ONLINE APPENDIX

Table A1- Replication of Hierarchical Linear Models with anti-immigration attitudes as the dependent variable

	Model 1	Model 2	Model 3
Occupational migrant share	0.061	-0.009	0.158
	(0.05)	(0.06)	(0.12)
Occupational dualism	0.429***	0.02	-0.608*
	(0.06)	(0.18)	(0.35)
Years of education	-0.369***	-0.368***	-0.349***
	(0.01)	(0.01)	(0.01)
Religiosity	-0.082***	-0.082***	-0.080***
	(0.01)	(0.01)	(0.01)
Age	0.010***	0.010***	0.010***
	(0.00)	(0.00)	(0.00)
Gender	0.625***	0.626***	0.808***
	(0.06)	(0.06)	(0.06)
Country % foreign born	0.008	0.008	0.016
	(0.05)	(0.05)	(0.05)
Country GDP	-0.000**	-0.000**	-0.000**
	(0.00)	(0.00)	(0.00)
Country unemployment	0.046	0.047	0.049
	(0.07)	(0.07)	(0.07)
Country social expenditure	0.048	0.049	0.049
	(0.05)	(0.05)	(0.05)
Migrant share x dualism		-0.171**	-0.307**
		(0.07)	(0.15)
Skill specificity			1.429***
			(0.22)
Migrant share x skill specificity			0.284***

			(0.10)
Dualism x skill specificity			-0.619**
			(0.28)
Migrant share x dualism x skill specificity			-0.156
			(0.12)
Intercept	19.210***	19.027***	19.681***
	(1.40)	(1.40)	(1.40)
Wave intercept variance	0	0	0
	(0)	(0)	(0)
Country intercept variance	2.62	2.62	2.58
	(0.48)	(0.48)	(0.47)
Occupational intercept variance	0.98	0.98	0.86
	(0.09)	(0.09)	(0.08)
Individual intercept variance	31.26	31.26	31.15
	(0.2)	(0.2)	(0.2)
N	51364	51364	51364
Log Likelihood	-161972	-161969	-161825
BIC	324106	324111	323867.9

Standard errors between brackets
* 0.1 ** 0.05 *** 0.01
Source: ESS cumulative file and OECD

The dependent variable is an additive scale ranging from 0 to 30, where higher values indicate anti-immigration attitudes. The individual components of the scale are 3 items measuring attitudes on whether (1) immigration is bad or good for the country's economy, (2) the country's cultural life is undermined or enriched by immigrants, and (3) immigrants make the country a worse or better place to live.

Table A2- Replication of Hierarchical Linear Models controlling for migrant average levels of income and education

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Occupational migrant share	0.118	0.009	-0.028	-0.061	-0.022	-0.066
	(0.15)	(0.02)	(0.04)	(0.15)	(0.02)	(0.04)
Occupational dualism	0.012	-0.085	-0.303**	0.026	-0.146**	-0.330**
	(0.03)	(0.06)	(0.13)	(0.03)	(0.07)	(0.13)
Years of education	-0.083***	-0.083***	-0.083***	-0.102***	-0.102***	-0.100***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Religiosity	-0.027***	-0.027***	-0.027***	-0.028***	-0.028***	-0.028***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Age	0.014***	0.014***	0.014***	0.013***	0.013***	0.013***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Gender	0.112***	0.112***	0.147***	0.070***	0.072***	0.121***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Country % foreign born	0.004	0.003	0.005	0.007	0.006	0.008
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Country GDP	-0.000***	-0.000***	-0.000***	-0.000***	-0.000***	-0.000***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Country unemployment	0.022	0.02	0.02	-0.007	-0.007	-0.004
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Country social expenditure	0.017	0.017	0.017	0.016	0.017	0.016
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Occupational level of migrant education	-0.116***	-0.113***	-0.101***			
	(0.01)	(0.01)	(0.01)			
Occupational level of migrant income				-0.188***	-0.182***	-0.153***
				(0.01)	(0.01)	(0.01)
Migrant share x dualism		-0.050**	-0.121**		-0.075***	-0.144**

		(0.02)	(0.05)		(0.03)	(0.06)
Skill specificity			0.105			0.155*
			(0.08)			(0.08)
Migrant share x skill specificity			-0.012			-0.013
			(0.03)			(0.04)
Dualism x skill specificity			-0.225**			-0.198*
			(0.10)			(0.11)
Migrant share x dualism x skill specificity			-0.071*			-0.070
			(0.04)			(0.04)
Intercept	7.080***	7.125***	7.005***	7.399***	7.339***	7.181***
	(0.52)	(0.52)	(0.53)	(0.55)	(0.55)	(0.56)
Wave intercept variance	0	0	0	0	0	0
	(0)	(0)	(0)	(0)	(0)	(0)
Country intercept variance	0.37	0.37	0.37	0.36	0.36	0.36
	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)
Occupational intercept variance	0.08	0.08	0.08	0.09	0.09	0.09
	(0.07)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Individual intercept variance	4.61	4.61	4.61	4.6	4.6	4.6
	(0.03)	(0.04)	(0.03)	(0.03)	(0.03)	(0.03)
N	53177	53177	53177	50618	50618	50618.000
Log Likelihood	-116564	-116559	-116527	-110955	-110950	-110905
BIC	233302.5	233303.9	233282.9	222083.2	222083.3	222036.7

Standard errors between brackets
* 0.1 ** 0.05 *** 0.01
Source: ESS cumulative file and OECD

Table A3- Replication of Hierarchical Linear Models with wave cross-classified effects and post-2008 dummy

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Occupational migrant share	-0.015	-0.038*	-0.078*	0.005	-0.03	-0.057
	(0.02)	(0.02)	(0.04)	(0.02)	(0.02)	(0.04)
Occupational dualism	0.084***	-0.056	-0.333***	0.166***	-0.048	-0.315**
	(0.02)	(0.06)	(0.13)	(0.02)	(0.07)	(0.13)
Years of education	-0.107***	-0.107***	-0.103***	-0.115***	-0.115***	-0.110***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Religiosity	-0.027***	-0.027***	-0.027***	-0.028***	-0.027***	-0.027***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Age	0.013***	0.013***	0.013***	0.013***	0.013***	0.013***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Gender	0.125***	0.125***	0.166***	0.101***	0.101***	0.156***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Country % foreign born	0.086***	0.088***	0.090***	0.007	0.007	0.009
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Country GDP	-0.000***	-0.000***	-0.000***	-0.000***	-0.000***	-0.000***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Country unemployment	0.024***	0.024***	0.024***	-0.002	-0.001	-0.001
	(0.01)	(0.01)	(0.01)	(0.03)	(0.03)	(0.03)
Country social expenditure	0.043***	0.043***	0.043***	0.015	0.016	0.016
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Migrant share x dualism		-0.058**	-0.163***		-0.089***	-0.173***
		(0.02)	(0.05)		(0.03)	(0.06)
Skill specificity			0.248***			0.242***
			(0.08)			(0.08)
Migrant share x skill specificity			-0.012			0.008

			(0.03)			(0.04)
Dualism x skill specificity			-0.239**			-0.266**
			(0.10)			(0.10)
Migrant share x dualism x skill specificity			-0.091**			-0.088**
			(0.04)			(0.04)
Intercept	4.736***	4.669***	4.784***	6.545***	6.449***	6.475***
	(0.34)	(0.34)	(0.35)	(0.53)	(0.53)	(0.53)
Wave dummies	YES	YES	YES	NO	NO	NO
Post-2008 dummy				0.214	0.212	0.208
				(0.17)	(0.17)	(0.18)
Wave intercept variance	0.01	0.01	0.01	0	0	0
	(0.01)	(0.01)	(0.01)	(0)	(0)	(0)
Country intercept variance	0.61	0.62	0.63	0.35	0.35	0.36
	(0.22)	(0.22)	(0.22)	(0.06)	(0.07)	(0.07)
Occupational intercept variance	0.14	0.14	0.12	0.11	0.11	0.1
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Individual intercept variance	4.64	4.64	4.63	4.62	4.62	4.62
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
N	53177	53177	53177.000	53177	53177	53177.000
Log Likelihood	-116715	-116713	-116644	-116734	-116728	-116651
BIC	233593.9	233599.1	233506.1	233642.4	233641.1	233530.8

The first 3 models are cross-classified hierarchical linear models fixing the wave-level of variation with an identity covariance structure. In this specification, it is conventional to assume an identity covariance structure whereby the random variation of wave and country dummies is set to be equal, and the covariance between random effects across levels is set to be 0 (Hox 2010).

The last 3 models are standard 4-level random effects models controlling for a post-2008 dummy.

Standard errors between brackets; * 0.1 ** 0.05 *** 0.01; Source: ESS cumulative file and OECD.

Table A4- Replication of Hierarchical Linear Models controlling for Gini and redistribution

	Model 1	**Model 2**	**Model 3**
Occupational migrant share	-0.166	-0.044	-0.106*
	(0.19)	(0.03)	(0.05)
Occupational dualism	0.212***	0.002	-0.400**
	(0.04)	(0.08)	(0.17)
Years of education	-0.109***	-0.108***	-0.104***
	(0.00)	(0.00)	(0.00)
Religiosity	-0.032***	-0.032***	-0.031***
	(0.00)	(0.00)	(0.00)
Age	0.012***	0.012***	0.012***
	(0.00)	(0.00)	(0.00)
Gender	0.154***	0.156***	0.203***
	(0.03)	(0.03)	(0.03)
Country % foreign born	-0.015	-0.018	-0.015
	(0.03)	(0.03)	(0.03)
Country GDP	-0.000*	-0.000*	-0.000*
	(0.00)	(0.00)	(0.00)
Country unemployment	0.022	0.021	0.021
	(0.03)	(0.03)	(0.03)
Country social expenditure	0.021	0.023	0.023
	(0.02)	(0.02)	(0.02)
Redistribution (gini pre – gini post tax)	-0.185	-0.2	-0.176
	(0.62)	(0.62)	(0.62)
Gini	4.485*	4.599*	4.993**
	(2.43)	(2.41)	(2.43)
Migrant share x dualism		-0.077**	-0.197***
		(0.03)	(0.07)

Skill specificity			0.095
			(0.10)
Migrant share x skill specificity			-0.037
			(0.05)
Dualism x skill specificity			-0.407***
			(0.13)
Migrant share x dualism x skill specificity			-0.129**
			(0.06)
Intercept	4.661***	4.724***	4.514***
	(0.92)	(0.92)	(0.93)
Wave intercept variance	0	0	0
	(0)	(0)	(0)
Country intercept variance	0.26	0.26	0.26
	(0.07)	(0.06)	(0.07)
Occupational intercept variance	0.12	0.11	0.1
	(0.01)	(0.01)	(0.01)
Individual intercept variance	4.85	4.85	4.84
	(0.04)	(0.04)	(0.04)
N	32278	32278	32278.000
Log Likelihood	-71627	-71619	-71574
BIC	143429.6	143424.5	143377.1

Standard errors between brackets
* 0.1 ** 0.05 *** 0.01
Source: ESS cumulative file and OECD

Table A5- Replication of difference-in-differences models with bootstrapped standard errors

	Model 1 (whole sample)	Model 2 (High dualism)	Model 3 (low dualism)	Model 4 (whole sample)
Treated	-0.004	-0.07**	0.01	0.03**
	(0.01)	(0.03)	(0.01)	(0.01)
Occupational dualism				0.001
				(0.02)
Treated x Occupational Dualism				-0.25***
				(0.08)
Survey-year fixed effects	YES	YES	YES	YES
Individual fixed-effects	YES	YES	YES	YES
N observations	346,674	76,678	269,996	346,674
N individuals	61,778	38,189	55,946	61,778

Standard errors between brackets
* 0.1 ** 0.05 *** 0.01
Source: German Socio-Economic Panel (1999-2014)
Treated group: highly skilled workers in relevant survey year

Table A6- Parallel trends assumption: treated group interacted with pre-treatment and post-treatment survey years

	1999	**2000**	**2001**	**2002**	**2003**	**2004**	**2006**
Treated	0.04	-0.01	0.02	0.003	0.005	0.02	-0.001
	(0.05)	(0.03)	(0.04)	(0.02)	(0.03)	(0.02)	(0.03)
Survey-year fixed effects	YES	YES	YES	YES	YES	YES	YES
Individual fixed-effects	YES	YES	YES	YES	YES	YES	YES
N observations	76678	76678	76678	76678	76678	76678	76678
N individuals	38189	38189	38189	38189	38189	38189	38189

Standard errors between brackets
* 0.1 ** 0.05 *** 0.01
Source: German Socio-Economic Panel (1999-2014)
Treated group: highly skilled workers in relevant survey year

Table A7- Replication of difference-in-differences models with unit-specific trends

	Model 1 (whole sample)	Model 2 (High dualism)	Model 3 (low dualism)	Model 4 (whole sample)
Treated	-0.01	-0.08**	0.002	0.02*
	(0.01)	(0.03)	(0.01)	(0.01)
Occupational dualism				-0.005
				(0.01)
Treated x Occupational Dualism				-0.25***
				(0.08)
Highly educated	2.51	5.19	1.31	2.52
	(1.72)	(3.55)	(1.86)	(1.72)
Time trend	-0.008***	-0.01***	-0.008***	-0.008***
	(0.001)	(0.002)	(0.001)	(0.001)
Highly educated x time trend	-0.001	-0.003	-0.001	-0.001
	(0.001)	(0.002)	(0.001)	(0.001)
Survey-year fixed effects	YES	YES	YES	YES
Individual fixed-effects	YES	YES	YES	YES
N observations	332,900	73,802	259,098	332,900
N individuals	59,714	36,949	53,813	59,714

Standard errors between brackets
* 0.1 ** 0.05 *** 0.01
Source: German Socio-Economic Panel (1999-2014)
Treated group: highly skilled workers in relevant survey year

Table A8- Replication of difference-in-differences models with only highly skilled individuals (treated = above average in occupational dualism; control = below average in occupational dualism)

	Model 1
Treated	-0.07***
	(0.03)
Survey-year fixed effects	YES
Individual fixed-effects	YES
N observations	62,951
N individuals	13,250

Standard errors between brackets
* 0.1 ** 0.05 *** 0.01
Source: German Socio-Economic Panel (1999-2014)