

Generational Change and Attitudes to Immigration, *Journal of Ethnic and Migration Studies*

Lauren McLaren and Ian Paterson

Online Supplemental Materials

Table A. List of Far-Right Anti-Immigration Parties for Multivariate Analyses

Country	Far-right anti-immigration parties
Belgium	National Front; Flemish Block/ Flemish Interest
Denmark	Progress Party; Danish People's Party
Finland	Finns Party/True Finns
France	National Front
Germany	Republican Party; National Democratic Party of Germany; Alternative for Germany
Hungary	Hungarian Justice and Life Party, MIÉP-Jobbik Third Way Alliance of Parties, Movement for a Better Hungary (Jobbik)*
Ireland	N/A
Netherlands	People's Party for Freedom and Democracy; List Pim Fortuyn Party/ Fortuyn; One NL; Party for Freedom
Norway	Progress Party
Poland	Law and Justice (PiS)
Portugal	N/A
Slovenia	Slovenian National Party
Spain	N/A
Sweden	Sweden Democrats
Switzerland	Swiss People's Party
United Kingdom	British National Party; UK Independence Party

*Note that the shift toward anti-immigration discourse on the part of the Hungarian Civic Alliance, or FIDESZ, came after the final survey used in the analysis in this paper.

Table B. Hierarchical Cross-Classified Fixed Effects Model of Positive Attitudes to Immigration, ESS1-7

	Model 1			Model 2		
	period + cohort effects			+age		
	b	SE		b	SE	
Intercept	5.157	0.123	***	5.133	0.122	***
Age	--			-0.011	0.001	***
Cohort fixed effects						
Born before 1940 (cohort 1)	--			--		
Born 1940-1949 (cohort 2)	0.293	0.042	***	0.142	0.034	***
Born 1950-1959 (cohort 3)	0.494	0.058	***	0.235	0.050	***
Born 1960-1969 (cohort 4)	0.596	0.061	***	0.226	0.065	***
Born 1970-1979 (cohort 5)	0.673	0.067	***	0.193	0.079	*
Born 1980-1989 (cohort 6)	0.564	0.066	***	-0.027	0.103	
Born 1990+ (cohort 7)	0.530	0.074	***	-0.156	0.128	
Period fixed effects (year of survey)						
2004	-0.093	0.056		-0.07	0.17	
2006	0.044	0.072		0.09	0.17	
2008	0.096	0.056		0.16	0.17	
2010	0.050	0.059		0.13	0.17	
2012	0.176	0.064	**	0.28	0.17	
2014	0.027	0.048		0.15	0.17	
Variance components						
Individual (Level 1)	3.514		0.0%	3.514		0.0%
Country-cohort (Level 2 cohort)	0.025	***	68.8%	0.025	***	68.8%
Country-year (Level 2 period)	0.034	***	17.1%	0.034	***	17.1%
Country (Level 3)	0.253	***	-4.5%	0.252	***	-4.5%

Entries are unstandardised coefficients and standard errors; * $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$. Level 1 N: 180,629; Level 2 Country-year N: 112; Level 2 Country-cohort N: 112; Level 3 (country) N: 16.

†Figures represent variance at each level and percent of variance explained at each level compared to the null model, unless otherwise indicated. Variance components with no independent variables in the model (the null model) are Level 1 (individual): 3.514 (90.6% of the total variance); Level 2 country-cohort: 0.080 (2.1% of the total variance); Level 2 country-year: 0.041 (1.1% of the total variance); Level 3 (country): 0.242 (6.2% of the total variance).

Table C. Model 2 of Table 4 of Main Paper, Social Protection Expenditure Included

	Full model including cohort-far-right mobilisation-education interaction		
	b	SE	
Intercept	5.188	0.132	***
<i>Individual fixed effects</i>			
Age	-0.0004	0.003	
Education	0.355	0.020	***
Minority	0.349	0.067	***
Unemployed	-0.133	0.040	***
Female	-0.057	0.038	
Difficult to live on present income	-0.279	0.022	***
<i>Cohort fixed effects</i>			
Cohort 1-7 variable (oldest to youngest)	0.049	0.042	
Pct vote far-right in formative years	0.005	0.007	
<i>Interactive effects</i>			
Pct vote far-right *cohort (1-7)	-0.0001	0.001	
Pct vote far-right *Education	0.038	0.010	***
Education*cohort (1-7)	0.015	0.006	*
Pct vote far-right *cohort (1-7)*Education	-0.007	0.002	***
<i>Country-level fixed effects</i>			
Average pct foreign (OECD)	-0.012	0.023	
Average unemployment level (OECD)	0.107	0.036	
Average expenditure on social protection (Eurostat)	0.0001	0.0000	*
<i>Variance components†</i>			
Individual (Level 1)	3.255		8.4%
Country-cohort (Level 2)	0.020	***	75.6%
Pct vote far-right *cohort (1-7)*Education slope variance	0.00000	***	
Country (Level 3)	0.153	***	38.1%

Entries are unstandardised coefficients and standard errors.

* $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$; Level 1 N: 180,629; Level 2 (country-cohort) N: 112; Level 3 (country) N: 16.

†Figures represent variance at each level and percent of variance explained at each level compared to the null model, unless otherwise indicated. Variance components with no independent variables in the model (the null model) are shown in Table 1, Model E.

Table D. Model 2 of Table 4 of Main Paper, Sweden and Finland Omitted

	Full model including cohort-far-right mobilisation-education interaction		
	b	SE	
Intercept	5.050	0.086	***
<i>Individual fixed effects</i>			
Age	0.0006	0.001	
Education	0.357	0.006	***
Minority	0.343	0.033	***
Unemployed	-0.126	0.020	***
Female	-0.089	0.009	
Difficult to live on present income	-0.284	0.007	***
<i>Cohort fixed effects</i>			
Cohort 1-7 variable (oldest to youngest)	0.070	0.014	
Pct vote far-right in Formative Years	0.003	0.012	
<i>Interactive effects</i>			
Pct vote far-right *cohort (1-7)	-0.001	0.002	
Pct vote far-right *Education	0.044	0.003	***
Education*cohort (1-7)	0.017	0.003	***
Pct vote far-right *cohort (1-7)*Education	-0.008	0.001	***
<i>Country-level fixed effects</i>			
Average pct foreign (OECD)	-0.012	0.023	
Average unemployment level (OECD)	0.107	0.036	
<i>Variance components†</i>			
Individual (Level 1)	3.308		8.5%
Country-cohort (Level 2)	0.023	***	71.6%
Pct vote far-right *cohort (1-7)*Education	0.002	***	
Pct vote far-right *cohort (1-7)*Education slope variance	0.00000	***	
Country (Level 3)	0.100	***	40.1%

Entries are unstandardised coefficients and standard errors.

* $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$; Level 1 N: 156,762; Level 2 (country-cohort) N: 98; Level 3 (country) N: 14; Variance components for null model: Level 1, 3.617; Level 2, 0.081; Level 3, 0.167

†Figures represent variance at each level and percent of variance explained at each level compared to the null model, unless otherwise indicated. Variance components with no independent variables in the model (the null model) are shown in Table 1, Model E.

Table E. Hierarchical Cross-Classified Model of Positive Attitudes to Immigration, ESS1-7, Age and Contemporaneous Far-Right Mobilisation Interactions Included

	b	SE	
Intercept	5.174	0.133	***
Individual fixed effects			
Age	-0.006	0.002	**
Education	0.437	0.054	***
Minority	0.335	0.032	***
Unemployed	-0.113	0.019	***
Female	-0.056	0.009	***
Difficult to live on present income	-0.274	0.006	***
Age*Education	0.0003	0.0006	
Cohort fixed effects			
Cohort 1-7 variable (oldest to youngest)	0.001	0.015	
Pct vote far-right in Formative Years	0.002	0.011	
Period fixed effects (contextual)			
Unemployment rate	-0.009	0.007	
Pct Foreign	-0.025	0.016	
Pct vote far-right in general election held most immediately before the survey	0.007	0.004	
2012 dummy variable	0.144	0.051	**
Interactive effects			
Pct vote far-right in formative years*cohort (1-7; oldest to youngest)	-0.001	0.002	
Pct vote far-right in formative years*Education	0.036	0.003	***
Education*cohort (1-7; oldest to youngest)	0.020	0.006	**
Pct vote far-right in formative years *cohort (1-7; oldest to youngest)*Education	-0.008	0.001	***
Pct vote far-right in GE immediately before survey * age (individual-level)	0.0001	0.0001	
Pct vote far-right in GE immediately before survey * education (individual-level)	0.003	0.002	
Pct vote far-right in GE immediately before survey * age (individual-level) * education (individual-level)	-0.00005	0.00003	
Variance components			
Individual (Level 1)	3.221		8.3%
Country-cohort (Level 2 cohort)	0.019	***	76.3%
Pct vote far-right *cohort (1-7)*Education††	0.0000	***	
Country-year (Level 2 period)	0.027	***	34.1%
Country (Level 3)	0.209	***	13.6%

Entries are unstandardised coefficients and standard errors.

* $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$; Level 1 N: 180,629 Level 2 Country-year N: 112; Level 2 Country-cohort N: 112; Level 3 Country-level N: 16.

†Figures represent variance at each level and percent of variance explained at each level compared to the null model, unless otherwise indicated. Variance components with no

independent variables in the model (the null model) are Level 1 (individual): 3.514 (90.6% of the total variance); Level 2 country-cohort: 0.080 (2.1% of the total variance); Level 2 country-year: 0.041 (1.1% of the total variance); Level 3 (country): 0.242 (6.2% of the total variance).

††Variance < 0.00001.

Table F. Hierarchical Cross-Classified Model of Positive Attitudes to Immigration, Cohort and Period Effects

	Model 1			Model 2			Model 3		
	Cohort and Period Fixed Effects (Dummy Variables)			Cohort Fixed Effect (1-7 Scale)			Cohort Fixed Effect (1-7 Scale) + Random Effect		
	b	SE		b	SE		b	SE	
Intercept	5.157	0.123	***	4.863	0.157	***	4.867	0.158	***
<i>Cohort fixed effects (dummy variables)</i>									
Born before 1940 (cohort 1)	--								
Born 1940-1949 (cohort 2)	0.293	0.042	***	--			--		
Born 1950-1959 (cohort 3)	0.494	0.058	***	--			--		
Born 1960-1969 (cohort 4)	0.596	0.061	***	--			--		
Born 1970-1979 (cohort 5)	0.673	0.067	***	--			--		
Born 1980-1989 (cohort 6)	0.564	0.066	***	--			--		
Born 1990+ (cohort 7)	0.530	0.074	***	--			--		
<i>Cohort fixed effect (1-7 variable, oldest to youngest)</i>	--			0.084	0.013	***	0.082	0.013	***
<i>Period fixed effects (dummy variables for year of survey)</i>									
2002	--								
2004	-0.093	0.056		--			--		
2006	0.044	0.072		--			--		
2008	0.096	0.056		--			--		
2010	0.050	0.059		--			--		
2012	0.176	0.064	**	0.156	0.054	**	0.162	0.052	**
2014	0.027	0.048		--			--		
<i>Variance components†</i>									
Individual	3.514		0.0%	3.514		0.0%	3.511		0.0%
Country-cohort	0.025	***	68.8%	0.047	***	41.3%	0.048	***	40.0%
Country-cohort slope variance	--			--			0.001	***	
Country-year	0.034	***	17.1%	0.037	***	0%	0.059	***	-43.9%
Country	0.253	***	-4.5%	0.248	-2.5%	-2.1%	0.245	***	-1.2%

Entries are unstandardised coefficients and standard errors; * $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$. Level 1 N: 180,629; Level 2 Country-year N: 112; Level 2 Country-cohort N: 112; Level 3 (country) N: 16.

†Figures represent variance at each level and percent of variance explained at each level compared to the null model, unless otherwise indicated. Variance components with no independent variables in the model (the null model) are Level 1 (individual): 3.514 (90.6% of the total variance); Level 2 country-cohort: 0.080 (2.1% of the total variance); Level 2 country-year: 0.041 (1.1% of the total variance); Level 3 (country): 0.242 (6.2% of the total variance).

Table G. Hierarchical Cross-Classified Model of Positive Attitudes to Immigration, ESS1-7

	Model 1			Model 2		
	Full model, no interactions, age omitted			Full model, no interactions, age included		
	b	SE		b	SE	
Intercept	5.012	0.150	***	5.220	0.161	***
Individual fixed effects						
Age	--			-0.006	0.002	***
Education	0.368	0.019	***	0.367	0.019	***
Minority	0.333	0.067	***	0.332	0.067	***
Unemployed	-0.126	0.035	***	-0.127	0.035	***
Female	-0.054	0.039		-0.053	0.039	
Difficult to live on present income	-0.276	0.020	***	-0.275	0.020	***
Cohort fixed effects						
Cohort 1-7 variable (oldest to youngest)	0.049	0.015	**	-0.008	0.019	
Pct vote far-right in Formative Years	0.005	0.004		0.005	0.004	
Period fixed effects (contextual)						
Unemployment rate	-0.011	0.008		-0.009	0.008	
Pct Foreign	-0.007	0.014		0.001	0.014	
2012 dummy variable				0.174	0.049	***
Variance components†						
Individual (Level 1)	3.224		8.3%	3.224		8.3%
Country-cohort (Level 2 cohort)	0.019	***	76.3%	0.019	***	76.3%
Country-cohort slope variance	0.002	***		0.002	***	
Country-year (Level 2 period)	0.053	***	-29.3%	0.056	***	-
Country (Level 3)	0.208	***	14.0%	0.202	***	36.6%

Entries are unstandardised coefficients and standard errors.

* $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$

Level 1 N: 180,629; Level 2 Country-year N: 112; Level 2 Country-cohort N: 112; Level 3 (country) N: 16.

†Figures represent variance at each level and percent of variance explained at each level compared to the null model, unless otherwise indicated. Variance components with no independent variables in the model (the null model) are Level 1 (individual): 3.514 (90.6% of the total variance); Level 2 country-cohort: 0.080 (2.1% of the total variance); Level 2 country-year: 0.041 (1.1% of the total variance); Level 3 (country): 0.242 (6.2% of the total variance).

Table H. Hierarchical Cross-Classified Model of Positive Attitudes to Immigration, ESS1-7

	Model 1			Model 2		
	Full model including cohort-far-right mobilisation interaction			Full model including cohort-far-right mobilisation-education interaction		
	b	SE		b	SE	
Intercept	5.201	0.166	***	5.172	0.166	***
Individual fixed effects						
Age	-0.006	0.002	***	-0.005	0.002	**
Education	0.368	0.018	***	0.465	0.040	***
Minority	0.336	0.070	***	0.335	0.071	***
Unemployed	-0.123	0.035	***	-0.113	0.036	**
Female	-0.053	0.039		-0.056	0.039	
Difficult to live on present income	-0.274	0.020	***	-0.274	0.019	***
Cohort fixed effects						
Cohort 1-7 variable (oldest to youngest)	-0.008	0.018		0.002	0.019	
Pct vote far-right in Formative Years	-0.001	0.009		0.002	0.006	
Period fixed effects (contextual)						
Unemployment rate	-0.011	0.008		-0.013	0.009	
Pct Foreign	0.001	0.016		-0.005	0.016	
2012 dummy variable				0.193	0.045	***
Interactive effects						
Pct vote far-right*cohort (1-7)	0.001	0.002		-0.001	0.001	
Pct vote far-right*Education	--			0.036	0.009	***
Education*cohort (1-7)	--			0.015	0.007	*
Pct vote far-right *cohort (1-7)*Education	--			-0.007	0.002	***
Variance components†						
Individual	3.227		8.2%	3.221		8.3%
Country-cohort	0.021	***	73.8%	0.019	***	76.3%
Pct vote far-right*cohort slope variance††	0.001	***		--		
Pct vote far-right *cohort (1-7)*Education††	--			0.000	***	
Country-year	0.030	***	26.8%	0.030	***	26.8%
Country	0.207	***	14.5%	0.214	***	11.6%

Entries are unstandardised coefficients and standard errors.

*p ≤ 0.05; **p ≤ 0.01; ***p ≤ 0.001; Level 1 N: 180,629; Level 2 Country-year N: 112; Level 2 Country-cohort N: 112; Level 3 (country) N: 16.

†Figures represent variance at each level and percent of variance explained at each level compared to the null model, unless otherwise indicated. Variance components with no independent variables in the model (the null model) are Level 1 (individual): 3.514 (90.6% of the total variance); Level 2 country-cohort: 0.080 (2.1% of the total variance); Level 2

country-year: 0.041 (1.1% of the total variance); Level 3 (country): 0.242 (6.2% of the total variance).

††Variance < 0.00001.

Table I. Hierarchical Cross-Classified Model Including Social Protection Expenditure

	b	SE	
Intercept	5.179	0.134	***
Individual fixed effects			
Age	-0.006	0.001	***
Education	0.464	0.013	***
Minority	0.335	0.032	***
Unemployed	-0.113	0.036	**
Female	-0.056	0.009	***
Difficult to live on present income	-0.274	0.006	***
Cohort fixed effects			
Cohort 1-7 variable (oldest to youngest)	-0.0003	0.015	
Pct vote far-right in Formative Years	0.002	0.010	
Period fixed effects (contextual)			
Unemployment rate	-0.012	0.007	
Pct Foreign	-0.025	0.017	
Social protection expenditure	0.00003	0.00002	*
2012 dummy variable	0.160	0.051	**
Interactive effects			
Pct vote far-right*cohort (1-7)	-0.001	0.002	
Pct vote far-right*Education	0.036	0.003	***
Education*cohort (1-7)	0.015	0.002	***
Pct vote far-right *cohort (1-7)*Education	-0.007	0.001	***
Variance components†			
Individual (Level 1)	3.221		8.3%
Country-cohort (Level 2 cohort)	0.019	***	76.3%
Pct vote far-right *cohort (1-7)*Education††	0.000	***	
Country-year (Level 2 period)	0.028	***	31.7%
Country (Level 3)	0.216	***	10.7%

Entries are unstandardised coefficients and standard errors.

* $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$

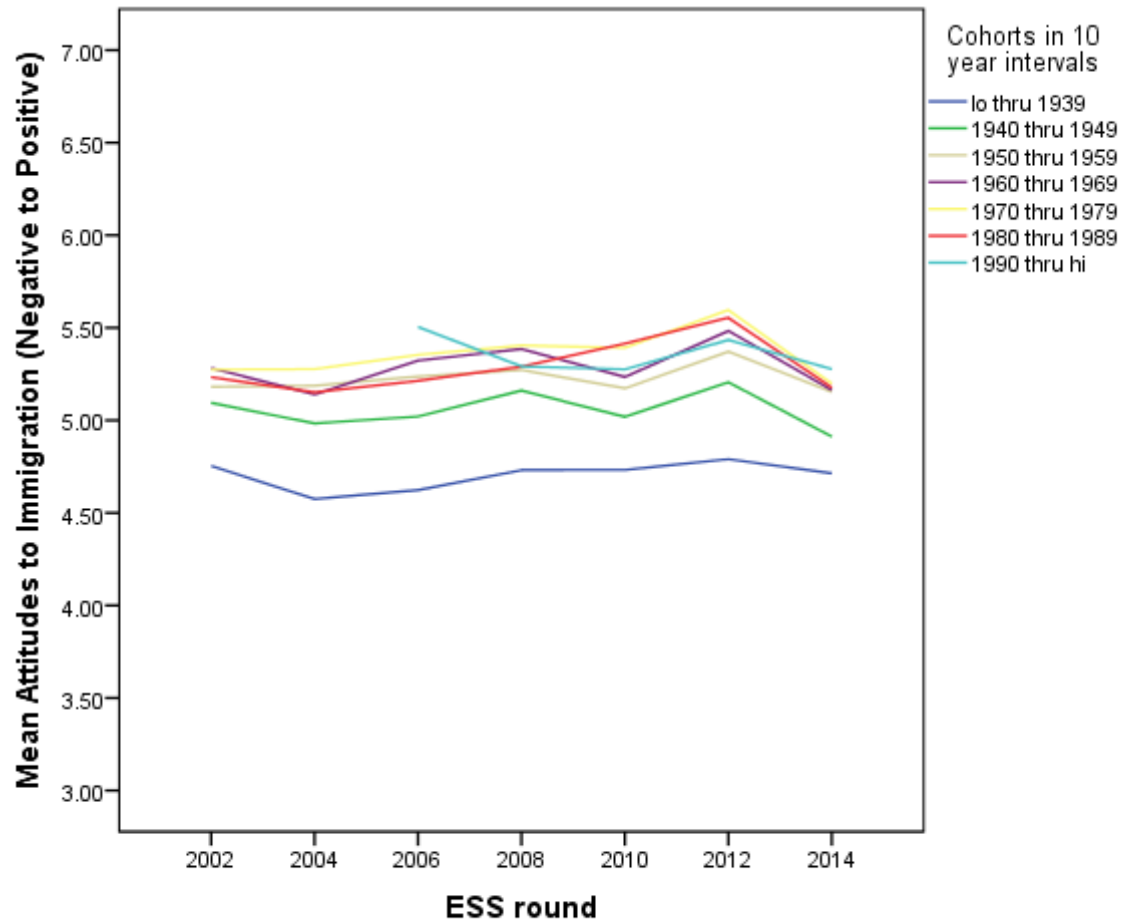
Level 1 N: 180,629; Level 1 N: 180,629; Level 2 Country-year N: 112; Level 2 Country-cohort N: 112; Level 3 (country) N: 16.

†Figures represent variance at each level and percent of variance explained at each level compared to the null model, unless otherwise indicated. Variance components with no independent variables in the model (the null model) are Level 1 (individual): 3.514 (90.6% of the total variance); Level 2 country-cohort: 0.080 (2.1% of the total variance); Level 2 country-year: 0.041 (1.1% of the total variance); Level 3 (country): 0.242 (6.2% of the total variance).

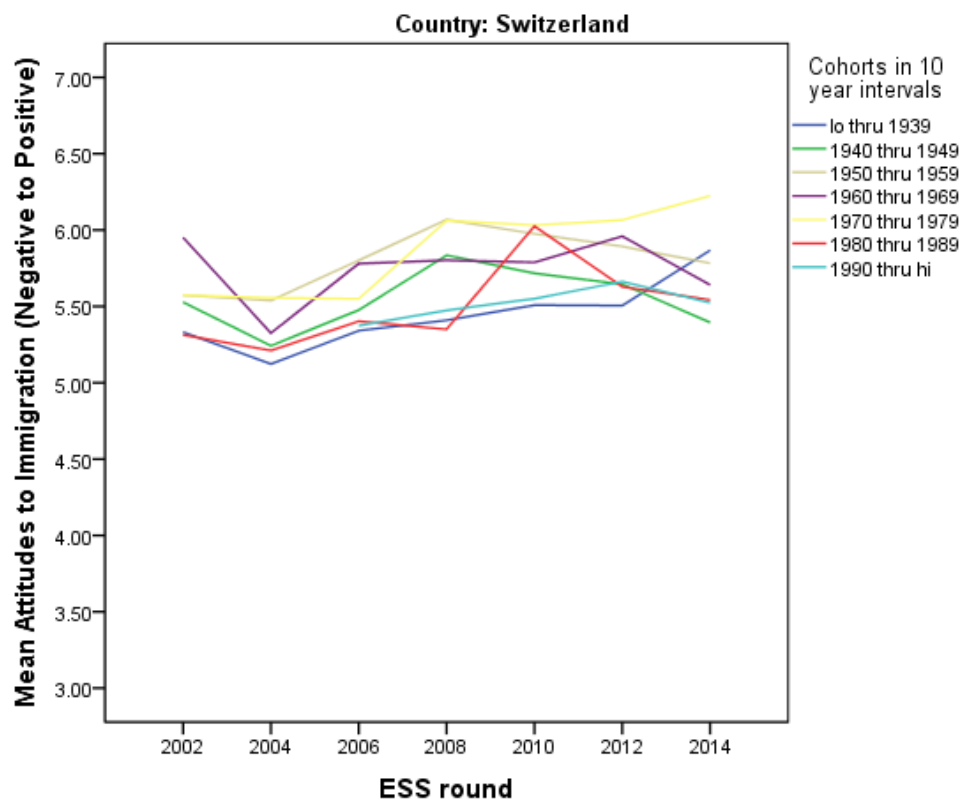
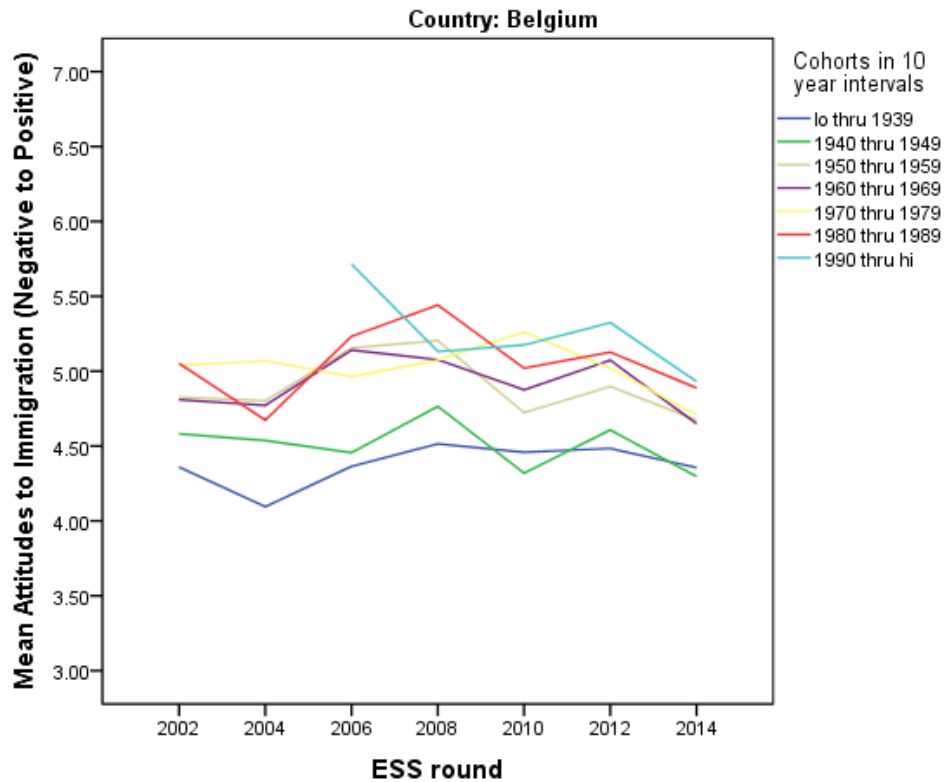
††Variance < 0.00001.

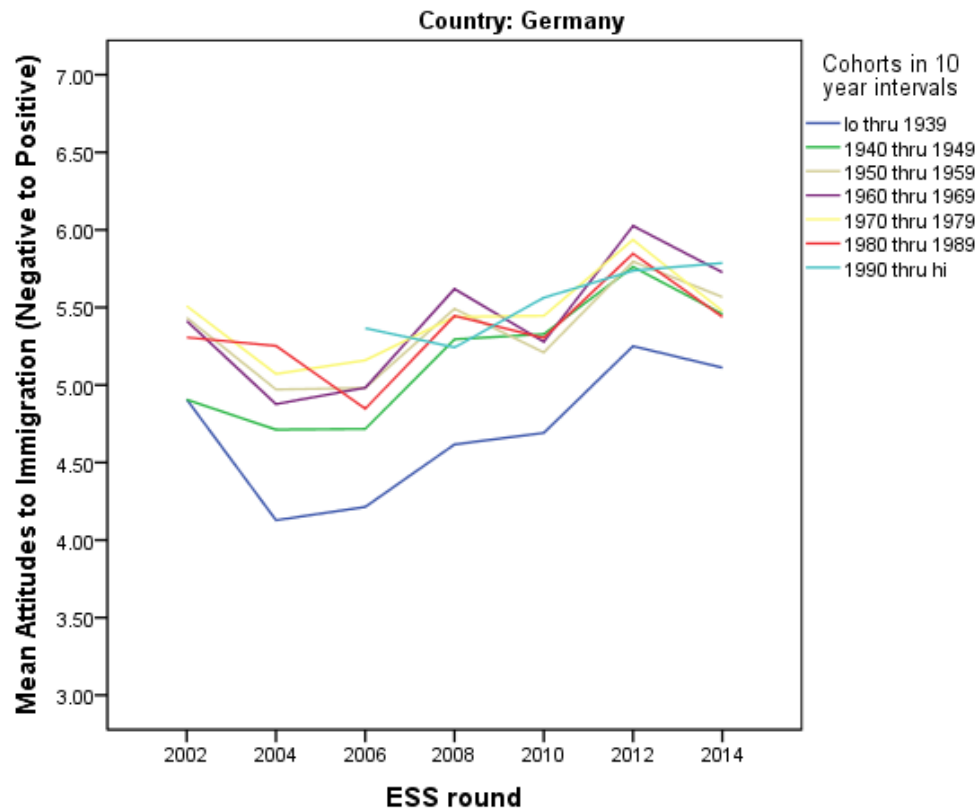
Attitudes to Immigration by Cohort Figures

All Countries

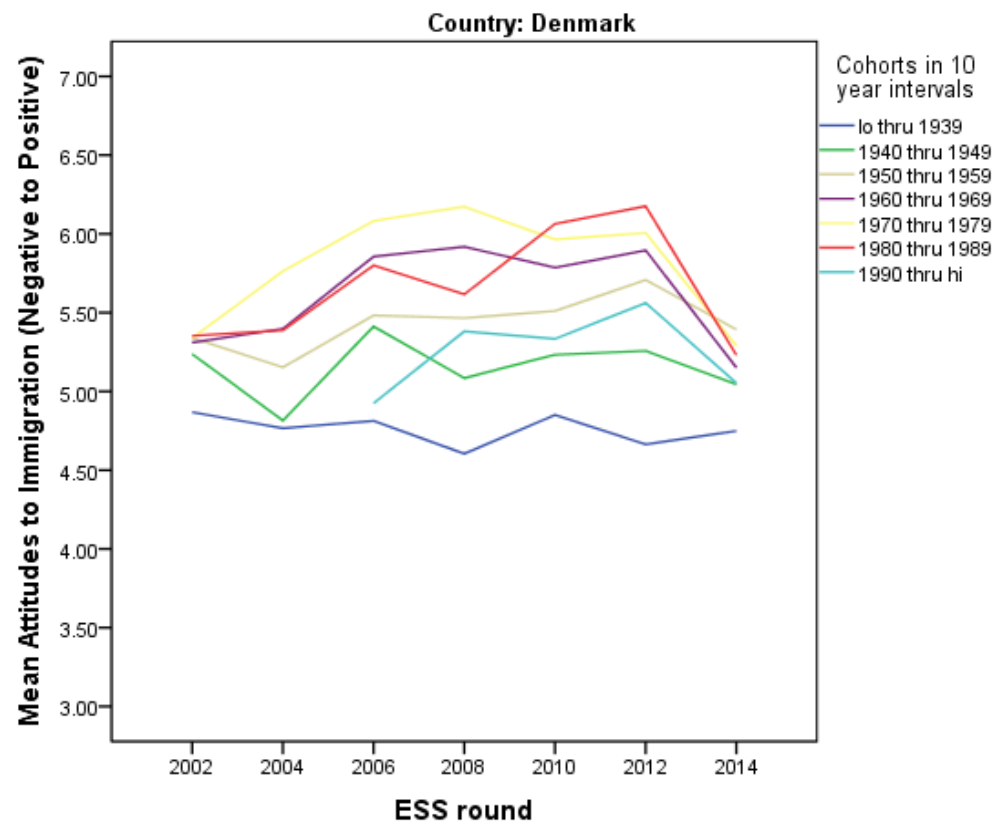


Cases weighted by Post-stratification weight including design weight

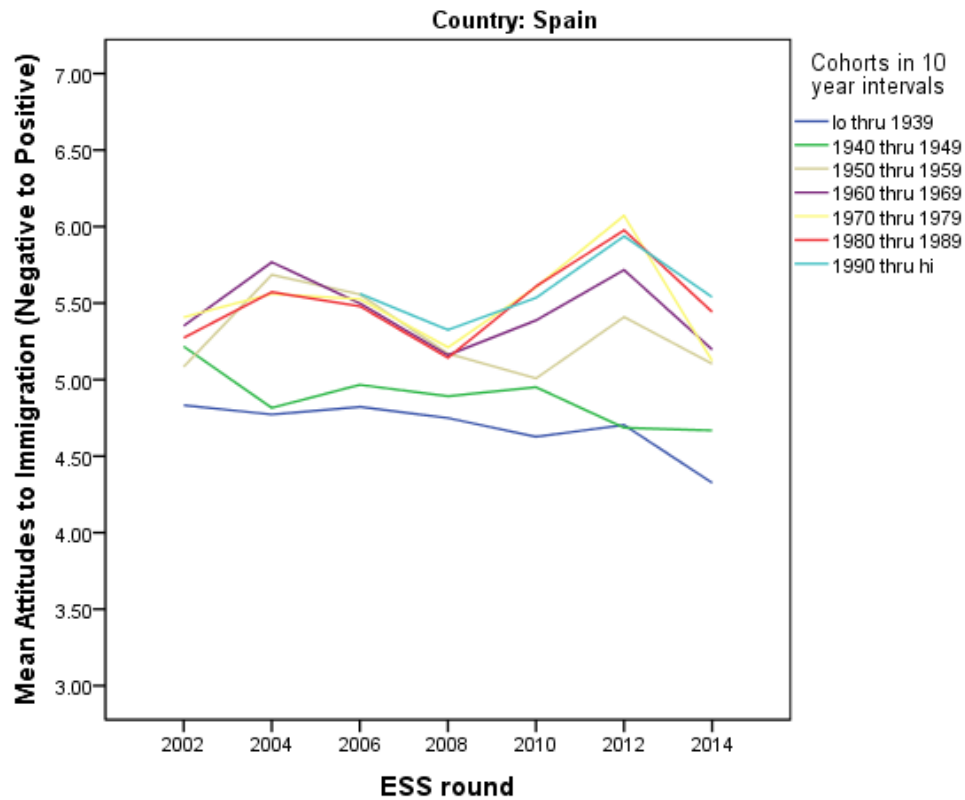




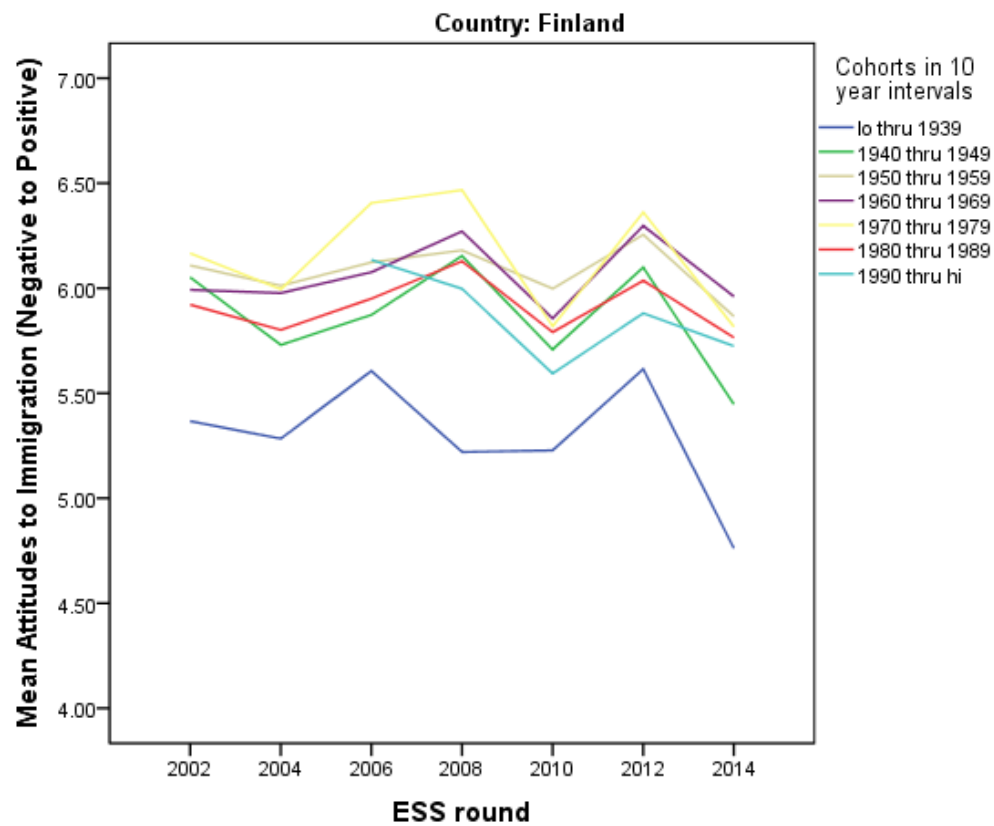
Cases weighted by Post-stratification weight including design weight



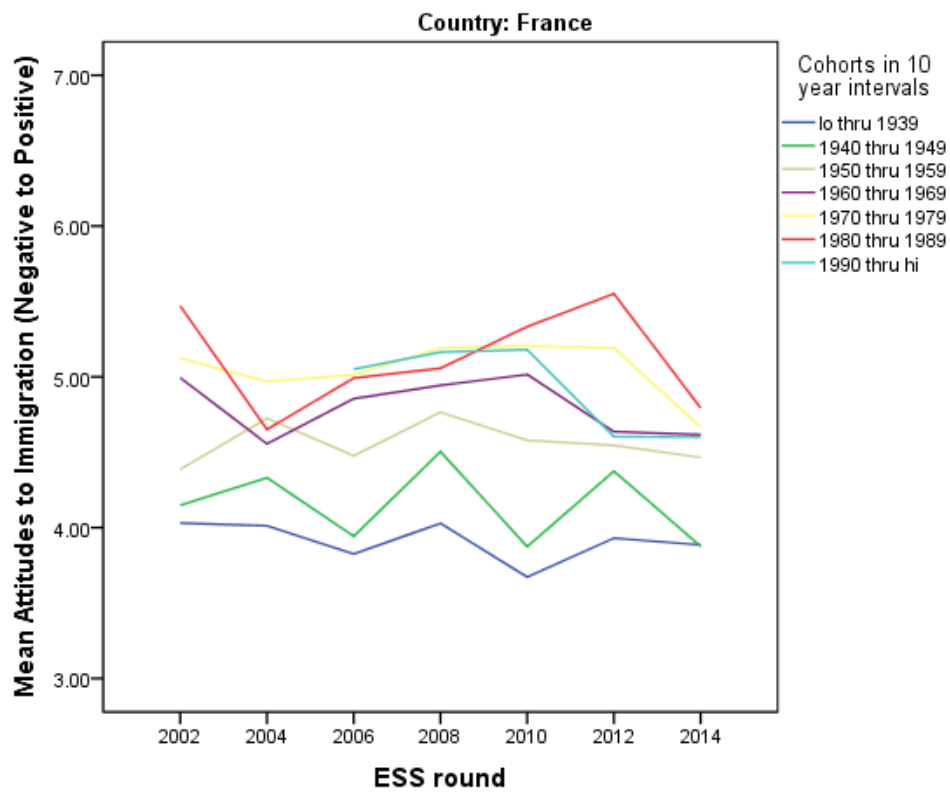
Cases weighted by Post-stratification weight including design weight



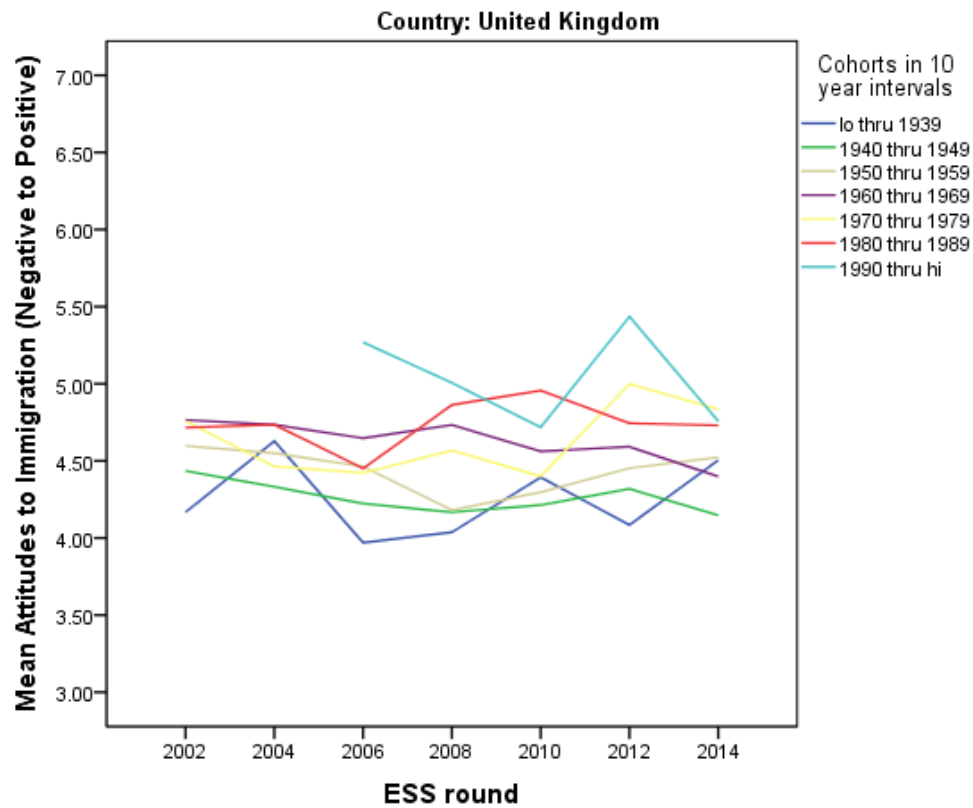
Cases weighted by Post-stratification weight including design weight



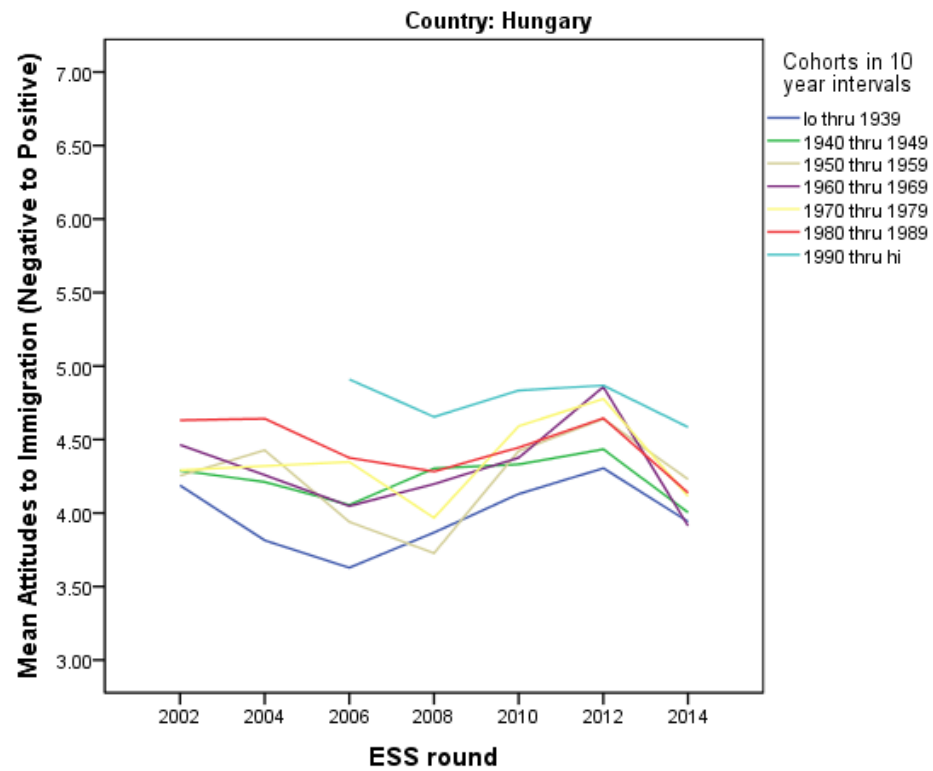
Cases weighted by Post-stratification weight including design weight



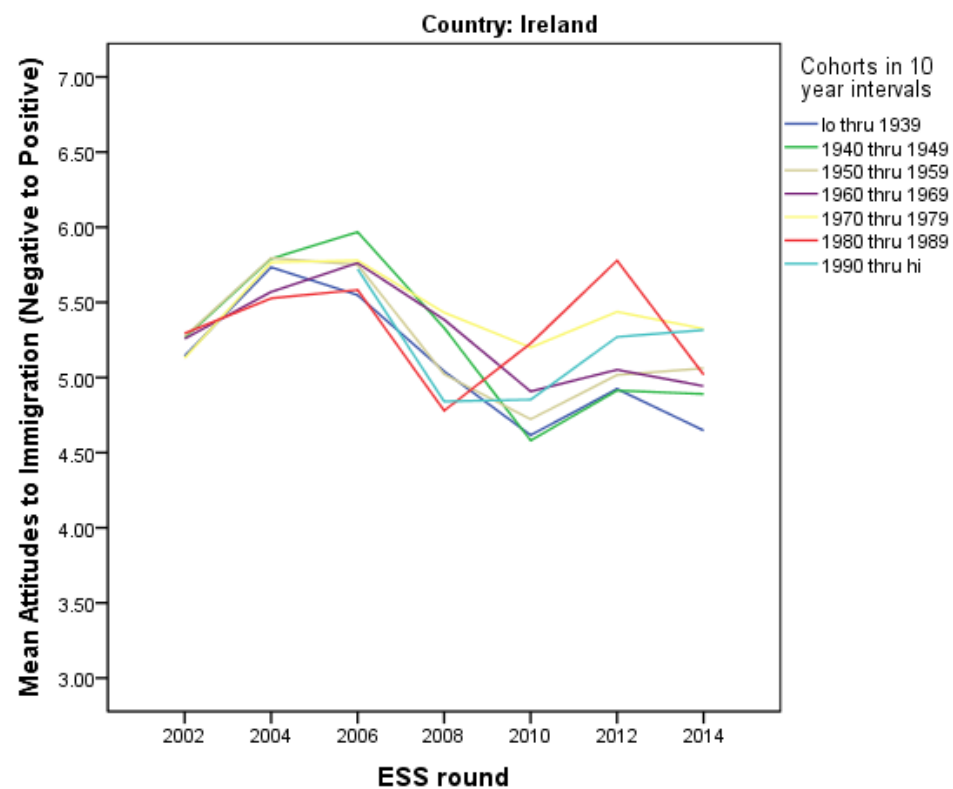
Cases weighted by Post-stratification weight including design weight



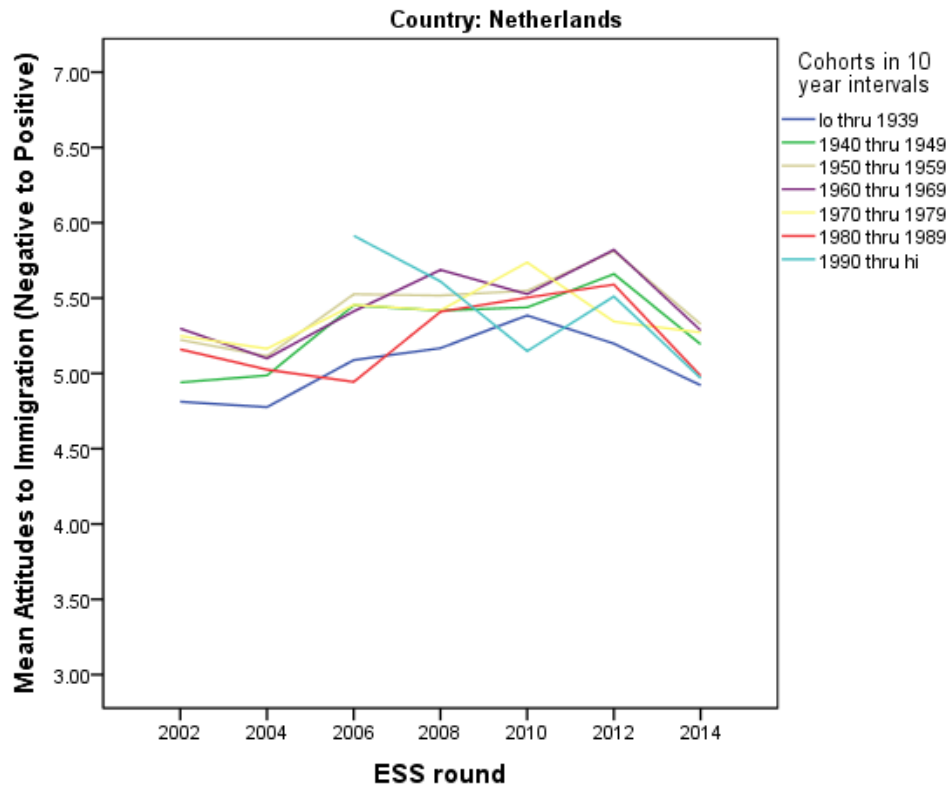
Cases weighted by Post-stratification weight including design weight



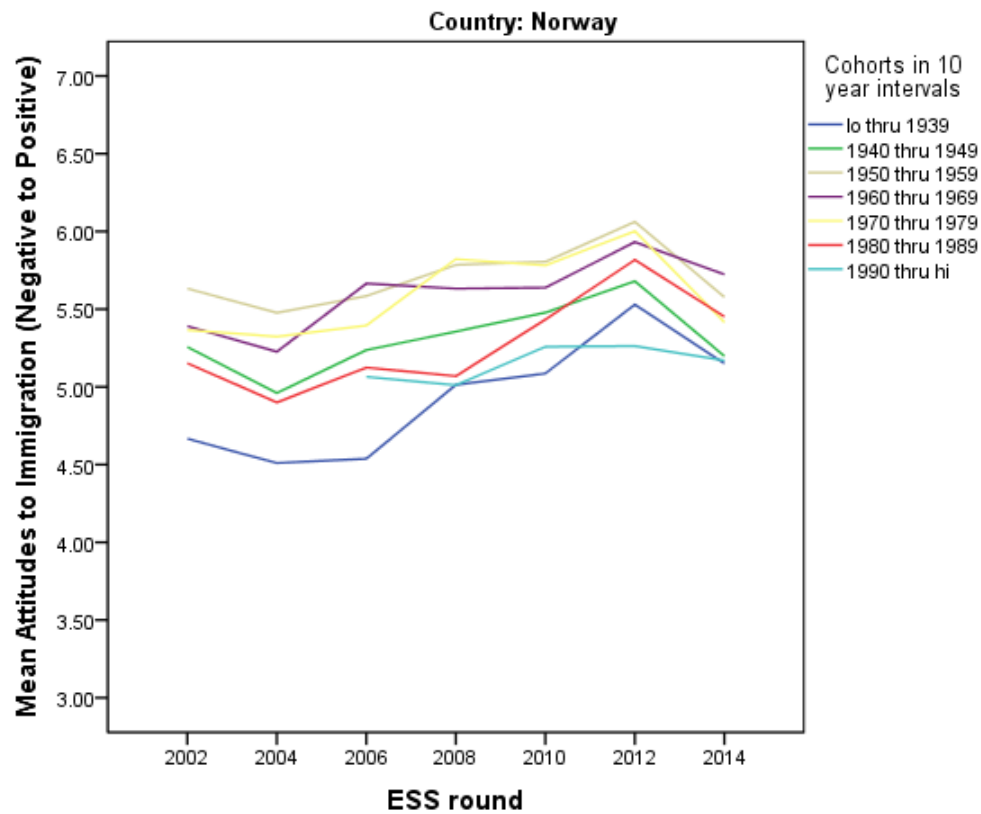
Cases weighted by Post-stratification weight including design weight



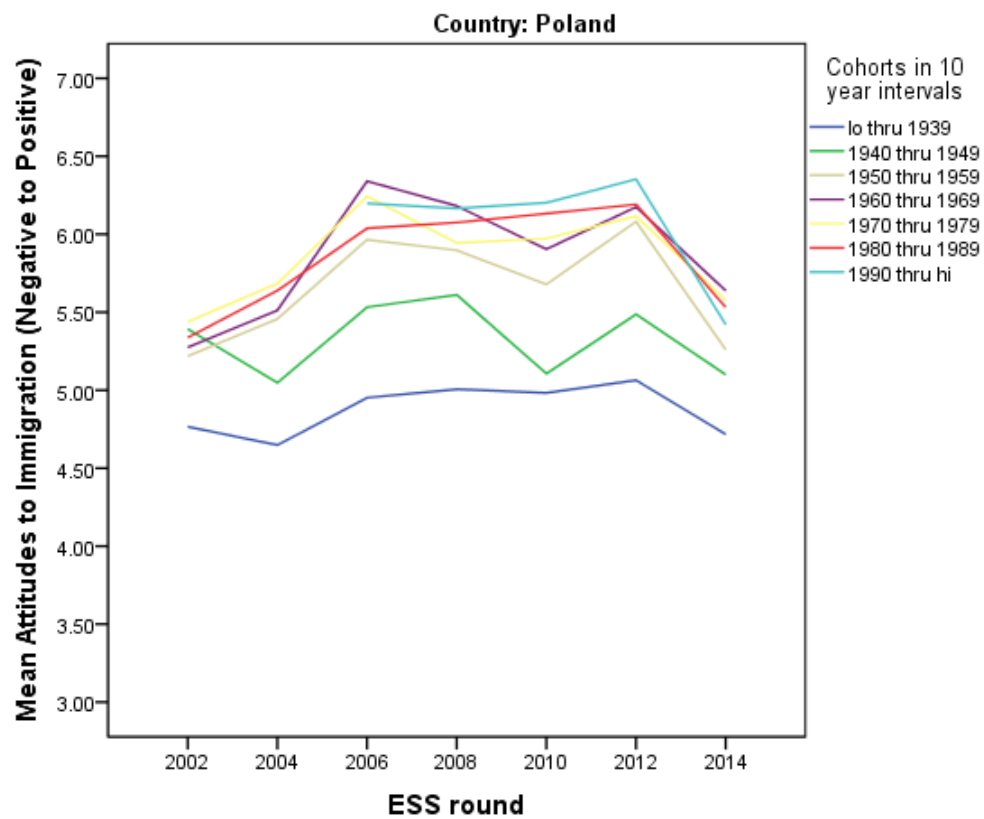
Cases weighted by Post-stratification weight including design weight



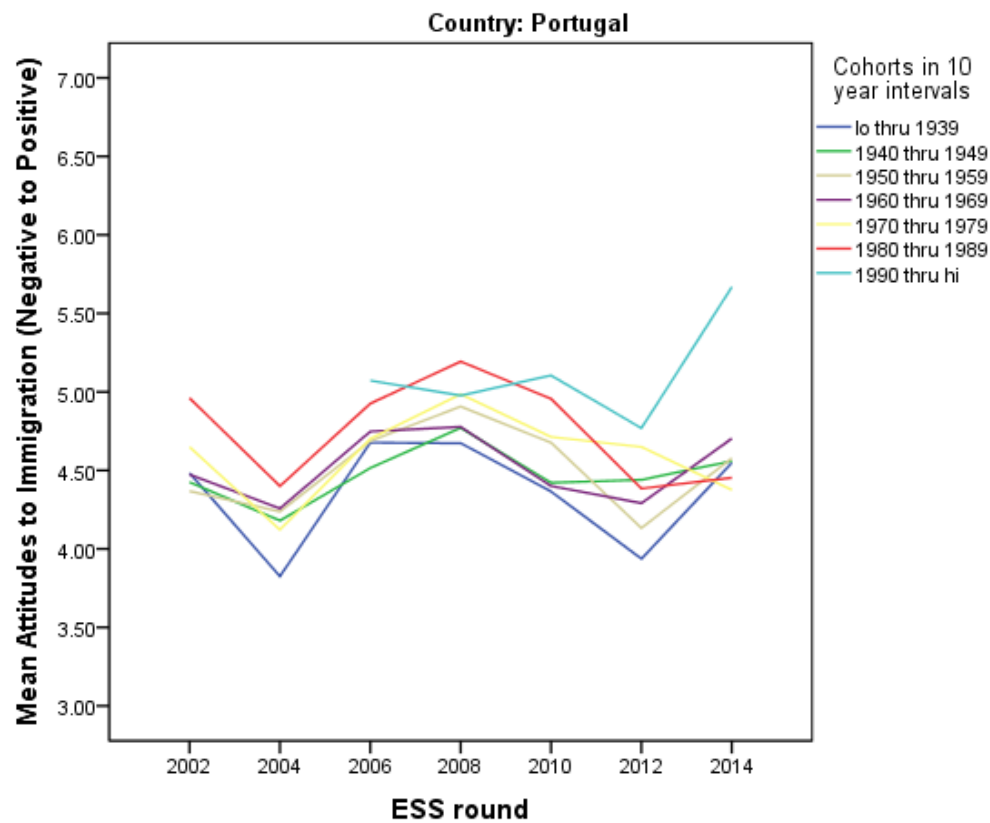
Cases weighted by Post-stratification weight including design weight



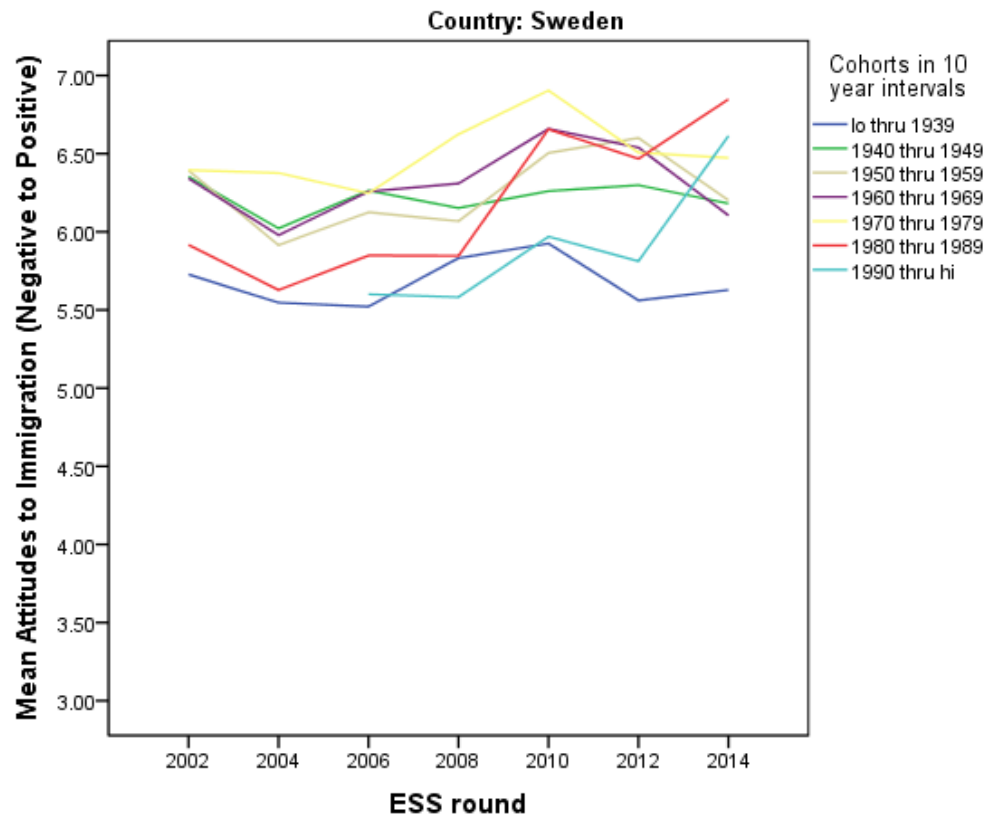
Cases weighted by Post-stratification weight including design weight



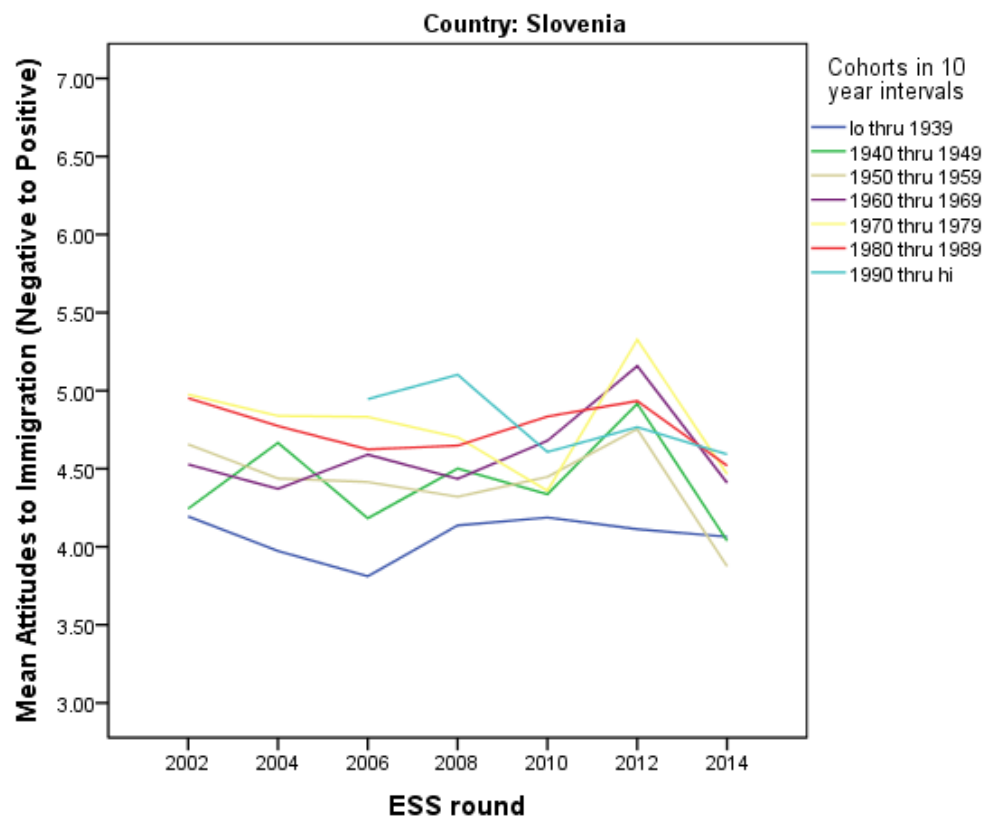
Cases weighted by Post-stratification weight including design weight



Cases weighted by Post-stratification weight including design weight



Cases weighted by Post-stratification weight including design weight



Cases weighted by Post-stratification weight including design weight