DOES IMMIGRATION CAUSE CRIME? EVIDENCE FROM THE UNITED STATES

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A capstone project submitted to Johns Hopkins University in conformity with the requirements for the degree of Master of Science in Government Analytics

Baltimore, Maryland
August, 2018

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Abstract

Donald Trump announced that immigration should be responsible for higher crime incidents in the United States, and he in turn aimed to strengthen his anti-immigrant policies. Recently, his entire anti-immigrant agenda has triggered debates all over the United States. There are not too many previous studies focusing on empirical evidence, and they have never reached a consensus. This paper investigates the relationship between three kinds of immigration and crime in different regional groups to provide an updated assessment, including unauthorized immigrants, foreign population and Mexican unauthorized immigrants.

State level cross-sectional data in 2014 is analyzed using multivariate regression. The results of the regression analysis reveal that immigration has significantly positive effects on violent crime. Compared with foreign population, the influence of unauthorized immigration appears to be stronger. Compared with foreign population and Mexican unauthorized immigrants, the influence of unauthorized immigration appears to be stronger. Contrary to inland state group, the study reveals that immigration accounts for crime. The evidence in fact shows that poverty rate increases the amount of violent crime and crime rate significantly. In the end, the findings provide important implications for the concerned authorities and policymakers.

Key words: immigration, crime, unauthorized immigration, foreign population
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Introduction

Immigration is a contentious issue all over the world. People in recipient countries are more concerned over the effects of the successive waves of immigration on the society. Since the late 1800s and early 1900s, immigrants were brought into the United States with expanded influxes from abroad. At the beginning, the general public and policymakers held a positive attitude of tolerance or welcome towards immigration. Within a short time, many of them started to associate violence, drug crime, unemployment with these new immigrants. The public and policymakers began to be worried about the negative impact of immigrants, such as housing, welfare, social stability and so on.

Under such concerns, various policies were implemented to control immigration, and has been for practical purposes, applied to criminal acts, including economic crime, violence, and drug regulation (Martinez and Lee, 2000).

Recently President Trump delivered speeches on anti-immigration policies after he officially announced his presidential run on June 16, 2015. He claimed that the sharp rise of immigrants into the United States led to the increase of crime rates, especially he thought a large proportion of immigrants were drug dealers, criminals and rapists, so he considered immigrants as criminal threats to the United States. After being elected the president of the United States at the end of 2016, President Trump kept his promises about anti-immigrant policies. Recently, President Trump tweeted that he accomplished a lot, including reducing crime and illegal immigration.

Even though after the enactment of anti-immigration policies, it seemed that the economy progressed very well and the crime rate was really decreased, according to the statistics,
while no one can prove that this positive result is the consequence of such anti-immigrant policies. Opponents of immigration or massive immigration believed immigration was the reason for bringing and keeping poverty, due to the fact that a great deal of low-skilled foreigners immigrated to the USA. Thus debates of immigration policies went on for a long time. Many scholars argued with the government and attempted to prove that immigrants were not the cause of criminal actions. However, the correlation between immigration and crime remained a topic in the public consciousness, but has never reached at a consensus. In spite of the lack of consistent empirical evidence, the general belief in the public that higher crime is associated with increased immigrants has overwhelmed for a long time. A large number of people accept the negative effects of immigration as the fact which causes social chaos (Butcher and Piehl, 1998).

This article explores the question of whether immigration influences crime and attempts to determine the hypothesis of immigration-crime relationship held up in the United States, especially focuses on the association between unauthorized Mexican immigration and crime. In Section 1, research background is introduced and the previous studies are summarized in literature review. The existing studies are lack of empirical evidence for the connection between immigration and crime, and have not reached for a consensus. And then the theoretic framework and methodology are presented in Section 2. The cross-sectional data obtained from Uniform Crime Reporting (URC Database), American Community Survey (ACS), Migration Policy Institute Data, the Bureau of Labor Statistics (BLS) and U.S. Bureau of Economic Analysis (BEA) is employed in the state level with OLS regression.
Section 3 shows the results of OLS regression analysis. After regression of analysis, discussion and conclusion is carried out in Section 4.

This article explores the question of whether immigration influences crime and attempts to determine the hypothesis of immigration-crime relationship held up in the United States.

**Literature Review & Theoretical Framework**

Having just lived through a rise in crime, many studies focus on identifying the most critical factor to crime. When the government fails to maintain decent public order, the immigration policy put into place is expected to reduce criminal activities. Actually, earlier literature indicates that foreign born immigrants have significantly lower crime rates compared with the native residents in the United States (Sutherland, 1924). But over nearly a hundred year, many studies hold diversified viewpoints.

**Theoretical Perspective**

A large number of literatures attempt to identify the link between criminal activities and immigration by using diversified theories: biological approaches, psychological approaches, sociological approaches, geographic approaches and economic approaches (Akers, 2013). Among such literatures, studies with sociological theoretical perspective, which are relevant to our research, include two distinct schools: social structure theories and opportunity structure theories. Social structure theories propose that immigrants in the lower level of social structure are more likely to present criminal behavior because of family poverty. Siegel (2000) categorizes social structure theories into three parts: social disorganization theory, strain theory, and cultural deviance theory. Opportunity structure theories hold that
immigrants cause crime, owing to lack of opportunity with education and employment (Wilson, 1987; Kasarda, 1983).

Based on major immigrant-crime theories in literatures of young gangs from post-1965 immigrant groups, Bankston (1998) has different opinions that theoretical approaches can be divided into three schools of thoughts: opportunity structure theory, cultural theory, and social disorganization theory. Cultural theory means that cultural conflict and exchange helps low-income immigrant group to perpetuate their poverty and separate themselves from American society (Vigil, 1983; Bankston and Caldas, 1996).

**Empirical Perspective**

**Empirical Studies across Countries**

Many empirical studies are devoted to proving whether the immigrant-crime relationship is existing on the country level. Zhang (2014) suggests that immigration decreases criminal activities in Canada because of the spillover effect and the neighborhood effect. Bell et al. (2013) find the similar reducing result in the United Kingdom which is non-linear effect and only becomes significant in immigrant enclaves. Golunov (2014) implies that immigrants should not be ascribed to criminal acts in Russia.

Bircan and Hooghe (2011) investigate the immigrant-crime relationship at the community level in Belgium and conclude that immigration comes with deprivation of jobs then produces higher crime rates indirectly. Bianchi et al. (2012) imply that in Italy the immigrant population leads to promote crime, but in other countries find no significant causal relationship by employing IV estimates. Bell et al. (2013) distinguish two different waves of UK immigration and estimate empirical connections between crime and immigration, then conclude that immigration affects property crime, but not violent crime.
Empirical Studies over USA

Immigration policy is one of the hottest debate issues in the United States. A large number of scholars focus on revealing the correlation between immigration and criminal action in USA. But the results have reached no consensus yet.

A group of studies claims that the growth of immigration accounts for increased crime in the USA. Harris, Gruenewald and Painter-Davis (2015) focus on the association between Hispanic immigration and black violence in USA, and suggest that black violence is positively related with Hispanic immigration, which is conditioned by ethnicity of the victim. Waldinger (1997) indicates that immigrant population normally suffers tough economic situation and usually has lower skills which may lead towards crime and violence. According to Mehmood, Ahmad and Khan (2016), the empirical result is that immigration has a strongly positive association with crime, which is consistent with Ousey and Kubrin (2009).

Freedman, Owens and Bohn (2018) study the impact of the Immigration Reform and Control Act of 1986 (IRCA) on criminal activities by using a triple-differences strategy, and find out that criminal behavior is affected through employment restrictions of immigrants from IRCA, which leads recently arrived unauthorized immigrants to a high-risk group in the United States. On the contrary, many literatures hold that immigration has no impact on crime, while some suggest that immigration has a reducing effect on crime, in consistent with Bell and Machin (2013).

Based on the perspective of institutionalization, Butcher and Piehl (1998) compare the criminal behavior in newly arrived immigrants with native-born citizens. In other research, Butcher and Piehl (1999) also find that on the cross-sectional level, cities with higher crime
rates often have large immigrant population, but recent immigrants are not statistically significantly involved with crime across cities, but native-born youth are more likely to commit crime than youth born overseas.

Chalfin (2014) suggests there is no causal effect of Mexican immigration on increasing crime rate in USA by empirical methods. Wadsworth (2010) estimates the correlation between immigration and crime with panel data from 1990 to 2000, and according to the statistics, robbery crime in the cities with increasing immigrant population decline during the period, which indicates that immigration may reduce criminal activities due to close family and community ties. Borjas, Grogger and Hanson (2010) demonstrate that US natives, particularly black males, are more prone to criminal activities as a result of response to labor market competition with immigrants of which the inflows appear to have a negative effect on employment opportunities.

Gap in the existing literatures

A number of existing empirical literatures investigate the immigrant-crime correlation but reveal contradictory results by employing different methodologies or with different time-period or country dataset. The previous research attempts to determine how immigration influences changes in criminal actions, but has an access to limited data with a broad view. Many studies estimate the relationship based on empirical methodologies rather than further theoretical framework and mechanism. The literatures that define focal variables, controls other complicated determinants of crime and reduce endogeneity is limited and rare. Moreover, few empirical literatures pay attention to the importance of gender in immigrant-crime research.
Hypotheses and Methodology

The connection between immigration and crime has been taken for granted among the general public and policy makers (Mears, 2002; Reid et al., 2005). And also President Trump claims that immigration has a negative impact on social stability and foreign born immigrants are more likely to increase criminal activities.

To reiterate the previous expectations more explicitly, I start preliminarily with the following hypothesis:

Hypothesis 1a: unauthorized immigrant population has a positive effect on violent crime in the United States.

Hypothesis 2a: foreign population has a positive effect on violent crime in the United States.

According to the statistics, a great number of unauthorized immigrants admitted to U.S. are mainly from particular regions (i.e. Europe, Asia, Africa, Mexico, North America and South America), in which Mexican immigrants account for more than a half. As President Trump claimed that many Mexican illegal immigrants brought drugs, and they criminals and rapists. And also in 1996, Pat Buchanan stated to build a wall across the U.S.-Mexico border in his presidential bid. In order to test the dubbed correlation and find out the extent that such a characterization is true, the preceding hypothesis adds the selected regional variable:

Hypothesis 3a: Unauthorized Mexican population has a positive effect on violent crime in the United States.

The hypotheses test the impact on crime with the focal variables, which are mainly foreign population size and illegal immigration. I conduct associations by two different dependent variables: unauthorized immigration and foreign population. In addition, looking for correlations is employed in the investigation with other control variables.
**Data and Methods**

As President Trump raises “the hypothesis” —— immigrants will bring crime, to investigate whether the correlation between immigrants and crime exists or not, these two critical variables should be defined.

**Dependent Variables**

As the dependent variable, criminal activity is measured by the number of crime and crime rate. Reported crime cases are classified by type of criminal offense: violent crime (murder and non-negligent manslaughter, legacy rape, revised rape, robbery, aggravated assault), property crime (including burglary, larceny-theft, motor vehicle theft), and drug-related crime.

The number of crime and crime rate in state level are obtained from the Federal Bureau of Investigation’s Uniform Crime Reporting (UCR) statistics. Crime means the amount of incidents of violent crime, property crime or drug arrest, which can be collected from UCR. Crime rate is the proportion of incidents of violent crime, property crime or drug arrests per 100,000 individuals, which is also found in UCR.

I will use violent crime and violent crime rate as a measure for the dependent variable. Accordingly, crime will denote the logarithms of reported crime over the total population for violent criminal offense to undermine the unobservable heteroscedasticity.

**Focal Variables**

Immigrants are disaggregated into types of categories in the analysis: unauthorized immigrant and foreign population, which are collected from the Migration Policy Institute data. Unauthorized immigrants include immigrants of any nationality residing in the country without legal documentation or status. Foreign population means any individual who was not
born as a U.S citizen, namely born outside of the United States, including refugees, immigrants with legal status. These key variables are obtained through Migration Policy Institute Data.

Control Variables

The primary concern is the impact of immigration on crime and there are other major factors which also affect criminal activities. These control variables are taken into account preliminarily with additional demographic and structural indicators. Demographic determinants include percentage of male residents, young adult ratio (percentage of young adult residents, aging 15-24), which are from the U.S. Census Bureau’s American Community Survey (ACS). Structural determinants contain ratio of residents with high school education (educational achievement), poverty rate, which are also obtained through the U.S. Census Bureau’s American Community Survey (ACS).

Turning to the socioeconomic terms, real GDP per capita and unemployment rate are available in U.S. Bureau of Economic Analysis (BEA) and the Bureau of Labor Statistics (BLS). Real GDP per capita is Gross Domestic Product(GDP) of a given area divided by the resident population of the area. Unemployment rate is equal to the percentage of workers unemployed in state level.

Table 1 lists the data resources of all the variables.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition</th>
<th>Data Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crime</td>
<td>Incidents of violent crime</td>
<td>Uniform Crime Reporting (URC Database)</td>
</tr>
<tr>
<td>Metric</td>
<td>Description</td>
<td>Source</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>---------------------------------------</td>
</tr>
<tr>
<td>Unauthorized immigrants</td>
<td>Estimated number of state unauthorized immigrants</td>
<td>Migration Policy Institute Data</td>
</tr>
<tr>
<td>Foreign population</td>
<td>Size of state foreign-born population</td>
<td>Migration Policy Institute Data</td>
</tr>
<tr>
<td>Mexican unauthorized population</td>
<td>Estimated number of state unauthorized immigrants born in Mexico</td>
<td>Migration Policy Institute Data</td>
</tr>
<tr>
<td>Poverty rate</td>
<td>State poverty rate</td>
<td>American Community Survey (ACS)</td>
</tr>
<tr>
<td>Residents with high school education</td>
<td>Percentage of state residents over age 25 with at least a high school diploma</td>
<td>American Community Survey (ACS)</td>
</tr>
<tr>
<td>Young adult concentration</td>
<td>Percentage of state residents, ages 15 to 24</td>
<td>American Community Survey (ACS)</td>
</tr>
<tr>
<td>Real GDP per capita</td>
<td>Gross Domestic Product of a given area divided by the resident population of the area</td>
<td>U.S. Bureau of Economic Analysis (BEA)</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>Percentage of workers unemployed in state</td>
<td>the Bureau of Labor Statistics (BLS)</td>
</tr>
</tbody>
</table>
Table 2 provides the descriptive statistics for all variables. From Table 2, we can find out that unauthorized immigrants, violent crime and other variables have a large standard deviation which will lead to heteroscedasticity. To weaken the possible heteroscedasticity, the logarithm of these variables is employed. And a robust variance estimator is computed during the regression analysis.

*Table 2 Descriptive Statistics of Variables*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs.</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Max</th>
<th>Min</th>
</tr>
</thead>
<tbody>
<tr>
<td>Violent crime</td>
<td>51</td>
<td>46076.42</td>
<td>165513.90</td>
<td>1197987.00</td>
<td>622.00</td>
</tr>
<tr>
<td>Unauthorized immigrants</td>
<td>49</td>
<td>89840.82</td>
<td>322651.70</td>
<td>2201800.00</td>
<td>1000.00</td>
</tr>
<tr>
<td>Foreign population</td>
<td>43</td>
<td>10.16</td>
<td>6.08</td>
<td>27.09</td>
<td>2.18</td>
</tr>
<tr>
<td>Mexican unauthorized immigrants</td>
<td>43</td>
<td>143534.90</td>
<td>358266.20</td>
<td>2127000.00</td>
<td>2000.00</td>
</tr>
<tr>
<td>Poverty rate</td>
<td>51</td>
<td>14.87</td>
<td>3.09</td>
<td>21.50</td>
<td>9.20</td>
</tr>
<tr>
<td>Residents with high school education</td>
<td>51</td>
<td>88.52</td>
<td>3.06</td>
<td>92.90</td>
<td>82.10</td>
</tr>
<tr>
<td>Young adult concentration</td>
<td>51</td>
<td>13.86</td>
<td>0.77</td>
<td>16.10</td>
<td>12.00</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>51</td>
<td>5.79</td>
<td>1.28</td>
<td>7.90</td>
<td>2.70</td>
</tr>
<tr>
<td>Real GDP per capita</td>
<td>51</td>
<td>49982.32</td>
<td>16709.14</td>
<td>159369.00</td>
<td>31635.00</td>
</tr>
</tbody>
</table>
Model Specification

To investigate the impact of immigration on crime, in this study the estimating equation is as follows:

\[
Crime_i = \alpha + \beta \text{ImmigrationType}_i + \gamma \text{Control}_i + \epsilon_i
\]

where \( Crime_i \) is the dependent variable, measured by the crime rate reported by FBI (Uniform Crime Reporting) in state \( i \) in 2014, because of a large standard deviation leading to heteroscedasticity, the logarithm of crime will be utilized; \( \text{ImmigrationType}_i \) is also measured by the log of different types of immigrants over population in state \( i \); \( \text{Control}_i \) means a set of control variables, composed of demographic, structural and socioeconomic indicators of crime, such as educational achievement among young adult, youth aged from 15 to 24 years old, poverty rate, and unemployment rate; at last, \( \epsilon_i \) is an error term. This study mainly focuses on identifying the coefficient \( \beta \), which implies the effects of immigration on crime.

After excluding US islands, the final sample is a cross-sectional data including observations in 51 states as well as the District of Colombia, using 2014 data. Table 2 has already summarized the data resources of all the variables.

Then I run the simple tests to look for the association between immigration and crime, and later separate all the states into two groups: states which are close to national boundaries and states inland.
Results and Discussion

Table 3 illustrates the correlation matrix between all the variables. It reports that, for all types of immigration population, the univariate association with crime is positive.

Table 4 shows the results of the regression analysis as follows:

In the first model, the explanatory power of this model is strong, we can find out the R-squared value remains very moderate. Of primary concerns the focal variable, unauthorized immigration shows a significantly positive relationship with violent crime at the 99 percent confidence level, which means violent crime will go up by 0.692% if unauthorized immigration population increases by 1%.

In the second model, foreign population substitutes for unauthorized immigration as a key variable, which is used to measure the effects of foreign born population on crime. The R-square value is no less than 0.3, which implies that the explanatory power of this model is still strong enough to explain the determinants of crime. There is a weak but still significantly positive relationship between foreign population size and violent crime at 90% confidential level. The violent crime will rise by 0.064%, if foreign-born population increases by 1%.

In the third model, a new focal variable is used to calculate the relationship between Mexican unauthorized population and crime. The explanatory power of this model remains strong enough. The result indicates that crime is affected by unauthorized Mexican population at 99% confidential level. The amount of violent crime will rise up by 0.501% with 1% increase of unauthorized Mexican population. The result of regression for unauthorized Mexican immigrants is consistent with Bell et al. (2013), who examines the effects of Mexican and non-Mexican immigrants on crime separately and indicate that Mexican immigrants have a significant positive relationship with crime.
Component of unauthorized immigrants are shown as Figure 1.

*Figure 1 Unauthorized Immigrants Component over the Period from 2012-2016*

*Notes: The data is collected from Migration Policy Institute Data*

Based on the results, the hypothesis that immigration has a positive impact on crime should not be rejected. In contrast with foreign population and unauthorized Mexican population, the influence from total unauthorized immigrants is stronger.

According to Ousey and Kubrin (2009), immigrants normally are confronted with tough economic hurdles in the process of assimilation in the environment with new culture conflict and language obstacle, so that this may lead towards violent crime. Bell et al. (2013) points out that “this negative view of the impact of immigrants on crime was particularly strong when the focus was on illegal immigrants”.
It is interesting that of all the independent variables, other than the key variable, only poverty rate shows a significantly positive association with violent crime in the first model, while the test of the effects of other variables yields no significant relationship. The results imply that higher poverty rate will lead to higher crime. But unemployment rate and real GDP per capita indicate no relationship with crime. Furthermore, the effects of higher education level are limited to reduce violent crime rates.
**Table 3 Correlation Matrix**

<table>
<thead>
<tr>
<th></th>
<th>Violent crime</th>
<th>Foreign population</th>
<th>Unauthorized immigrants</th>
<th>Unauthorized Mexican population</th>
<th>Educational achievement</th>
<th>Young adult concentration</th>
<th>Unemployment rate</th>
<th>Poverty rate</th>
<th>Real GDP per capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>Violent crime</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign population</td>
<td>0.136</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unauthorized immigrants</td>
<td>0.013</td>
<td>0.645</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unauthorized Mexican population</td>
<td>0.016</td>
<td>0.547</td>
<td>0.251</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational achievement</td>
<td>-0.261</td>
<td>-0.139</td>
<td>-0.451</td>
<td>-0.446</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Young adult concentration</td>
<td>0.128</td>
<td>-0.210</td>
<td>0.073</td>
<td>0.204</td>
<td>0.013</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>0.474</td>
<td>0.265</td>
<td>0.216</td>
<td>0.165</td>
<td>-0.613</td>
<td>-0.178</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poverty rate</td>
<td>0.384</td>
<td>-0.242</td>
<td>0.104</td>
<td>0.109</td>
<td>-0.781</td>
<td>-0.009</td>
<td>0.543</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Real GDP per capita</td>
<td>0.591</td>
<td>0.306</td>
<td>0.012</td>
<td>0.027</td>
<td>0.254</td>
<td>0.225</td>
<td>0.073</td>
<td>-0.213</td>
<td>1.000</td>
</tr>
</tbody>
</table>

**Note:** This table reports the correlation matrix between the dependent and independent variables across the 51 state in the United States in 2014.
### Table 4 Regression Results — The Impacts of Variables on Violent Crime

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crime</td>
<td>Crime</td>
<td>Crime</td>
<td>Crime</td>
</tr>
<tr>
<td>Unauthorized immigrants</td>
<td>0.692***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(0.059)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign population</td>
<td>0.064*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(0.033)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unauthorized Mexican</td>
<td>0.501***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>population</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(0.075)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational achievement</td>
<td>5.798</td>
<td>-6.246</td>
<td>-2.635</td>
</tr>
<tr>
<td>(4.126)</td>
<td>(8.546)</td>
<td>(5.611)</td>
<td></td>
</tr>
<tr>
<td>Youth</td>
<td>-0.044</td>
<td>-0.236</td>
<td>-0.145</td>
</tr>
<tr>
<td>(0.100)</td>
<td>(0.234)</td>
<td>(0.211)</td>
<td></td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>0.037</td>
<td>-0.050</td>
<td>0.147</td>
</tr>
<tr>
<td>(0.076)</td>
<td>(0.164)</td>
<td>(0.120)</td>
<td></td>
</tr>
</tbody>
</table>
The results of two different regional groups are illustrated in Table 4 as follows. Due to the uneven distribution of immigration all over the states in U.S., the sample is categorized into two groups according to the geographic position of states in this section. The first group contains all the states close to the national border\(^1\), the second group includes all of the other inland states\(^2\).

In Table 5, the first column of each model examines the impact of immigration on crime over the states close to national border. In the next columns, it is constructed to test whether there is the correlation reflected in the inland states. The results show that the coefficients of three

\[\begin{array}{cccc}
\text{Poverty rate} & 0.117^{***} & 0.091 & 0.015 \\
& (0.040) & (0.090) & (0.057) \\
\text{Real GDP per capita} & -0.054 & -0.110 & 0.553 \\
& (0.329) & (0.685) & (0.474) \\
\text{Constant} & -23.900 & 40.449 & 11.099 \\
& (18.922) & (37.921) & (26.209) \\
\end{array}\]

Observations 
R-squared 
0.843 
0.332 
0.647

Standard errors in parentheses

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

---

\(^1\) These states are Alaska, Arizona, California, Idaho, Maine, Michigan, Minnesota, Montana, New Hampshire, New York, North Dakota, Pennsylvania, Texas, Vermont, Washington, Wisconsin.

\(^2\) The other states include Alabama, Arkansas, Colorado, Connecticut, Delaware, District of Columbia, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Massachusetts, Mississippi, Missouri, Nebraska, Nevada, New Jersey, New Mexico, North Carolina, Ohio, Oklahoma, Oregon, Rhode Island, South Carolina, Tennessee, Utah, Virginia, Wyoming
different types of immigration are only significant with a positive sign in the same within the inland state group. According to Social Disorganization Theory, the floods of immigrants into a peace and stable society will make troubles and bring in social disorder, which may lead to the increase of crime rate.

Except unauthorized immigration, however, there is no significant relationship between foreign born immigrants, including Mexico born unauthorized population, and violent crime in the first group. Based on the statistics from Migration Policy Institute Data, it is found that states and counties near the national border attract more immigrants than the inland region. These states and counties are more tolerant of new non-native population with their cultural diversity and social development. In the inclusive and comprehensive circumstances, immigrants are treated friendly, which may reduce the chance of crime offense and bring down the crime rate. This may be the reason about a deviation of the immigrant-crime relationship across regions.

Compared with other two key variables, the correlation between foreign born population and violent crime is weaker in the inland group. The coefficient of unauthorized immigrants is higher than other kinds of immigration, while the positive effect on crime does exist in the states near the border. For the states near the national border, violent crime will rise by 0.791% when unauthorized immigrants increase by 1%, however, for the states far away from the national boundary, violent crime will rise by 0.699% if unauthorized immigrants increase by 1%. Thus the impact of increasing unauthorized immigrants in states near the national boundary appears to be nearly 0.1% stronger than in the other group within inland. As Reid et al. (2005) demonstrate, immigrants prefer to band together accompanied by the growth of niche markets. Furthermore, according to the statistic Migration Policy Institute
Data, top countries of unauthorized immigration’s birth are mostly located in South America and North America, while illegal immigration prefers to stay in the developed regions where are closer to their motherland, like California, New York. After they arrive, they tend to be assembled to help each other and live together, some of them search a low-skilled job for living.

Strain Theory raised by Merton suggests that individuals often get involved in criminal activities as alternative means to achieve their goal due to lack of legal means and the bottom of society (Jones, 2006; Mehmood et al., 2016). It can explain that unauthorized immigrants are more likely to commit crimes because of lower social class, economic disadvantages and racial discrimination.

And also in case of immigration in inland states, poverty rate has a significantly positive correlation with crime. Furthermore, turning to age demographic characteristic, only in inland state group, the proportion of young adults has a negative relationship with violent crime.

According to the results, the positive role of immigration on crime within different groups with demographic characteristics is identified. Unauthorized immigrants may gather in community located in ethnically heterogeneous areas, which may engender these protective forces or resort to violence.
Table 5 Regression Results within different regional groups —The Impacts of Variables on Violent Crime

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>States near the Border</td>
<td>Crime</td>
<td>0.037</td>
<td>0.074*</td>
<td>0.07</td>
<td>0.041</td>
<td></td>
</tr>
<tr>
<td>States away from the Border</td>
<td>Crime</td>
<td>-0.07</td>
<td>-0.041</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unauthorized immigrants</td>
<td>0.791***</td>
<td>0.699***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unauthorized Mexican population</td>
<td>-0.121</td>
<td>-0.069</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational achievement</td>
<td>-3.864</td>
<td>11.152</td>
<td>11.012</td>
<td>3.96</td>
<td>0.434</td>
<td>-4.508</td>
</tr>
<tr>
<td></td>
<td>-23.147</td>
<td>-10.662</td>
<td>-7.756</td>
<td>-6.157</td>
<td>-25.095</td>
<td>-10.229</td>
</tr>
<tr>
<td></td>
<td>0.817</td>
<td>-0.411*</td>
<td>0.04</td>
<td>-0.227*</td>
<td>0.85</td>
<td>-0.14</td>
</tr>
<tr>
<td>--------------------------------</td>
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</tr>
<tr>
<td>Unemployment rate</td>
<td>-1.074</td>
<td>-0.218</td>
<td>-0.179</td>
<td>-0.118</td>
<td>-0.966</td>
<td>-0.243</td>
</tr>
<tr>
<td></td>
<td>0.515</td>
<td>-0.104</td>
<td>0.226</td>
<td>-0.099</td>
<td>0.417</td>
<td>0.078</td>
</tr>
<tr>
<td>Poverty rate</td>
<td>-0.369</td>
<td>-0.198</td>
<td>-0.158</td>
<td>-0.107</td>
<td>-0.272</td>
<td>-0.164</td>
</tr>
<tr>
<td></td>
<td>0.063</td>
<td>0.186*</td>
<td>0.061</td>
<td>0.156***</td>
<td>-0.065</td>
<td>0.029</td>
</tr>
<tr>
<td>Real GDP per capita</td>
<td>5.827*</td>
<td>-0.994</td>
<td>0.834</td>
<td>-0.016</td>
<td>4.16</td>
<td>0.521</td>
</tr>
<tr>
<td></td>
<td>-2.818</td>
<td>-0.706</td>
<td>-0.986</td>
<td>-0.416</td>
<td>-2.419</td>
<td>-0.73</td>
</tr>
<tr>
<td></td>
<td>-137.84</td>
<td>-45.143</td>
<td>-41.14</td>
<td>-26.029</td>
<td>-137.928</td>
<td>-42.626</td>
</tr>
<tr>
<td>Observations</td>
<td>12</td>
<td>31</td>
<td>14</td>
<td>34</td>
<td>10</td>
<td>32</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.832</td>
<td>0.373</td>
<td>0.955</td>
<td>0.837</td>
<td>0.895</td>
<td>0.585</td>
</tr>
</tbody>
</table>

Standard errors in parentheses

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

**Conclusion**

Over more than one hundred years, the immigration-crime correlation has been in the spotlight of contentious issue in the host countries, especially for the general public and policymakers. It is widely believed that immigration will increase the crime rate by citizens and politicians, but without empirical evidence. In the last decade or two, although many
empirical studies are devoted to identify the relationship between immigration and crime, there is no uniform answer. As President Trump addressed, foreign born immigrants are responsible for crime rate to some extent. He asserts that they have a negative impact on society development and make a social chaos with criminal activities.

This article assesses the empirical correlation between crime and immigration in the United States with updating recent data and test to what extent the dubbed hypothesis is true. In this study, state level data in 2014 is employed, which is over the period before Donald Trump was elected president. The key variables are utilized separately in three similar models, namely unauthorized immigrants, foreign population and unauthorized Mexican immigrants, with by selected demographic and socioeconomic characteristics.

Multivariate regression analysis is used to achieve the objectives in two steps. At first, after the bivariate analysis (Pearson Correlation), the relationship between types of immigration and crime is captured; at the second step, the sample is divided into two parts by geographic characteristics: state near the national border and state away from the border, then OLS regression is used to assess the immigrant-crime association across different regional groups.

These are interesting findings for policy makers. First, the results affirm that all types of immigration positively affect crime. Unauthorized immigration has stronger impact on crime than foreign population and Mexican undocumented immigrants. Foreign population has significant but weak and little relationship with crime. The result also illustrates that poverty rate increases crime.

Secondly, contrary to inland state group, in which the findings reveal that there is no effect of foreign population and Mexican unauthorized immigration on crime, immigration is
responsible for crime in the state distant from the border. But unauthorized immigration has a positive relationship with crime in either group, even stronger in inland state.

As this study shows the contradictory results on the nexus results of previous research related with the immigration-crime relationship (Chen and Zhong, 2013; Hagan, Levi, and Dinovitzer, 2008): immigrants has a significantly positive relationship with crime, but three types of immigration have distinct impacts, the findings provide important implications for concerned authorities and policymakers. Government should establish a proper immigration system to attract high-skilled professionals and focus on security measures to control illegal entry into the destination country. Developing economy will decrease the poverty rate then reduce crime rate.
Reference


Curriculum Vita

I, Mengyi Zhang, a current student majoring in Government Analytics at Johns Hopkins University, was born on September 8th, 1994 in Shishou City, Hubei Province, China. After high school in Hubei, I went to Ohio University to major in finance. After graduation, I started my career with China Energy Engineering Investment Corporation Limited, the investment platform of Energy China, while taking the time to consider continuing my studies. Working with a state-owned enterprise generated my interest to further my studies in governmental matters, therefore here comes my JHU experiences and this capstone project. I sincerely hope that this capstone project, as the end of my student career but also the beginning of my next stage, shines a light to enlighten and guide me through my future works relating to governmental issues.