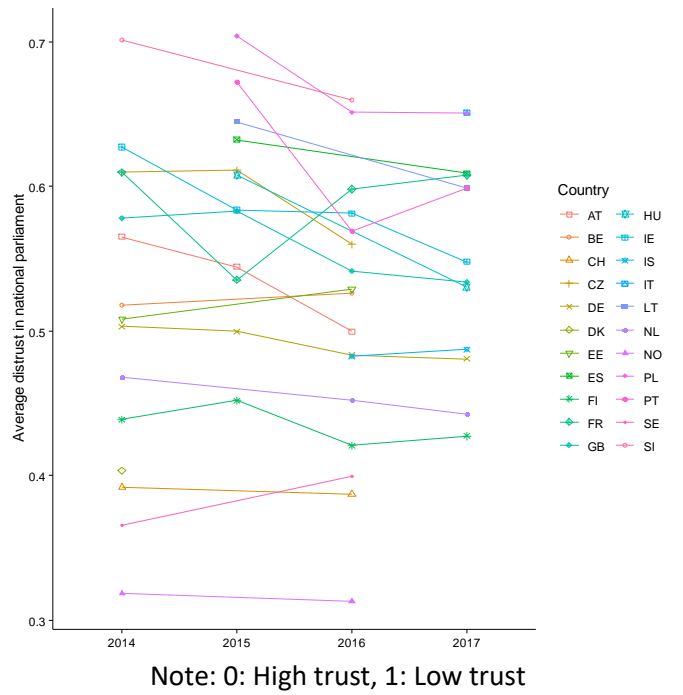
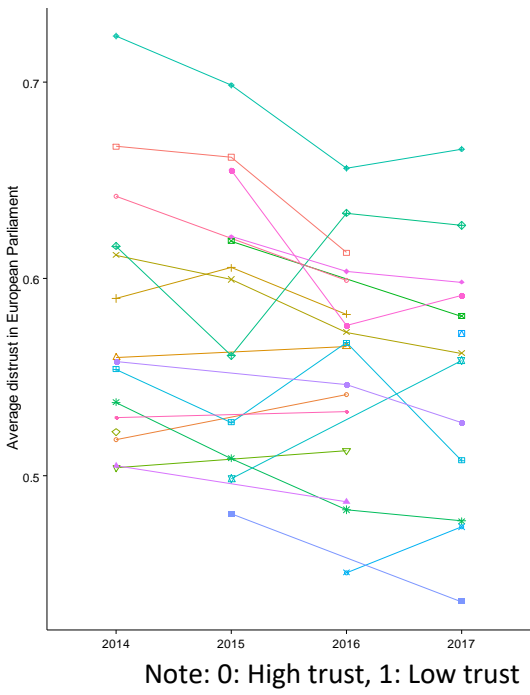
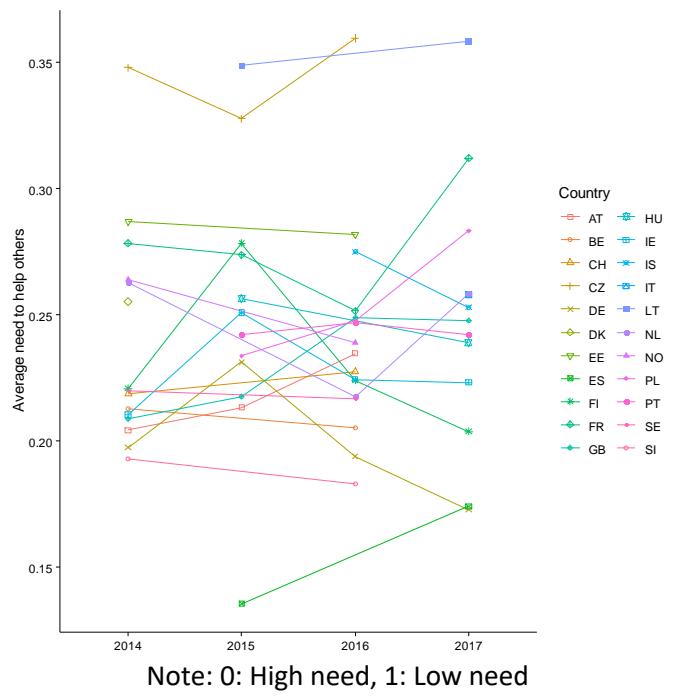
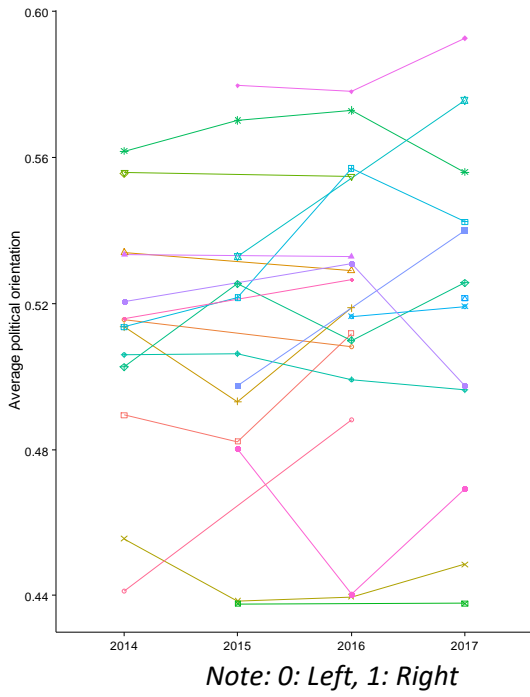


Table A2: Interactions (terms of interest in bold)

Interaction models of negative attitude toward refugees

	LR scale interaction	Need to help interaction	Trust European Parliament interaction	Trust national parliament interaction
<i>Country variables</i>				
Foreigner share (WE)	0.26 (1.02)	0.03 (0.70)	-1.46 (1.23)	-0.66 (0.68)
Foreigner share (BE)	0.06 (0.03)	0.06 * (0.03)	0.06 (0.03)	0.05 (0.03)
GDP/c (WE)	-0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)
GDP/c (BE)	-0.01 (0.01)	-0.00 (0.01)	-0.01 (0.01)	-0.02 * (0.01)
<i>Individual variables</i>				
LR scale (WE)	0.52 *** (0.04)			
LR scale (BE)	2.87 (2.46)			
Need to help others (WE)		0.30 *** (0.04)		
Need to help others (BE)		2.73 (2.01)		
Trust EP (WE)			0.74 *** (0.03)	
Trust EP (BE)			-1.73 (1.58)	
Trust national parl. (WE)				0.45 *** (0.04)
Trust national parl. (BE)				-1.99 (1.36)
<i>Individual level controls</i>				
Foreigner share (WE) X LR scale (WE)	0.61 *** (0.10)	✓	✓	✓
Foreigner share (BE) X LR scale (WE)	0.09 *** (0.01)			
Foreigner share (WE) X LR scale (BE)	0.03 (2.16)			
Foreigner share (WE) X Need to help (WE)		-0.28 * (0.11)		
Foreigner share (BE) X Need to help (WE)		0.01 (0.01)		
Foreigner share (WE) X Need to help (BE)		1.24 (3.29)		

Foreigner share (WE) X Trust EP (WE)			0.24 **	
			(0.09)	
Foreigner share (BE) X Trust EP (WE)			0.01	
			(0.01)	
Foreigner share (WE) X Trust EP (BE)			2.97	
			(2.07)	
Foreigner share (WE) X Trust national parl. (WE)				0.02
				(0.09)
Foreigner share (BE) X Trust national parl. (WE)				0.04 ***
				(0.01)
Foreigner share (WE) X Trust national parl. (BE)				1.86
				(1.32)
<i>Time trend</i>	✓	✓	✓	✓
Intercept	1.22	1.98 **	3.81 ***	4.15 ***
	(1.29)	(0.59)	(0.95)	(0.97)
Random Effects				
σ^2	1.07	1.10	1.07	1.08
τ_{00}	0.02 year:Country	0.02 year:Country	0.01 year:Country	0.02 year:Country
	0.16 Country	0.15 Country	0.16 Country	0.15 Country
N (countries)	22	22	22	22
N (country-years)	57	57	57	57
N (respondents)	50933	50933	50933	50933
AIC	148209.867	149683.594	148317.490	148995.010

* $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$. All continuous individual-level variables standardized to range from 0 to 1

Table A3: Number of observations per country and year of maximum sample

	2014	2015	2016	2017
AT	189	1032	1396	0
BE	1236	39	1198	72
CH	745	41	752	38
CZ	447	969	1782	0
DE	1811	427	1864	227
DK	1163	19	0	0
EE	919	0	1009	96
ES	0	1266	0	1302
FI	1652	141	1381	330
FR	1064	209	998	422
GB	1071	400	1174	109
HU	0	1133	0	1044
IE	1116	324	107	1490
IS	0	0	170	427
IT	0	0	0	1426
LT	0	1161	0	1224
NL	1301	60	1119	149
NO	1035	0	1092	1
PL	0	1089	997	233
PT	0	903	171	791
SE	1231	9	1002	80
SI	688	19	825	6

Table A4: Selected robustness checks

Predictors of negative attitude toward refugees

	(1) ordered logit RE (Ors)	(2) incl < 100 interviews	(3) excl < 200 interviews	(4) w/o DE	(5) w/o AT	(6) w/o SE	(7) w/o DE, AT & SE	(8) 2 waves	(9) w/o 2015	(10) parallel trends (DE split)
<i>Country variables</i>										
Asylum appl. (WE)	0.97 * (0.01)	-0.01 (0.01)	-0.02 (0.01)	-0.01 (0.01)	-0.02 * (0.01)	-0.02 * (0.01)	-0.02 * (0.01)	-0.02 (0.03)	-0.01 (0.02)	0.01 (0.02)
Asylum appl. (BE)	1.09 (0.05)	0.04 (0.03)	0.05 (0.03)	0.04 (0.04)	0.05 (0.04)	0.06 (0.03)	0.08 (0.05)	0.05 (0.06)	0.05 (0.04)	-0.38 (1.98)
Foreigner share (WE)	1.66 *** (0.15)	0.20 * (0.09)	0.29 ** (0.11)	0.31 * (0.14)	0.28 ** (0.10)	0.31 ** (0.10)	0.39 (0.21)	0.46 ** (0.16)	0.30 ** (0.11)	0.86 ** (0.27)
Foreigner share (BE)	1.09 (0.05)	0.06 * (0.03)	0.05 (0.03)	0.05 (0.03)	0.05 (0.03)	0.05 (0.03)	0.06 (0.03)	0.05 (0.03)	0.05 (0.03)	0.55 (1.30)
GDP/c (WE)	1.00 (0.01)	0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)	0.00 (0.01)	0.01 (0.01)	-0.00 (0.01)	0.19 (0.29)
GDP/c (BE)	0.99 (0.01)	-0.01 (0.00)	-0.01 (0.00)	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.00)	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)	0.05 (0.39)
National election	0.99 (0.09)	0.04 (0.05)	-0.06 (0.07)	-0.01 (0.06)	0.01 (0.06)	-0.00 (0.06)	0.02 (0.07)		0.05 (0.08)	-0.36 (0.22)
<i>Individual variables</i>										
Income satisfaction (ref.: living comfortably)										
Coping	1.11 *** (0.02)	0.05 *** (0.01)	0.05 *** (0.01)	0.05 *** (0.01)	0.05 *** (0.01)	0.06 *** (0.01)	0.04 ** (0.01)	0.05 *** (0.01)	0.06 *** (0.01)	0.05 *** (0.01)
Difficult	1.23 *** (0.03)	0.12 *** (0.02)	0.12 *** (0.02)	0.11 *** (0.02)	0.11 *** (0.02)	0.12 *** (0.02)	0.10 *** (0.02)	0.12 *** (0.02)	0.13 *** (0.02)	0.11 *** (0.02)
Very difficult	1.57 *** (0.05)	0.25 *** (0.03)	0.25 *** (0.03)	0.22 *** (0.03)	0.24 *** (0.03)	0.25 *** (0.03)	0.21 *** (0.03)	0.25 *** (0.03)	0.28 *** (0.03)	0.24 *** (0.03)
Unemployed	0.87 ** (0.04)	-0.08 ** (0.03)	-0.09 *** (0.03)	-0.08 ** (0.03)	-0.09 *** (0.03)	-0.08 ** (0.03)	-0.08 ** (0.03)	-0.08 *** (0.03)	-0.10 *** (0.03)	-0.09 *** (0.03)
Education (ref.: high (>=ISCED 5))	1.24 ***	0.12 ***	0.13 ***	0.14 ***	0.13 ***	0.12 ***	0.13 ***	0.13 ***	0.12 ***	0.13 ***

Medium (ISCED 4)	(0.02)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)
Medium (ISCED 3)	1.43 *** (0.02)	0.21 *** (0.01)	0.21 *** (0.01)	0.20 *** (0.01)	0.19 *** (0.01)	0.20 *** (0.01)	0.17 *** (0.01)	0.21 *** (0.01)	0.21 *** (0.01)	0.21 *** (0.01)
Low (<= ISCED 2)	1.35 *** (0.03)	0.18 *** (0.02)	0.18 *** (0.02)	0.19 *** (0.02)	0.18 *** (0.02)	0.17 *** (0.02)	0.18 *** (0.02)	0.18 *** (0.02)	0.15 *** (0.02)	0.18 *** (0.02)
Age	0.97 (0.04)	-0.01 (0.02)	-0.03 (0.02)	-0.01 (0.02)	-0.03 (0.02)	-0.01 (0.02)	-0.04 (0.02)	-0.01 (0.02)	0.00 (0.02)	-0.02 (0.02)
<i>Time trend</i>										
2015	1.08 (0.11)	0.04 (0.06)	0.01 (0.08)	0.04 (0.08)	0.02 (0.07)	0.05 (0.07)	0.00 (0.09)			-0.22 (0.47)
2016	1.37 *** (0.09)	0.22 *** (0.06)	0.16 * (0.06)	0.19 ** (0.06)	0.18 ** (0.06)	0.20 *** (0.06)	0.18 ** (0.07)		0.18 ** (0.06)	-0.56 (0.73)
2017	Jan 29 (0.13)	0.14 (0.08)	0.12 (0.09)	0.15 (0.09)	0.13 (0.08)	0.15 (0.08)	0.10 (0.10)		0.12 (0.10)	-0.71 (1.01)
Intercept	Cutoffs skipped	2.63 *** (0.23)	2.69 *** (0.23)	2.65 *** (0.24)	2.67 *** (0.24)	2.61 *** (0.23)	2.65 *** (0.24)	2.77 *** (0.23)	2.69 *** (0.24)	0.34 (11.05)
Country dummies X year dummies										✓
Random Effects										
σ^2	3.29	1.10	1.10	1.10	1.09	1.12	1.09	1.10	1.13	1.10
τ_{00}	0.04 year:Country	0.02 year:Country	0.02 year:Country	0.02 year:Country	0.02 year:Country	0.01 year:Country	0.02 year:Country	0.04 essround:Country	0.02 year:Country	1.19 Country2
	0.37 Country	0.15 Country	0.14 Country	0.16 Country	0.16 Country	0.14 Country	0.16 Country	0.16 Country	0.16 Country	0.02 year
N (countries)	22	22	22	21	21	21	19	22	22	23
N (country-years)	57	69	50	53	54	55	48	41	45	61
N (respondents)	50933	51413	49897	46604	48316	48700	41754	51413	41879	50724
AIC	144435913	151295288	146854960	136938341	141480138	143911071	122570892	151303492	124290135	149158917

* $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$, two-sided tests. All continuous variables standardized to range from 0 to 1

Table A5: Conservation value models

<i>Country variables</i>		
Foreigner share (WE)	0.29 ** (0.10)	-1.21 (1.31)
Foreigner share (BE)	0.05 (0.03)	-0.01 (0.03)
GDP/c (WE)	-0.00 (0.01)	-0.00 (0.01)
GDP/c (BE)	-0.01 (0.00)	-0.01 (0.01)
<i>Individual variables</i>		
Conservation value (WE)	0.51 *** (0.03)	0.10 (0.05)
Conservation (BE)		0.54 (2.04)
<i>Individual level controls</i>	✓	✓
<i>Time trend</i>	✓	✓
Foreigner share (WE) X conservation (WE)		0.34 * (0.13)
Foreigner share (BE) X conservation (WE)		0.10 *** (0.01)
Foreigner share (WE) X conservation (BE)		1.98 (2.02)
Intercept	2.39 *** (0.23)	2.28 (1.47)
Random Effects		
σ^2	1.10	1.10
τ_{00}	0.02 year:Country 0.16 Country	0.02 year:Country 0.17 Country
N (countries)	22	22
N (country-years)	57	57
N (respondents)	50094	50094
AIC	147130.514	147049.145

* $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$. All continuous individual-level variables standardized to range from 0 to 1