

# **Article: *Why Do Immigrants Participate in Politics Less Than Native-born Citizens? A Formative Years Explanation***

## **Online Appendix**

### **Descriptive statistics**

Tables OA1, OA2, and OA3 summarize the data that are used in the analysis. We found two points warrant attention. First, a significant portion of the immigrant population (about 44% in 2008) are not U.S. citizens, which means that we need to examine both voting and non-voting to obtain a comprehensive understanding of immigrants' political behavior. Second, many (39% of native-born citizens and 17% of immigrants in 2008) had participated in non-voting activities such as boycotting a product, supporting a political candidate, etc. Thus, even though voting is more prevalent than non-voting, non-voting is also an important component of political participation.

Table OA1: Demographics on eligible voters, 1994 -2016

	Men	Women	18-29	30-49	50-65	65+	White	Black	Hispanic	Other	College degree or more	Some college	High school or less
Native born citizens	48%	52%	21%	37%	23%	18%	78%	12%	7%	3%	27%	62%	12%
Immigrants	47%	53%	10%	40%	28%	22%	29%	8%	33%	30%	34%	47%	20%
Immigrants based on age at immigration													
0-4	48%	52%	46%	44%	8%	1%	26%	6%	40%	29%	35%	57%	9%
5-11	49%	51%	31%	52%	15%	3%	29%	7%	36%	27%	36%	55%	9%
12-15	48%	52%	23%	54%	17%	6%	28%	9%	39%	25%	35%	53%	13%
16-18	52%	48%	15%	59%	20%	7%	23%	9%	44%	25%	29%	51%	20%
19-24	47%	53%	6%	54%	27%	12%	28%	8%	36%	28%	31%	48%	21%
25-34	44%	56%	1%	39%	36%	25%	31%	9%	27%	32%	38%	43%	19%
35+	45%	55%	0%	12%	37%	51%	31%	8%	28%	33%	30%	40%	29%
Immigrants based on region of origin													
Anglophone	41%	59%	5%	23%	30%	43%	93%	2%	1%	3%	38%	53%	9%
East/Southeast Asia	43%	57%	10%	42%	30%	19%	3%	0%	1%	96%	45%	43%	12%
Former Soviet	46%	54%	11%	32%	26%	30%	99%	0%	0%	0%	41%	48%	11%
Latin America/Caribbean	47%	53%	11%	45%	27%	17%	4%	14%	2%	2%	19%	50%	31%
Oceania	49%	51%	13%	43%	26%	19%	47%	10%	11%	32%	28%	53%	18%
Middle East/South Asia	55%	45%	11%	46%	28%	14%	46%	2%	0%	52%	60%	33%	7%
Sub-Saharan Africa	56%	44%	14%	54%	24%	7%	15%	79%	1%	5%	46%	47%	7%
Western/Northern Europe	44%	56%	2%	19%	32%	47%	95%	1%	4%	1%	27%	52%	21%

Note: CPS Data on eligible voters, 1994 -2016, used for baseline SES models on voting.

Table OA2: Demographics on all respondents, 2008

	Men	Women	18-29	30-49	50-65	65+	White	Black	Hispanic	Other	College degree or more	Less than college	High school or less	% naturalized
Native born citizens	47%	53%	24%	34%	25%	18%	78%	11%	7%	3%	27%	59%	14%	NA
Immigrants	49%	51%	20%	47%	20%	13%	22%	7%	48%	22%	27%	43%	31%	56%
Immigrants based on age at immigration														
0-4	50%	50%	57%	37%	5%	0%	21%	6%	51%	22%	21%	49%	30%	40%
5-11	51%	49%	46%	44%	8%	2%	21%	8%	53%	19%	22%	56%	22%	42%
12-15	54%	46%	45%	43%	10%	2%	22%	9%	54%	14%	19%	50%	30%	54%
16-18	54%	46%	34%	52%	10%	4%	15%	8%	61%	16%	17%	44%	39%	59%
19-24	52%	48%	28%	51%	15%	6%	19%	6%	57%	18%	22%	45%	33%	61%
25-34	46%	54%	5%	56%	24%	15%	26%	7%	41%	26%	35%	38%	27%	57%
35+	45%	55%	0%	17%	43%	41%	24%	7%	39%	30%	27%	37%	36%	57%
Immigrants based on region of origin														
Anglophone	40%	60%	9%	36%	22%	33%	93%	2%	5%	0%	39%	55%	6%	47%
East/Southeast Asia	43%	57%	14%	46%	26%	14%	4%	0%	0%	95%	47%	40%	14%	39%
Former Soviet	46%	54%	24%	36%	21%	19%	99%	0%	1%	0%	40%	47%	13%	39%
Latin America/Caribbean	52%	48%	23%	51%	18%	9%	4%	7%	88%	1%	12%	43%	45%	66%
Oceania	43%	57%	30%	34%	31%	5%	8%	10%	82%	0%	8%	57%	35%	61%
Middle East/South Asia	55%	45%	23%	52%	17%	8%	39%	4%	0%	58%	61%	26%	13%	57%
Sub-Saharan Africa	51%	49%	26%	52%	19%	3%	16%	77%	1%	7%	36%	55%	9%	55%
Western/Northern Europe	42%	58%	5%	31%	24%	40%	93%	1%	3%	2%	30%	52%	19%	35%

Note: CPS Data on all respondents, 2008, used for baseline SES and hierarchical models on non-voting participation.

Table OA3: Descriptive statistics of dependent variables, 2008

	Voting		Political participation				Total Participation	
	Midterm elections	Presidential elections	Attend a meeting	Boycott	Protest	Contact politician		Support Candidates
Total	52%	70%	11%	23%	11%	3%	15%	36%
Native born citizens	53%	71%	12%	26%	12%	3%	17%	39%
Immigrants	44%	63%	4%	10%	4%	2%	7%	17%
Immigrants based on age at immigration								
0-4	35%	60%	8%	14%	7%	6%	11%	28%
5-11	38%	62%	6%	15%	7%	4%	10%	25%
12-15	41%	60%	5%	12%	6%	2%	10%	20%
16-18	40%	59%	4%	9%	5%	2%	7%	19%
19-24	43%	63%	3%	9%	3%	2%	7%	17%
25-34	48%	65%	3%	10%	3%	2%	7%	16%
35+	45%	62%	2%	8%	1%	1%	4%	11%
Immigrants based on region of origin								
Anglophone	53%	71%	12%	26%	12%	3%	17%	39%
East/Southeast Asia	38%	56%	4%	12%	4%	2%	8%	20%
Former Soviet	40%	59%	3%	8%	3%	1%	7%	15%
Latin America/Caribbean	43%	63%	3%	7%	2%	2%	6%	16%
Oceania	44%	51%	4%	7%	9%	1%	7%	17%
Middle East/South Asia	40%	65%	4%	10%	3%	2%	8%	18%
Sub-Saharan Africa	49%	70%	5%	16%	2%	3%	12%	27%
Western/Northern Europe	55%	71%	8%	19%	15%	4%	13%	35%

Note: CPS Data on all respondents, 2008, used for baseline SES and hierarchical models.

## Baseline models

Tables OA4 and OA5 show the standard SES model estimation with voting as the dependent variable. We focused on the most recent 2014-16 elections, although very similar results could be obtained from any other year. Column (1) in Table OA4 and OA5 shows the probit regression results comparing immigrants to native-born citizens in the data. In line with other findings in the literature, immigrant citizens vote at significantly lower rates than other citizens. Because we focus on voting in this example, we were able to examine only citizens who are eligible to vote. Column (2) breaks down the immigrant population by their age at immigration. Across the board, we again see a lower rate of participation compared against the native-born population. Columns (3) and (4) introduce controls for demographic (sex, age, age-squared, race and ethnicity), socioeconomic (income and education), and geographic (state fixed effects, included but not shown) variables. These models also include a dummy variable for whether or not the survey respondent was reporting on their own behavior or on behalf of someone else in the household (included but not shown).

The combination of columns (1) and (3) provides a clear depiction of the puzzle presented at introduction: immigrants participate in politics at a lower rate compared to their native-born counterparts (column 1), and this lower level persists after accounting for SES (column 3). After taking into consideration immigrants' age at immigration, the picture becomes more nuanced. Without controlling for demographics, SES, and state-fixed effect, immigrants across different age at immigration groups still participate at a lower rate; with the controls, however, those who came before their fifth birthday are not statistically different from the native-born population, and those who came after age 18 were substantially less likely to turnout to vote.

Table OA4: Standard SES Model With 2014 Voting Data (Probit Regression)

	<i>Dependent variable:</i>			
	voted			
	(1)	(2)	(3)	(4)
Immigrant	-0.433*** (0.028)		-0.244*** (0.083)	
Age at immigration: 0-4		-0.655*** (0.118)		0.063 (0.153)
Age at immigration: 5-11		-0.758*** (0.085)		-0.294** (0.121)
Age at immigration: 12-15		-0.508*** (0.097)		-0.181 (0.134)
Age at immigration: 16-18		-0.584*** (0.104)		-0.121 (0.139)
Age at immigration: 19-24		-0.435*** (0.063)		-0.194* (0.104)
Age at immigration: 25-34		-0.290*** (0.051)		-0.299*** (0.095)
Age at immigration: 35+		-0.328*** (0.057)		-0.323*** (0.102)
Female			0.076*** (0.016)	0.077*** (0.016)
White, non-Hispanic			0.302*** (0.043)	0.300*** (0.043)
Black, non-Hispanic			0.783*** (0.050)	0.782*** (0.050)
Hispanic			0.065 (0.053)	0.063 (0.053)
Family income (std)			0.149*** (0.009)	0.149*** (0.009)
Age (std)			0.620*** (0.011)	0.622*** (0.011)
Age-squared (std)			-0.023** (0.009)	-0.023** (0.009)
HS or less			-0.972*** (0.031)	-0.971*** (0.031)
College graduate			0.818*** (0.019)	0.818*** (0.019)
Constant	0.127*** (0.007)	0.127*** (0.007)	-0.743*** (0.117)	-0.744*** (0.117)
Observations	81,185	81,185	81,185	81,185
Log Likelihood	-56,056.110	-56,039.580	-46,372.410	-46,367.420
Akaike Inf. Crit.	112,116.200	112,095.200	92,918.820	92,920.850

Note:

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Table OA5: Standard SES Model With 2016 Voting Data (Probit Regression)

	<i>Dependent variable:</i>			
	voted			
	(1)	(2)	(3)	(4)
Immigrant	-0.437*** (0.029)		-0.353*** (0.091)	
Age at immigration: 0-4		-0.559*** (0.118)		-0.147 (0.158)
Age at immigration: 5-11		-0.483*** (0.081)		-0.266** (0.123)
Age at immigration: 12-15		-0.456*** (0.102)		-0.297** (0.142)
Age at immigration: 16-18		-0.613*** (0.102)		-0.399*** (0.143)
Age at immigration: 19-24		-0.412*** (0.062)		-0.292*** (0.110)
Age at immigration: 25-34		-0.378*** (0.054)		-0.492*** (0.105)
Age at immigration: 35+		-0.413*** (0.061)		-0.366*** (0.112)
Female			0.236*** (0.018)	0.236*** (0.018)
White, non-Hispanic			0.385*** (0.043)	0.383*** (0.043)
Black, non-Hispanic			0.807*** (0.052)	0.807*** (0.052)
Hispanic			0.105** (0.051)	0.104** (0.051)
Family income (std)			0.232*** (0.010)	0.232*** (0.010)
Age (std)			0.349*** (0.012)	0.352*** (0.012)
Age-squared (std)			0.025** (0.010)	0.024** (0.010)
HS or less			-1.018*** (0.029)	-1.017*** (0.029)
College graduate			0.997*** (0.024)	0.997*** (0.024)
Constant	1.023*** (0.008)	1.023*** (0.008)	0.448*** (0.126)	0.450*** (0.126)
Observations	80,303	80,303	80,303	80,303
Log Likelihood	-46,815.370	-46,812.410	-39,777.650	-39,772.760
Akaike Inf. Crit.	93,634.750	93,640.810	79,729.310	79,731.510

Note:

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

## Age multiplier

Figure OA5 shows the estimated values of  $\alpha$  for the different age categories in the model. Apart from the 35+ category (which was constrained to equal one), the multipliers were free to take any value in the [0,1] interval. The monotonic relationship between age at immigration and the country-of-origin multiplier effect emerged from the data. Values closer to one indicate behavior that is more like immigrants who migrated as adults while values close to zero indicate behavior that is indistinguishable from demographically similar native-born citizens.

Figure OA5: Estimated size of the age multiplier ( $\alpha$ )

