# Online Appendix: The Political Impact of Immigration: Evidence from the United States by Anna Maria Mayda, Giovanni Peri and Walter Steingress

#### Figures

#### **Figure B1: The share of immigrants by country of origin group** Sample period is 1980



**Note:** Each bar represents the number of immigrants by country of origin group as a share of the total number of immigrants in the U.S. in 1980.

#### **Figure B2: The change in the share of immigrants by skill-level and country of origin group** Period 1990 to 2016



Note: Each bar represents the average change of immigrants by country of origin group as a share of the overall adult population.

Figure B3: Estimated 2SLS coefficients for high and low-skilled immigrants when we exclude a country-of-origin group at a time.



Panel (a): Estimated coefficients on the share of low-skilled immigrants

Panel (b): Estimated coefficients on the share of high-skilled immigrants



**Note:** The dependent variable is the Republican vote share in a county and year. Each point corresponds to a point estimate of the coefficient for the share of low-skilled immigrants (panel (a)) and the share of high-skilled immigrants (panel (b), when we exclude the immigrants from the country of origin on the horizontal axis from the definition of the instrument. All specifications include the following controls at the commuting zone level: share of low-skilled natives, share of men, share of married, share of African-American, share of rural citizens, share of unemployed, labor market participation rate and average income per person in the citizen population as well as the Bartik employment shifter described in the text and the Import competition exposure as defined in Autor, Dorn and Hanson (2013). Each regression is weighted by the citizen population of the county. Standard errors in parentheses are clustered by commuting zone: \*\*\*, \*\*, \* indicate the statistically significant difference from zero at the 1, 5 and 10 percent levels respectively.

#### **Tables**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dependent variable	Change in th	ne predicted shar	e of low-skilled i	mmigrants	Change in the	predicted share	of high-skilled	immigrants
Change in the mean Republican vote share two years ago	0.000560 [0.000460]	0.000539 [0.000454]	0.000488 [0.000409]	0.000452 [0.000402]	-0.000532*** [0.000191]	-0.000515** [0.000206]	-0.000164 [0.000141]	-0.000181 [0.000144]
Commuting zone control variables	no	yes	no	yes	no	yes	no	yes
County fixed effects	no	no	yes	yes	no	no	yes	yes
Time fixed effects	yes	yes	yes	yes	yes	yes	yes	yes
Observations R-squared	40,027 0.071	40,027 0.084	40,027 0.200	40,027 0.209	40,027 0.122	40,027 0.142	40,027 0.634	40,027 0.636

## Table A1: Lagged change in the Republican share of votes and change in share of immigrants for each skill levelOLS estimates, U.S. Counties, all elections between 1990 and 2016

**Note:** The sample period consists of all two-year periods between 1990 and 2016. Specifications (2), (4), (6) and (8) in panel a and b include the following controls at the commuting zone level: share of low-skilled natives, share of men, share of married, share of African-American, share of rural citizens, share of unemployed, labor market participation rate and average income per person in the citizen population as well as the change in the Bartik employment shifter described in the text and the change in the Import competition exposure as defined in Autor, Dorn and Hanson (2013). Each regression is weighted by the change in the citizen population of the county. All regressions include year effects. Robust standard errors in parentheses are clustered by commuting zone: \*\*\*, \*\*, \* indicate the statistically significant difference from zero at the 1, 5 and 10 percent levels respectively.

					Share of	Share of		
Donondont variable	Share of	Unemploy-	Av. income	Trade	African	white low-	Share of	Share of
Dependent variable	rural	ment rate	per capita	shock	American	skilled male	low-skilled	high-skilled
	citizens				citizens	citizens	natives	natives
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Pooled							
Share of low-skilled	-5.267	-0.178*	-3.810**	-0.161	-0.280	-0.00810	0.187	0.0525
immigrants at county level	[5.236]	[0.0974]	[1.594]	[0.455]	[0.238]	[0.0199]	[0.262]	[0.222]
Share of high-skilled	0.149	0.00191	-1.142	-0.196	-0.409**	0.00184	0.0731	0.00472
immigrants at county level	[0.789]	[0.0451]	[1.350]	[0.174]	[0.190]	[0.00601]	[0.110]	[0.0835]
Commuting zone control variables	VAS	Ves	Vec	VAS	Ves	Vec	Ves	Vec
Country fine diaffa ata	yes							
County fixed effects	yes							
Time fixed effects	yes							
Observations	43 106	43 106	43 106	43 106	43 106	43 106	43 106	43 106
IV F-stat	40.13	40.38	22 56	18 99	21 16	73 78	-3, <u>100</u>	40,100
Observations IV F-stat	43,106 40.13	43,106 40.38	43,106 22.56	43,106 48.99	43,106 21.16	43,106 73.78	43,106 69.39	43,106 69.39

#### Table A2: Correlation of the instruments with contemporaneous trends

2SLS estimates, U.S. Counties, all elections between 1990 and 2016

**Note**: The sample period consists of all election years between 1990 and 2016. All specifications include the following controls commuting zone level: share of low-skilled natives, share of men, share of married, share of African-American, share of rural citizens, share of unemployed, labor market participation rate and average income per person in the citizen population as well as the change in the Bartik employment shifter described in the text and the change in the Import competition exposure as defined in Autor, Dorn and Hanson (2013). Each regression is weighted by the citizen population of the county. Robust standard errors in parentheses are clustered by state: \*\*\*, \*\*, \* indicate the statistically significant difference from zero at the 1, 5 and 10 percent levels respectively.

	(1)	(2)
Elections	Pooled	Pooled
Share of low skilled immigrants at County Level	4 563***	4 563***
share of four skines in ingrants at county zever	[0 947]	[0 738]
Share of high skilled immigrants at County Level	-1 522***	-1 292**
	[0 494]	[0 535]
Average total personal income in 1999\$ of voters	-0.0250	-0 0249
	[0 0262]	[0 0240]
Share of voters who are African American	-0 225	-0 333
share of voters who are ranear ranenear	[0 323]	[0 321]
Share of voters who are urban	0 0150	0 00911
	[0 0129]	[0 0125]
Share of voters who are unemployed	-0 540	-0 568
share of voters who are anemployed	[0 443]	[0 446]
Share of voters who are males	1 009*	0 600
share of voters who are males	[0 528]	[0.495]
Share of voters who are married	-0 684***	-0 737***
share of voters who are married	[0 175]	[0 172]
Autor Dorn Hanson instrument for trade	0 0710	0 0892
	[0.0684]	[0 0702]
Bartik instrument for employment	0 238	0 335
	[0.848]	[0 814]
Share of voters participating in Jabor market	0 600***	0 642***
	[0 174]	[0 170]
Share of low-skilled natives	-0.877***	-0 363
	[0 272]	[0 296]
Share of white males with low education	[0:272]	-1 763***
		[0 456]
Share of whites with low education		2 045***
		[0.654]
Election fixed effects	yes	yes
Time fixed effects	yes	yes
County fixed effects	yes	yes
Observations	92,982	92,982
IV F-stat	78.97	79.27

### Table A3: Republican vote share, low-skilled and high-skilled immigrants, robustness

2SLS estimates, U.S. Counties, all elections between 1990 and 2016

**Note:** The dependent variable is the Republican vote share. Each column is a different specification and includes county fixed effects and time fixed effects. We pooled over all three types of elections. The years considered are 1990 to 2016. Method of estimation is two-stage least squares. Each regression is weighted by the citizen population of the county. Standard errors in parentheses are clustered by the state level: \*\*\*, \*\*, \* indicate the statistically significant difference from zero at the 1, 5 and 10 percent levels respectively.

Low-skilled imm	nigrant share	High-skilled immigrant s	hare
Country-group	Rotemberg weight	Country-group	Rotemberg weight
Korea	0.0517	Latin America (excluding Mexico)	0.713
Mexico	0.0287	India	0.648
Other Asia	0.0186	Vietnam	0.483
Africa	0.0146	Oceania	0.141
Vietnam	0.0128	Philippines	0.136

#### Table A4: Top 5 Rotemberg weight for country-of-origin groups

**Note:** The Rotemberg weights identify the set of countries of origin that carry the highest weight in the instrument for the identification (see, Goldsmith-Pinkham et al 2018).

#### Table A5: Republican vote share, low-skilled and high-skilled immigrants, robustness

2SLS estimates, U.S. Counties, all elections between 1990 and 2016

	Controlling for						
Control variable	None	Share of rural	Unemployment	Av. income	Trade shock	Share of African	Share of male
		citizens	rate	per capita		American citizens	citizens
Share of low-skilled immigrants	3.676***	3.845***	3.647***	3.781***	3.676***	3.696***	4.010***
at the county level	[1.016]	[0.916]	[1.013]	[0.994]	[1.018]	[0.981]	[1.047]
Share of high-skilled immigrants	-2.386***	-2.357***	-2.369***	-2.358***	-2.386***	-2.343***	-2.216***
at the county level	[0.298]	[0.306]	[0.307]	[0.316]	[0.299]	[0.302]	[0.369]
Control variable		0.0209	-0.354	0.0183	0.00167	0.151	1.843***
		[0.0136]	[0.619]	[0.0236]	[0.0860]	[0.302]	[0.650]
Election fixed effects	yes	yes	yes	yes	yes	yes	yes
Time fixed effects	yes	yes	yes	yes	yes	yes	yes
County fixed effects	yes	yes	yes	yes	yes	yes	yes
Observations	92,982	92,982	92,982	92,982	92,982	92,982	92,982
IV F-stat	26.77	31.50	21.22	47.04	26.97	43.20	20.10
Control veriable	Share of married	Bartik instrument	Share of citizens	Share of low-	Share of white	Share of white low-	
Control variable	citizens	employment	in labor force	skilled natives	low-skilled citizens	skilled male citizens	
							_
Share of low-skilled immigrants	3.162***	3.679***	4.762***	4.184***	4.152***	3.988***	
at the county level	[1.053]	[1.026]	[1.077]	[0.997]	[0.700]	[0.798]	
Share of high-skilled immigrants	-2.255***	-2.394***	-2.322***	-1.581***	-1.376**	-1.654***	
at the county level	[0.259]	[0.274]	[0.284]	[0.342]	[0.336]	[0.309]	
Control variable	-0.650***	0.369	0.700***	-1.109***	-1.241***	-1.942***	
	[0.219]	[0.908]	[0.201]	[0.320]	[0.317]	[0.556]	
Election fixed effects	yes	yes	yes	yes	yes	yes	
Time fixed effects	yes	yes	yes	yes	yes	yes	
County fixed effects	yes	yes	yes	yes	yes	yes	
Observations	92,982	92,982	92,982	92,982	92,982	92,982	
IV F-stat	29.11	27.15	27.46	13.95	16.93	17.99	

**Note:** The dependent variable is the Republican vote share. Each column is a different specification and includes county fixed effects and time fixed effects. We pooled over all three types of elections. The years considered are 1990 to 2016. Method of estimation is two-stage least squares. Each regression is weighted by the citizen population of the county. Standard errors in parentheses are clustered by the state level: \*\*\*, \*\*, \* indicate the statistically significant difference from zero at the 1, 5 and 10 percent levels respectively.

#### Table A6: Republican vote share and immigrant share for different subpopulation

	(1)	(2)	(3)
Election type	Pooled	Pooled	Pooled
Group	Latin America	Mexico	OECD member (cty)
Non-group	non-Latin America	Rest of the World	non-OECD member
Share of low-skilled immigrants	3.487***	4.686***	4.467***
from group	[1.253]	[1.197]	[1.210]
Share of high-skilled immigrants	-0.459	-1.488**	-1.809***
from group	[0.560]	[0.557]	[0.558]
Share of low-skilled immigrants	3.170*	1.343	0.745
from non-group	[1.686]	[1.724]	[3.031]
Share of high-skilled immigrants	-4.152***	-2.155***	-1.755***
from non-group	[0.682]	[0.334]	[0.394]
Election fixed effects		yes	yes
Commuting Zone control variables		yes	yes
Time fixed effects		yes	yes
County fixed effects		yes	yes
Observations	92,982	92,982	92,982
IV F-stat	35.13	5.944	2.246

2SLS estimates, U.S. Counties, all elections between 1990 and 2016

**Note:** The dependent variable is the Republican vote share in a county and year. The explanatory variable is equal to immigrants as a share of the adult population. Method of estimation is two-stage least squares. All regressions include county, election as well as year fixed effects. Specification (1) distinguishes between the skill level of immigrants and whether immigrants are from a Latin American country. Specification (2) distinguishes between the skill level of immigrants and whether immigrants are from Mexico. Specification (3) distinguishes between the skill level of immigrants and whether immigrants are from Mexico. Specifications also include the following controls at the commuting zone level: share of low-skilled natives, share of men, share of married, share of African-American, share of rural citizens, share of unemployed, labor market participation rate and average income per person in the citizen population as well as the Bartik employment shifter described in the text and the Import competition exposure as defined in Autor, Dorn and Hanson (2013). Each regression is weighted by the citizen population of the county. Standard errors in parentheses are clustered by the state level: \*\*\*, \*\*, \* indicate the statistically significant difference from zero at the 1, 5 and 10 percent levels respectively.