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Kelly Duncan

Gabe Darger

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The Effects (or Lack Thereof) of Immigration on U.S. Crime Rates

Kelly N. Duncan and Gabe Darger

Introduction

Since the attacks of 9/11 and the War on Terrorism, many U.S. citizens have expressed concern over the impact immigrant populations have on the U.S., particularly on crime rates (Beck 2014). These concerns have been co-opted into fear-based political messaging used to influence public opinion with sensational imagery and hearsay. Current U.S. President Donald Trump has been open in expressing criticism of immigrant populations. During Trump's presidential bid in 2015, he said, "When Mexico sends its people, they're not sending their best [. . .] They're bringing drugs. They're bringing crime. They're rapists. And some, I assume, are good people" (C-SPAN 2015).

Reaching a critical mass, this political messaging has begun to influence policy and proposals. On 25 January 2017, Trump signed Executive Order 13767, detailing plans to build a southern border wall, which he estimated to cost between \$6 to \$10 billion (Associated Press 2017). On that same day, Trump also signed Executive Order 13768, cutting federal funding to sanctuary cities (Trump 2017). Citing the threat of terrorism, Trump's administration instituted a travel ban two days later, which barred travelers from Iran, Iraq, Libya, Somalia, Sudan, Syria, and Yemen (Trump 2017). In February 2018, the U.S. Citizenship and Immigration Services agency removed the words "a nation of immigrants" from its mission statement (Hauslohner 2018).

However, these policies ignore the actual rates of crime in the United States. In the years between 1990 and 2013, the proportion of foreign-born members of the U.S. population grew from 7.9 to 13.1 percent. Similarly, the estimated population of unauthorized immigrants nearly quadrupled from 3.5 million to 11.2 million (Ewing,

Martinez, and Rumbaut 2016). During these same decades, the FBI reported that violent crime rates decreased by 48 percent and property crime decreased by 41 percent (Ewing et al. 2016).

Despite this reduction in crime, news outlets, political commentators, and the current administration have cited anecdotal cases and offered high-profile reports depicting horrific crimes committed by undocumented immigrants. On 22 June 2018, the White House hosted families of deceased victims who passed away due to illegal immigrants. President Trump said, “These are the stories that Democrats [. . .] don’t want to discuss, they don’t want to hear, they don’t want to see, they don’t want to talk about.” Multiple families hosted at that event, however, lost loved ones in traffic-related tragedies, not tragedies of violent crime as the Trump Administration was suggesting (Horsley 2018). Stories like these have helped feed a national dialogue of hysteria, fear, and calls for mass deportation and immigration reform.

The abundance of these anecdotes runs contrary to our comparative findings. In this paper, we will provide background research and discuss our theories, data, methods, and results that measure changes in immigration rates and crime rates over time. Using fixed-effects models, we find that immigration levels have no effect on—and in some cases actually reduce—rates of crime. Proponents of immigration reform cannot therefore refer to rising crime statistics as sufficient reason to enact stricter immigration policies.

Conceptual Framework and Background

There is a considerable existing field of research that studies the relationship between immigration and crime. Much of this research found there is no positive correlation or association between immigration and the rates of property or violent crime (Chalfin 2013; Klein, Allison, and Harris 2017; Lee, Martinez, and Rosenfeld 2001). Hagan and Palloni (1999) conclude that Latino immigrants are “disproportionately young males who, regardless of citizenship, are at greater risk of criminal involvement,” while Graif and Sampson (2009) find the “immigrant concentration is either unrelated or inversely related to homicide, whereas language diversity is consistently linked to lower homicide.” While some researchers found that immigrants are no more “inclined to commit crime than the native born” (Ousey and Kubrin 2014), others have discovered second-generation immigrants, who have assimilated to U.S. culture, are just as likely to commit crime as native-born Americans (Bersani 2013; Morin 2013). In an extended study, Ousey and Kubrin (2017) found that immigration has negative effects on crime, but these effects are so small that they are essentially null.

While past studies have been constructive, they have lacked elements of external validity by either focusing on specific ethnic immigrant groups or implementing a difference-in-difference framework on only a few select cities. Furthermore, past studies do not include the most recent data on immigration and crime trends. Our study focuses on a macro-level analysis of the effects of immigrant populations on crime rates at the state level and employs a series of difference-in-difference models.

Discussion of Theories

One theoretical perspective that speaks to the nature of immigrants is the self-selection theory. It suggests that immigrant populations have disproportionately low levels of crime, because they are self-selected ambitious individuals with economic goals in mind (Borjas 1988). Because so many immigrants leave their home countries looking for economic opportunity, they tend to be hardworking individuals who are goal-oriented and are looking for long-term advancement in their new communities. As a whole, immigrant populations tend to avoid encounters with the law.

Another theory relating to immigration revolves around the cities and states that accept immigrant populations. Martinez-Schuldt and Martinez (2017) released a study that observed violent crime rates specifically in sanctuary cities and found that policies implemented by sanctuary cities are either unrelated or sometimes inversely related to crime. In direct contrast to Trump’s claims that funding for sanctuary cities should be cut because they have “resulted in so many needless deaths” (Los Angeles Times Staff 2016), Martinez-Schuldt and Martinez found that an increase in the city’s unauthorized Mexican population results in a predicted reduction of homicides in sanctuary cities. They also found that robbery rates are lower in sanctuary cities. According to this research, these municipal jurisdictions are not only sanctuaries to the immigrants they house but are safer for natives living in the city as well.

These theoretical perspectives allow us to make explicit predictions relating to the effect of immigrant populations on U.S. crime rates. With so much at stake for both current and prospective U.S. citizens, it is imperative that the Trump administration and state-level legislators are made aware of the effects their decisions can produce.

Data

To answer whether increased immigration leads to higher levels of violence, we have gathered comprehensive data that includes policy outputs, violent crime rates, immigrant populations, and English programs. In this analysis, we use the aggregate of data from the Correlates of State Policy (CSP) (Boehmke and Frederick 2012; Caughey and Warshaw 2015; Jordan and Grossmann 2017), which includes the effects of various policy outputs in all fifty states, as well as Washington, D.C., and has data beginning in the early twentieth century. Our analysis focuses on data specifically related to criminal justice, demographics (including varieties of immigrant populations), and immigration-related policy outputs.

Crime Data

The data measuring violent crime rates is provided by the U.S. Department of Justice (DOJ). The DOJ defines violent crime as “murder and non-negligent manslaughter, forcible rape, robbery, [or] aggravated assault” (2018). The DOJ also provides the data on property crime rates and defines it as: “Estimated property crime rate by state. Larceny-theft (except motor vehicle theft)—the unlawful taking, carrying,

leading, or riding away of property from the possession or constructive possession of another. Examples are thefts of bicycles, motor vehicle parts and accessories, shoplifting, pocket-picking, or the stealing of any property or article that is not taken by force and violence or by fraud. Attempted larcenies are included. Embezzlement, confidence games, forgery, check fraud, etc., are excluded" (2018). All crime data also includes those committed by gangs. These crime measures are collected by the DOJ by collecting data from all agencies that they have reports on as well as estimations for areas of that data. The DOJ's sources include the Federal Bureau of Investigation (FBI) as well as Uniform Crime Reports prepared by the National Archive of Criminal Justice Data (2018).

Immigrant Population Data

The data measuring new immigrant populations is provided by the U.S. Department of Homeland Security (DHS) and defines members as: "Persons obtaining legal permanent resident status [. . .] A permanent resident is defined as a Green Card holder who has been granted lawful authorization to live and work in the United States on a permanent basis. As proof of that status, a person is granted a permanent resident card, commonly called a 'Green Card'" (2011).

Data related to undocumented immigrants is defined as the "estimated number of unauthorized immigrants in a state [. . .] Figures are estimates by the Pew Hispanic Center, not actual counts" (Passel and Cohn). Estimates of unauthorized immigrants are not perfectly comprehensive and are subject to measurement error, but the methods conducted by the Pew Research Center are reliable and continue to improve. The Pew Research Center calculates the estimated number of non-immigrant visa overstayers using U.S. Visitor and Immigrant Status Indicator Technology (US-VISIT), which provides "computerized records of arrivals and departures and a means of checking the identity of the visitor with biometric data" (Passel and Cohn). In its most recent report, Pew predicted an average of 4 to 5.5 million visa overstayers in 2006. Estimating Border Crossing Card overstays (past the permitted thirty days) is more statistically challenging, but the research team uses a methodology created by Robert Warren, "a veteran demographer who was employed for many years at the U.S. Immigration and Naturalization Service, which has since been subsumed into DHS" (Passel and Cohn). This framework allowed Pew to arrive at an estimation of 250 to 500 thousand Border Crossing Card violators in 2006. The rest of the unauthorized migrant population entered the country illegally. "Some evaded customs and immigration inspectors at ports of entry by hiding in vehicles [. . .] Others trekked through the Arizona desert, waded across the Rio Grande or otherwise eluded the U.S. Border Patrol which has jurisdiction over all the land areas away from the ports of entry on the borders with Mexico and Canada" (Passel and Cohn). Pew estimated that 6 to 7 million migrants entered the country illegally in 2006 without inspection. While measurement error relating to undocumented immigrants is likely, the existing framework for measuring

this population implements some of the most effective technologies and methodologies available at this time.

The refugee total is measured by the "number of refugees arriving per state per fiscal year" and is provided by the U.S. Department of Health and Human Services (2018). Data related to the foreign-born population is also provided by the Pew Research Center, which has categorized the measurement simply as the "percentage of state population who are foreign born" (Reich 2017).

Policy Data

The data measuring whether a state adopted "state hate crime laws" were collected by Boehmke and Skinner (2012). Reich (2017) collected the data measuring the total "'accommodating' [sic] laws relating to immigrants passed in the year." Caughey and Warshaw (2015) collected the data measuring whether "English [is a] state's official language."

A total of thirty-one states have adopted English as their official language (Liu and Sokhey 2014). This piece of "official English" legislation has been propelled by interest groups such as ProEnglish, a declared hate group by the Southern Poverty Law Center (SPLC) (Beirich 2011). The founder of ProEnglish, John Tanton, prepared a memo for the Federation of American Immigration Reform questioning "the 'educability' of Latinos and warned of a coming 'Latin onslaught'" (Beirich 2011).

Past analyses have found a relationship between immigrant population size and the adoption of English as the official language in state, but only during times when immigration is a national news topic (Liu and Sokhey 2014). In other words, states are more likely to respond with official English legislation when immigration is making headlines (Liu and Sokhey 2014).

With 80 percent of the U.S. speaking only English in the home, English is already the de facto official national language (U.S. Census Bureau 2013). Because English has no strong contenders in the U.S., the official English policy is an unnecessary piece of legislation that could signal implicit anti-immigrant sentiments. When enacted, the official English legislation has largely been coupled with immigration reform (Crawford 2008). Because of this relationship, we use this official English policy as a proxy to measure a state's exclusivity and protectionist ideals against immigrant populations.

Methods

We use the multi-period panel data to compare states with varying rates of new immigrant or refugee populations with each state's corresponding crime rates. We implement a difference-in-difference framework that observes rolling treatments over time and across space, while holding constant time-invariant variables in each state. This model accounts for all the unique time-variant factors that make each state different—such as culture and geography—and holds them constant. Our model also has state-specific time trends that control for all variation within states (Angrist and Pischke 2015).

A difference-in-difference model allows for the assumption that without immigration-specific policies and laws, treatment states would run parallel to the non-treated states. To measure this difference-in-difference, we refer to the equation below:

$$Y_{st} = \alpha + \delta_{rDD}IMMIG_{st} + \sum_{k=Alaska}^{Wyoming} \beta_k STATE_{ks} + \sum_{j=1960}^{2012} \gamma_j YEAR_{jt} + \sum_{k=Alaska}^{Wyoming} \theta_j (STATE_{jt} \times t) + e_{st}$$

The dependent variable represents the crime rates in state and year. The coefficient captures the causal effect of immigration rates and crime rates and captures variation of immigration in states within years. The coefficient includes state effects and is the coefficient for each state dummy. Time effects are coefficients on the year dummies. The coefficient captures state-specific linear trend parameters (Angrist and Pischke 2015).

Our difference-in-difference model offers a framework that allows us to measure the causal relationship between immigration and crime by state. This framework also introduces elements of nonparallel development between states and their varying rates of new immigrant populations. The model includes state fixed-effects interacted with a linear year variable. This controls for trends that remain constant within years across states. In the case of individual states, we are also controlling for things that remain constant within state lines (such as culture). Each state might have a different pattern in violent or property crime rates over time, and these models account for that possibility. A difference-in-difference model also controls for state-specific trends by allowing for different immigration and crime rates on different trajectories (Angrist and Pischke 2015). This model allows for the assumption that an absence in immigrant populations would result in a steady linear trend in U.S. crime rates. This inclusion of state-specific trends offers a check on causal interpretation; nevertheless, a limitation of the model is that findings are often imprecise. Abrupt deviations in state trends are picked up by the model; however, when effects emerge at steady rates, the model is less likely to detect the results.

We selected a number of relevant variables from the CSP database relating to immigration, crime, and other state characteristics and placed each variable on a logarithmic scale to adjust large positive skews and outliers. We then ran a series of models to observe population and policy effects on violent and property crime rates. The results of our analyses are found in Tables 1–3, A1–A6, and Figures 1–9. All analyses were performed with the use of Stata software, version 15.

To assess the quality of our design, we created a series of checks to look for variation in our treatment effects. First, we produced a new model in which we included

additional controls for poverty rates, graduation rates, the percentages of the nonwhite population, the total state revenue, population growth, and population total. We found no difference in the results between the new model and our original fixed-effects model. Additional checks found that these null effects on crime do not change over long periods of time but do change with certain language policies in place. We also included unemployment rates as a check and found immigrants have no effect on crime rates when unemployment rates are high but are associated with decreases in violent crime when unemployment rates are low. Finally, we tested our model for endogeneity and found no reverse causal relationship between immigration and crime.

Results

Immigration trends in the U.S. have been dynamic both in their increasing rates as well as in the percentage shifts of region of origin. Pictured below, Figure 1 reflects the growth in the estimated number of undocumented immigrants in the U.S. since 1990 (Passel and Cohn 2011). Also below, Figure 2 shows the fluctuations in the percentages of immigrant populations divided by region of origin since 1960. “In 1960, 84 percent of immigrants living in the U.S. were born in Europe or Canada, while only 6 percent were from Mexico, 3.8 percent from South and East Asia, 3.5 percent from the rest of Latin America, and 2.7 percent from other areas. By 2015, immigrant origins had changed dramatically as European and Canadian immigrants made up only a small share of the foreign-born population (13.5 percent), while Mexicans accounted for one of the largest shares, 26.8 percent. Asian immigrants made up 26.9 percent of all immigrants, other Latin Americans stood at 24.2 percent, and the other 8.6 percent of immigrants were born in other regions,” (López and Radford 2017). Concurrent with these increases in immigration, crime rates have been trending downward. Figures 3 and 4 reveal that the trends measuring the number of violent and property offenses per 100,000 people have fallen significantly over the past two decades.

Figure 1. Estimated National Trends of Undocumented Immigrant Populations

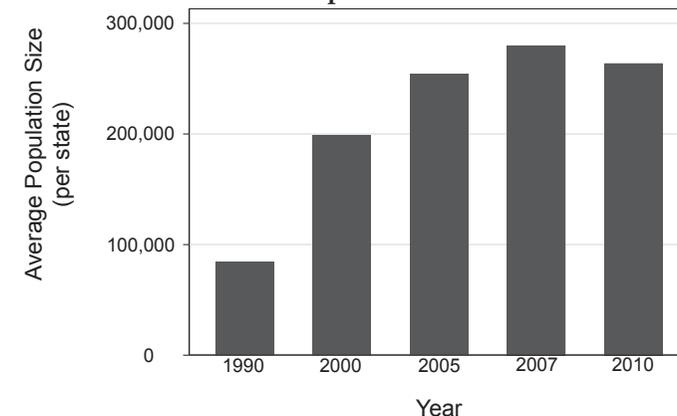
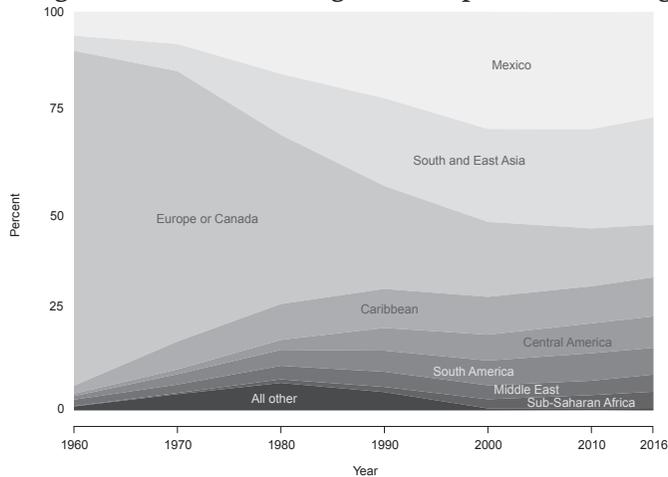
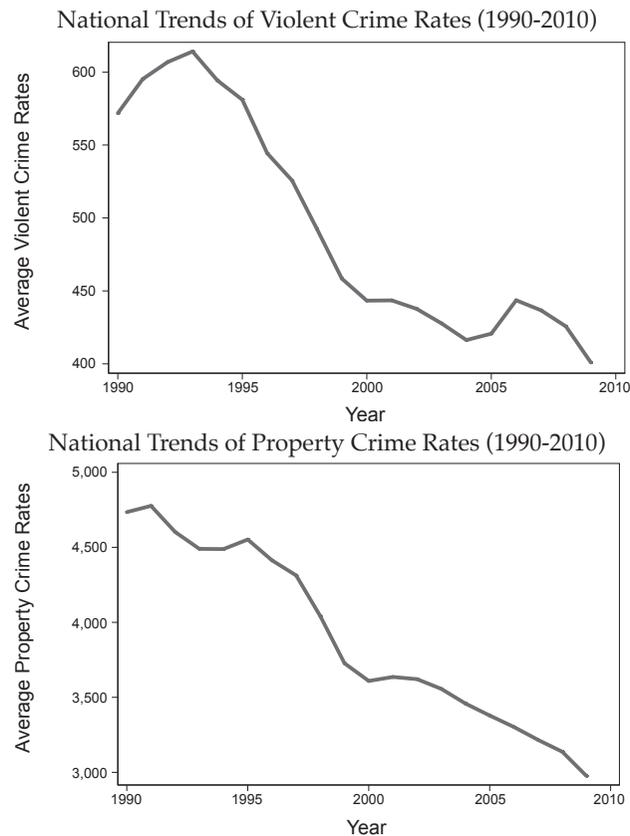


Figure 2. Origin and Percent of Foreign-Born Population Residing in the U.S.



Figures 3. (top) and 4. (bottom): Declining Trends of Crime Rates in the U.S.



The correlations above support our findings. Pictured below, Figure 5 shows the null effects that new immigrants have on violent crime rates. Average violent crime rates generally do not change given the fluctuation in new immigrants. The yellow lowess line crosses the zero-line twice. Also below, Figure 6 shows the effects that new immigrants have on property crime rates. As with violent crime rates, average property crime rates also do not change given the fluctuation in new immigrants. Once again, the yellow low-ess line crosses the zero-line.

Figure 5. Effects of New Immigrants on Violent Crime

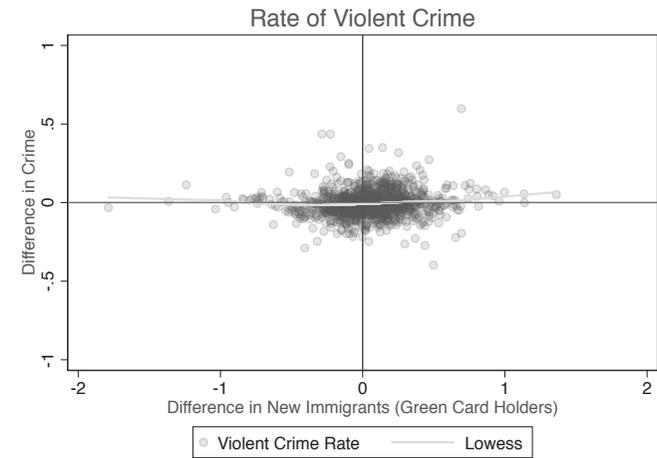
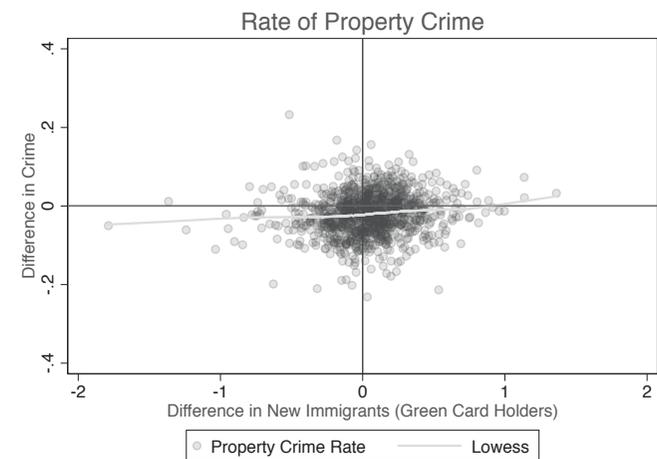


Figure 6. Effects of New Immigrants on Violent Crime



Our results for violent crime (pictured in Table 1 and Figure 7) suggest that neither documented nor undocumented immigrants have any effect on violent crime

rates in the United States. However, in the case of the U.S.'s foreign-born population, we found that a 1 percent increase is associated in a predicted 20 percent decrease in violent crime. A negatively correlated substantive finding such as this suggests that immigrant populations are disproportionately less likely to commit crimes than the native-born. These results support our self-selection theory. In the case of refugees, we found that for every 1 percentage point increase in a refugee population, there is a predicted 0.09 percent increase in violent crime. While this positive correlation is significant ($p=0.036$), it is not statistically substantive.

Conversely, we see (in Table 2 and Figure 8) that a 1 percentage point increase in a refugee population corresponds with a predicted 0.05 percent decrease in property crime. Neither the foreign-born population nor documented nor undocumented immigrants have any effect on property crime rates. These results reflect changes in immigration rates over time. Each of our models controls for all things, observed and unobserved, that remain constant in states over time, within years, and for state-specific time trends.

Table 1. Regression Analysis of Immigrant Population Effects on Violent Crime

	Log of Violent Crime Rate			
Log of New Immigrant Pop.	-0.00566 (0.0174)			
Log of Foreign-Born Pop.		-0.200** (0.0949)		
Log of Undocumented Immigrant Pop.			-0.0735* (0.0413)	
Log of Refugee Total				0.00920** (0.00437)
State Fixed-Effects	Yes	Yes	Yes	Yes
Year Fixed-Effects	Yes	Yes	Yes	Yes
Constant	-22.77*** (8.632)	19.79 (46.61)	62.38*** (13.17)	-18.64 (52.31)
Observations	1,122	234	170	497
R-squared	0.993	0.992	0.980	0.992

Standard errors in parentheses
 *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Figure 7. Coefficient Plot Comparing Various Effects on Violent Crime

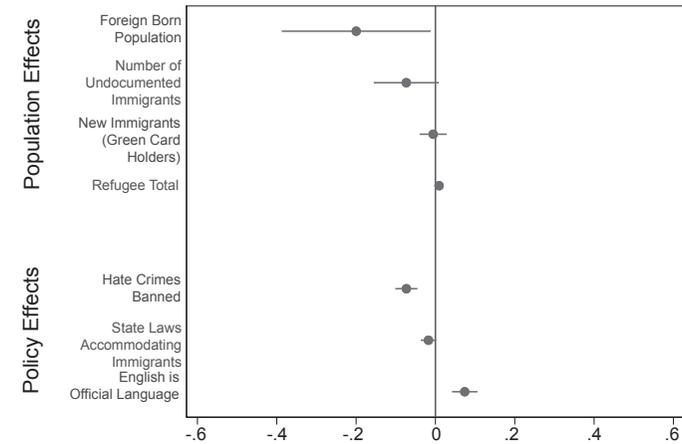
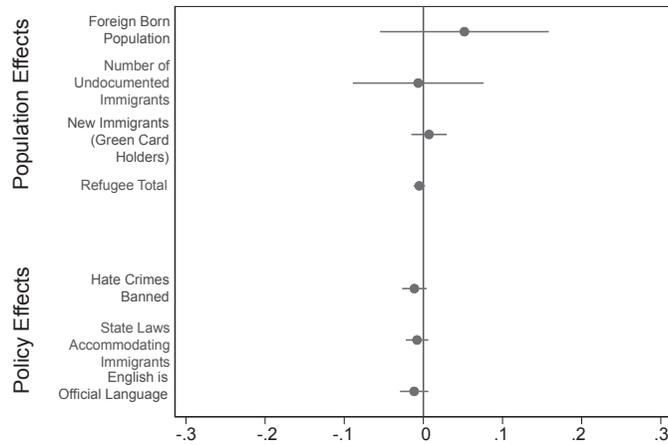


Table 2. Regression Analysis of Immigrant Population Effects on Property Crime

	Log of Property Crime Rate			
Log of New Immigrant Pop.	0.00717 (0.0114)			
Log of Foreign-Born Pop.		0.0518 (0.0539)		
Log of Undocumented Immigrant Pop.			-0.00659 (0.0415)	
Log of Refugee Total				-0.00518 (0.00372)
State Fixed-Effects	Yes	Yes	Yes	Yes
Year Fixed-Effects	Yes	Yes	Yes	Yes
Constant	17.50*** (5.647)	37.12 (26.48)	-32.78** (13.24)	91.35** (44.56)
Observations	1,122	234	170	497
R-squared	0.992	0.977	0.964	0.976

Standard errors in parentheses
 *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Figure 8. Coefficient Plot Comparing Various Effects on Property Crime



Policy Effects

While immigrant populations do not have significant positive effects on violent crime rates, immigration policies do seem to affect violent crime rates in both directions. States that have explicitly banned hate crimes or that have enacted laws that are accommodating to immigrants, experience an associated decline in violent crime. Conversely, states that have created legislation declaring English as the official language tend to experience a positive effect on violent crime rates—an effect that runs presumably opposite to what these state legislators and lobbyists might have expected or hoped for.

We use this official English dummy to see whether there is an observable difference in crime rates between states that are inclusive versus those that are not. Below, Table 3 provides evidence that states that have proclaimed English as their official language do not see significant increases in violent crime as the rates of new immigrants increase (p=0.485). Nevertheless, when states do not have English as their official language, we observe a predicted 5 percent decrease in violent crime as new immigrants enter the state (p=0.012). This finding signals the concept that a region’s attitudes toward immersion and inclusion can result in more peaceful communities. We again find null effects from new immigrants when observing property crimes with the official English dummy as a proxy (Official English law p=0.578; No Official English law p=0.848). These results support our supportive state theory. It appears states that are sympathetic to marginalized groups and that focus on inclusionary policies experience more decency among its people, while states that exert protectionism, encounter greater hostility and higher crime rates.

Table 3. Immigration Effects on Crime with Official English Policy as Proxy

	Log of Violent Crime rates in states that have English as its official language	Log of Violent Crime rates in states that do not have English as its official language	Log of Property Crime rates in states that have English as its official language	Log of Property Crime rates in states that do not have English as its official language
Log of New Immigrant Pop.	0.0220 (0.0315)	-0.0484** (0.0192)	0.00925 (0.0166)	0.00287 (0.0150)
State Fixed-Effects	Yes	Yes	Yes	Yes
Year Fixed-Effects	Yes	Yes	Yes	Yes
State-Specific Trends	Yes	Yes	Yes	Yes
Constant	-6.606 (21.43)	-160.2*** (28.83)	12.34 (11.31)	20.46 (22.46)
Observations	519	603	519	603
R-squared	0.976	0.987	0.972	0.967

Standard errors in parentheses
 *** p<0.01, ** p<0.05, * p<0.1

Tables 1 and 2 each provide four models measuring the different effects new immigrant populations (N=1,122), foreign-born populations (N=234), undocumented immigrant populations (N=170), and refugee populations (N=497) have on violent crime rates and property crime rates, respectively. All variables are logged. Both state and year fixed-effects are included, as well as state-specific trends. No immigrant population has a significant effect on property crime rates, though increases in the foreign-born population are associated in sharp declines in violent crime rates.

Technical Findings on Immigrant Populations

In the case of new immigrant populations, we see in Table 1 that for every 1 percent increase of new immigrants, there is a predicted 0.5 percent decline in violent crime—nevertheless, with a p-value of 0.75 (95 percent CI, -0.04 to 0.03), this measurement is not significant. Similarly, we observe in Table 2 an insignificant effect with property crime rates with a p-value of 0.53 (95 percent CI, -0.02 to 0.03). In other words, new immigrants have no effect on violent or property crime rates. Similar insignificant effects are found for the case of undocumented immigrants on violent or property crime, with p-values of 0.08 (95 percent CI, -0.16 to 0.01) and 0.87 (95 percent CI, -0.09 to 0.08), respectively. While increased percentages of a foreign-born population have no effect on property crime rates (p-value of 0.34; 95 percent CI, -0.05 to 0.16), they

appear to have a predicted decrease in violent crime (p-value of 0.03; 95 percent CI, -0.39 to -0.01).

In the case of refugees, we see in Table 1 that for every 1 percentage point increase in a refugee population, there is a predicted 0.9 percent increase in violent crime. Conversely, we see that a 1 percentage point increase in a refugee population corresponds with a predicted 0.5 percent decrease in property crime. These predictions could be a manifestation of the self-selection theory, effects of PTSD or despair in refugees, or perhaps even the result of hostility from their state of residence. Further analysis is necessary to better understand the directions of refugee effects.

Checks and Tests

Checking Effects by Time Period

Due to the ever-changing nature of immigration policies in the U.S., we decided to check for differences in our model results by time periods. We divided our data spanning 1988 to 2011 in two equal eleven-year blocks to each represent an early (pre-9/11 era) and late (quasi post-9/11 era) period. We did not see evidence of differences in violence between the two time periods (early $p=0.706$; later $p=0.252$; see Table A2 in Appendix). In the case of property crime, we found that increased rates of new immigrants in the early time period were associated with a 2 percent decrease in crime (albeit, at the 90 percent confidence level; $p=0.085$; see Table A3 in Appendix). New immigrants have no effect on property crime in later years ($p=0.865$). Effectively, the null effects that immigration has on crime do not change over time.

Checking Effects against Unemployment Rates

To test whether a state's unemployment rates affect the relationship between immigration and crime, we divided all observation units (each state over every year) by whether they were above or below the unemployment rate mean (6.103821). Table A4 provides evidence that immigration has no effect on crime rates in states with higher unemployment rates ($p=0.153$). Yet, states that have lower unemployment rates will also experience a predicted 5 percent decrease in violent crime ($p=0.025$). It is possible that a state's stability extends into different domains. Table A4 reveals that state property crime rates are not significantly affected (at the 95 percent confidence level) by immigrants, regardless of the unemployment rate.

Testing for Reverse Causation

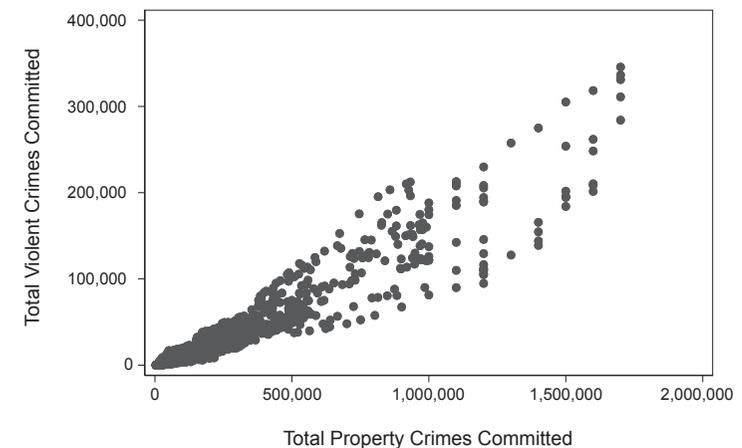
To check whether the relationship we found was an effect of reverse causation, we ran a series of regressions measuring lagged crime rates. If our model was, in fact, picking up on an endogenous relationship, we would find a relationship between increased numbers in new immigrant populations—in any given year—associated with low crime rates from one to four years prior. In other words, a new immigrant, in deciding his or her new state of residence, would look at past criminology reports and see whether the state is safe or crime-ridden. The findings in Table A5 show there is no reverse causality in violent crime rates within a four-year window (Year 1 $p=0.616$;

Year 2 $p=0.432$; Year 3 $p=0.483$; Year 4 $p=0.885$). Similarly, Table A6 shows no reverse causality in property crime rates within a four-year window (Year 1 $p=0.459$; Year 2 $p=0.306$; Year 3 $p=0.590$; Year 4 $p=0.512$). From this endogeneity check on the quality of our model, we may assume that our previous estimates of the effect of immigration on crime are unbiased.

Limitations

While the CSP does not include data on drug-related crimes, our measures of crime do cover otherwise comprehensive groupings. Furthermore, our correlation matrix (Figure 9) shows that measures of crime are highly correlated with each other ($R=0.95$). With such a strong positive correlation among criminal behavior, we may infer that states that are high in crime in one area tend to be high in others—including crimes related to drugs or human trafficking.

Figure 9. Correlations between Criminal Behavior



Domestic violence, sexual assault, and gang violence are perceived to be underreported crimes amongst immigrants. The reasons behind this include language barriers, cultural definitions of justice, fear of the authorities, or shame amongst family members (Ousey and Kubrin 2018). We acknowledge there is almost certainly an underreporting of crimes, especially by immigrants themselves.

All of the checks on the quality of our model were performed exclusively with the new immigrant (Green Card holder) population as the independent variable. This decision was made because the sample size was the only one large enough ($N=1,224$) to offer statistical significance worthy of interpretation. Further analysis would require fuller sample sizes of each immigrant population, as well as data on varieties of racial and ethnic groups. Lastly, our analysis does not include trends starting from 2014 to the present day because the data has not yet been released. We look forward to further analysis once the data is published.

The research on the relationship between immigration and crime rates should not stop here. Because crime rates are only one aspect to be considered in the debate over immigration reform, we hope to develop this analysis to comprehensively cover all the effects immigrant populations might or might not have on the U.S. This expansion would include effects on the economy, unemployment rates, housing markets, and public schools.

Conclusion

In this paper, we found that multiple measures of immigration rates have no effect on property or violent crime rates. In fact, in the case of the foreign-born population, higher immigration rates are associated with negative rates of violent crime.

Concerning theory, we find that while we cannot understand the motivations behind the immigrants from purely a quantitative macroanalysis, our data seems to agree with a self-selection theory. Our evidence shows that immigrant populations are inherently less prone to committing crime than the native-born in the U.S.

As for the list of policies that the Trump administration plans to enact, we find that crime rates cannot be cited as a valid reason to further these proposals. Taxpayer dollars could be used in more effective ways than a \$6 billion wall. President Trump cannot rightly institute travel bans of visitors from Islamic-majority countries while citing increases in crime and terrorism. These bans do not reduce the rates of crime they profess to affect.

The data shows in Figures 7 and 8 that the only immigration policy that has a significant positive effect on crime is when a state adopts English as its official language. Only in that case do violent crime rates increase. As we have discussed, this piece of legislation is often coupled with anti-immigrant policies and legislature. Policy measures that aim to protect immigrant populations, such as banned hate crimes, result in negative effects on violent crime rates. Policy measures that aim to include immigrants, such as accommodation laws, have null effects on violent crime rates. From our results, we see that decency breeds more decency, while protectionism and anti-immigration policies breed hostility.

If crime is the critical factor driving the construction of a wall, a travel ban, or other immigration reform laws, it should be clear that there is no crisis; the presence of immigrant populations produce null effects on crime rates in the U.S. The Trump administration cannot correctly cite increases in crime as its case for immigration reform. Our nation does not experience higher risks of crime when more immigrants enter the country or naturalize. In fact, rates of crime are shown to decrease with larger foreign-born populations.

Policy should not be steered by anecdotal stories that might pander to fear or xenophobia but instead be guided by empirical evidence conducted at macro levels. When citizens can be corrected on the issue of immigration and its attending effects, politicians will be emboldened to make intelligent policies that benefit the U.S.’s native-born citizens and respects its newest members.

Appendix

Table A1. Summary Statistics of all Independent Variables and Dependent Variables

Statistics	Percent Foreign-Born	Number of Undocumented Immigrants	Number of New Immigrants	Refugee Total	Hate Crimes Banned	Total Accom. Immigrant Laws
Mean	8.500	216,877.93	19,386.21	1,219.65	.681	1.431
SD	6.013	420,335.38	49,200.318	2,137.36	.466	2.366
Min.	1.1	5,000	159	0	0	0
Max.	27.4	2,750,000	732,735	22,880	1	15
Range	26.3	2,745,000	732,576	22,880	1	15
N	371	213	1,224	662	1,700	371
Statistics	English Official Language		Violent Crime Rate		Property Crime Rate	
Mean	.347		400.090		3,731.242	
SD	.476		306.547		1,455.24	
Min.	0		9.5		573.1	
Max.	1		2,921.8		9,512.1	
Range	1		2,912.3		8,939	
N	2,295		2545		2,545	

Note: Table A1 includes the descriptive statistics of all independent and dependent variables of our models. The foreign-born statistics are recorded as percentages. Undocumented immigrants, new immigrants (Green Card holders), and the refugee population are all recorded as total numbers. The hate crimes and English Official Language measurements are dummy variables. The accommodating immigrant laws variable is measured as a total number.

Table A2. Immigration Effects on Violent Crime Divided by Time Period

	Log of Violent Crime Rates 1988 to 1999	Log of Violent Crime Rates 2000 to 2011
Log of New Immigrant Pop.	-0.00707 (0.0187)	-0.0272 (0.0237)
State Fixed-Effects	Yes	Yes
Year Fixed-Effects	Yes	Yes
State-Specific Trends	Yes	Yes
Constant	-95.68*** (18.03)	-51.97*** (16.84)
Observations	612	510
R-squared	0.989	0.992

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table A2 provides evidence that there is no difference in immigration effects on violent crime among time periods.

Table A3. Immigration Effects on Property Crime Divided by Time Period

	Log of Property Crime Rates 1988 to 1999	Log of Property Crime Rates 2000 to 2011
Log of New Immigrant Pop.	-0.0194* (0.0112)	-0.00343 (0.0202)
State Fixed-Effects	Yes	Yes
Year Fixed-Effects	Yes	Yes
State-Specific Trends	Yes	Yes
Constant	12.14 (10.82)	16.08 (14.32)
Observations	612	510
R-squared	0.977	0.976

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table A4. Immigration Effects on Crime in States with Unemployment Rates Above and Below the Mean

	Log of Violent Crime rates in states with unemployment above the mean (6.104)	Log of Violent Crime rates in states with unemployment below the mean (6.104)	Log of Property Crime rates in states with unemployment above the mean (6.104)	Log of Property Crime rates in states with unemployment below the mean (6.104)
Log of New Immigrant Pop.	0.0341 (0.0238)	-0.0527** (0.0235)	0.0251* (0.0131)	-0.0259 (0.0200)
State Fixed-Effects	Yes	Yes	Yes	Yes
Year Fixed-Effects	Yes	Yes	Yes	Yes
State-Specific Trends	Yes	Yes	Yes	Yes
Constant	6.167*** (0.197)	-33.99*** (7.911)	8.220*** (0.108)	18.52*** (6.741)
Observations	590	532	590	532
R-squared	0.983	0.989	0.975	0.973

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table A5. Endogenous Test between New Immigrants and Violent Crime on a 4-Year Lag

	Log of Property Crime rate with 1 year lag	Log of Property Crime rate with 2 year lag	Log of Property Crime rate with 3 year lag	Log of Property Crime rate with 4 year lag
Log of New Immigrant Pop.	0.00891 (0.0178)	0.0141 (0.0180)	0.0131 (0.0187)	0.00283 (0.0196)
State Fixed-Effects	Yes	Yes	Yes	Yes
Year Fixed-Effects	Yes	Yes	Yes	Yes
State-Specific Trends	Yes	Yes	Yes	Yes
Constant	-27.76*** (8.381)	-27.53*** (8.086)	-24.78*** (8.403)	-20.31** (8.809)
Observations	1,173	1,224	1,224	1,224
R-squared	0.978	0.977	0.976	0.974

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table A6. Endogenous Test between New Immigrants and Property Crime on a 4-Year Lag

	Log of Violent Crime rate with 1 year lag	Log of Violent Crime rate with 2 year lag	Log of Violent Crime rate with 3 year lag	Log of Violent Crime rate with 4 year lag
Log of New Immigrant Pop.	0.00837 (0.0113)	0.0115 (0.0112)	0.00594 (0.0110)	-0.00712 (0.0109)
State Fixed-Effects	Yes	Yes	Yes	Yes
Year Fixed-Effects	Yes	Yes	Yes	Yes
State-Specific Trends	Yes	Yes	Yes	Yes
Constant	18.98*** (5.329)	21.29*** (5.041)	23.57*** (4.953)	26.99** (4.875)
Observations	1,173	1,224	1,224	1,224
R-squared	0.963	0.963	0.963	0.963

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

REFERENCES

- Angrist, Joshua D. and Jörn-Steffen Pischke. 2015. *Mastering Metrics: The Path from Cause to Effect*. Princeton, NJ: Princeton University Press.
- The Associated Press. "Transcript of AP Interview with Trump." *AP News*. April 23, 2017. Accessed April 2018. www.apnews.com/c810d7de280a47e88848b0ac74690c83.
- Beck, Glenn. *The Glenn Beck Program: Interview with Rick Perry*. The Blaze Radio Network, July 17, 2014.
- Beirich, Heidi. "Georgia Governor Appoints Hate Group Leader to Immigration Board." *Southern Poverty Law Center*. September 2, 2011. Accessed April 2018. www.splcenter.org/hatewatch/2011/09/02/georgia-governor-appoints-hate-group-leader-immigration-board.
- Bersani, Bianca E. 2013. "An Examination of First and Second Generation Immigrant Offending Trajectories." *Justice Quarterly*. 31(2): 315–343. DOI:10.1080/07418825.2012.659200.
- Boehmke, Frederick J. and Paul Skinner. 2012. "State Policy Innovativeness Revisited." *State Politics and Policy Quarterly*, 12(3):303–29.
- Borjas, George J. 1998. "Immigration and Self-Selection." National Bureau of Economic Research. Accessed February 8, 2018. www.nber.org/papers/w2566.
- Caughey, Devin and Christopher Warshaw. 2015. "The Dynamics of State Policy Liberalism, 1936–2014." *American Journal of Political Science*, 60(4): 899–913. DOI: 10.1111/ajps.12219.
- Chalfin, Aaron. 2013. "What is the Contribution of Mexican Immigration to U.S. Crime Rates? Evidence from Rainfall Shocks in Mexico." *American Law and Economics Review*, Vol. 16, Issue 1 (1 March 2014): 220–68, www.DOI.org/10.1093/aler/aht019.
- Clinton, Bill. 1994. "Operation Gatekeeper." *The White House*. September 17, 1994. Accessed April 24, 2018.
- Crawford, James. 2008. "Language Legislation in the U.S.A." *languagepolicy.net*. Accessed April 24, 2018.
- C-SPAN. 2015. "Donald Trump Presidential Campaign Announcement, Jun 16 2015 | Video." C-SPAN.org. June 16, 2015. Accessed February 07, 2018. www.c-span.org/video/?326473-1%2Fdonald-trump-presidential-campaign-announcement.
- Ewing, Walter, Daniel E. Martinez, and Rubén G. Rumbaut. 2016. "The Criminalization of Immigration in the United States." *American Immigration Council*. November 29, 2016. Accessed March 2, 2018. www.americanimmigrationcouncil.org/research/criminalization-immigration-united-states.
- Graif, Corina and Robert J. Sampson. 2009. "Spatial Heterogeneity in the Effects of Immigration and Diversity on Neighborhood Homicide Rates." *Homicide Studies* 13, no. 3 (2009): 242–60. DOI:10.1177/1088767909336728.
- Hagan, John and Alberto Palloni. 1999. "Sociological Criminology and the Mythology of Hispanic Immigration and Crime." *Social Problems* 46, no. 4 (1999): 617–32. DOI:10.1525/sp.1999.46.4.03x0265e.
- Hauslohner, Abigail. 2018. "Nation of immigrants? According to U.S. Citizenship and Immigration Services, not so much." *The Washington Post*. February 22, 2018. Accessed March 1, 2018. www.washingtonpost.com/news/post-nation/wp/2018/02/22/nation-of-immigrants-according-to-u-s-customs-and-immigration-services-not-so-much/?utm_term=.e953f4ee97d2.
- Horsley, Scott. 2018. "Fact Check: Trump, Illegal Immigration and Crime." *National Public Radio*. June 22, 2018. Accessed December 2018. www.npr.org/2018/06/22/622540331/fact-check-trump-illegal-immigration-and-crime.
- Jordan, Marty P. and Matt Grossmann. 2017. "The Correlates of State Policy Project." v.1.14. East Lansing, MI: Institute for Public Policy and Social Research (IPPSR).
- Klein, Brent R., Kayla Allison, and Casey T. Harris. 2017. "Immigration and Violence in Rural versus Urban Counties, 1990–2010." *The Sociological Quarterly* 58, no. 2 (2017): 229–53. DOI:10.1080/00380253.2017.1296339.
- Lee, Matthew T., Ramiro Martinez, and Richard Rosenfeld. 2001. "Does Immigration Increase Homicide? Negative Evidence from Three Border Cities." *The Sociological Quarterly* 42, no. 4 (2001): 559–80. DOI:10.1525/tsq.2001.42.4.559.
- Liu, Amy H. and Anand Edward Sokhey. 2014. "When and Why Do U.S. States Make English Their Official Language?" *The Washington Post*. June 18, 2014. Accessed April 2018. www.washingtonpost.com/news/monkey-cage/wp/2014/06/18/when-and-why-do-u-s-states-make-english-their-official-language/?utm_term=.3e1b2635639c.
- López, G. and J. Radford. 2017. "Facts on U.S. Immigrants, 2015." Retrieved from www.pewhispanic.org/2017/05/03/facts-on-u-s-immigrants/#fb-key-charts-origin
- Los Angeles Times Staff. 2016. "Transcript: Donald Trump's Full Immigration Speech, Annotated." August 31, 2016. Accessed April 6, 2018. www.latimes.com/politics/la-na-pol-donald-trump-immigration-speech-transcript-20160831-snap-htmllstory.html.
- Martínez-Schuldt, Ricardo D., and Daniel E. Martínez. 2017. "Sanctuary Policies and City-Level Incidents of Violence, 1990 to 2010." *Justice Quarterly*. DOI: 10.1080/07418825.2017.1400577.
- Morin, Rich. 2013. "Crime rises among second-generation immigrants as they assimilate." *Pew Research Center*. October 15, 2013. Accessed February 8, 2018. www.pewresearch.org/fact-tank/2013/10/15/crime-rises-among-second-generation-immigrants-as-they-assimilate/.
- Ousey, Graham C. and Charis E. Kubrin. 2009. "Exploring the Connection between Immigration and Violent Crime Rates in U.S. Cities, 1980–2000." *Social Problems* 56, no. 3 (2009): 447–73. DOI:10.1525/sp.2009.56.3.447.
- Ousey, Graham C. and Charis E. Kubrin. 2018. "Immigration and Crime: Assessing a Contentious Issue." *Annual Review of Criminology* 1, no. 1 (2018): 63–84. DOI:10.1146/annurev-criminol-032317-092026.
- Passel, Jeffrey S. and D'Vera Cohn. 2011. "Unauthorized Immigrant Population: National and State Trends, 2010." *Pew Research Center*.
- Pew Hispanic Center. *Modes of Entry for the Unauthorized Migrant Population* (Rep.). (May 22, 2006). Accessed April 5, 2018, from Pew Hispanic Center web site: www.pewhispanic.org/files/2011/10/19.pdf.
- Reich, Gary. 2017. "Immigrant legislation, across and within the United States." *Research and Politics* 4(4).
- Smith, Peter H. 2013. *Talons of the Eagle: Latin America, the United States, and the World*. New York, New York: Oxford University Press.
- Trump, Donald J. 2017. "Executive Order: Enhancing Public Safety in the Interior of the United States." *The White House*. Accessed April 7, 2018.
- Trump, Donald J. 2017. "Executive Order Protecting the Nation from Foreign Terrorist Entry Into the United States." *The White House*. March 6, 2017. Accessed February 7, 2018.
- U.S. Census Bureau. Camille Ryan. 2013. "Language Use in the United States: 2011" (PDF). www.census.gov/prod/2013pubs/acs-22.pdf.
- U.S. Department of Health & Human Services. 2018. "Refugee Arrival Data." *Office of Refugee Resettlement*. 2017. www.acf.hhs.gov/programs/orr/resource/refugee-arrival-data.
- U.S. Department of Homeland Security. 2017. "Persons Obtaining Legal Permanent Resident Status by State of Residence: Fiscal Years 1988 to 2011." www.dhs.gov/publication/yearbook-immigration-statistics-2011-legal-permanent-residents.
- U.S. Department of Homeland Security. 2017. "Yearbook 2011." Accessed February 8, 2018. www.dhs.gov/immigration-statistics/yearbook/2011.
- U.S. Department of Justice, Uniform Crime Reporting Statistics - UCR Data Online. 2018. "Estimated Violent Crime Rate." www.ucrdatatool.gov/Search/Crime/State/StatebyState.cfm.
- U.S. Department of Justice. 2018. "Uniform Crime Reporting Statistics." Accessed February 9, 2018.