An Economic Analysis on The Social Cost of Illegal Immigration

Van, Germinal and Orellana, Jose

George Washington University, George Mason University

31 August 2021

An Economic Analysis
on The Social Cost of Illegal Immigration

An Empirical Analysis

by

GERMINAL G. VAN

germinalvan27@gwmailgwu.edu
The George Washington University
2121 I Street NW
Washington, D.C. 20052

&

JOSE ORELLANA

jorella5@masonlive.gmu.edu
The George Mason University
Department of Economics
Buchanan Hall, 1st Floor, MSN 3GA
Fairfax, Virginia 22030

Abstract

The purpose of this paper is to analyze the economic cost of illegal immigration in the United States since the 1990s and its consequences on American society. Indeed, illegal immigration has been a major topic of discussion among the main social issues during election cycles in the United States. Those who lean more conservative have argued that illegal immigration is an externality that increases social costs. They argue that illegal immigrants increase the cost of healthcare, public education, and welfare programs such as Medicaid and food stamps. And the cost falls on the American taxpayer. Those who lean more liberal argue that the government should create social programs to assist illegal immigrants in helping them adjusting and conforming their immigration status to the laws and customs of the United States. This paper has two objectives: (1) to determine if illegal immigration imposes a higher social cost on the American taxpayer based on a multivariate regression analysis, (2) to propose recommendations to help the illegal immigrants becoming legal while minimizing the future social cost of illegal immigration on the American taxpayer. Our findings show that there is a correlational relationship between illegal immigration and the cost of social welfare, and this correlational relationship is of strong magnitude.

1. INTRODUCTION

Since the presidency of George W. Bush, illegal immigration has been a "hot" topic to discuss among all the social issues in the political climate. The United States today contains 47 million immigrants.[1] These 47 million include lawful and unlawful immigrants living on American soil. It is first and foremost important to remind the public that the United States is a country principally founded on immigration, by immigrants. It is a melting-pot, a heterogeneous society where immigrants from all over the world have settled and contributed to the economic, social, and political development of the United States. What makes the United States a "nation" is the U.S. Constitution, the laws and customs that every immigrant agrees to abide by when settling here. As we could see in figure 1, the U.S. immigrant population has soared since the 1970s.
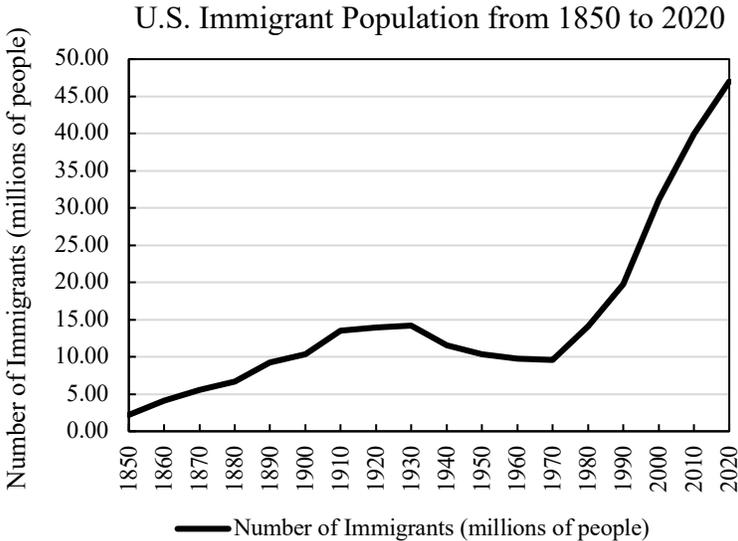

Figure 1. Source: Migration Policy Institute

The surge of immigration in the United States since the 1970s is a double-edged sword. On the one hand, immigration has allowed people to pursue an education in America and live the American Dream. On the other hand, the growing immigrant population has also encouraged illegal immigration to become part of the woes of the American social order. Indeed, since the 2000s, illegal immigration has substantially grown and became a major concern for many Americans. Democrats and Republicans have starkly different priorities when it comes to U.S. immigration policies.[2] According to a Pew Research Center study published in 2019, two-thirds of Americans say that it is very or somewhat important to establish a way for most immigrants in the country illegally to remain here legally.[3]

---

[1] U.S. Department of Homeland Security (2020).
[2] Daniller, Andrew. (2019). "Americans' Immigration Policy Priorities: Division Between—and within—the two parties." *Pew Research Center.*
[3] Ibid. (2019).

Majorities in U.S. see increased border
securities, path to legal status as important
immigration policy goals
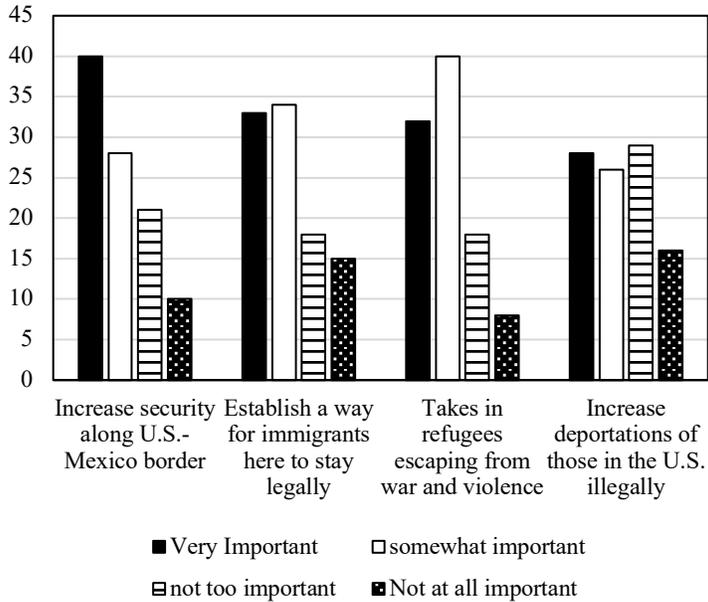
Figure 2. Source: Pew Research Center and Survey of U.S. Adults

Estimated Unauthorized Immigrant
Population from 1990 to 2020

Figure 3. Source: U.S. Department of Homeland Security

Republicans tend to be firm toward illegal immigration whereas Democrats generally more or less remain flexible. Those with conservative beliefs argue that illegal immigration is a real problem on the ground that illegal immigrants increase the social cost of the American taxpayer. To be

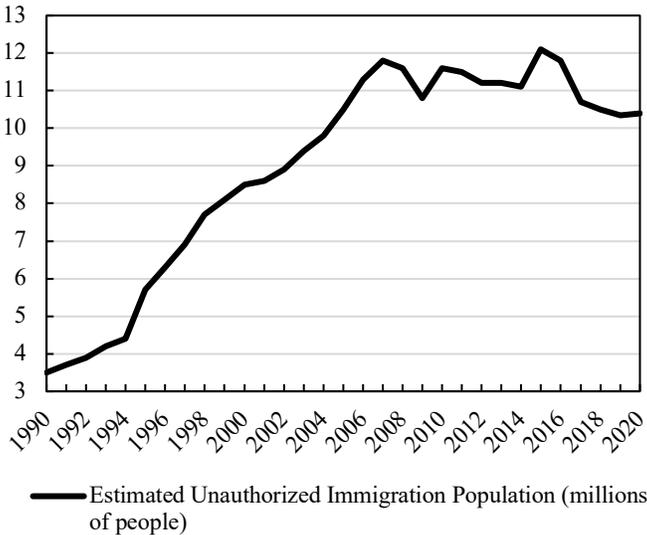more precise, conservatives argue that illegal immigrants are free riders who take advantage of the U.S. social system to reap its benefits without contributing proportionally. Republicans and conservatives argue that illegal immigrants increase the cost of healthcare, public education, and welfare programs such as Medicaid and food stamps. Democrats and social liberals, on the other hand, argue that many of the illegal immigrants who live in the United States have can simply not be abruptly deported and separated from their families because, despite being illegal, they have been contributing to the economic growth of the country, and therefore deserve to stay. They argue that the government should create social programs to assist illegal immigrants in helping them adjusting and conforming their immigration status to the laws and customs of the United States. The growing issue of immigration has led Donald Trump to the White House in 2016, him who promised to enforce a zero-tolerance policy on illegal immigration if elected.

Is there a correlational relationship between illegal immigration and the cost of social welfare in the American context? If yes, to what extent? If illegal immigration is not, however, correlated with the growing cost of social welfare in the United States, then what factor(s) trigger the cost of social welfare to augment? Our goal in this analysis is to determine, by using the multivariate regression analysis, if illegal immigration does impose a higher social cost on the American taxpayer and provide recommendations regarding how illegal immigration could be attenuated whereby everyone could be better-off.

2. SPECIFICATION OF THE MODEL

In order to determine the correlational relationship between illegal immigration and the cost of social welfare, we decided to use the multivariate regression as the main model. This model will contain four dependent variables and one independent variable. All four dependent variables depend on the same independent variable. The independent variable in question is the illegal immigrant population. We are wondering how the illegal immigrant population is affecting (1) the total healthcare spending per capita, (2) the total Medicaid expenditures, (3) the cost of food stamps, and (4) total public education expenditure per pupil. However, to avoid any potential bias from the model, we added a couple of control variables. These control variables are the total U.S. immigrant population, the number of people covered by Medicaid, the number of people living below the poverty line, and unemployment rate. These control variables are added according to the circumstances of the individual equation at hand. Moreover, these control variables are held constant. Hence, our model could be written as the following system of four equations using the log-linear model of the multivariate regression:

$$(1)\ln Y_1 = \beta_{01} + \beta_{11}X_1 + \beta_{12}X_2 + \varepsilon_1$$
$$(2)\ln Y_2 = \beta_{02} + \beta_{21}X_1 + \beta_{22}X_2 + \beta_{23}X_3 + \beta_{24}X_4 + \varepsilon_2$$
$$(3)\ln Y_3 = \beta_{03} + \beta_{31}X_1 + \beta_{32}X_2 + \beta_{33}X_3 + \varepsilon_3$$
$$(4)\ln Y_4 = \beta_{04} + \beta_{41}X_1 + \beta_{42}X_2 + \varepsilon_4$$

Where (X_1) is the causal regression, represented by the illegal immigrant population, (X_2) is the controlled variable, represented by the total U.S. immigrant population; ($\ln Y_1$) is the first dependent variable, represented by the total healthcare spending per capita, ($\ln Y_2$) is the second dependent variable, represented by the total Medicaid expenditures, and ($\ln Y_3$) is the third dependent variable, represented by the cost of food stamps, and ($\ln Y_4$) is the fourth dependent variable, represented by the total expenditures of public education per pupil.

This model, however, could be written in a simpler and more compact form. First, we will have to convert the model into a matrix form in order to deduct its compact form. Thus, the model will look like the following:

$$\begin{bmatrix} \ln Y_1 \\ \ln Y_2 \\ \ln Y_3 \\ \ln Y_4 \end{bmatrix} + \begin{bmatrix} \beta_{01} \\ \beta_{02} \\ \beta_{03} \\ \beta_{04} \end{bmatrix} + \begin{bmatrix} \beta_{11} & \beta_{12} & 0 & 0 \\ \beta_{21} & \beta_{22} & \beta_{23} & \beta_{24} \\ \beta_{31} & \beta_{32} & \beta_{33} & \beta_{34} \\ \beta_{41} & \beta_{42} & 0 & 0 \end{bmatrix} \begin{bmatrix} X_1 \\ X_2 \\ X_3 \\ X_4 \end{bmatrix} + \begin{bmatrix} \varepsilon_1 \\ \varepsilon_2 \\ \varepsilon_3 \\ \varepsilon_4 \end{bmatrix}$$

By applying basic matrix operations, we can finally write our log-linear model in its compact form as:

$$\ln Y_i = \beta_i + \beta X_4 + \varepsilon_i$$

For clarification purposes, X_4 encapsulates the variable of interest (illegal immigrant population) as well as all the control variables included in each of the four equations. Moreover, X_4 also represents the regressor of each dependent variable ($\ln Y_1$, $\ln Y_2$, $\ln Y_3$, $\ln Y_4$) in the system of equations.

2.1. Unbiasedness of control variables

To determine the unbiasedness of the model, we ought to first capture the conditional mean independence. And to capture it, let us assume that the error term depends on X_2, X_3, X_4, as follows:

$$\varepsilon_i = \gamma_0 + \gamma_2 X_2 + \gamma_3 X_3 + \gamma_4 X_4 + \upsilon_i$$

Where υ_i has conditional mean = 0. We are assuming that ε_i and X_2, X_3, and X_4 are correlated, therefore the estimate of β_2, β_3, and β_4 will be biased. However, in our case, the conditional mean independence ε_i does not depend on X_{1i} but only on X_{2i}, X_{3i}, X_{4i}. Hence, we can rewrite the compact log-linear model by method of substitution:

$$\ln Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \beta_4 X_{4i} + \varepsilon_i$$

$$\ln Y_i = \beta_0 + \beta_4 X_{4i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \beta_4 X_{4i} + \gamma_0 + \gamma_2 X_2 + \gamma_3 X_3 + \gamma_4 X_4 + \upsilon_i$$

$$\ln Y_i = (\beta_0 + \gamma_0) + \beta_1 X_{1i} + (\beta_2 + \gamma_2) X_{2i} + (\beta_3 + \gamma_3) X_{3i} + (\beta_4 + \gamma_4) X_{4i} + \upsilon_i$$

Since υ_i has conditional mean = 0, the estimates of $(\beta_0 + \gamma_0)$, β_1, $(\beta_2 + \gamma_2)$, $(\beta_3 + \gamma_3)$, and $(\beta_4 + \gamma_4)$ are all unbiased. Therefore, we obtain an unbiased estimate of the causal coefficient of interest, β_1, but the coefficients on X_2, X_3, and X_4 are only unbiased estimate of $(\beta_2 + \gamma_2)$, $(\beta_3 + \gamma_3)$, $(\beta_4 + \gamma_4)$ not β_2, β_3, and β_4. However, since X_{2i}, X_{3i} and X_{4i} are only used as a control variable, our model is therefore unbiased.

2.2. Allocation of control variables

The control variables in our model will be used in different settings. That being said, some of the control variables may not be used in every equation of our model.

For equation (1) the control variable that will be used is the total U.S. immigrant population, represented by X_2.

For equation (2) the control variables that will be used are the total U.S. immigrant population, represented by X_2, the number of people covered by Medicaid, represented by X_3; and the number of people living below the poverty line, represented by X_4.

For equation (3) the control variables that will be used are the total U.S. immigrant population, represented by X_2; the number of people living below the poverty line, represented by X_3; and unemployment rate, represented by X_4.

For equation (4) the control variable that will be used is the total U.S. immigrant population, represented by X_2.

3. DATA

3.1. Data for the variable of interest and the control variables

a) Data for Variable of Interest

The dataset we built to test our hypothesis is a sample of 31 observations ($n = 31$) because the observations go from 1990 to 2020. Each data point represents a year within the timeframe. The data for our variable of interest were extracted from the U.S. Department of Homeland Security. These data analyzed the flux of illegal immigration since the early 1990s but gives a great emphasis on the 2000s. As we saw in figure 3, the illegal immigrant population substantially grew from 2000 to 2007 before it began to regularly fluctuate.

b) Data for Control Variables

As was aforementioned at the outset of our analysis, we are using a total of three control variables that are redistributed among the equations of our model. For the X_2, which is the total U.S. immigrant population, we used the data from the Migration Policy Institute. This control variable is used in each of the four equations of our model.

For equation (2), X_3, which is the number of people covered by Medicaid, the data was extracted from Kaiser Family Foundation. For X_4, which is the number of people below the poverty line, the data were extracted from the U.S. Census Bureau.

For equation (3), X_3, which is the number of people below the poverty, is the same data we used for the second equation. For X_4, which is the unemployment rate, the data were extracted from the U.S. Bureau of Labor Statistics.

3.2. Data for the dependent variables

$\text{Ln}Y_1$

The data for the healthcare expenditure per capita were extracted from the U.S. Department of Health and Human Services. In 2000, the American taxpayer paid about $6,800 on healthcare. In 2020, the average citizen pays about $11,730 in healthcare per year. The unit value is an estimated dollar unit.

$\text{Ln}Y_2$

The data for the total Medicaid Expenditures were also extracted from the U.S. Department of Health and Human Services. Total Medicaid expenditures in 2000 were about 206 billion. Today, in 2020, the cost of Medicaid has tripled.

LnY_3

Total Medicaid expenditures are about $639 billion. The unit value of the data is estimated in billions of dollars. The data for the cost of food stamps were extracted from the Supplemental Nutrition Assistance Program (SNAP), and the unit value is measured in billions of dollars. In 2000, the total cost of food stamps was $17 billion. Today, in 2020, the cost is $79 billion.

LnY_4

Lastly, the data for the total public education expenditures per pupil were extracted from National Center for Education Statistics. The unit value was measured in dollar units. In 2000, public education expenditures per pupil were estimated at $12,201. In 2020, public education expenditures per pupil were estimated at $14,729. A growth of about $2500 overall was made during those 2020 years.

4. DESCRIPTIVE STATISTICS

Table 1 shows the descriptive statistics of the dependent variables:

LN Healthcare Spending per Capita		Ln Total Medicaid Expenditures		Ln Total Cost of Food Stamps		LN Public school expenditure per pupil	
Mean	8.71116838	Mean	5.63783231	Mean	10.4793546	Mean	9.45449943
Standard Error	0.07569078	Standard Error	0.11081968	Standard Error	0.10528683	Standard Error	0.02311141
Median	8.77256119	Median	5.75289005	Median	10.3440627	Median	9.50144159
Mode	#N/A	Mode	#N/A	Mode	#N/A	Mode	9.25646031
Standard Deviation	0.42142844	Standard Deviation	0.61701788	Standard Deviation	0.58621225	Standard Deviation	0.12867891
Sample Variance	0.17760193	Sample Variance	0.38071107	Sample Variance	0.34364481	Sample Variance	0.01655826
Kurtosis	-1.279247	Kurtosis	-0.4995451	Kurtosis	-1.6629428	Kurtosis	-1.3485283
Skewness	-0.1636604	Skewness	-0.5400071	Skewness	0.21617884	Skewness	-0.5137423
Range	1.40588661	Range	2.18857001	Range	1.63750442	Range	0.35205198
Minimum	7.95261511	Minimum	4.27944005	Minimum	9.64712713	Minimum	9.25646031
Maximum	9.35850172	Maximum	6.46801005	Maximum	11.2846315	Maximum	9.60851228
Sum	270.04622	Sum	174.772802	Sum	324.859994	Sum	293.089482
Count	31	Count	31	Count	31	Count	31
Largest (1)	9.35850172	Largest (1)	6.46801005	Largest (1)	11.2846315	Largest (1)	9.60851228
Smallest (1)	7.95261511	Smallest (1)	4.27944005	Smallest (1)	9.64712713	Smallest (1)	9.25646031
Confidence Level (95.0%)	0.1545812	Confidence Level (95.0%)	0.22632399	Confidence Level (95.0%)	0.21502439	Confidence Level (95.0%)	0.0471998

Table 1

Table 2 shows the descriptive statistics of the independent variable and the control variables.

Estimated Unauthorized immigrant population (millions of people)		Total Immigrant Population (millions of people)		Number of people covered by Medicaid (in thousands of people)		Number of people living below the poverty line (millions of people)		Unemployment rate (%)	
Mean	8.96903226	Mean	35.8932258	Mean	41.5493667	Mean	38.5753941	Mean	5.90354839
Standard Error	0.50124026	Standard Error	1.48053241	Standard Error	2.3165813	Standard Error	0.80430507	Standard Error	0.29108198
Median	10.35	Median	37.42	Median	38.19	Median	37.28	Median	5.6
Mode	10.5	Mode	#N/A	Mode	#N/A	Mode	#N/A	Mode	5.6
Standard Deviation	2.79078765	Standard Deviation	8.24325558	Standard Deviation	12.8981788	Standard Deviation	4.47818108	Standard Deviation	1.62067588
Sample Variance	7.7884957	Sample Variance	67.9512626	Sample Variance	166.363017	Sample Variance	20.0541058	Sample Variance	2.62659032
Kurtosis	-0.6628428	Kurtosis	-1.007797	Kurtosis	-1.3779668	Kurtosis	-0.7758254	Kurtosis	-0.0775458
Skewness	-0.838848	Skewness	-0.4330443	Skewness	0.42591258	Skewness	0.54497607	Skewness	0.86576339
Range	8.6	Range	27.23	Range	38.12	Range	15.08	Range	5.9
Minimum	3.5	Minimum	19.77	Minimum	24.26	Minimum	31.58	Minimum	3.7
Maximum	12.1	Maximum	47	Maximum	62.38	Maximum	46.66	Maximum	9.6
Sum	278.04	Sum	1112.69	Sum	1288.03037	Sum	1195.83722	Sum	183.01
Count	31	Count	31	Count	31	Count	31	Count	31
Largest (1)	12.1	Largest (1)	47	Largest (1)	62.38	Largest (1)	46.66	Largest (1)	9.6
Smallest (1)	3.5	Smallest (1)	19.77	Smallest (1)	24.26	Smallest (1)	31.58	Smallest (1)	3.7
Confidence Level (95.0%)	1.02366917	Confidence Level (95.0%)	3.02365056	Confidence Level (95.0%)	4.73109019	Confidence Level (95.0%)	1.64261008	Confidence Level (95.0%)	0.59446871

Table 2.

5. EMPIRICAL EVIDENCE AND DISCUSSION

After testing the model, here are the results of our subsequent regressions:

Multivariate Regression Summary Output

Dependent Variables	R^2	Adjusted R^2	p-value	F-statistics
LnY_1	0.98789118	0.98702627	1.4569E-27	1142.18244
LnY_2	0.98722144	0.98525551	3.3513E-24	502.164425
LnY_3	0.96627751	0.96108944	9.8916E-19	186.249727
LnY_4	0.92274476	0.91722653	2.6977E-16	167.217474

Table 3

The results of our regressions show that there is a strong correlational relationship between the variable of interest and the dependent variables. As we could see, each of the relationships between the variable of interests and the dependent variables is statistically significant with an R^2 that is each above 0.7 ($R^2 > 0.7$). Consequently, we are going to analyze each correlational relationship individually.

However, it is noteworthy to remind everyone that correlation does not imply causation. There is surely a strong correlation between the dependent variables and the illegal immigration population, which is our variable of interest, but it does not mean that illegal immigration alone is necessarily the reason why the cost of social welfare has grown. The control variables we included in the model help us understand that other factors also affect the dependent variables than the mere variable of interest.

5.1. Illegal immigration and healthcare expenditures per capita

There is a strong correlational relationship between the illegal immigration population and the cost of healthcare per American citizen. Healthcare spending per capita increases by $8,800 for the American taxpayer for every 1 million undocumented immigrants. One of the reasons why healthcare has become costly for the American taxpayer is because undocumented immigrants are uninsured and are therefore at a higher risk.

According to a 2019 study from the Kaiser Family Foundation, the lack of medical insurance for undocumented immigrants is because they have a limited access to coverage options.[4] Among the total nonelderly population, 45 percent of illegal immigrants were uninsured compared to about one in four (23 percent) lawfully present immigrants and less than one-in-ten citizens (8 percent) as of 2017 as we can see in figure 4.[5]
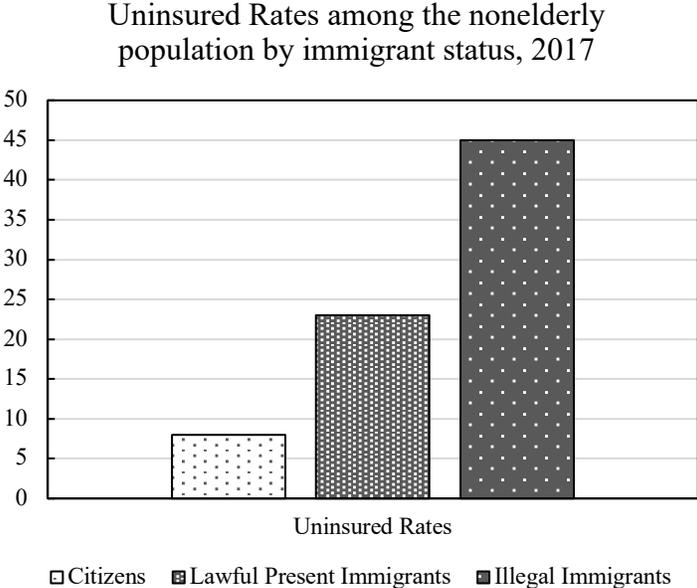
Uninsured Rates among the nonelderly
population by immigrant status, 2017

☐ Citizens   ▦ Lawful Present Immigrants   ▨ Illegal Immigrants

Figure 4. Source: Kaiser Family Foundation

In 2016, federal taxpayers provided $11.2 billion in subsidized care to unauthorized immigrants.[6] In 2018, this amount increased to $18.5 billion.[7] The purported intent of the federal policy is to prevent federal tax dollars from being used to fund healthcare for unauthorized immigrants except in extreme circumstances. [8] Notwithstanding express prohibitions contained in the statutes related to Medicaid and the Affordable Care Act, there also are companion federal programs that permit federal funding to be used for healthcare for unauthorized immigrants indirectly. According to a study published by the Center for Immigration Studies, undocumented immigrants access to

---

[4] Artiga, Samantha; Diaz, Maria. (2019). "Health Coverage and Care of Undocumented Immigrants." *Kaiser Family Foundation.* Issue Brief. pp.1-6.
[5] Ibid. p. 3
[6] Conover, Chris. (2018). "How Americans Citizens Finance $18.5 billion for Unauthorized Immigrants." *Forbes.*
[7] Conover, (2018).
[8] Conover, (2018)

federally funded healthcare could cost up to $23 billion per year.[9] The study also found that if providing a subsidy to help undocumented immigrants buy private insurance on the Affordable Care Act, it could also cost about $4,600 to the American taxpayer.

5.2. Illegal immigration and total Medicaid expenditures.

The results of our regression also show that there is a positive correlational relationship between illegal immigration and Medicaid expenditures. Medicaid is a federal-funded healthcare program designed for low-income individuals and families. Under Medicaid and CHIP (Children's Health Insurance Program), no federal funding may be used to cover unauthorized immigrants, except for payment for limited emergency services.[10] Moreover, states can and do use state-only Medicaid programs to cover people.[11] For example, California's Health for All Kids Act provides unauthorized immigrant children with access to coverage through Medi-Cal, the state Medicaid program.[12] Its passage in 2015 made California the largest state to use state-only funding to provide coverage to all children regardless of immigration status; in doing so, it joins New York, Illinois, Massachusetts, Washington, and the District of Columbia.[13]

A general challenge in analyzing Medicaid expenditures per capita is that medical expenditures are unevenly distributed: children have low average expenditures, while the aged and disabled have high expenditures.[14] Back in the 1990s when illegal immigration began to surge in America, a study found that the accumulation of immigrants increase the cost of Medicaid because the welfare reform did not affect the eligibility of immigrants who were already present in the United States.[15] As a matter of fact, undocumented immigrants who lose their Medicaid coverage were still eligible for emergency medical services.[16] Table 4 presents the total Medicaid costs for undocumented immigrants by U.S. state.

Total Medicaid Costs for Undocumented Immigrants by U.S. State

U.S. States	Total Costs (millions of dollars)
Alabama	55.41
Alaska	6.68
Arizona	394.37
Arkansas	44.22
California	1122.80
Colorado	137.78
Connecticut	137.53
Delaware	34.13

[9] Camarota, Steven; Zeigler, Karen; Richwine, Jason. (2019). "How Much Would It cost to Provide Health Insurance to Illegal Immigrants?" *Center for Immigration Studies.*
[10] Conover, (2018)
[11] Conover, (2018)
[12] Conover, (2018)
[13] Conover, (2018)
[14] Ku, Leighton; Kessler, Bethany. (1997). "Number and Cost of Immigrants on Medicaid, The National Estimates." *The Urban Institute.*
[15] Ku; Kessler. (1994)
[16] Ku; Kessler. (1994)

D.C.	10.12
Florida	661.78
Georgia	489.68
Hawaii	7.99
Idaho	39.20
Illinois	289.54
Indiana	128.45
Iowa	17.32
Kansas	82.88
Kentucky	56.47
Louisiana	82.89
Maine	2.50
Maryland	190.01
Massachusetts	50.10
Michigan	41.13
Minnesota	84.18
Mississippi	66.01
Missouri	48.46
Montana	4.51
Nebraska	67.73
Nevada	112.53
New Hampshire	6.29
New Jersey	394.51
New Mexico	93.05
New York	609.28
North Carolina	455.40
North Dakota	5.00
Ohio	89.50
Oklahoma	107.13
Oregon	102.81
Pennsylvania	135.33
Rhode Island	33.60
South Carolina	105.88
South Dakota	10.21
Tennessee	199.43
Texas	2302.05
Utah	85.97
Vermont	0.52
Virginia	196.99
Washington	296.83
West Virginia	2.07
Wisconsin	27.17
Wyoming	7.49

Table 4. Source: Center for Immigration Studies. **Note:** *Estimates are based on those reported by the Kaiser Family Foundation for 2014 and adjusted to reflect higher 2019 costs and lower healthcare consumption by immigrants when on the program.*

The state of Texas has the highest cost of Medicaid for undocumented immigrants with an amount of $2 billion while the state of Vermont spends less than a million dollars on Medicaid for

undocumented immigrants. The cost of providing ACA subsidies for all undocumented immigrants with income above the Medicaid eligibility threshold would be an additional $9.9 billion.[17] Adding this to the cost of providing Medicaid, which is $9.7 billion, creates a total cost of about $19.6 annually.[18]

It is nonetheless important to asseverate that the illegal immigrant population alone is not the causal factor for the increase of total Medicaid costs. As the data show in figure 5, immigrants (lawful and undocumented immigrants) in general have a higher use rate of Medicaid than native-born Americans. On the other hand, Native-born citizens spend a higher value of benefits per capita on welfare programs than immigrants. The average value of welfare benefits per immigrant was about $3,718 in 2016, about 39 percent less than the 6,081 average value of welfare benefits per native-born citizen.[19] This is the case for recipients of Medicaid. Native-born citizens recipients of Medicaid benefits spend slightly more than immigrants as we can see in figure 6.[20] And the reason why is that most of the Medicaid enrollees are primary native-born citizens.

Medicaid use rates by nativity and immigration status for adults age 19 and older at all poverty level in 2016.
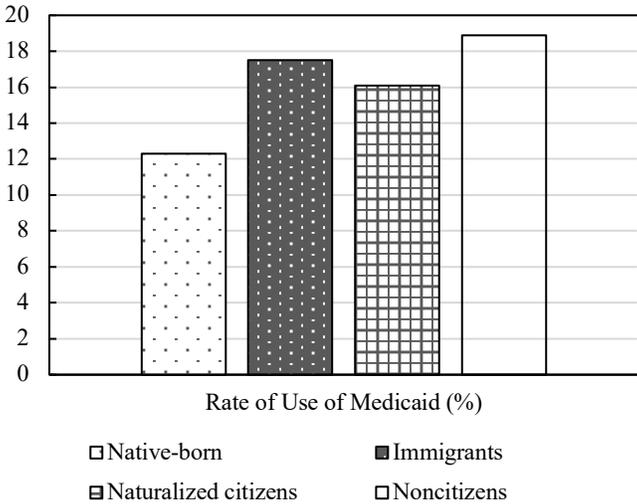

Rate of Use of Medicaid (%)

☐ Native-born   ■ Immigrants
⊟ Naturalized citizens   ☐ Noncitizens

Figure 5. Source: 2017 Annual Social and Economic Supplement to the Current Population Survey and 2015 Medical Expenditures Panel Survey Data

---

[17] Camatora, Zeigler, Richwine. (2019)

[18] Camarota, Zeigler, Richwine. (2019)

[19] Nowrasteh, Alex; Orr, Robert. (2018) "Immigration and the Welfare State." *Research and Policy Brief: Immigration.* Number 6. Cato Institute. pp. 1-8.

[20] In figure 6, the term "nonimmigrants" was used. According to the Department of Homeland Security, the term "nonimmigrant" refers to foreign nationals who are admitted to the United States temporarily for a specific purpose. By contrast, the term "immigrant" refers to foreign nationals who wish to come the United States permanently.
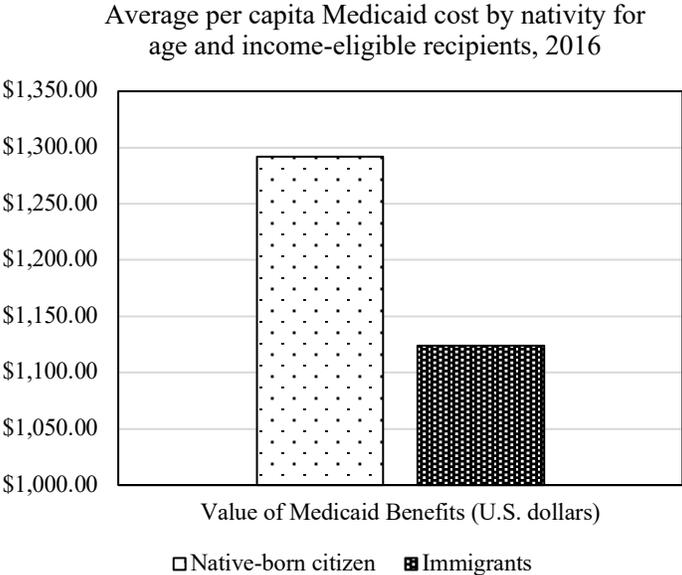
Average per capita Medicaid cost by nativity for
age and income-eligible recipients, 2016

Figure 6. Source: 2017 Annual Social and Economic Supplement to the Current Population Survey and 2015 Medical Expenditures Panel Survey Data

5.3. Illegal Immigration and Cost of Food Stamps

There is a clear correlational relationship between illegal immigration and the cost of food stamps. However, it is interesting to note that unauthorized immigrants are ineligible for most means-tested programs. But immigrants, in general, do have access to welfare programs, especially, if they are within a specific income threshold.

In 2018, the Cato Institute published a study regarding the impact of immigration on social welfare programs. The study found that although immigrants are less likely to consume most welfare benefits than native-born Americans due to many restrictions upon their eligibility, immigrants have a higher use of food stamps than native-born citizens. However, immigrant children are less likely to use all means-tested welfare programs than native-born children as we could see in figure 8.[21]

---

[21] Nowrasteh; Orr. (2018)

SNAP use rates by nativity and immigration status for adults age 19 nad older at all poverty levels, 2016

Use rate of SNAP (%)

□ Native-born citizens ▣ Immigrants
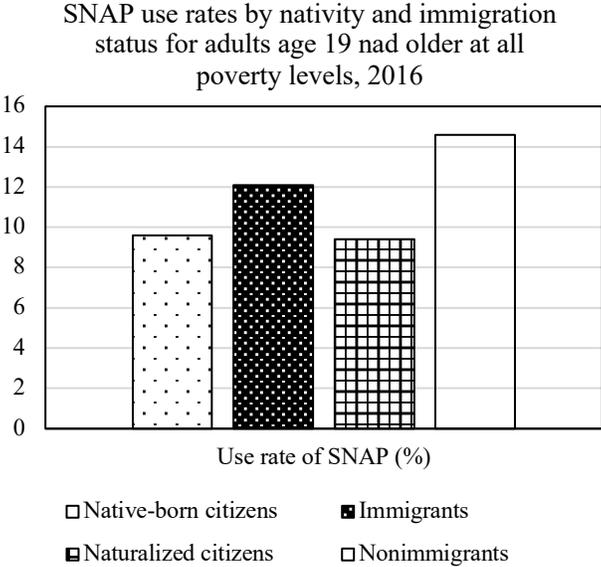▣ Naturalized citizens □ Nonimmigrants

Figure 7. Source: 2017 Annual Social and Economic Supplement to the Current Population Survey and 2015 Medical Expenditures Panel Survey Data
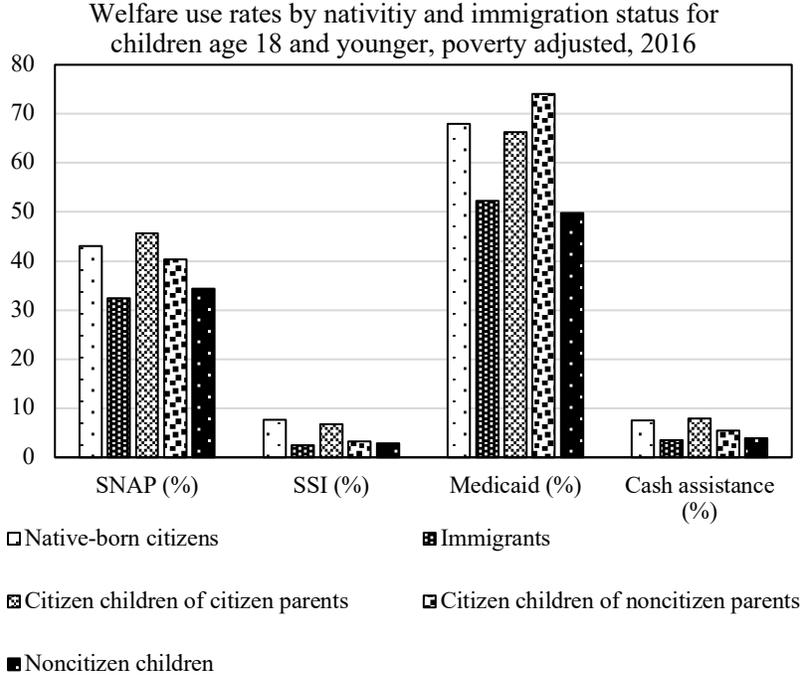
Welfare use rates by nativitiy and immigration status for children age 18 and younger, poverty adjusted, 2016

□ Native-born citizens ▣ Immigrants
▣ Citizen children of citizen parents ▣ Citizen children of noncitizen parents
■ Noncitizen children

Figure 8. Source: 2017 Annual Social and Economic Supplement to the Current Population Survey and 2015 Medical Expenditures Panel Survey Data

In 2002, many states have implemented the Farm Bill Restorations, which restored eligibility to legal disabled immigrants, immigrants that have been in the United States for at least five years,

and children of immigrants.[22] State food stamp agencies have joined with school districts, health departments, and other immigrant-serving agencies to conduct outreach for the Food Stamp and Child Nutrition programs.[23] During the 1990s, the foreign-born population increased by 57 percent to 31 million foreign-born residents.[24] As the U.S. immigrant population was increasingly settling in non-traditional immigrant-receiving states such as North Carolina, Georgia, Nevada, or Arkansas, the challenge of providing food and other social services to the immigrant population was evidenced in data showing that immigrants report higher rates of food insecurity and hunger than native-born citizens.[25] The data showed that 37 percent of children in immigrant households lived with food affordability, compared with 27 percent of children in native-born citizen households.[26] Hence, to reduce this food insecurity, food stamp agencies expanded the eligibility option to immigrants, which substantially increased the cost of maintaining the program. For example, in North Carolina, the immigrant population increased by 274 percent in the decade between 1990 and 2000.[27] Which such an increase, it was clear that once the Farm Bill Restoration was implemented, the cost of food stamps would inevitably skyrocket.

5.4. Illegal Immigration and Public Education Expenditures per Pupil

The results of our regression also showed that there is a strong correlation between illegal immigration and public education spending per student. To understand this correlation, more in-depth, we ought to analyze how immigrants affect the public education system in the United States. The following data show an increase of second-generation students compared to first-generation.
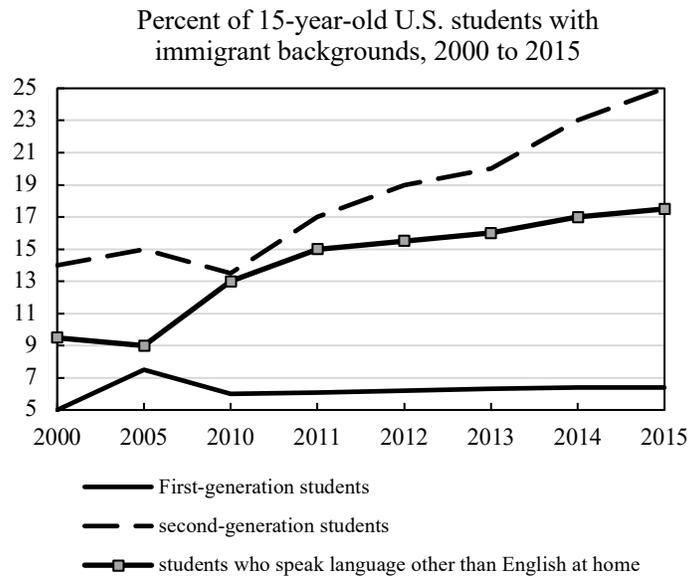

Figure 9. Source: Programme for International Student Assessment, OECD

---

[22] Gigliotti, Katherine. (2004). "Food Stamps Access for Immigrants: How States Have Implemented the 2002 Farm Bill Restorations." *National Conference of State Legislatures.* pp.1-13

[23] Ibid. p. 3

[24] Ibid. p. 3

[25] Ibid. p. 3

[26] Ibid. p. 3

[27] Ibid. p. 9

Indeed, the data show that second-generation immigrants have integrated themselves into the educational system as their percentage significantly increased since the 2010s. If the percentage of immigrants in the educational system increased, it is then fair to say that the percentage of children of unauthorized immigrant parents also increased during that period because some programs such as DACA enable them to receive an education, which is even considered a path to achieve citizenship.

% of K-12 students with at least one parent
who is an unauthorized immigrant

—— % of K-12 students with at least one parent who is an
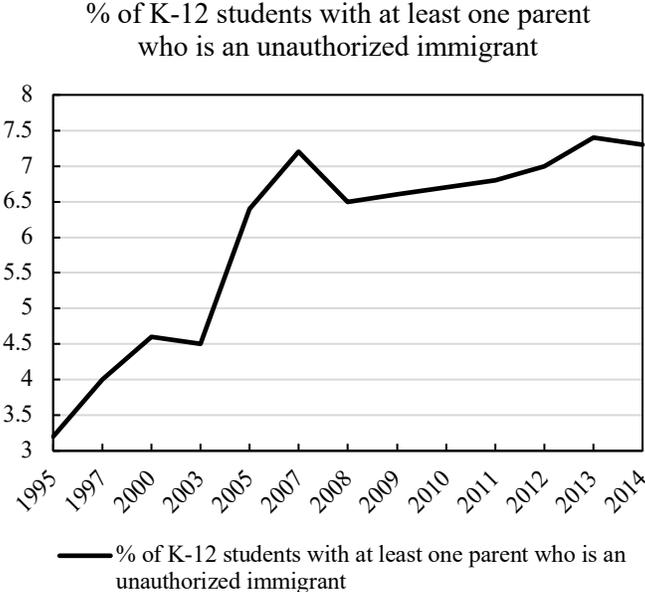unauthorized immigrant

Figure 10. Pew Research Center

The rise in K-12 students with at least one parent who is an unauthorized immigrant contrasts with the total number of unauthorized immigrants, which has remained stable since 2009.[28] Before 2009, the trends had been similar, with both groups in number from 1995 to 2007, then declining to a lower level in 2008.[29] The number of students with at least one unauthorized immigrant parent ticked up in 2009.[30] The vast majority of students with at least one unauthorized immigrant parent –3.2 million, or 5.9 percent of total enrollment in 2014—were U.S.-born children and thus U.S. citizens at birth.[31] That being said, U.S.-born children made up 81 percent of all children of unauthorized immigrants enrolled in grades K-12 in 2014.[32]

As America's elementary and high schools have been saddled with having to accommodate a rising number of immigrants children, including legal, illegal, and refugee newcomers, each school

---

[28] Passel, Jeffrey; Cohn, D'Vera. (2019). "Children of unauthorized immigrants represent rising share of K-12 students." *Pew Research Center.*
[29] Passel; Cohn. (2019)
[30] Passel; Cohn. (2019)
[31] Passel; Cohn. (2019)
[32] Passel; Cohn. (2019)

district has had to deal with the problem in individual ways.[33] Traditionally, a community can cope with a steady flow of new arrivals in their schools by studying the need for new elementary and high schools in the future, setting forth financial plans to build or expand present school facilities, and preparing budgets to hire new teachers, etc.[34] But all these plans were undermined with the growth of immigration as it raised the cost of public education. In many areas, an extremely large number of students show up in a short period of time, which leads to an almost overnight crisis of school overcrowding, major teacher shortages, huge educational budget shortfalls, and a lack of school equipment and resources for all students.[35] A recent study in Denmark addressed this issue in its own country and argued that one of the most direct consequences of having many immigrant children in the classroom is that the teacher's attention and time are diverted from the native-born children.[36] Since most immigrant children have a poorer command of the host country's language, the teacher may need to spend more class time providing individual assistance, and the teacher may also slow the pace of instruction to accommodate immigrant children with limited language proficiency or weak educational background.[37] As a result, teachers may cover less of the curriculum than the class would otherwise have covered.[38] Hence, in these specific circumstances, the cost of having immigrant children outweighs the benefits of assisting them.

6. CONCLUSION AND POLICY RECOMMENDATION

As we reach the conclusive part of our analysis, we saw that there is a correlational relationship between illegal immigration, which is our variable of interest, and the four dependent variables. Illegal immigration does indeed increase the cost of the American taxpayer when it comes to funding social welfare programs. On that note, we ought to admit that conservatives have a point. Now the question remains "how to handle the issue?"

Those on the far right of the Republican Party have advocated for deportation and for a border wall on the southern border as the best solutions to minimize the burden of illegal immigration. Donald Trump, despite his zero-tolerance immigration policy while President, could not stop illegal immigration entirely. As we mentioned at the outset of our analysis, two-thirds of Americans would rather have a way where illegal immigrants could stay in the United States legally. This approach to curbing the burden of immigration seems less radical and beneficial for both, the native-born American citizen, and the illegal immigrant. It is fair to say that illegal immigrants contribute to the economy to some extent by performing jobs that no native-born American would normally perform. Moreover, even if they do not pay income tax, they do still pay sales tax, which is a form of contribution rendered to society at large. How could illegal immigrants be maintained in the United States legally?

Two recommendations are worth being suggested for answering this question. First, an assimilation program should be implemented by the U.S. Department of Homeland Security. This assimilation program would require undocumented immigrants to integrate into the American

---

[33] Daly, Christopher J. (2017) "The Impact of Immigrant Children on America's Public Schools." *Negative Population Growth.* pp. 1-8
[34] Ibid. p. 3
[35] Ibid. p. 3
[36] Ibid. p. 4
[37] Ibid. p. 4
[38] Ibid. p. 4

culture by taking mandatory English courses as part of the requirement to apply for legal residency or naturalization and to learn the history of the United States. Moreover, an assimilation policy would be an incentive to reduce the spread of illegal immigration. Them, knowing that there is a program in place for their integration into American society, will encourage them to seek the legal approach to adjust their immigration status. This approach and process could potentially save millions of dollars in aggregate taxation, and resources will not be wasted on trying to contain a problem that cannot be eliminated. If undocumented immigrants are allowed to adjust their immigration status and obtain regular jobs, it will decrease the number of participants in welfare programs as well as their number of recipients.

The second recommendation would be to maintain a program such as DACA as a path to integrate undocumented immigrants into the school system. DACA helps the children of undocumented immigrants to become eligible to work and to legally contribute to the economic development of the United States.

Economically, it will cost more to deploy resources just to evict or deport undocumented immigrants whereas illegal immigration cannot entirely be suppressed no matter how hard and how many times it is tried. It would be easier to accommodate those who are already here while strengthening new immigration policies that would be based on meritocracy to reduce the number of newcomers.

Hence, new hypothetical immigration policies could consist of focusing on facilitating access to immigrants who have a higher level of education because those with higher education tend to have a more law-abiding behavior compared to those with a limited educational background. Additional requirements should be integrated into this new hypothetical policy for those who have a limited educational background because they represent more of a liability rather than an asset for the U.S. economy.

REFERENCES

U.S. Department of Homeland Security (2020).

Daniller, Andrew. (2019). "Americans' Immigration Policy Priorities: Division Between—and within—the two parties." *Pew Research Center.*

Ibid. (2019).

Artiga, Samantha; Diaz, Maria. (2019). "Health Coverage and Care of Undocumented Immigrants." *Kaiser Family Foundation.* Issue Brief. pp.1-6.

Ibid. p. 3

Conover, Chris. (2018). "How Americans Citizens Finance $18.5 billion for Unauthorized Immigrants." *Forbes.*

Conover, (2018).

Conover, (2018)

Camarota, Steven; Zeigler, Karen; Richwine, Jason. (2019). "How Much Would It Cost to Provide Health Insurance to Illegal Immigrants?" *Center for Immigration Studies.*

Conover, (2018)

Conover, (2018)

Conover, (2018)

Conover, (2018)

Ku, Leighton; Kessler, Bethany. (1997). "Number and Cost of Immigrants on Medicaid, The National Estimates." *The Urban Institute.*

Ku; Kessler. (1994)

Ku; Kessler. (1994)

Camatora, Zeigler, Richwine. (2019)

Camarota, Zeigler, Richwine. (2019)

Nowrasteh, Alex; Orr, Robert. (2018) "Immigration and the Welfare State." *Research and Policy Brief: Immigration.* Number 6. Cato Institute. pp. 1-8.

In figure 6, the term "nonimmigrants" was used. According to the Department of Homeland Security, the term "nonimmigrant" refers to foreign nationals who are admitted to the United States temporarily for a specific purpose. By contrast, the term "immigrant" refers to foreign nationals who wish to come to the United States permanently.

Nowrasteh; Orr. (2018)

Gigliotti, Katherine. (2004). "Food Stamps Access for Immigrants: How States Have Implemented the 2002 Farm Bill Restorations." *National Conference of State Legislatures.* pp.1-13

Ibid. p. 3

Ibid. p. 3

Ibid. p. 3

Ibid. p. 3

Ibid. p. 9

Passel, Jeffrey; Cohn, D'Vera. (2019). "Children of unauthorized immigrants represent a rising share of K-12 students." *Pew Research Center.*

Passel; Cohn. (2019)

Passel; Cohn. (2019)

Passel; Cohn. (2019)

Passel; Cohn. (2019)

Daly, Christopher J. (2017) "The Impact of Immigrant Children on America's Public Schools." *Negative Population Growth.* pp. 1-8

Ibid. p. 3

Ibid. p. 3

Ibid. p. 4

Ibid. p. 4

Ibid. p. 4