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National Center for Risk and Economic Analysis of Terrorism Events
University of Southern California

with

Institute for Defense Analyses

Northern Triangle Migrant Flow Study:

Final Report

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ABOUT CREATE

The National Center for Risk and Economic Analysis of Terrorism Events (CREATE) was the first university-based Center of Excellence (COE) funded by the Office of University Programs (OUP) of the Science and Technology (S&T) Directorate of the Department of Homeland Security (DHS). CREATE started operations in March of 2004 and has since been joined by additional DHS centers. Like other COEs, CREATE contributes university-based research to make the nation safer by taking a longer-term view of scientific innovations and breakthroughs and by developing the future intellectual leaders in homeland security.

CREATE's mission is to improve homeland security decisions and operations to make our nation safer. We are accomplishing our mission through an integrated program of research, education and outreach that is designed to inform and support decisions faced by elected officials and governmental employees at the national, state, and local levels. We are also working with private industry, both to leverage the investments being made by the DHS in these organizations and to facilitate the transition of research toward meeting the security needs of our nation.

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By the nature of the research in risk, economics, risk management and operations research, CREATE serves the need of many agencies at the DHS, including the Transportation Security Administration, Customs and Border Protection, Immigration and Customs Enforcement, Federal Emergency Management Agency and the US Coast Guard. In addition, CREATE has developed relationships with clients in the Offices of National Protection and Programs, Intelligence and Analysis, the Domestic Nuclear Detection Office and many State and Local government agencies. CREATE faculty and students take both the long-term view of how to reduce terrorism risk through fundamental research, and the near-term view of improving the cost-effectiveness of counter-terrorism policies and investments through applied research.

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ABOUT IDA

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Abstract

Asylum seekers from the Northern Triangle countries of El Salvador, Guatemala, and Honduras represent a significant part of migrants entering the United States. This report assesses whether these migrants would stay in Mexico as a final destination or return home, if seeking asylum in the United States is not an option. The report reviews empirical data and carries out a broad range of statistical analysis to evaluate the motivations of these migrants and the nature of their migratory trip. The core finding that emerges is that any appreciable diversion of these migrants to Mexico is unlikely. Adult asylum seekers have primarily been driven by economic motivations, and juvenile migrants by economic opportunities and reunification with family, and evidence on the impact of crime and violence on juvenile and adult flows is mixed. Mexico does not offer enough gain in economic opportunities and reduction in exposure to crime and violence to justify the costs of migration, and juvenile migrants require family members and networks already present in the destination country that do not exist in Mexico.

Key words: Asylum seekers, migrants, northern triangle, economic analysis, survey

Executive Summary

For decades, the large majority of those attempting illegal entry across the U.S.-Mexico border were adult Mexican nationals crossing between authorized ports of entry. This migrant flow has fallen dramatically in recent years due to a tightening of border security and demographic changes in Mexico. As this traditional flow was declining, a new flow began to emerge in 2011. This new flow is composed primarily of asylum seekers, including unaccompanied children (UACs), family units (FMUAs), and adults who claim credible fear. The vast majority of this new flow is from the Northern Triangle countries of El Salvador, Guatemala, and Honduras. These non-traditional illegal border crossers rely less on clandestine crossing of the border, and instead often request various forms of relief from removal and use the adjudication process to secure entry into the United States for extended periods of time.

Customs and Border Protection (CBP) asked the Department of Homeland Security (DHS) Science and Technology Directorate (S&T) to study the Northern Triangle Migration Flow. DHS S&T funded the Center for Risk and Economic Analysis of Terrorism Events (CREATE), with assistance from the Institute for Defense Analyses (IDA), to research this non-traditional flow to gain a better understanding of its causes and likely reactions to changes in policy. The specific questions directed by CBP are:

- If asylum in the United States is not an option, would this deter asylum seekers from Central America from crossing into Mexico?

- Of the migrants who are already in Mexico, how many would:

  - Stay in Mexico?

  - Return to their home country?

  - Go elsewhere?

To address these questions, the research team conducted an extensive inventory of what was known about the options available to these migrants (e.g., asylum in Mexico versus the United States), their levels (referred to as *stocks*) and flows, and their motivations for migrating, including economic, crime and safety, and family reunification. This information, along with data collected on the conditions in Northern Triangle countries, Mexico, and the United States (e.g., economic and crime conditions), were then used to conduct a range of empirical analyses on motivating factors to identify their relative importance and the role they play in the timing of the emergence and surging of the non-traditional flow.

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The research team found that it is unlikely that there would be any appreciable diversion of non-traditional flow into Mexico as a final destination if asylum in the United States were not an option. Except for Guatemala, most migrants from Northern Triangle countries who enter Mexico illegally are there in order to transit to the United States and would likely continue their journey even with a U.S. policy change, but substitute to attempting clandestine entry at the U.S. border instead of seeking asylum. It is possible that some would be deterred from continuing their journey and return to their home country.

More broadly, the research team found that:

- Long-term illegal migration to the United States of adults from Northern Triangle countries has primarily been driven by economic motivations.

- The primary motivations of juvenile migrants from 2011 to the present are economic opportunities and reunification with family that migrated previously. Evidence on the impact of crime and violence on juvenile migrants is mixed.

- Mexico offers very little economic gain to Northern Triangle migrants, and the increase in income that a migrant could typically expect from migrating to Mexico would not justify the costs of doing so.

- Although crime and violence might be a contributing factor to migration decisions, and the murder rate in Mexico is significantly lower than in Northern Triangle counties, other data on crime perceptions suggest that Mexico is not perceived as a safer destination, but that the U.S. is perceived as safer.

- Juvenile migrants generally require that other family members already be present in the destination country in order to migrate, and the small populations of Northern Triangle migrants resident in Mexico will not support large flows of juvenile migrants to Mexico regardless of the migrant motivation or U.S. policies on asylum.

- The proximate cause of the timing (i.e., the surge) of juvenile migration is likely related to actual and perceived policy changes in the United States and Mexico.

This report provides a detailed review of the data and analyses conducted by the research team for CBP.

Overview of Country Conditions

The research team began with an examination of the economic, crime, and social network conditions in the Northern Triangle countries, Mexico, and the United States. Social networks are discussed further below in the section on stocks and flows. The most

striking observation in the economic data is the extreme difference between U.S. wage rates and those of Northern Triangle countries. Table ES-1 shows the ratio of per capita national income (Gross Domestic Product, or GDP) in Mexico or the United States to Northern Triangle countries. Ratios are much higher for the United States than for Mexico, suggesting that Northern Triangle migrants gain much more economically from migrating to the United States than to Mexico. Use of this measure to capture potential income gain for migrants is problematic, however, and Table ES-2 shows our preferred measure: wage ratios for migrating populations from Northern Triangle countries that reflect actual wages earned in migrants' home countries and the countries to which they migrated. As the table shows, U.S. wages for people migrating illegally to the United States tend to be about 13 to 14 times the wages available to them in their home countries of Guatemala and Honduras (differences with El Salvador are generally similar, but comparable data were not available from the source used in the table). Income in Mexico tends to fall between the United States and Northern Triangle countries, but for the people migrating to the United States, wages in Mexico are very similar to those in Northern Triangle countries.

Table ES-1. Per-Capita National Income Gaps

	2008	2009	2010	2011	2012	2013	2014	2015	2016
Per capita GDP gap (current $)									
Guatemala									
U.S.	17	18	17	16	16	15	15	14	14
Mexico	3	3	3	3	3	3	3	2	2
El Salvador									
U.S.	14	14	14	13	13	14	14	14	14
Mexico	3	2	3	3	3	3	3	2	2
Honduras									
U.S.	28	26	25	23	24	25	24	24	24
Mexico	6	4	5	5	5	5	5	4	3
Per capita GDP gap (current PPP $)									
Guatemala									
U.S.	7	7	7	7	7	7	7	7	7
Mexico	2	2	2	2	2	2	2	2	2
El Salvador									
U.S.	7	7	7	7	7	7	7	7	7
Mexico	2	2	2	2	2	2	2	2	2
Honduras									
U.S.	12	12	12	12	12	12	12	12	12
Mexico	4	4	4	4	4	4	4	4	4

Note: PPP – purchasing-power-parity.

Table ES-2. Wage Ratios for Migrating Populations from Northern Triangle Countries

	Guatemala	El Salvador	Honduras
Average ratio of Mexico wage to home-country wage	1.1	1.1	1.1
Average ratio of U.S. wage to home-country wage	12.9	n/a	14.0

Another major issue in Northern Triangle countries is high levels of crime and violence. Murder rates are one important measure of crime and violence, and Honduras and El Salvador have among the highest rates in the Western Hemisphere. Guatemala also has a high murder rate, although it is significantly lower than Honduras and El Salvador. The United States has one of the lowest murder rates in the Western Hemisphere and, as with income, Mexico falls between these extremes.

One challenge with using murder rates as a measure of violence in the country is that murders tend to be concentrated among narrow segments of society (both geographically and demographically), frequently those most exposed to other forms of crime. This apparent disconnect can be seen in survey data on crime and violence in Northern Triangle countries, which shows that respondents' crime victimization experiences and perceptions of safety are similar to those of many other Latin American countries, even though the murder rate in the Northern Triangle countries is significantly higher.

Northern Triangle Migrants – Stocks and Flows

The research team also compiled the most complete quantitative picture possible of the current levels (stocks) of migrant populations in each country and flows between the countries of interest. The most striking difference that arose from this analysis is how much larger the populations (both legal and illegal) of migrants from Northern Triangle countries is in the United States compared to Mexico. Mexico is just over a third the size of the United States (by population) and closer geographically to the Northern Triangle countries (contiguous with Guatemala), but legal populations in the United States range from 10 times (for Guatemala) to 85 times (for El Salvador) the size of these populations in Mexico. Table ES-3 provides the legal populations in the United States and Mexico. The divergence in unauthorized populations may be even larger, with an estimate of almost two million unlawful migrants from the Northern Triangle countries in the United States and an unknown, but believed to be small, unlawful population in Mexico.

Table ES-3. Legal Populations in the U.S. and Mexico

	U.S.	Mexico	U.S. to Mexico
Guatemala	430,000	46,912	9.2
Honduras	255,000	11,350	22.5
El Salvador	695,000	8,195	84.8

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Examining flows is challenging because there are less data available (illegal flow is unobserved) and most illegal flow to the United States passes through Mexico. While the United States has conducted extensive research on illegal flows and has developed credible estimates, no known credible estimates of illegal flows to Mexico have been made. What can be compared are apprehension rates and applications for asylum. Table ES-4 provides total asylum requests to the United States and Mexico and Table ES-5 provides asylum requests by unaccompanied juveniles only, showing that the numbers are much larger for the United States.

Table ES-4. Total Asylum Requests to U.S. and Mexico

Total Asylum Seekers[a]						
	2012	2013	2014	2015	2016	2017
El Salvador						
To United States	9,368	21,220	50,945	33,110	67,576	
To Mexico		309	626	1,476	3,493	3,708
Guatemala						
To United States	6,937	15,727	38,480	35,670	59,694	
To Mexico		48	108	102	437	676
Honduras						
To United States	6,857	19,182	64,406	21,972	44,076	
To Mexico		530	1,035	1,560	4,129	4,272
Other Countries[b]						
To United States	6,893	14,360	16,276	18,145	31,592	
To Mexico		409	368	286	737	5,940

[a] For U.S., includes apprehensions of adults claiming credible or reasonable fear, UACs, and FMUAs. For Mexico, includes applicants for refugee status.

[b] For U.S., excluding Mexican nationals.

Table ES-5. Requests by Unaccompanied Juveniles Only

	2012	2013	2014	2015	2016	2017
El Salvador						
To United States	3,419	6,191	16,936	9,852	19,266	
To Mexico		10	19	65	87	62
Guatemala						
To United States	3,885	8,228	18,092	14,977	21,420	
To Mexico		5	10	10	18	21
Honduras						
To United States	3,063	7,026	19,182	5,748	11,609	
To Mexico		40	46	64	124	153
Other countries[a]						
To United States	407	1,011	1,359	746	1,057	
To Mexico		8	3	3	13	23

[a] For U.S., excluding Mexican nationals.

Why Asylum Seeker Flows Have Risen

The first step in understanding the root causes of why these migrants are traveling to the United States is to ask them directly. This is done in many ways, and the three tables below provide the findings from key sources. Systematic surveying is conducted of adults from Northern Triangle countries who have been apprehended and returned by either U.S. or Mexican authorities, and these surveys have asked about the reasons for making the trip. Table ES-6 summarizes responses for migrants apprehended and returned by Mexican authorities. For all three countries, the vast majority of migrants report economic incentives as the reason for migrating. In 2017, El Salvador had the largest fraction of respondents identifying violence as a motivation, but even there it was less than 20 percent. The EMIF sample of migrants returned by Mexican authorities includes migrants headed to the U.S. to claim asylum but also migrants who do not intend to claim asylum.

Table ES-6. Survey Responses for Migrants Apprehended and Returned by Mexican Authorities

	Final Destination is Mexico				Final Destination is U.S.			
	2014	2015	2016	2017	2014	2015	2016	2017
Number of responses								
Guatemala								
Economic incentives	1054	1517	790	258	1050	1351	867	200
Violence	1	0	2	0	2	2	3	0
Family	15	8	2	1	56	4	0	1
Other	589	288	122	41	414	6	1	0
El Salvador								
Economic incentives	353	529	531	156	1902	2358	2531	476
Violence	1	200	2	46	8	1172	8	116
Family	25	8	5	18	231	25	34	43
Other	118	3	8	6	729	3	15	7
Honduras								
Economic incentives	98	107	230	148	1186	955	1400	389
Violence	5	21	3	13	26	83	10	10
Family	19	12	4	1	290	44	7	2
Other	17	1	17	2	175	9	18	2
Percentage breakdown								
Guatemala								
Economic incentives	64%	84%	86%	86%	69%	99%	100%	100%
Violence	0%	0%	0%	0%	0%	0%	0%	0%
Family	1%	0%	0%	0%	4%	0%	0%	0%
Other	36%	16%	13%	14%	27%	0%	0%	0%
El Salvador								
Economic incentives	71%	71%	97%	69%	66%	66%	98%	74%
Violence	0%	27%	0%	20%	0%	33%	0%	18%
Family	5%	1%	1%	8%	8%	1%	1%	7%
Other	24%	0%	1%	3%	25%	0%	1%	1%
Honduras								
Economic incentives	71%	76%	91%	90%	71%	88%	98%	97%
Violence	4%	15%	1%	8%	2%	8%	1%	2%
Family	14%	9%	2%	1%	17%	4%	0%	0%
Other	12%	1%	7%	1%	10%	1%	1%	0%

Table ES-7 provides survey responses for migrants apprehended and returned by U.S. authorities. For this cohort, violence was only explicitly included in the most recent year. The table provides the count of survey respondents providing each answer and, for 2017 when violence was included, the percentage breakdown, like the table above. As with those returned by Mexican authorities, the primary motivation is economic incentives, and El

Salvador is the only country with an appreciable number of respondents listing violence (again, less than 20 percent).

Table ES-7. Survey Responses for Migrants Apprehended and Returned by US Authorities

	2014	2015	2016	2017	(2017: % breakdown)
Guatemala					
Economic incentives	2,305	1,323	1,481	684	95%
Violence	*	*	*	7	1%
Family	47	75	64	26	4%
Other	97	77	80	6	1%
El Salvador					
Economic incentives	2,314	2,186	1,957	580	73%
Violence	*	*	*	149	19%
Family	39	40	50	67	8%
Other	45	4	9	2	0%
Honduras					
Economic incentives	1,471	1,267	813	328	96%
Violence	*	*	*	6	2%
Family	23	8	6	5	1%
Other	80	43	28	2	1%

* A "violence" answer option was not available for this question in these years.

This EMIF sample is, however, unrepresentative of the asylum-seeking population, because it consists of those who were deported after not claiming asylum or after losing their asylum case in immigration court. Further insight into motivations of adult Northern Triangle asylum seekers can be obtained from evaluation of U.S. administrative data on the ultimate asylum outcomes for Northern Triangle migrants who are apprehended at the U.S.-Mexico border. Table ES-8 shows outcomes for single-adult migrants who were apprehended during 2012-2016. Some apprehended migrants do not claim asylum by making a "credible fear" claim, even though this leads to deportation to their home country in most instances. Others claim credible fear but ultimately do not win their immigration court case and are ordered removed, and others claim credible fear and ultimately win permission to be legally present in the U.S. This combination of migrant decisions (whether to claim credible fear or not) and court decisions (granting of asylum or not) can be used to assess the degree to which migrants are migrating for asylum-related reasons. One challenge in using these data is that many cases in immigration court are still pending. Table ES-8 gives rates resulting from a plausible assumption on pending cases and shows that this rate for Guatemala and Honduras is 5% or less, and for El Salvador roughly 10%. These low rates are due to the fact that many apprehended adults do not actually apply for asylum (which suggests crime and violence was not actually the reason for their

emigration), and of those that do, many lose their asylum case (which means that U.S. immigration courts found the case to be insufficiently substantiated).

Table ES-8. Outcomes for Single-Adult Migrants After Arrival at U.S.-Mexico Border

	No credible fear claim	Credible fear claim			Positive credible fear outcomes as % of all apprehensions[A]
		Ordered removed	Given permission to stay in U.S.	Case still pending	
El Salvador					
2012	13,219	2,437	999	1,287	8%
2013	16,698	4,475	1,955	5,419	13%
2014	17,598	7,740	890	8,614	10%
2015	12,130	4,525	148	5,911	9%
2016	13,120	5,333	96	9,515	11%
Guatemala					
2012	28,810	1,252	506	507	2%
2013	39,779	2,286	1,088	2,069	4%
2014	46,069	2,787	488	2,475	2%
2015	26,526	1,984	78	2,144	3%
2016	27,976	2,950	42	3,887	4%
Honduras					
2012	24,532	1,449	465	765	2%
2013	28,792	2,904	952	3,050	5%
2014	31,690	3,693	401	3,335	3%
2015	13,757	1,781	74	1,969	3%
2016	16,197	3,046	47	3,836	4%

A : Under the assumption that pending cases get relief at 2013 rate

For the juvenile migrants from Northern Triangle countries, who are a major portion of the current surge, there is less systematic surveying. One useful survey was conducted of juveniles in U.S. shelters in 2014. Table ES-9 provides the results from this survey, showing that for juveniles the primary motivation is family reunification (and opportunity, which was combined in the survey question). Violence is again secondary, although El Salvador does have a higher rate of respondents reporting violence as an important motivation, as in the case of adults.

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Table ES-9. Results of Survey of Juveniles in US Shelters in 2014

	Guatemala	El Salvador	Honduras
Family or opportunity, deprivation	113	90	101
Violence in society	20	69	43
Abuse in home	23	21	24
Other	39	36	33

These findings are important because it is widely perceived that the primary motivation for emigrating from the Northern Triangle is to flee violence. As discussed in the previous sections, however, adult rates of victimization and perceived safety are similar in the Northern Triangle countries (which are experiencing a surge in migration) and other countries in Latin America—despite the very high murder rates for the Northern Triangle countries. This is consistent with the tables above showing economic incentives as the primary motivation (and family reunification for juveniles) and the fact that requests for relief from removal (e.g., asylum) are generally not found to be meritorious in the U.S. adjudication process.

To better understand these findings and begin to quantify the relative impacts of various factors, the research team next conducted a series of empirical analyses on migrant flow. Three primary analyses conducted were:

- Cross-country study using administrative records such as migrant apprehensions and crime rates,

- Cross-country study using survey data, and

- Detailed study of variations within the Northern Triangle using administrative records.

This executive summary reviews the first and third analyses.

The first analysis examined the annual apprehensions of UACs to the United States from 16 Western Hemisphere countries related to country-level root-cause measures. Although migrants from Northern Triangle countries account for the large majority of the UAC surge, small positive flows from other countries in Latin America and the Caribbean have also occurred. The countries included are Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Jamaica, Nicaragua, Panama, Peru, and Venezuela. The dependent variable used is a UAC flow rate: the ratio of UAC apprehensions to the country's total juvenile population. This measure reflects the likelihood that a child from a given country will be apprehended on the border. Explanatory variables include per-capita national gross domestic product in constant PPP prices, current and lagged adult apprehension rate (adult apprehensions as a percentage of total adult population in the source country, which captures the family reunification motive), the murder rate for the country, two alternative crime measures on perception of

neighborhood safety and gang presence, and control variables including country and year dummy variables. Regressions were also run that make adult apprehensions the dependent variable, to assess the influence of economic and crime/violence root-cause variables on the flow of adult migrants to the U.S.

Table ES-10 provides regression coefficient estimates. For the UAC apprehension rate, current and lagged values of the adult apprehension rate have statistically significant coefficients with the expected sign, and per capita income is insignificant. The murder rate has a statistically significant coefficient with the expected sign, but the other two crime measures are statistically insignificant. For the adult apprehension rate, per capita income has a statistically significant impact with the expected sign if the lagged adult apprehension is not included but an insignificant impact if it is included, and the murder rate is statistically insignificant under both specifications. Cross-country annual panel regressions thus suggest that evidence is mixed on the impact of crime and violence on UAC flows, and that crime and violence do not significantly influence adult migrant flow.

Table ES-10. Regression Coefficient Estimates for Empirical Specifications

Dependent variable:	Ratio of UAC apprehensions to juvenile population			Ratio of adult apprehensions to adult population	
Adult apprehension Rate	0.33**	1.1***	1.1***		
	(2.1)	(2.9)	(3.0)		
Lagged adult apprehension rate	0.34*				0.53***
	(1.7)				(4.4)
Per-capita income	-0.001	-0.003	-0.004	-0.002***	-0.006
	(-1.6)	(-1.6)	(-1.5)	(-2.7)	(-1.0)
Murder rate	0.32*			0.11	0.02
	(1.9)			(0.9)	(0.1)
Neighborhood safety^A		-0.003			
		(-1.3)			
Gang presence^A			0.005		
			(1.3)		
Constant					
	-0.0001	0.004	0.001	0.002***	0.001*
	(-0.2)	(1.3)	(0.5)	(3.3)	(1.6)
R^2adj	0.61	0.58	0.58	0.72	0.81

Country and year fixed effects are included in all regressions. Estimation technique is OLS with White diagonal standard error estimation. ***, **, and * denote statistical significance at the 1%, 5%, and 10% level, respectively.

A : Measures constructed from data of the Latin American Public Opinion Poll.

The third empirical analysis listed above takes a different approach to understanding the roles of family reunification and violence. This analysis examines variation across

municipalities within Northern Triangle countries. More specifically, it compares murder rates and lagged adult migration rates to the United States by municipality and Border Patrol stations to UAC apprehensions from municipality-station pairs. Lagged adult migration captures the family reunification motive. Table ES-11 provides the results from nine different empirical specifications and shows that statistical significance of the murder rate is not robust to the inclusion of economic variables, whereas the family reunification variable is statistically significant in all specifications. Change in the R^2 measure across specifications indicates that the murder rate adds little explanatory power to the model after controlling for time-invariant municipality characteristics, but that the reunification variable does.

It is important to note that the influence of the family reunification variables in Tables ES-10 and ES-11, the adult apprehension rate, captures multiple factors. Juvenile migration that is correlated with family migration may indicate that juveniles are attempting reunification for the sake of cohesion but could also suggest that having family in the United States enables people to migrate but is not the causal driver. If juveniles are migrating because of economic opportunity or violence but need a relative in the United States to facilitate the migration process, these effects may be incorrectly attributed to desire for family reunification.

Table ES-11. Murder Rates and US Migration: Results from Nine Different Empirical Specifications

	Juvenile Apprehension Rate			Male Juvenile Apprehension Rate			Female Juvenile Apprehension Rate		
Murder Rate	0.0008***	0.0008***	0.0004	0.0005***	0.0005***	0.0003*	0.0003***	0.0003***	0.0001
	(3.3)	(3.6)	(1.4)	(3.5)	(3.8)	(1.7)	(2.8)	(2.9)	(0.98)
Reunification – 2 Year Lag		0.0604***	0.0687***		0.0347***	0.0377***		0.0257***	0.0310***
		(7.4)	(6.3)		(7.5)	(6.8)		(7.2)	(5.6)
Wealth Index			0.0056			0.0034			0.0021
			(0.74)			(0.78)			(0.59)
Infant Mortality			0.0179			0.0113			0.0066
			(0.82)			(0.02)			(0.60)
Years of Education			0.0594			0.0268			0.0326
			(0.91)			(0.04)			(0.03)
GDP Per Capita			-0.0004			-0.0003**			-0.0001
			(-1.6)			(-2.2)			(-0.77)
Unemployment Rate			-0.0218			-0.0324			0.0107
			(-0.26)			(0.05)			(0.04)
R^2adj	-0.008	0.095	0.049	-0.008	0.090	0.042	-0.008	0.063	0.033

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It remains to explain the timing and dynamics of the surge. As shown above, the primary motivation of adults is economic incentives and the primary motivation of juveniles is family reunification, with crime and violence playing a more marginal role. But none of this explains why there was a break in trend in 2011–when migration of non-traditional migrants began to increase–and the dramatic fluctuations during 2014–2017. Change in policies and perceptions of policies that affect migrants from all three countries can plausibly explain surge dynamics. The surge began soon after a major change in Mexican immigration policies, as Mexico went from a tough immigration regime to a liberalized regime during 2008–2011. Change in actual U.S. policies or perceptions of them subsequently affected the dynamics of the flow, with events in 2012 and 2013 accelerating the flow, and events starting in the summer of 2014 causing the flow to fall or rise. Figure E-10 shows the correlation of various events to changes in flow magnitudes.

A plausible story that can explain the dynamics of the flow of juvenile migrants from Northern Triangle countries involves both root causes and policies. Root causes provide the underlying motivation for migration. Passing of the new Mexican immigration law in 2011 made smuggling easier and led to the initial emergence of these flows. The surge accelerated after the U.S. executive branch adopted the DACA measure in June 2012 and the U.S. Senate passed a comprehensive immigration reform bill in June 2013. After initially peaking in June 2014, the flows have fluctuated dramatically since then due to actual and perceived changes in U.S. and Mexican policies. In July 2014, a range of U.S. and Mexican immigration enforcement policies were implemented that caused a sharp fall in flow. In January 2016, flows fell temporarily in response to an attempt by the U.S. government to deport a small number of migrants who had lost their asylum case but were not detained, but they recovered after it became clear that this isolated instance did not herald a change in policy. Flows subsequently fell dramatically after the inauguration of President Trump in January 2017.

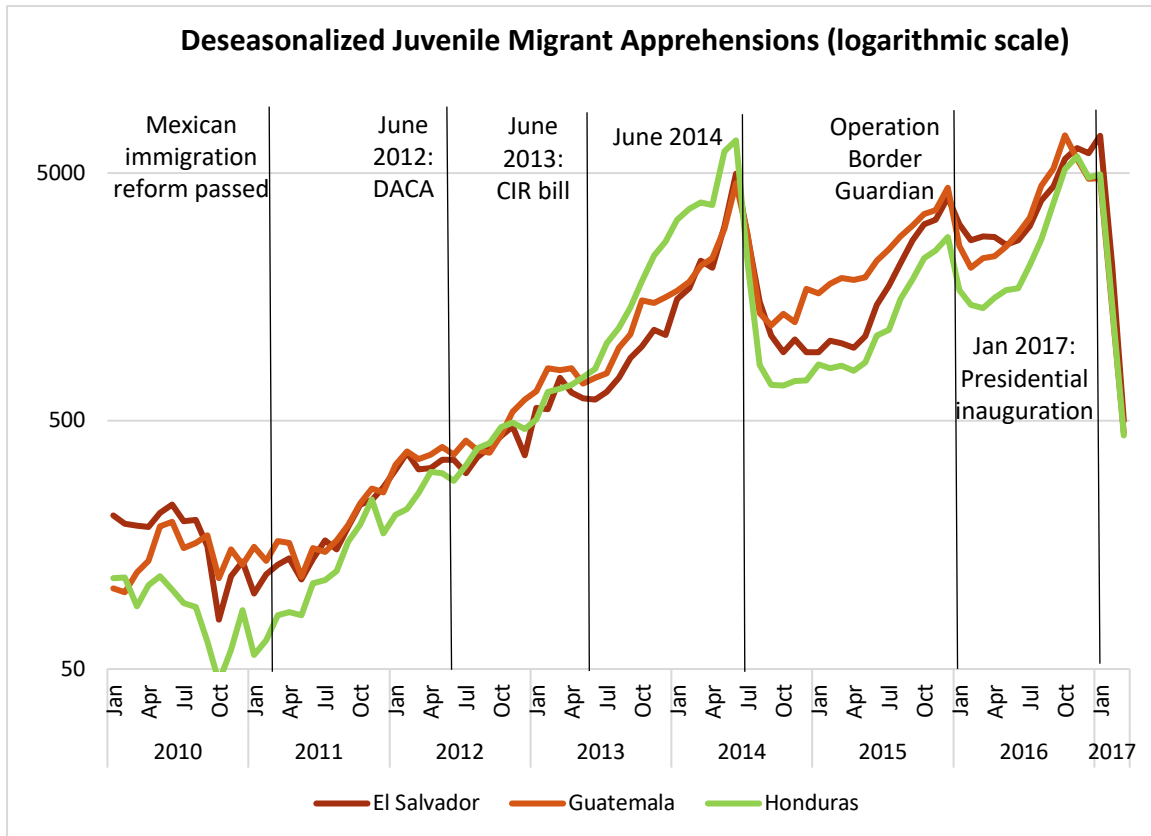**Deseasonalized Juvenile Migrant Apprehensions (logarithmic scale)**

Figure ES-1. Deseasonalized Juvenile Migrant Apprehensions (logarithmic scale)

Impacts of Closing Asylum Channel

Over the past two decades, almost all Northern Triangle migrants have gone to the United States rather than to Mexico. Both the legal and unauthorized populations of Northern Triangle immigrants resident in the United States are much higher than the reported population resident in Mexico, as are the flows of asylum seekers going to the United States as opposed to Mexico, even though the trip to the United States is much more expensive. It is unsurprising that the United States is the final destination for almost all migrants leaving the Northern Triangle, given that they can expect to increase their wage by 1,200 percent by going to the United States, but by only 10 percent by going to Mexico. Most Northern Triangle migrants headed to the United States already have family members there, but generally do not have family members living in Mexico. Although Mexico's murder rate is much lower than that of Northern Triangle countries, crime perception data suggest that perceptions of being criminally victimized are about equal in these four countries. Although Northern Triangle migrants who do not claim asylum face a significant chance of being caught attempting illegal entry and suffer a major consequence if they are caught, this is not the case for asylum seekers, as juvenile asylum seekers are essentially guaranteed successful long-term entry into the United States, and adult asylum seekers are

more likely than not to succeed. (Although Table ES-8 shows that many adult asylum seekers are ordered removed, a significant number of these migrants are not detained and never actually removed.)

These findings suggest that there will be very little diversion of asylum seeker flow from the United States to Mexico if seeking asylum in the United States is not an option. The primary motivations of adult asylum seekers coming to the United States are economic opportunities, and there will be very little diversion of adult asylum seeker flow to Mexico as a final destination because there is very little economic gain from migrating to Mexico. Juvenile migrants are motivated by economic opportunities and possibly exposure to crime and violence, but family reunification is the most important variable in explaining juvenile migration flows. Even if family reunification is merely a necessary mechanism through which juveniles can flee violence or achieve higher wages, the lack of Northern Triangle migrants currently living in Mexico suggest that juveniles would be unable to successfully settle in Mexico because they would not have these family networks

Rather than divert to Mexico, migrants who are currently entering the United States through the asylum channel will either continue coming to the United States and trying to enter the United States illegally through evasion at the border, or not migrate from their home country. Crossings across the Mexico-Guatemala border into Mexico will decline, but there will still be crossings into Mexico for transit to the United States.

Developments in 2017 are useful in illuminating what might happen in this regard. A dramatic fall in asylum seeker flow took place in the months after the 2016 U.S. presidential election, with the total number of UAC and FMUA apprehensions falling by 90 percent from November 2016 to April 2017. This was likely driven by a perception that major changes in U.S. immigration and border enforcement policies were imminent, including policies on asylum seekers. This episode is arguably the historical event that is the closest available to an actual closing of the asylum channel. Several key points can be made given currently available data:

- There was no change in the annual number of refugee applications made by Northern Triangle nationals in Mexico from 2016 to 2017, which suggests that there was not any significant substitution of asylum seekers from a U.S. destination to a Mexico destination.

- Data on refugee-related applications in Mexico that are currently available at a monthly frequency come from issuance by the Instituto Nacional de Migracion of visitor cards for humanitarian reasons (TVRH). These non-immigrant visas are issued to those seeking refugee status or political asylum, or who have been a victim of a crime. As in the case of the refugee application, the TVRH is attractive as a method to enter Mexico legally,

either in order to migrate to Mexico as a refugee, or to transit Mexico on the way to the United States.

- Figure ES-2 shows data on monthly issuances of TVRHs to Northern Triangle nationals in this period. Issuance grew over 2014–2016. Immediately after the November 2016 U.S. presidential election, issuance fell sharply, and remained at depressed levels through July 2017, when they rose dramatically to higher levels through the end of the year. These dynamics suggest that issuance of TVRHs move with the flow of Northern Triangle asylum seekers headed to the United States. Importantly, the number of TVRHs issued fell in the period when asylum seeker flow to the United States was depressed, suggesting that Northern Triangle asylum seekers did not divert to Mexico as the United States became an unattractive destination.

- Data on evasion versus presenting at the U.S.-Mexico border shows no increase in the evasion rate in 2017.

The lack of substitution to either Mexico or evasion at the border by asylum seekers in the first half of 2017 suggests that the number of migrants leaving their home in the Northern Triangle fell dramatically. In the immediate aftermath of the election, there may have been a perception that the new administration would pursue a generalized enforcement buildup, both at the border and in the interior, and that policies on the ability to seek asylum in the United States would change. Migrants did not want to pursue any entry channel to the United States, because the perceived risk of not effecting entry through all of them rose. If this is an accurate explanation of what happened in 2017, the degree to which Northern Triangle migrants continue coming to the United States and try to evade— versus not migrate at all—will depend on whether a closing of the asylum channel is an isolated policy change or part of a larger package of measures that affect perceptions of the ability to successfully illegally enter and reside in the United States.

Mexico: Issuance of Visitor Cards for Humanitarian Reasons (TVRH)
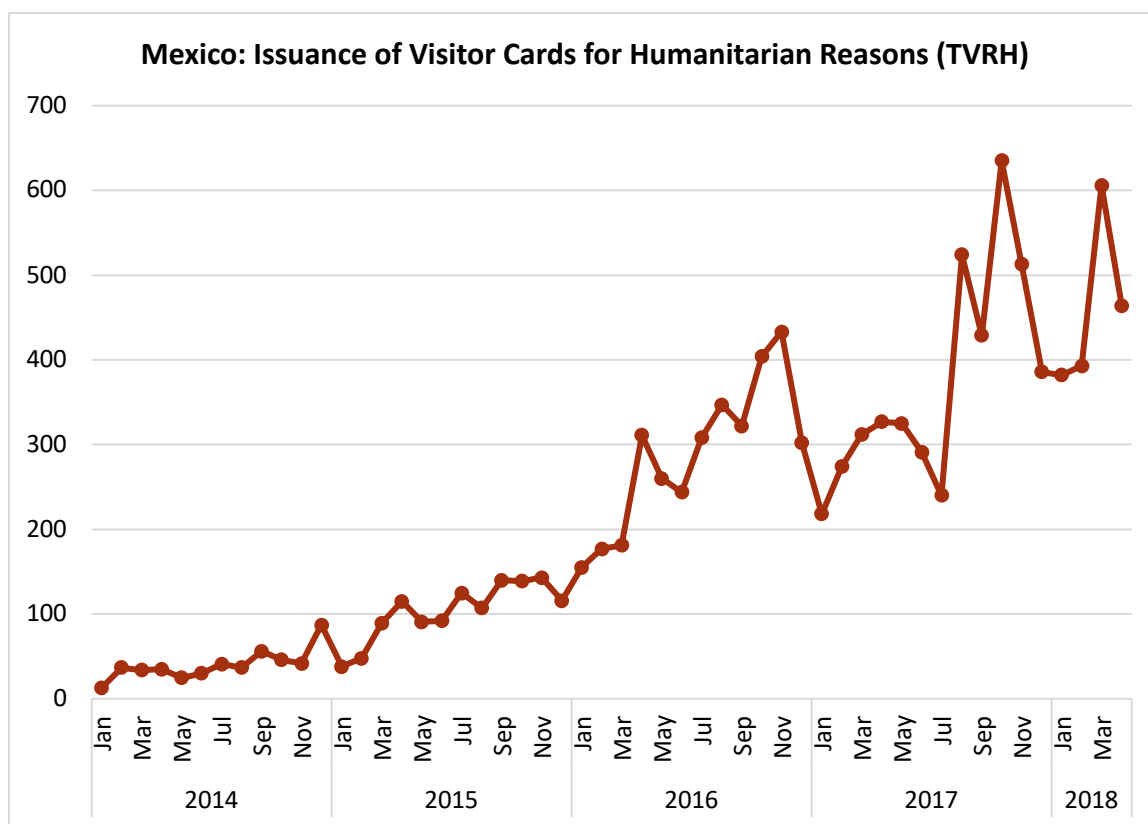
Source: Instituto Nacional de Migracion.

Figure ES-2. Mexico: Issuance of Visitor Cards for Humanitarian Reasons (TVRH)

Contents

1. Introduction

For decades, the large majority of those attempting illegal entry across the U.S.-Mexico border were adult Mexican nationals crossing between authorized ports of entry (POEs). This migrant flow has fallen dramatically in recent years due to a tightening of border security and demographic changes in Mexico. As this traditional flow was declining, a new flow began to emerge in 2011. This new flow is composed primarily of asylum seekers, including unaccompanied children (UACs), family units (FMUA: adult(s) accompanied by a child or children), and adults who claim credible fear. The vast majority of this new flow is from the Northern Triangle countries of El Salvador, Guatemala, and Honduras. These non-traditional illegal border crossers rely less on clandestine crossing of the border, and instead often request various forms of relief from removal and use the long adjudication process to secure entry into the United States for extended periods of time.

1.1. Study Questions

Customs and Border Protection (CBP) asked the Department of Homeland Security (DHS) Science and Technology Directorate (S&T) to study the Northern Triangle Migration Flow. DHS S&T funded the Center for Risk and Economic Analysis of Terrorism Events (CREATE), with assistance from the Institute for Defense Analyses (IDA), to research this non-traditional flow to gain a better understanding of its causes and likely reactions to changes in policy[1]. The specific questions directed by CBP are:

- If asylum in the United States is not an option, would this deter asylum seekers from Central America from crossing into Mexico?

- Of the migrants who are already in Mexico, how many would:

– Stay in Mexico?

– Return to their home country?

– Go elsewhere?

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[1] DHS S&T funded CREATE under a task order for the Basic Ordering Agreement to the University of Southern California/CREATE. DHS S&T established Basic Ordering Agreements with the university-based COEs. Through the BOAs, DHS components can issue task orders for research, analysis, and related services aligned with the unique expertise of the respective COEs. In FY18 $11.6M of funding was awarded through task orders under the Basic Ordering Agreements.

1.2. **Migrant Flow from the Northern Triangle to the United States**

Over many decades, almost all illegal migration over the U.S.-Mexico border consisted of Mexican nationals who were not seeking asylum. Although some positive flow of illegal migration by Northern Triangle nationals occurred prior to the 2000s, it was a small flow. This has changed dramatically over the past 15 years. Figure 1.1 shows apprehensions of Northern Triangle adults by the U.S. Border Patrol (USBP) in the U.S.-Mexico border region during October 1999–March 2017, and Figure 1.2 shows apprehensions of Northern Triangle juveniles in the same period. Apprehensions are correlated with the number of successful illegal entries and are often used to assess trends in flow. There was an initial surge of adult apprehensions in the mid-2000s, which abated after new policy measures were implemented by the U.S. government. Adult apprehensions then surged again after 2011. A significant number of these adults were asylum seekers, either as part of FMUA apprehensions, or as a single adult claiming asylum. Apprehensions of juveniles were very low during the 2000s, but also increased dramatically after 2011, and almost all of the post-2011 juveniles were UACs or part of an FMUA group and were asylum seekers. Flows from the three Northern Triangle countries have been highly correlated with each other after 2011, and they have also fluctuated dramatically.

Figure 1.3 shows apprehension series for UACs and FMUAs that have been de-seasonalized so as to more clearly reveal those fluctuations.
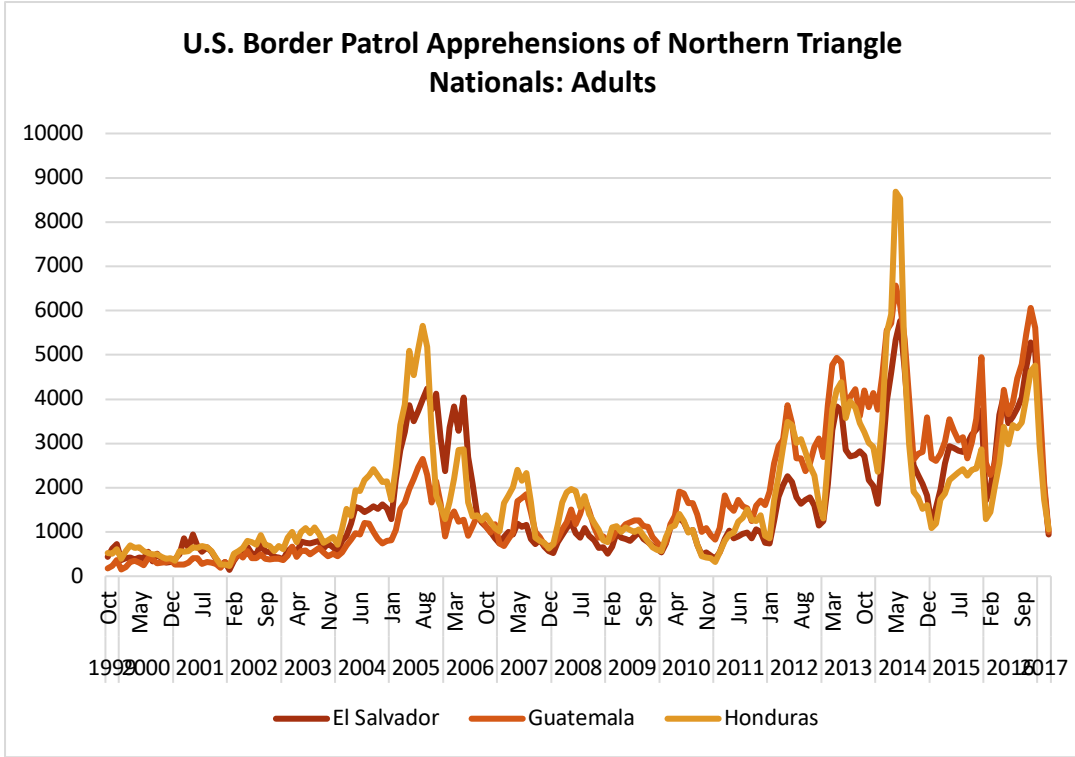
Figure 1.1. U.S. Border Patrol Apprehensions of Northern Triangle Nationals: Adults
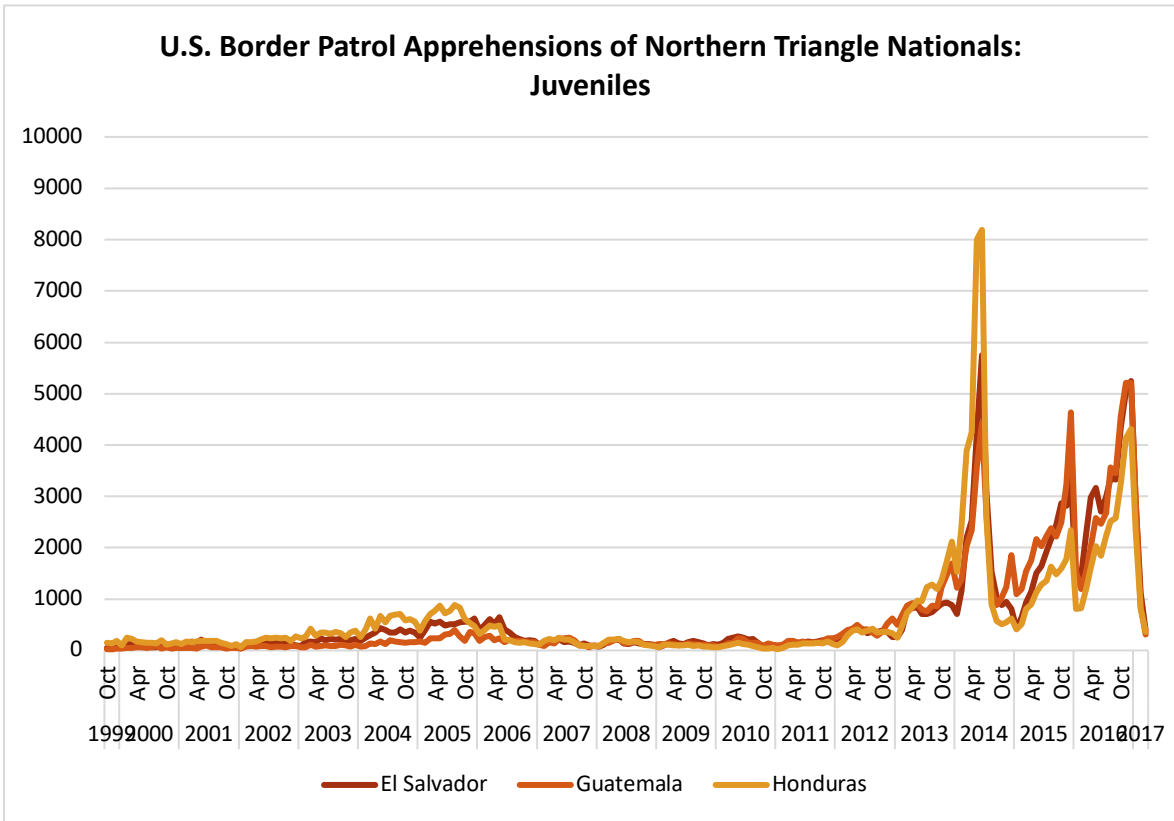
Figure 1.2. U.S. Border Patrol Apprehensions of Northern Triangle Nationals: Juveniles

Apprehensions of Unaccompanied Children and Family Member Units (deseasonalized)
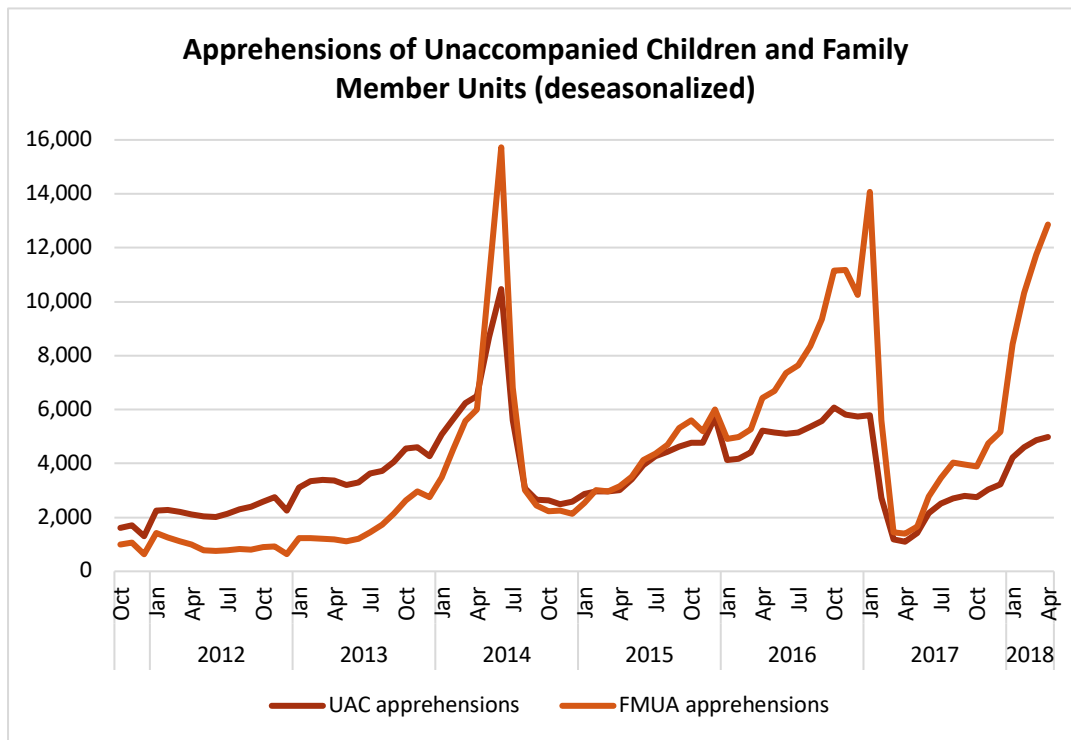
Source: USBP apprehensions. De-seasonalized using Census X-13 procedure. Unaccompanied children and family member units arriving at POEs not included.

Figure 1.3. Apprehensions of Unaccompanied Children and Family Member Units (deseasonalized)

As the surge of juvenile migrants first peaked in the summer of 2014, a debate broke out about whether these migrants were coming to the United States because of conditions in their home countries or because of U.S. policies. "Root causes" such as poverty and violence are believed by many to be the underlying cause of these flows, whereas others believe that change—or perceptions of change—in U.S. immigration policies are inducing them.

In order to answer the core research questions, this study develops a basic framework for migrant decision making (Chapter 2), presents a wide range of empirical evidence on country conditions in Western Hemisphere countries (Chapter 3), and presents data on stocks and flows of migrants both in the United States and Mexico (Chapter 4). It presents evidence on what migrants say are their reasons for migrating, and conducts a range of statistical analyses to quantify the relationship between the intention or decision to migrate and various root-cause factors, including economic conditions, crime and violence risk, and family reunification motives (Chapter 5). It evaluates the impact of border enforcement on both the Mexico-Guatemala and U.S.-Mexico borders (Chapter 6). Chapter 7 pulls together the insights gained from this analysis to evaluate the likely impacts of closing the

U.S. asylum channel. Chapter 8 concludes with a review of other recent asylum seeker surges and policies adopted in response to these surges.

The study uses data from multiple sources to carry out analysis, including U.S. government administrative records, Mexican government administrative records, the Encuesta sobre Migración en la Frontera de México (EMIF)-Sur migrant survey carried out by the Mexican research institution Departamento de Estudios Culturales del Colegio de La Frontera Norte (COLEF), and the Latin American Public Opinion Project (LAPOP) survey. Details on these data sources are given in Appendix A.

2.   Migrant Decision Making

Potential migrants will generally make decisions on whether or not to emigrate to a particular destination based on an assessment of the increase in their welfare that they can expect from moving to that destination compared to the costs of moving there. At any given point in time, a person will consider how much they can expect to increase their monetary income and enjoyment of goods and services that they do not have to pay for by emigrating, including education and safety from crime and violence. This must be contrasted with the costs of emigrating, including the need to finance the migration trip, potential risks and dangers associated with the trip, and impacts on family members left behind. Potential migrants can consider multiple destinations. In the case of Northern Triangle residents, potential destinations include the United States and Mexico.

Once someone has made the decision to migrate to Mexico or the United States, a series of decisions must be made regarding their journey to Mexico, or through Mexico to the United States. Figure 2.1 illustrates key decisions as a set of nodes in a decision tree. These decisions are sequential and proceed from the bottom of the diagram:

- The first decision must be made as the migrant comes to the Mexico-Guatemala border and decides between attempting to evade Mexican immigration enforcement and seeking asylum in Mexico.

    – If the person attempts to evade, they may be caught and returned to their home country, where they must decide whether to try to make another crossing into Mexico or quit. If they succeed, they then decide whether to reside in Mexico or continue to the U.S.-Mexico border to cross into the United States.

    – If the person applies for asylum in Mexico and succeeds in their application, they must then decide whether to reside in Mexico or continue to the U.S.-Mexico border to attempt entry into the United States. If the person's application is unsuccessful, it is not clear what happens, as it is not clear to what degree Mexico removes unsuccessful asylum applicants.

- For all migrants who transit through Mexico to the U.S.-Mexico border, they must decide whether or not to make an illegal entry by attempting to evade law enforcement authorities, or to make an asylum claim.

    – Those who attempt to evade and succeed join the unauthorized population resident in the United States.

–   Those who attempt to evade and are caught may or may not opportunistically make an asylum claim. Those who do not make a claim are returned to their home country. Those who do make a claim are processed through the asylum system.

–   Those who do not evade, self-present to enforcement authorities, and make an asylum claim are processed through the asylum system.

Choices about whether or not to emigrate to Mexico or the United States, and whether or not to evade or claim asylum in the transit and/or destination country, will be influenced by perceptions of the benefits and costs associated with each decision, and the probability of ultimately achieving successful entry into the destination country. These benefits, costs, and probabilities are reviewed in Chapters 3, 4, and 6. Evidence of how they influence the decisions of those who do and do not migrate is reviewed in Chapter 5.

One important aspect of migration-related decision making that is not explicitly depicted in Figure 2.1 but that is relevant to this study is decisions related to family separation and reunification. Some migrants heading to the U.S. or Mexico are "pioneer migrants" who, if they successfully establish themselves in the destination country, may eventually bring other family members to the destination country to reunify with them. Separation and reunification decisions are not incorporated into what is already a complicated diagram, but they are an important part of migrant household decision making.
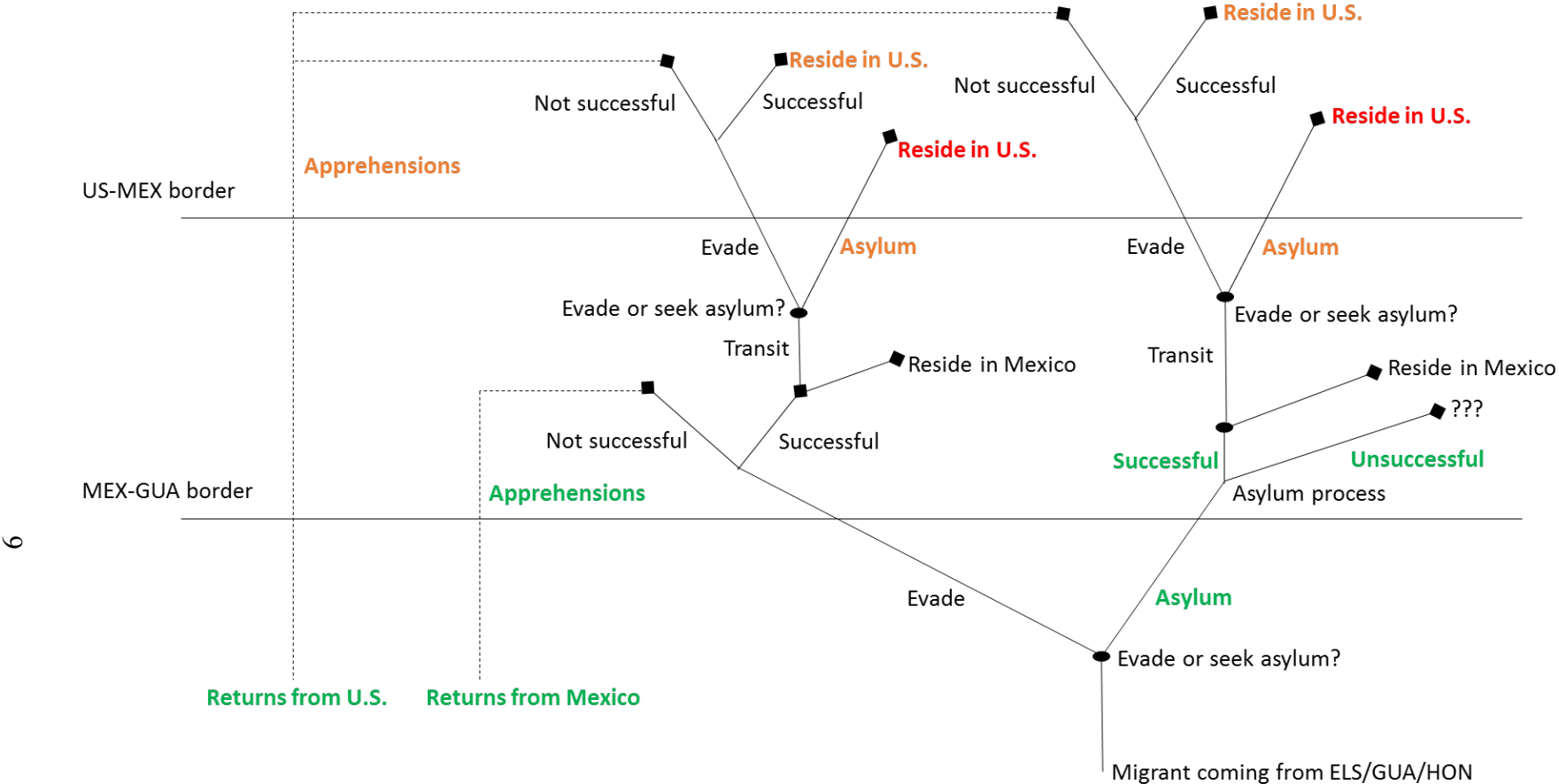
Figure 2.1. Migrant Decisions and Outcomes

3. Overview of Country Conditions

Northern Triangle migrants emigrate to the United States or Mexico because they believe that this will lead to an improvement in their lives, through earning higher incomes and enjoying a better standard of living, lowering their exposure to violence and crime, and/or reunifying with family members already in the United States. In this chapter, summary statistics on measures showing how economic well-being and crime and violence vary across Western Hemisphere countries are reviewed and discussed. The relative attractiveness of the United States and Mexico as migrant destinations can be assessed by comparing values for these measures with values for Northern Triangle countries. This overview of country conditions sets the stage for more intensive statistical analysis presented in Chapter 4.

3.1. Economic Conditions

Economic incentives to migrate are best captured by how much the migrant expects their income to increase after migrating. Data are available on national income per capita from national statistical authorities, and on wages that migrants from Northern Triangle countries actually earned in their home country, Mexico, and the United States that are collected by the EMIF migrant survey.[2]

National income (Gross Domestic Product, or GDP) per capita is a useful measure because it captures how much total income from all sources the average person can expect to earn in a country, and it is measured and reported by all countries in the Western Hemisphere. National income can be measured in either U.S. dollars or in purchasing-power-parity (PPP) dollars; the former is a better measure of the income that the average person receives, and the latter is a better measure of the living standard that the average person enjoys.[3] In migration analysis, the choice of which measure to use is complicated by the fact that money may be earned in one country (the United States) but spent in another country (transferred as a remittance to, say, El Salvador).

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[2] Ideally, an economic measure would also take into account the likelihood of being employed in the migrant's home country and destination country, but data are not available to permit this.

[3] The U.S. dollar measure converts per capita income in Mexico and the Northern Triangle countries from the country's local currency into U.S. dollars using the commercial exchange rate. The PPP dollar measure converts local-currency income values in dollar values using the purchasing power parity exchange rate, which takes into account the prices of goods and services that are not traded on international markets. It is generally accepted that comparing the living standards of two countries requires comparison of their PPP-dollar per-capita incomes.

Figure 3.1 shows the average of per-capita national income in PPP dollars during 2005–2016 for many countries in the Western Hemisphere. The Northern Triangle countries are among the poorest in the Western Hemisphere. Table 3.1 gives the ratio of average per-capita national income in the United States or Mexico to that in Northern Triangle countries. The gaps between the U.S. and Northern Triangle income levels are very large for both measures, and significantly exceed the gaps between Mexican and Northern Triangle countries. By this measure, the United States is a much more attractive destination in terms of potentially increased income than Mexico.
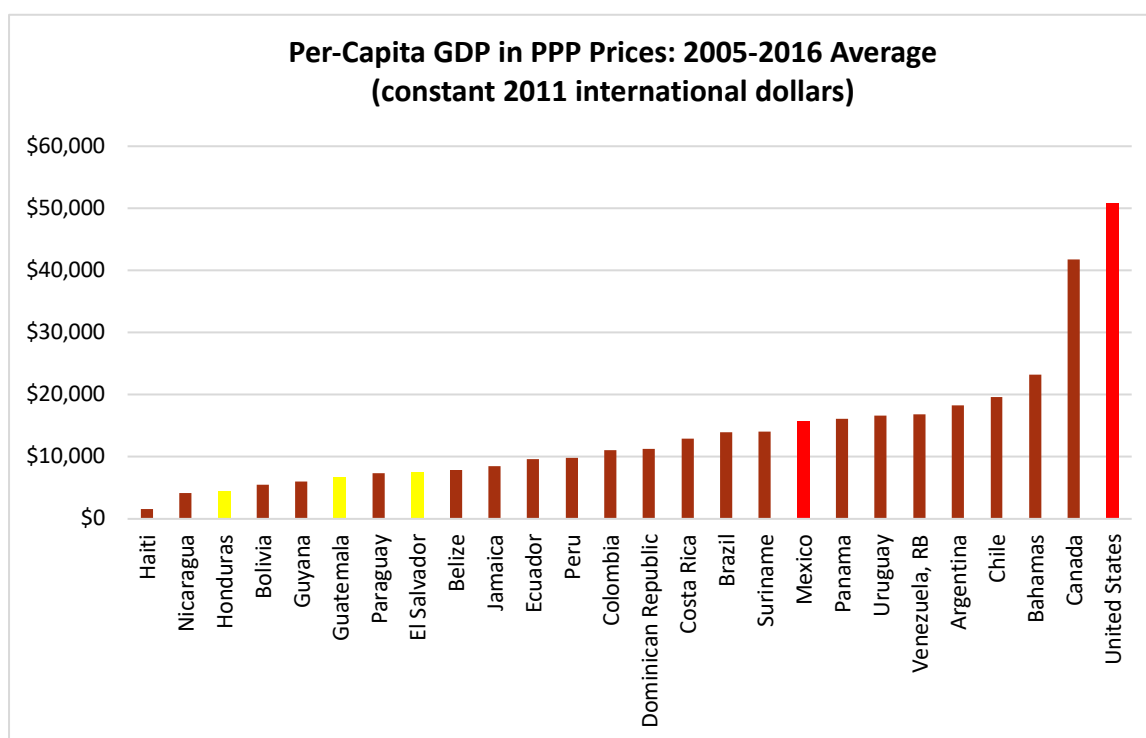

Figure 3.1. Per-Capita GDP in PPP Prices: 2005–2016 Average (constant 2011 international dollars)

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Table 3.1. Per-Capita National Income Gaps

	2008	2009	2010	2011	2012	2013	2014	2015	2016
Per capita GDP gap (current $)									
Guatemala									
U.S.	17	18	17	16	16	15	15	14	14
Mexico	3	3	3	3	3	3	3	2	2
El Salvador									
U.S.	14	14	14	13	13	14	14	14	14
Mexico	3	2	3	3	3	3	3	2	2
Honduras									
U.S.	28	26	25	23	24	25	24	24	24
Mexico	6	4	5	5	5	5	5	4	3
Per capita GDP gap (current PPP $)									
Guatemala									
U.S.	7	7	7	7	7	7	7	7	7
Mexico	2	2	2	2	2	2	2	2	2
El Salvador									
U.S.	7	7	7	7	7	7	7	7	7
Mexico	2	2	2	2	2	2	2	2	2
Honduras									
U.S.	12	12	12	12	12	12	12	12	12
Mexico	4	4	4	4	4	4	4	4	4

Source: World Development Indicators database, World Bank. Per capita GDP is GDP divided by mid-year population. Per capita PPP GDP is GDP converted to international dollars using purchasing power parity exchange rates. An international dollar has the same purchasing power over GDP as the U.S. dollar has in the United States.

However, for several reasons, national income comparisons only imperfectly capture the true economic improvement that a migrant can expect to achieve.[4] First, GDP is a measure of all recorded income flows in an economy. Developing countries usually have large informal sectors that are not captured in national income statistics, and these sectors tend to account for an increasing percentage of activity the poorer a country is in terms of measured income. Available evidence suggests that Northern Triangle countries have a higher informal-economy share than Mexico and the United States.[5] Second, GDP is

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[4] National income reflects what the average person in each country receives, and migrants from Northern Triangle countries will likely earn incomes less than the national average in both the United States and Mexico given their likely occupations, levels of human capital, and other socio-economic factors. National income also includes all sources of income, including wages and salaries but also rental incomes, income from investments (e.g. stocks and bonds), and other types of income. The income of Northern Triangle migrants in the United States and Mexico will consist primarily of wage/salary income, so comparison of wages/salaries in the home and destination country is the appropriate comparison.

[5] Estimates of the share of the shadow economy in total GDP developed by Andreas Buehn and Friedrich Schneider, "Shadow Economies Around the World: Novel Insights, Accepted Knowledge,

composed of different types of income, including wages and salaries (the biggest component), profits, rents, etc. Non-wage income is likely a relatively higher percentage of national income in the United States and Mexico than in Northern Triangle countries, as the U.S. and Mexican economies are more developed than Northern Triangle economies. Differences in the size of the shadow economy and weight of wage/salary income will cause divergence in GDP ratios that is misleading in terms of relative wages.

Third, and perhaps most importantly, even if per capita GDP ratios accurately reflect relative wage ratios, they reflect the ratio of the *average* wage in each country across all workers and all sectors. However, the average Northern Triangle migrant will not earn the average wage of the country to which they are migrating: migrants usually work in particular sectors of the host economy, and they usually have a different average level of education, skills, etc. A better measure to capture the income gain that a migrant can expect to experience from migrating is the wage in the destination country that they expect to earn compared to the wage in the home country that they have actually earned. The EMIF-Sur survey collects data on wage earned in a migrant's home country and in a destination country that they had previously been in and permits evaluation of actual wage outcomes for Northern Triangle migrants. Details on the data and how wage gaps are calculated are given in Appendix A. Table 3.2 summarizes the key findings on wage gaps. Migration to Mexico can be expected to produce a quite modest average increase in a migrant's wage, on the order of 10 percent. As will be discussed more below, this modest increase generally will not justify the costs involved with migrating, at least in terms of improved economic welfare. In contrast, migration to the United States will on average lead to a very large increase in a migrant's wage, by 13 or 14 times. Economic incentives alone will justify incurring large costs to migrate from a Northern Triangle country to the United States.

Table 3.2. EMIF-Sur Average Wage Gaps

	Guatemala	El Salvador	Honduras
Average ratio of Mexico wage to home-country wage	1.1	1.1[A]	1.1
Average ratio of U.S. wage to home-country wage	12.9	N/A	14.0

Source: see Table A.4 in Appendix A.

A: average of two values for Mexico-El Salvador wage gap given in Table A.3.

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and New Estimates," *International Tax and Public Finance* 19, no.1 (2012): 139–71, suggest that this share was roughly 9 percent on average during 1999–2007 in the United States, 30 percent in Mexico, 45 percent in El Salvador, 51 percent in Guatemala, and 48 percent in Honduras (see table 3 of their paper.)

3.2. Crime and Violence Conditions

The flow of asylum seekers from Northern Triangle countries to the United States is often characterized as being primarily motivated by high levels of crime and violence in those countries, and that people are fleeing situations in which they are in imminent danger of being harmed or killed. Developing an accurate picture of crime and violence conditions in these countries is thus of critical importance for analysis of this flow and how it might develop over time. There are two key sources of statistical information on crime and violence in Western Hemisphere countries: murder rates, which have been widely reviewed and discussed, and LAPOP, which has not.
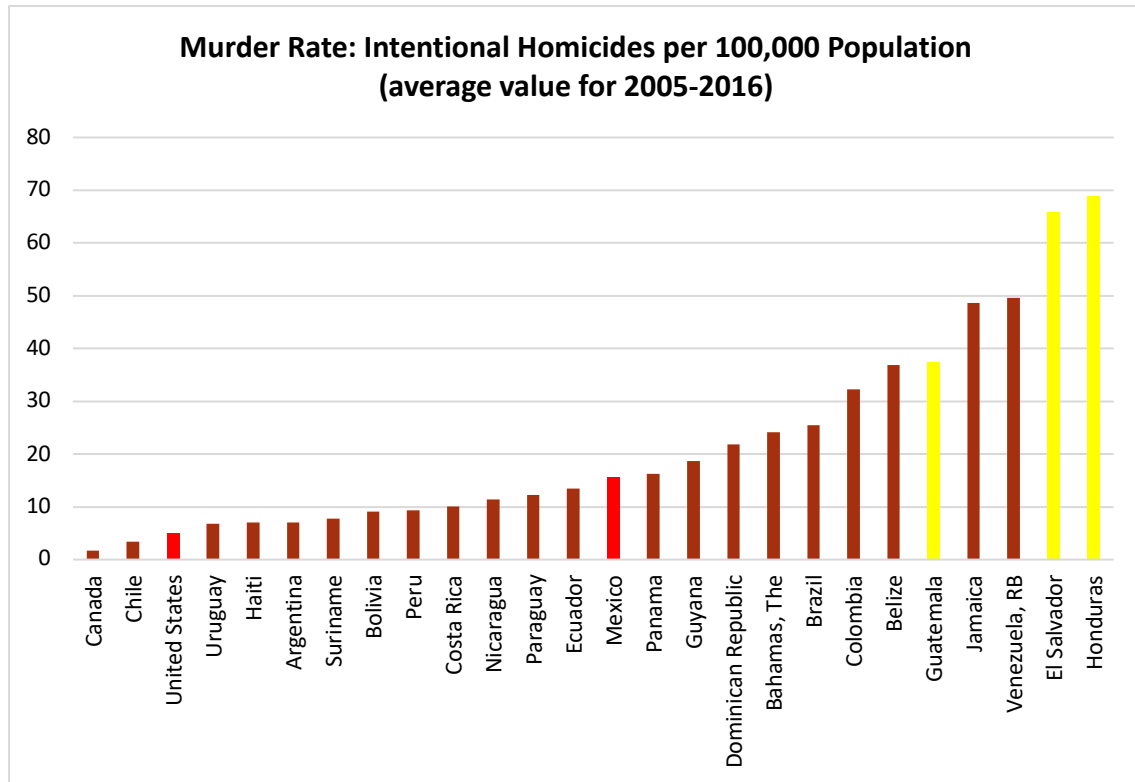
3.2.1. Murder Rates

The standard measure used to illustrate country conditions with respect to crime and violence is the murder rate, or intentional homicides per 100,000 population. Statistics on homicides are collected by all law enforcement agencies and made readily available to the public, and homicides are believed to be reported at much higher rates than other crimes.[6] Figure 3.2 shows the average value of the murder rate during 2005–2016 for Western Hemisphere countries. Honduras and El Salvador have had a significantly higher average murder rate than all other countries, and all Northern Triangle countries have significantly higher average murder rates than Mexico and the United States.

Figure 3.3 shows the evolution of the murder rate in the Northern Triangle countries, Mexico, and the United States during 1995–2016. El Salvador and Honduras have generally had the highest murder rates in the Western Hemisphere for over two decades, and there has been no obvious long-run trend in their rates. El Salvador's rate was the highest in the world in 1995 but fell dramatically through 2000, and it has fluctuated significantly since then. Honduras' rate rose significantly during 2007–2011 and then fell significantly through 2016. Guatemala's rate, which has always been lower than its neighbors, rose in the 2000s, stabilized in the late 2000s, and has fallen steadily from 2009 to 2016. Mexico's rate fell from 1995 to 2007 but then rose significantly as violence related to drug trafficking broke out. Although difficult to discern in the figure, the U.S.' rate fell significantly in the late 1990s and stabilized around the third-lowest rate in the Western Hemisphere.

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[6] Homicides are believed to usually be reported to law enforcement, and the solving of homicide cases is usually a law enforcement agency's top priority, given the severity of the crime. Other types of crime, such as assaults, rapes and other crimes of a sexual nature, robberies, burglary, and larceny are believed to be reported to and detected by law enforcement agencies at lower rates. For this reason, governments sometimes carry out victimization surveys that seek to better measure true crime rates. In the United States, the National Crime Victimization Survey has been carried out since 1972 and provides insight into the degree of under-reporting. See, Albert D. Biderman, James P. Lynch, and James L. Peterson, *Understanding Crime Incidence Statistics: Why the UCR Diverges from the NCS* (New York, NY: Springer, 1991).

Murder Rate: Intentional Homicides per 100,000 Population (average value for 2005-2016)

Source: World Development Indicators database.

Figure 3.2. Murder Rate: Intentional Homicides per 100,000 Population (average value for 2005-2016)

**Intentional Homicides per 100,000 Population:
Northern Triangle Countries, Mexico, and United States**
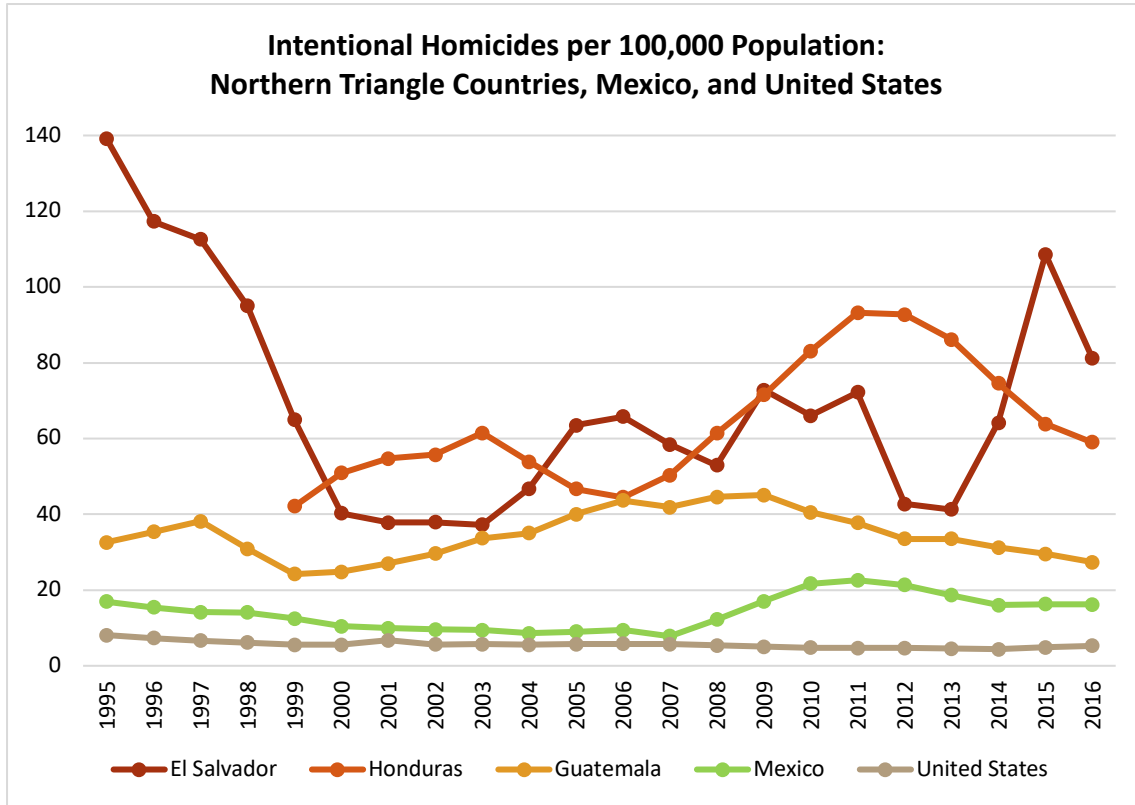
Source: World Development Indicators database.

Figure 3.3. Intentional Homicides per 100,000 Population: Northern Triangle Countries, Mexico, and United States

Exposure to homicide risk varies significantly across gender and age groups. Table 3.3 gives the murder rate broken down by gender and age group in Honduras for a peak murder-rate year (2012) and a more recent lower murder-rate year (2015). The risk of being murdered is much lower for females than males, and the risk increases dramatically from the early teen years to the late teen years, peaks in the late twenties, and remains high throughout adulthood.

Table 3.3. Homicide Rate in Honduras by Gender and Age Group (homicides per 100,000 population)

Age Group	2012		2015	
	Male	Female	Male	Female
0-4	6	2	5	3
5-9	2	1	2	1
10-14	12	5	10	2
15-19	164	16	122	16
20-24	348	21	249	20
25-29	423	30	305	20
30-34	401	28	278	26
35-39	334	26	220	18
40-44	282	26	207	13
45-49	272	27	176	20
50-54	176	22	131	15
55-59	186	15	152	12
60-64	135	8	100	11
65+	74	10	55	9

Source: Number of homicides obtained from Table 4, UNAH-Instituto Universitario de Democracia, Paz y Seguridad, "Observatorio de la Violencia," bulletins for January-December 2012 and 2015. Population by gender and age group is for 2013 and is obtained from Instituto Nacional de Estadistica, 17th Census of Population and Housing (2013).

3.2.2. Survey Data on Exposure to and Perception of Crime

Other crimes are often mentioned with regard to underlying conditions in the Northern Triangle countries. Assaults, extortion, robbery, rape, and other sexual crimes are believed to play an important role in affecting decisions such as whether or not to emigrate, and they are often associated with extensive gang activity in these countries. Although administrative government data on these crimes are sometimes collected and reported, it is believed that these crimes are significantly underreported, and the degree to which cross-country comparisons of these crime rates would be meaningful and informative is not clear.[7]

LAPOP provides a valuable source for data on exposure to and perception of crime conditions to compensate for challenges with the government-collected administrative data

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[7] For example, Honduras collects and reports data on the results of medical examinations of victims of assault and sexual crimes, which are reported by the General Directorate of Forensic Medicine, not a law enforcement agency. These data understate the true number of these crimes, as some victims will not undergo a medical examination. Underreporting of assault and sexual crimes is present in the United States as well. In order to meaningfully compare crime rates between countries, the degree of underreporting must somehow be controlled for. This might be possible using victimization surveys, but these surveys are not available for Northern Triangle countries.

on crime. The LAPOP survey has been conducted biannually since 2004 in most countries of the Western Hemisphere (see Appendix A for details on the survey and its methodology). It asks a nationally representative sample of adults aged 17 or older a wide range of questions on their socio-demographic characteristics, economic situation, crime and safety conditions, political attitudes, and other variables. Although the set of questions asked varies from country to country and year to year, a stable set of core questions has been asked since 2004 in a broad set of countries.

The survey asks many questions related to crime and safety, particularly in recent years and in the Northern Triangle countries. We focus here on reporting the following results for this set of questions:

- Vicbar1: % answering "Yes" to the question "Were there burglaries in the last 12 months in your neighborhood?"

- Vicbar3: % answering "Yes" to the question "Have there been sales of illegal drugs in the past 12 months in your neighborhood?"

- Vicbar4: % answering "Yes" to the question "Has there been any extortion or blackmail in the past 12 months in your neighborhood?"

- Vicbar7: % answering "Yes" to the question "Have there been any murders in that last 12 months in your neighborhood?"

- iarea7: % answering "A little", "Some", or "A Lot" to the question "To what extent would you say that the area around your home is affected by people arguing in an aggressive or violent way (speaking in a very loud voice, with anger)?"

- aoj11: % answering "Somewhat Unsafe" or "Very Unsafe" to the question "Speaking of the neighborhood where you live and thinking of the possibility of being assaulted or robbed, do you feel very safe, somewhat safe, somewhat unsafe, or very unsafe?"

- aoj17: % answering "A Lot" or "Some" to the question "To what extent do you think your neighborhood is affected by gangs? Would you say a lot, somewhat, a little, or none?"

Table 3.4 gives the relevant percentage of responses, which presumably indicate a significant crime or violence risk, to these questions for the most recent year available (2014 or 2016). This table includes all adults responding to the survey. The LAPOP survey does not include responses from children or teenagers, who comprise a significant part of the asylum-seeker flow to the United States. Because teenagers are likely to face similar conditions and hold similar perceptions to those of young adults, Table 3.5 gives these percentages for only those respondents in the 17–24 year-old age group.

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In contrast to murder rate data, which suggest that the Northern Triangle countries define the upper bound of crime risk in the Western Hemisphere, these data do not suggest that the Northern Triangle countries are unusually different with respect to crime and violence in comparison with other countries in Latin America and the Caribbean. Many countries are quite comparable with the Northern Triangle countries with respect to perceived presence of various types of criminal activity and aggressive behavior in one's neighborhood, risk of assault and robbery, gang presence, and actual criminal victimization. Comparison of Table 3.4 and Table 3.5 also suggests that these evaluations are typically similar between the groups of all respondents and young-adult respondents only.[8]

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[8] There are a few instances of significant differences, the most notable of which is that young adults in Honduras are somewhat more likely to perceive criminal activity in their neighborhood (captured by the vicbar1-7 questions).

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Table 3.4. LAPOP Responses – All Ages

	Vicbar1	Vicbar3	Vicbar4	Vicbar7	iarea7	Aoj11	Aoj17	Vic1ext
	Presence in last 12 months of activity in neighborhood:				Significant neighborhood presence of:			
Survey question:	Burglaries	Illegal drug sales	Extortion, blackmail	Murders	Aggressive behavior	Risk of assault, robbery	Gangs	Victim of crime
Survey year:	2014	2014	2014	2014	2016	2016	2014	2016
Mexico	55%	41%	18%	23%	13%	44%	35%	32%
Guatemala	41%	21%	23%	29%	11%	49%	31%	24%
El Salvador	38%	23%	23%	25%	5%	37%	39%	23%
Honduras	38%	34%	13%	29%	10%	43%	19%	22%
Nicaragua	51%	34%	1%	16%	10%	26%	21%	18%
Costa Rica	45%	58%	8%	11%	9%	32%	25%	22%
Panama	46%	34%	10%	27%	14%	33%	58%	16%
Colombia	55%	43%	15%	27%	26%	49%	31%	25%
Ecuador					6%	48%	29%	30%
Bolivia					10%	53%	26%	29%
Peru	57%	28%	9%	15%	6%	55%	33%	31%
Paraguay	45%	21%	15%	13%	3%	49%	22%	24%
Chile					12%	35%	33%	22%
Uruguay	69%	47%	3%	12%	2%	43%	26%	23%
Brazil	70%	65%	19%	51%	8%	52%	29%	24%
Venezuela				65%[A]	17%	67%	50%	40%
Argentina	72%	51%	9%	14%	6%	55%	36%	28%
Dominican Republic	72%	56%	24%	34%	25%	61%	43%	26%
Haiti	33%	7%	24%	19%	19%	54%	16%	22%
Jamaica	35%	21%	4%	25%	13%	26%	14%	11%
Guyana	31%	35%	2%	12%		30%[B]	13%	7%[B]
Trinidad and Tobago	33%	54%	7%	30%		19%[B]	24%	12%[B]
Belize	38%	42%	4%	18%		34%[B]	22%	14%[B]
Suriname	38%	26%	4%	7%		38%[B]	29%	10%[B]
Bahamas	28%	32%	12%	25%		16%[B]	22%	10%[B]
Barbados	27%	49%	6%	11%		9%[B]	12%	8%[B]
United States						13%	16%	13%
Canada						7%	15%	11%

Source: Tabulations of LAPOP data files for the 2014 and 2016 surveys.

A: 2016 value; B: 2014 value.

Table 3.5. LAPOP Responses – 17–24 Year-Old Respondents Only

	Vicbar1	Vicbar3	Vicbar4	Vicbar7	iarea7	Aoj11	Aoj17	Vic1ext
	Presence in last 12 months of activity in neighborhood:				Significant neighborhood presence of:			
Survey question:	Burglaries	Illegal drug sales	Extortion, blackmail	Murders	Aggressive behavior	Risk of assault, robbery	Gangs	Victim of crime
Survey year:	(2014)	(2014)	(2014)	(2014)	(2016)	(2016)	(2014)	(2016)
Mexico	58%	44%	18%	24%	13%	40%	39%	33%
Guatemala	46%	24%	23%	31%	11%	42%	30%	21%
El Salvador	37%	25%	18%	26%	6%	30%	39%	24%
Honduras	44%	44%	20%	36%	11%	41%	24%	26%
Nicaragua	62%	39%	2%	18%	9%	25%	26%	20%
Costa Rica	47%	62%	11%	11%	7%	30%	31%	27%
Panama	45%	31%	10%	24%	14%	32%	60%	17%
Colombia	56%	44%	13%	28%	28%	46%	34%	29%
Ecuador					5%	42%	30%	31%
Bolivia					8%	49%	29%	37%
Peru	58%	32%	9%	17%	5%	46%	33%	37%
Paraguay	48%	22%	16%	14%	2%	43%	22%	25%
Chile					15%	35%	37%	24%
Uruguay	72%	60%	5%	15%	3%	44%	31%	24%
Brazil	72%	66%	20%	53%	8%	50%	30%	31%
Venezuela				70%[A]	22%	63%	54%	52%
Argentina	76%	54%	14%	19%	5%	42%	33%	27%
Dominican Republic	69%	53%	30%	33%	27%	64%	46%	34%
Haiti	34%	7%	27%	15%	18%	56%	17%	22%
Jamaica	37%	21%	6%	28%	13%	32%	20%	13%
Guyana	34%	35%	5%	14%		32%[B]	15%	7%[B]
Trinidad and Tobago	33%	58%	7%	30%		18%[B]	23%	12%[B]
Belize	39%	40%	6%	20%		33%[B]	26%	14%[B]
Suriname	43%	33%	5%	9%		41%[B]	34%	8%[B]
Bahamas	33%	40%	15%	29%		18%[B]	30%	11%[B]
Barbados	31%	54%	9%	13%		11%[B]	16%	10%[B]
United States						20%	23%	16%
Canada						10%	23%	21%

Source: Tabulations of LAPOP data files for the 2014 and 2016 surveys.
A: 2016 value; B: 2014 value.

In terms of comparison of crime and violence conditions in Northern Triangle countries with the potential destination countries of Mexico and the United States, the LAPOP data suggest that Mexico is generally roughly comparable to the Northern Triangle countries. Although data for the United States are available for only three questions, responses indicate that the United States is a significantly safer destination.

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The LAPOP data present an important challenge to the widely held perception that the Northern Triangle countries are the most dangerous in the Western Hemisphere. This challenge can be illustrated by Figure 3.4, which compares the murder rate and the percentage of people answering "yes" to the LAPOP question on whether there were murders in their neighborhood in the past year (vicbar7). A significant statistical correlation exists between these two measures, but there are also outliers.[9] Most importantly, the Northern Triangle "yes" percentages are between 25 percent and 30 percent and thus tightly clustered, even though the murder rate varies enormously across them, from 31 to 75 homicides per 100,000.
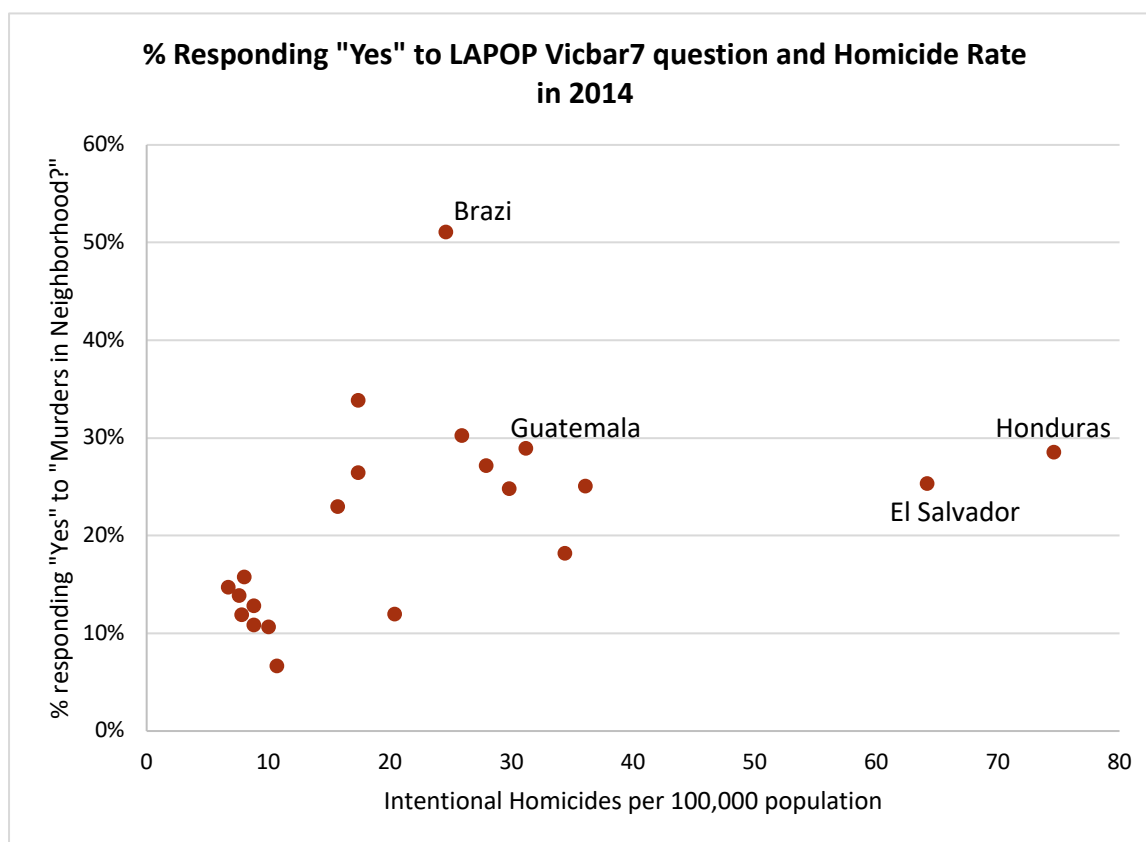
Figure 3.4. Percent Responding "Yes" to LAPOP Vicbar7 question and Homicide Rate in 2014

It is also important to assess trends in responses to these LAPOP questions. Although many of the LAPOP questions related to crime and violence have not been asked over a long period of time, some have, including the questions aoj11 (risk of assault or robbery) and aoj17 (gang presence). Table 3.6 shows the percentage of respondents answering "somewhat unsafe" or "very unsafe" to aoj11. The percentage for El Salvador does not

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9   The linear regression associated with Figure 3.4 has an adjusted R^2 of 0.15, and the coefficient on the murder rate is significant at the 5 percent level.

have any discernible trend. The percentages for Guatemala and Honduras rose significantly during 2012–2016, but this was true for many countries. Table 3.7 shows the percentage answering "a lot" or "some" to aoj17. There was a significant rise in the percentage for El Salvador after 2008, but some other countries reported significantly higher percentages than El Salvador. Guatemala is quite comparable to the Western Hemisphere average, and Honduras is often lower than the average. A dramatic rise in crime and violence conditions in Northern Triangle countries is not apparent in these data.

Table 3.6. Percent Answering "Somewhat" or "Very Unsafe" to LAPOP Question aoj11

	2004	2006	2008	2010	2012	2014	2016	Change: 2012–16
Belize			26%	45%	31%	34%		
Bolivia		51%	47%	43%	39%	55%	53%	14%
Brazil			33%	31%	28%	43%	52%	23%
Chile		46%	49%	34%	30%	37%	35%	5%
Colombia	38%	37%	34%	34%	33%	43%	49%	17%
Costa Rica	38%	48%	27%	25%	30%	49%	32%	2%
Ecuador	35%	45%	40%	37%	38%	35%	48%	9%
El Salvador	42%	47%	39%	50%	43%	46%	37%	-5%
Guatemala	42%	44%	37%	38%	31%	40%	49%	17%
Honduras	37%	35%	38%	26%	23%	34%	43%	20%
Jamaica			21%	23%	14%	17%	26%	13%
Mexico	35%		35%	41%	37%	47%	44%	7%
Nicaragua	43%		29%	37%	29%	39%	26%	-3%
Panama	45%	36%	27%	27%	19%	33%	33%	14%
Peru		67%	55%	58%	50%	60%	55%	5%
Uruguay		45%	43%	34%	32%	42%	43%	11%
Venezuela		45%	42%	50%	44%	67%	67%	24%
Dominican Republic		50%	33%	44%	39%	56%	61%	23%
Haiti			44%	30%	40%	40%	54%	14%
United States			11%	8%	12%	15%	13%	0%
Canada			10%	9%	9%	8%	7%	-1%

Source: Tabulations of the LAPOP "Grand Merge" file (2004–2014) appended with the 2016 data file.

Table 3.7. Percent Answering "A Lot" or "Some" to LAPOP Question aoj17

	2004	2006	2008	2010	2012	2014	2016
Belize			22%	36%	27%	22%	
Bolivia				42%	39%	26%	
Brazil				37%	39%	29%	
Chile			41%		30%	33%	
Colombia	28%	29%	34%	33%	37%	31%	
Costa Rica	31%	36%	24%	34%	34%	25%	
Ecuador		29%	31%	29%	39%	29%	
El Salvador	25%	24%	20%	36%	34%	39%	40%
Guatemala	31%	46%	27%	26%	33%	31%	36%
Honduras		17%	25%	28%	27%	19%	23%
Jamaica				23%	21%	14%	28%
Mexico	36%		41%	44%	34%	35%	
Nicaragua	22%		24%	30%	26%	21%	
Panama	35%		30%	49%	44%	58%	
Peru		41%	34%	43%	37%	33%	
Uruguay		36%		35%	35%	26%	
Venezuela				56%	46%	50%	
Dominican Republic		38%		45%	50%	43%	
Haiti				21%	21%	16%	
United States				18%	17%	16%	
Canada				16%	15%	15%	

Source: Tabulations of the LAPOP "Grand Merge" file (2004–2014) appended with the 2016 data file.

On the surface, there appears to be a contradiction between the country murder rate data (showing El Salvador and Honduras to be outliers) and the LAPOP data (showing them to be similar to many other countries in the region). It is unlikely that either data set is seriously flawed. Homicides are believed to be the most reliable crime data collected by law enforcement agencies, and refinement of these data usually only results in increases to the murder rate (because unknown homicides become known to law enforcement and included in the data). The LAPOP survey is a major focal point for collection of systematic data in Western Hemisphere countries and is implemented by a consortium of universities with the financial support of the U.S. government. A great deal of attention is placed on ensuring that survey samples are nationally representative and that survey questionnaires are well-designed and implemented.

One potential criticism of the LAPOP questions is that they are on perceptions of rates and risks, and different populations may form different norms and understandings of what objective risks correlate to subjective categories such as (for example) "A Lot," "Somewhat," "A Little," and "None." A Honduran, for example, may have a different understanding of what a "somewhat unsafe" neighborhood is with respect to the risk of

assault or robbery than a Canadian (with the exception of vic1ext). However, it is not clear whether this potential problem is material. These questions are carefully specified and avoid vagueness. Vicbar1 through 7 ask only whether an activity was present in a neighborhood, not the degree to which is was present. Vic1ext is a factual question about whether the person had been an actual victim of crime. Only iarea7, aoj11, and aoj17 ask about degrees of perceived risk and are thus subject to more concern about perception norms. However, the risk or phenomenon that these three questions ask about is fairly specific, and it is not clear that there would be systematic differences in understanding of what constitutes a low risk versus a high risk across countries.

There is also a logical problem if there are systematic differences in perception norms on these crime/violence questions, and Northern Triangle migrants want to migrate to escape crime and violence. If Northern Triangle migrants report low perceived risks in their neighborhoods but they want to migrate to countries with lower objective risks, then they must be aware of these lower objective risks. That raises a logical inconsistency, as they should base their perceptions of home-country risk taking into account their knowledge of destination-country risk.

Appendix C carries out regression analysis to evaluate if there are systemic differences across countries in perceptions of neighborhood safety risk after controlling for individual characteristics and year fixed effects and finds that there are substantial differences that accord well with *a priori* expectations. Panel regression analysis is also carried out to evaluate whether the average value of neighborhood safety perception at the department level in the Northern Triangle countries normalizes after a shock to the average value of those reporting being victimized by crime in the last 12 months and finds that normalization is not occurring. These logical arguments and empirical analysis suggest that the crime perception data collected by LAPOP convey meaningful information about the true crime risk that people actually face.

It is also possible that both data sets are correct and the apparent contradiction can be reconciled by a more detailed examination of the distribution of crime within countries. Both the data sets used above provide national averages, but crime rates tend to very significantly within countries. Even in the United States, some cities have murder rates almost as high as El Salvador and Honduras (e.g., St. Louis, Missouri and Baltimore, Maryland both have murder rates over 50 per 100,000), while Chula Vista, California has the lowest rate of all cities with at least 250,000 people, with less than one murder per 100,000.[10] It is possible that many of the murders in Northern Triangle countries are concentrated among specific groups (e.g., gangs and criminal elements) and parts of the

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[10] "Rate of homicides in U.S. cities with populations greater than 250,000 in 2016 (per 100,000 residents)," Statista, https://www.statista.com/statistics/718903/murder-rate-in-us-cities-in-2015/.

country, meaning that the broader population is less affected by the extreme murder rates and explaining why these countries are not outliers in the LAPOP data.

Figure 3.5 shows the frequency distribution of ***non-zero*** murder rates across El Salvadoran and Honduran municipalities and U.S. cities and towns in 2016.[11] U.S. cities and towns are highly concentrated into low murder rates as compared to El Salvadoran and Honduran municipalities; for cities and towns or municipalities with non-zero murder rates, almost 90 percent have murder rates greater than 0 and less than 30 per 100,000, whereas only 27 percent of El Salvadoran/Honduran municipalities have murder rates at these levels.
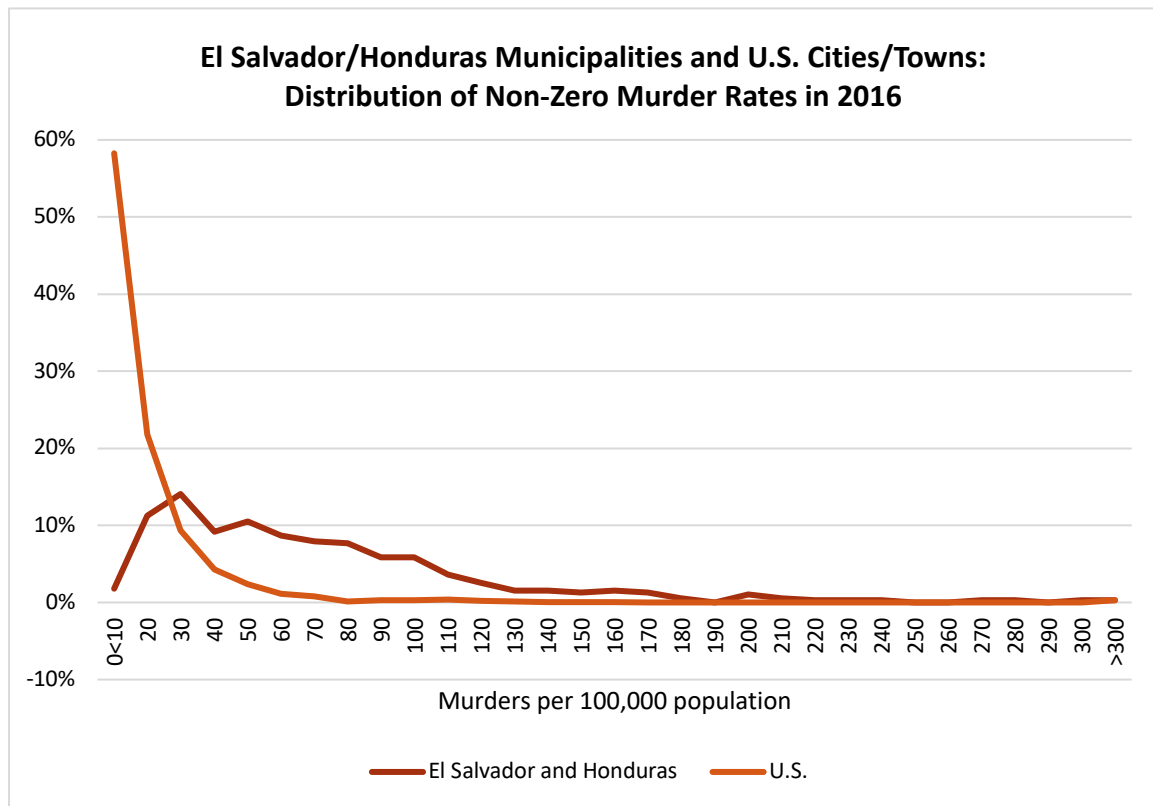
Source: Murder rates for U.S. cities and towns calculated using data from FBI, Uniform Crime Reports, Violent Crime – Table 6. Murder rates for El Salvadoran and Honduran municipalities calculated from data described in Chapter 5, Section 5.5.2.

Figure 3.5. El Salvador/Honduras Municipalities and U.S. Cities/Towns: Distribution of Non-Zero Murder Rates in 2016

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[11] Zero murder rates are excluded. Cities/towns in the United States with 0 murders in 2016 accounted for 80 percent of all cities/towns, and municipalities in El Salvador and Honduras with 0 murders in 2016 accounted for 11 percent of all municipalities.

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This introduces two important questions about the hypothesis that violence is a primary driver of the Northern Triangle migrant surge to the United States:

1. Are the migrants disproportionately coming from the most dangerous communities in Northern Triangle countries?

2. If so, why make a costly (financially and culturally) move to the United States, when a lower-cost within-country move could significantly improve safety?

Chapter 5 will provide analysis relevant to question 1. We are not aware of any research into the degree of internal migration in Northern Triangle countries and the role of crime and violence in bringing it about. Figure 3.5 suggests that there is considerable variance in murder rates across communities in Northern Triangle countries, and someone could reduce their exposure to crime and violence by moving to a different place in their home country. It is likely the case that moving from a community in El Salvador or Honduras with a high murder rate to one with a low murder rate is costly. The important question, however, is whether such a move is less costly than making an international trip to the United States. If high levels of crime and violence are producing a mass exodus of people from the Northern Triangle, it should also be producing significant internal migration.[12]

3.2.3. Illegal Drug Trafficking and Crime

Northern Triangle countries are often characterized as major transit corridors for flows of illegal drugs from South America to North America (primarily of cocaine), and a significant amount of crime and violence is associated with this flow.[13] It is difficult to assess this hypothesis using crime statistics, because it is not possible to establish a motive for many murders in these countries.[14] Recent data on suspected illegal drug flow events

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[12] We have not been able to identify any recent analysis of internal migration, or data that can be used to analyze internal migration. Andrew R. Morrison, "Violence or Economics: What Drives Internal Migration in Guatemala?," *Economic Development and Cultural Change* 41, no. 4 (1993): 817–31, uses data from the 1981 Guatemalan national census to analyze internal migration in Guatemala in the late 1970s and finds that both violence and economic variables significantly explained internal migration. Honduras conducted a census in 2013 but has not made microdata files available for research use. Guatemala last conducted a census in 2002, and it is not clear if microdata files are available for research use. El Salvador last conducted a census in 2007 and has made microdata files available, and research could presumably be done with these data to assess the impact of violence if data on explanatory economic and crime/violence variables are available at the level of states and/or municipalities in that year.

[13] See, for example, Jonathan T. Hiskey et al., "Leaving the Devil You Know: Crime Victimization, U.S. Deterrence Policy, and the Emigration Decision in Central America," *Latin America Research Review* 53, no. 3 (forthcoming), 7–8.

[14] Murders are reported broken down by underlying motive for Honduras, for example, but roughly half of all murders are reported as "without data" with regard to motive, and many of the remaining murders are reported as being due to a "settling of accounts," which is ambiguous (see UNAH-Instituto Universitario de Democracia, Paz y Seguridad, "Observatorio de la Violencia" bulletins).

involving the movement of cocaine from South America raises questions about the relationship between this flow and crime in the Northern Triangle. Figure 3.6 shows data on individual suspected flow events ("non-commercial maritime events") in 2016 that were mapped by the U.S. Coast Guard. The large majority of events seem to go from South America to Guatemala and Mexico, and relatively few to Honduras and El Salvador. Given that Guatemala's murder rate is significantly lower than that of Honduras and El Salvador, it is not clear to what degree illegal drug flow is responsible for high rates of violent crime in the Northern Triangle.[15]
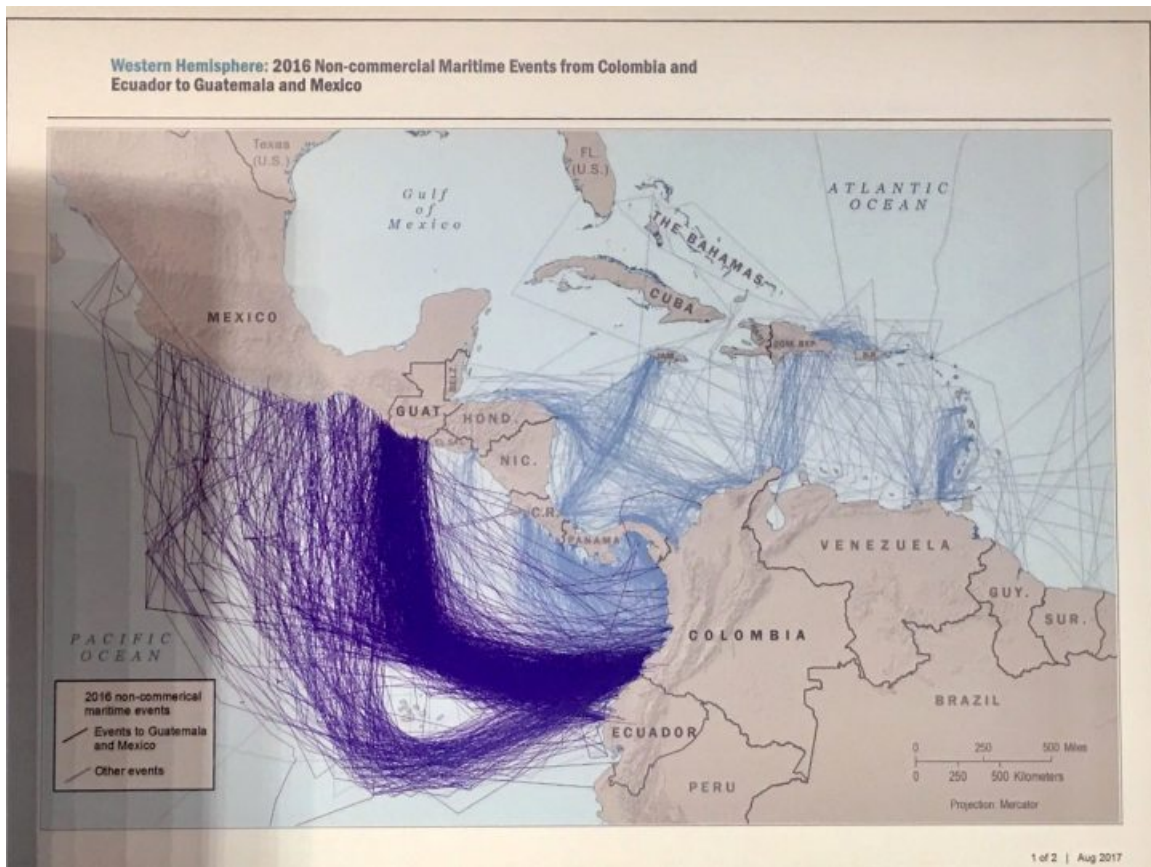
Source: U.S. Senate Caucus on International Narcotics Control hearing, "Adapting U.S. Counternarcotics Efforts in Colombia," September 12, 2017. Map was presented at hearing but not included in written testimony. It was photographed and is accessible at https://adamisacson.com/2016-suspect-trafficking-maps/.

Figure 3.6. Suspected Maritime Drug Flow Events in 2016

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[15] The figure maps suspected events rather than the suspected quantities of illegal drugs associated with these events. Given the extensive data that the U.S. government collects on cocaine flow in the Western Hemisphere, it should be possible to do more in-depth analysis on the relationship between suspected flow and crime outcomes in these countries.

4. Northern Triangle Migrants – Stocks and Flows

Migratory flows in North America are complex and involve people migrating from, to, and through many countries and doing so legally, illegally, or as refugees and asylum seekers. For the purposes of this study, categories of migrant stocks and flows that are most relevant for analysis are the following:

1. The stock of Northern Triangle migrants who are resident in Mexico and have:

   a. Legal status\\\\

   b. Illegal status

2. The flow of Northern Triangle migrants to Mexico who intend to reside in Mexico and are:

   a. Legally migrating

   b. Illegally migrating and attempting to evade Mexican immigration enforcement

   c. Illegally migrating and seeking asylum or refugee status

3. The flow of Northern Triangle migrants through Mexico who intend to reside in the United States.

4. The stock of Northern Triangle migrants who are resident in the United States and have:

   a. Legal status

   b. Illegal status

5. The flow of Northern Triangle migrants to the United States who intend to reside in the United States and are:

   a. Legally migrating

   b. Illegally migrating and attempting to evade U.S. immigration enforcement

   c. Illegally migrating and seeking asylum status

Estimates of most of these stocks and flows can be developed from national censuses, government administrative records, household surveys, and migrant surveys. This chapter

presents these estimates in order to develop a comprehensive picture of Northern Triangle migratory flow to Mexico and the United States.

4.1. Foreign-Born Populations Resident in the United States

Foreign-born and unauthorized populations resident in the United States must be estimated using census and household survey data and methodologies that make a range of assumptions. The widely accepted approach to estimating the unauthorized population is based on the residual methodology, which subtracts an estimate of the legal resident immigrant population from the total foreign-born population. This approach was pioneered by Jeffrey Passel and Robert Warren in the 1980s, and they both continue to make these estimates today.[16]

Table 4.1 gives estimates of the stock of foreign-born, unauthorized, and legal immigrants born in Northern Triangle countries who are resident in the United States. For all three countries, both the legal and unauthorized immigrant populations have risen rapidly during 1990–2015. Legal populations have more than doubled or tripled, and unauthorized populations have grown even faster. By 2015, both legal and illegal populations numbered in the hundreds of thousands for all three countries.

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[16] See D'Vera Cohn, Jeffrey S. Passel, and Ana Gonzales-Barrera, "Rise in U.S. Immigrants from El Salvador, Guatemala, and Honduras Outpaces Growth from Elsewhere" (Washington, DC: Pew Research Center, December 2017), for a methodological overview and further references. It should be kept in mind that these population stocks reflect how many migrants flow into and out of the stock each year. Inflows include entries of new migrants into the United States, and outflows include voluntary returns to home countries, deportations, adjustment of status, and deaths.

Table 4.1. Northern Triangle Populations Resident in the U.S. (in thousands)

	El Salvador			Guatemala			Honduras		
	Total foreign born	Unauthorized	Legal	Total foreign born	Unauthorized	Legal	Total foreign born	Unauthorized	Legal
1990	**595**	300	295	**265**	120	145	**115**	40	75
1995	**740**	325	315	**340**	150	190	**225**	80	145
2000	**980**	500	480	**405**	200	205	**310**	140	170
2005	**1,070**	575	495	**705**	375	330	**430**	250	180
2006	**1,110**			**800**			**435**		
2007	**1,200**	600	600	**750**	400	350	**480**	300	180
2008	**1,180**			**825**			**515**		
2009	**1,230**	650	580	**840**	475	365	**500**	325	175
2010	**1,250**			**830**			**545**		
2011	**1,300**			**890**			**530**		
2012	**1,320**	675	645	**930**	525	405	**580**	350	230
2013	**1,320**			**955**			**580**		
2014	**1,370**	700	670	**945**	525	420	**595**	350	245
2015	**1,420**	725	695	**980**	550	430	**630**	375	255

Source: All foreign-born estimates, and unauthorized estimates for 2015, are from D'Vera Cohn, Jeffrey S. Passel, and Ana Gonzales-Barrera, "Rise in U.S. Immigrants from El Salvador, Guatemala, and Honduras Outpaces Growth from Elsewhere" (Washington, DC: Pew Research Center, December 2017). Unauthorized estimates for 1990–2014 are from Jeffrey S. Passel and D'Vera Cohn, "Overall Number of U.S. Unauthorized Immigrants Holds Steady Since 2009" (Washington, DC: Pew Research Center, September 2016).

4.2. Foreign Born Populations Resident in Mexico

Table 4.2 gives the foreign-born population by country of birth that was resident in Mexico during 1895–2015. These values are from Mexican censuses and the 2015 inter-census. The foreign-born population in Mexico captured by the national census has never been very large and has ranged between 0.3 percent and 1.0 percent of the total population. Since 1980, the large majority has been American immigrants. Guatemalan immigrants have been the second largest group since 1990, but they numbered only 47,000 in 2015. The Honduran and El Salvadoran populations were significantly lower, at roughly 11,000 and 8,000 in 2015, respectively.

It is not clear to what extent the census captures unauthorized immigrants.[17] There are reasons to believe that it may not adequately capture these populations. It is known that many Nicaraguans, El Salvadorans, and Guatemalans came to Mexico in the late 1970s and early 1980s as refugees from civil conflicts in those countries. These flows amounted to tens of thousands of people, but 1980 and 1990 census values for the El Salvadoran and

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[17] It has not been possible to identify a methodology document for the Mexican national census that clarifies practices regarding the foreign born.

Nicaraguan foreign-born populations do not reflect these refugee flows. The values for Guatemala do show a big increase from 1980 to 1990 that was likely due to the refugee surge. Unlike those fleeing violence from El Salvador and Nicaragua, Guatemalans were formally recognized as refugees by the Mexican government in 1982, and this apparently meant that the 1990 national census captured them. These developments suggest that the national census does not include those without a formal legal right to reside in Mexico.

It is not clear if any estimates of the unauthorized resident immigrant population have been made by Mexican researchers. Household surveys are conducted in Mexico that might be capable of supporting such estimates if they include in their sample households with unauthorized members.[18] Further research on the unauthorized population resident in Mexico is an important task for future research.

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[18]   The Mexican National Survey of Occupation and Employment (ENOE survey) is a nationally representative, large-scale survey that is comparable to the U.S. American Communities Survey. The ENOE survey does identify households headed by Guatemalan foreign-born residents, but not by El Salvadoran and Honduran foreign-born. The National Survey of Demographic Dynamics (ENADID survey), which is done every several years, asks a more extensive set of questions related to international migration, and it might be possible to use this survey to estimate the foreign born population.

Table 4.2. Foreign-Born Population Resident in Mexico by Country of Birth

	1895	1900	1910	1921	1930	1940	1950	1960	1970	1980	1990	2000	2010	2015
TOTAL	**56,355**	**57,674**	**117,108**	**101,312**	**159,844**	**67,548**	**106,015**	**223,468**	**192,208**	**268,900**	**340,246**	**492,617**	**961,121**	**1,007,062**
United States	12,945	15,242	20,639	11,090	12,396	9,585	30,454	97,902	97,248	157,080	194,619	343,591	738,103	803,219
Guatemala	14,004	5,820	21,334	13,974	17,023	3,358	4,613	8,743	6,969	4,115	46,005	23,597	35,322	46,912
Spain	14,109	16,280	29,541	29,565	47,239	21,022	26,876	49,637	31,038	32,240	24,783	21,024	18,873	16,545
Colombia	67	67	82	182	273	-	-		1,133	2,778	4,635	6,465	13,922	14,592
Argentina	57	38	112	189	288	-	-	2,456	1,585	5,479	4,964	6,215	13,696	11,528
Cuba	-	2,715	3,668	1,956	2,497	1,123	1,612	3,827	4,197	3,767	5,217	5,537	12,108	8,104
Honduras	37	25	118	143	219			-	942	1,500	1,997	3,722	10,991	11,350
Venezuela	35	35	85	99	97				805	1,940	1,533	2,823	10,063	10,654
El Salvador	63	-	-		-	-			1,213	2,055	2,979	6,647	8,088	8,195
Canada	-	140	383	159	7,779	5,338	6,102	5,631	3,352	3,259	3,011	5,768	7,943	9,853
France	3,897	3,970	4,729	3,947	4,949	1,801	1,997	4,196	3,495	4,242	4,195	5,723	7,163	6,480
China	1,026	2,660	13,203	14,472	18,965	4,856	5,124	5,085	1,847	54	1,161	2,100	6,655	7,322
Germany	2,497	2,563	3,827	3,841	6,501	2,852	2,894	6,690	5,379	4,824	4,499	5,595	6,214	4,644
Perú	87	76	116	99	112			-	804	2,188	1,633	3,749	5,886	4,239
Chile	111	111	161	164	145	-	-		845	3,343	2,501	3,848	5,267	3,725
Italy	2,148	2,575	2,595	2,292	4,908	1,183	1,220	3,489	2,738	3,131	2,397	3,904	4,964	4,826
Brazil	91	27	40	32	54	-		-	538	1,108	1,293	2,320	4,532	4,217
Nicaragua	28	37	56	76	265	-	-		3,674	2,312	1,521	2,522	3,572	2,514
Other countries	5,153	5,293	16,419	19,032	36,134	16,430	25,123	35,812	24,406	33,485	33,648	39,205	47,759	24,078
Memo:														
Total population (million)	12.6	13.8	15.2	14.3	16.6	19.7	25.8	34.9	48.2	66.8	81.2	97.5	112.0	119.5
-foreign born as % of population	0.4%	0.4%	0.8%	0.7%	1.0%	0.3%	0.4%	0.6%	0.4%	0.4%	0.4%	0.5%	0.9%	0.8%

Sources: 1895–1980: Table 1.11 (pp. 51–53), *Estadisticas Historicas de Mexico*, Instituto Nacional de Estadistica, Geografia, I Informatica (INEGI); 1990 and 2010: INEGI values presented in Wikipedia, "Anexo: Estadística de la población extranjera en México"; 2000: Table on p.17, *Los Extranjeros en Mexico*, INEGI; 2015: Estimates developed using PUMS file for 2015 Mexican inter-census.

4.3. Flows of Northern Triangle Migrants to the United States

We categorize Northern Triangle migrants entering the United States into the following key types:

- Legal immigrants who arrive at a U.S. POE with a valid immigrant visa;

- Legal non-immigrants who arrive at a U.S. POE with a valid non-immigrant visa;

- "Traditional" unauthorized migrants who transit through Mexico, arrive at the U.S.-Mexico border, and attempt to enter the United States illegally between or at POEs;

- Asylum seekers who transit through Mexico, arrive at the U.S.-Mexico border, and claim asylum at or between POEs upon encounter with U.S. law enforcement.

Legal immigrants are not of material interest to this study, because it is very difficult to substitute from illegal entry to an immigrant visa given the nature of the U.S. immigration system. They will therefore not be discussed further in this section.

4.3.1. Legal Non-Immigrants: Visa Overstayers

Substitution from illegal entry to legal entry on a non-immigrant visa is possible to the degree that someone intending to permanently migrate to the United States can get a non-immigrant visa and subsequently illegally overstay that visa. This requires the migrant to convince consular officials at U.S. embassies in Northern Triangle countries that they will not in fact do this. Table 4.3 presents non-immigrant visa refusal rates at U.S. embassies in fiscal year (FY) 2017 and estimated visa overstay rates in FY 2016.[19] As the table indicates, visa refusal rates are quite high and suggest that the average applicant has only a roughly 50 percent chance of getting one. The estimated overstay rates on B visas (short-term trips) are roughly equal to the average for all countries of 2 percent, and many countries have significantly higher overstay rates. Slightly more than 5,000 people are estimated to have overstayed their B visas from each Northern Triangle country. For student and exchange visitors (F/M/J visas), overstay rates are also very close to the overall overstay rate average (5.7 percent), and the number of these overstays is very small. It should be emphasized that these estimates of visa overstayers include those who overstay by a few days, weeks, or months and thus include those who did not intend to be a longer-

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[19] Visa refusal rates are for B visas, which are for short-term trips for business or pleasure and account for the vast majority of non-immigrant visas applied for and issued. The visa overstay estimates presented in the table are only for those arriving in the United States at an international airport or seaport. Those arriving at land POEs are not included in the overstay analysis. It is not clear whether the number of Northern Triangle non-immigrants coming into the United States at land POEs is significant.

term resident in the United States. This evidence suggests it is not easy to fraudulently obtain a U.S. non-immigrant visa, and the number of migrants that manage to do so is small.

Table 4.3. Visa Refusal and Overstay Rates

	Guatemala	El Salvador	Honduras
Visa refusal rate: B visas[A]	47%	53%	40%
Total visa overstay rate: B visas[B]	2.4%	2.8%	2.9%
Total visa overstayers: B visas[B]	5,442	5,079	5,357
Total visa overstay rate: F/M/J visas[B]	5.4%	5.7%	7.2%
Total visa overstayers: F/M/J visas[B]	126	104	180

Sources: Visa overstay estimates are from Department of Homeland Security, *Fiscal Year 2016 Entry/Exit Overstay Report*. Visa refusal rates are from the U.S. State Department, https://travel.state.gov/content/dam/visas/Statistics/Non-Immigrant-Statistics/RefusalRates/FY17.pdf
A: FY 2017 refusal rate; B: FY 2016 estimate. Only covers visa overstays who entered through air and sea ports.

4.3.2. "Traditional" Unauthorized Migrants and Asylum Seekers

Until recently, the vast majority of Northern Triangle unauthorized migrants arriving at the U.S.-Mexico border were "traditional" unauthorized migrants, who would attempt illegal entry and, if caught, would be processed by U.S. immigration authorities and returned to their home country without making an asylum claim. In recent years, the number of those claiming asylum and undergoing related relief from removal processes has risen dramatically. These include juvenile migrants, who are usually not detained while having their asylum claim adjudicated, and adult migrants, who are often detained.

Juvenile migrants seeking asylum comprise the following key types:

- Unaccompanied children (UACs), who arrive at the border without an adult accompanying them. Most UACs are teenagers aged 11–17 years old.

- Accompanied children (AACs), who arrive at the border with an adult accompanying them. Most AACs are babies, toddlers, or younger children.

- Juveniles not designated as a UAC or AAC (<18). Prior to 2008, the UAC and AAC designators were not widely used. It is assumed that these juvenile migrants also went through an asylum process.

Adult migrants seeking asylum comprise the following key types:

- Credible fear claimants, who are adults who have not previously filed an asylum claim and been rejected.

- Reasonable fear claimants, who are adults who have filed a previous asylum claim and been rejected.

Juvenile migrant apprehensions are also broken down according to whether they were made by USBP between POEs, or by the Office of Field Operations (OFO) at POEs.

Apprehensions of these migrant streams are presented for Guatemala, El Salvador, and Honduras in Table 4.4, Table 4.5, and Table 4.6, respectively. Although fundamentally different from flow (which is successful entries into the United States), there is reason to believe that these apprehension trends are consistent with trends in overall flows.[20] Apprehensions of juvenile asylum seekers generally began rising significantly in 2012 and became substantial in 2014–2016. Apprehensions of adult asylum seekers also rose over the same period. Apprehensions of "traditional" unauthorized migrants peaked in 2014 and have fallen since then. As will be discussed further in Chapter 6, it is important to note that many juvenile asylum seekers are believed to present themselves to U.S. immigration authorities after arriving at the border and do not attempt to evade, whereas "traditional" unauthorized migrants are believed to evade.

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[20] See John E. Whitley et al., "Assessing Southern Border Security," IDA Paper NS P-5304 REVISED (Alexandria, VA: Institute for Defense Analyses, May 2016); and John E. Whitley et. al., "Assessing Southern Border Security: Technical Annex," IDA Paper NS P-5304 (Alexandria, VA: Institute for Defense Analyses, May 2016).

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Table 4.4. USBP and OFO Apprehensions: Guatemala

Fiscal year	Asylum Seekers								"Traditional" unauthorized
	Juveniles						Adults		Adults
	USBP Apprehensions			*OFO Inadmissibles*			*USBP and OFO*		
	<18	UACs	AACs	<18	UACs	AACs	Credible fear	Reasonable fear	USBP and OFO
2005	2,835	4	1	96	0	0			
2006	2,463	356	2	88	0	0			
2007	1,573	501	5	81	2	0			
2008	241	1,391	123	41	12	8			
2009	43	1,117	305	34	17	4			
2010	1	1,512	164	62	16	0			
2011	0	1,561	151	19	33	15			
2012	0	3,823	219	0	62	37	2,307	412	28,810
2013	1	8,061	626	0	167	123	5,633	902	39,779
2014	0	17,068	7,046	7	1,024	1,032	7,692	1,214	46,069
2015	0	13,592	7,189	1	1,385	1,717	8,052	960	26,526
2016	0	18,945	12,463	1,393	2,476	4,128	16,921	1,278	27,976
2017									

Source: Juvenile apprehensions tabulated from USBP apprehension records and OFO inadmissible records. Adult apprehensions tabulated from apprehension and inadmissible records that were linked to other DHS and immigration court administrative databases that permitted determining if an asylum claim had been made and was processed.

Table 4.5. USBP and OFO Apprehensions: El Salvador

Fiscal year	Asylum Seekers								"Traditional" unauthorized
	Juveniles						Adults		Adults
	USBP Apprehensions			OFO Inadmissibles			USBP and OFO		
	<18	UACs	AACs	<18	UACs	AACs	Credible fear	Reasonable fear	USBP and OFO
2005	5,432	1	1	102	0	0			
2006	4,903	785	0	129	0	0			
2007	1,411	630	9	44	0	1			
2008	160	1,391	150	15	12	2			
2009	55	1,220	373	18	5	3			
2010	0	1,910	298	28	17	0			
2011	0	1,394	151	8	39	17			
2012	0	3,311	412	0	108	36	4,858	572	13,219
2013	0	5,985	1,144	6	206	110	12,330	1,193	16,698
2014	0	16,403	8,556	1	533	466	18,804	1,370	17,598
2015	0	9,396	6,110	0	456	447	14,733	1,261	12,130
2016	0	17,516	15,158	785	1,750	2,807	33,736	1,889	13,120
2017									

Source: Juvenile apprehensions tabulated from USBP apprehension records and OFO inadmissible records. Adult apprehensions tabulated from apprehension and inadmissible records that were linked to other DHS and immigration court administrative databases that permitted determining if an asylum claim had been made and was processed.

Table 4.6. USBP and OFO Apprehensions: Honduras

	Asylum Seekers								"Traditional" unauthorized
	Juveniles						Adults		Adults
	USBP Apprehensions			OFO Inadmissibles			USBP and OFO		
Fiscal year	<18	UACs	AACs	<18	UACs	AACs	Credible fear	Reasonable fear	USBP and OFO
2005	8,284	16	4	79	0	0			
2006	3,895	600	9	61	0	0			
2007	1,300	805	13	31	1	0			
2008	184	1,578	92	16	19	2			
2009	52	968	198	20	9	1			
2010	0	1,017	150	29	12	0			
2011	0	973	107	10	15	10			
2012	0	2,981	333	0	82	64	2,794	549	24,532
2013	2	6,733	2,262	1	293	226	7,492	1,125	28,792
2014	0	18,248	19,306	3	934	1,650	10,527	1,441	31,690
2015	0	5,414	5,795	0	334	630	7,587	891	13,757
2016	0	10,483	10,891	449	1,126	2,407	20,674	1,584	16,197
2017									

Source: Juvenile apprehensions tabulated from USBP apprehension records and OFO inadmissible records. Adult apprehensions tabulated from apprehension and inadmissible records that were linked to other DHS and immigration court administrative databases that permitted determining if an asylum claim had been made and was processed.

4.4. Flows of Northern Triangle Migrants to Mexico

Most movement of Northern Triangle migrants into Mexico across land borders takes place on the Mexico-Guatemala border. Since the early 1900s, large flows of seasonal and daily Guatemalan agricultural workers crossed into Mexico and back to Guatemala, typically to work on coffee plantations in the state of Chiapas. Much of this flow traditionally moved informally across the border but, starting in the 1980s, the Mexican immigration authority has sought to regulate the movement of these migrants by offering appropriate documents (visas and border crossing cards) and taking steps to encourage their use.[21] In the late 1970s and early 1980s, flows of refugees went to Mexico from Nicaragua, Guatemala, and El Salvador, with some seeking to settle in Mexico and others transiting Mexico on their way to the United States. These refugee flows subsided in the 1990s as

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[21] See Manuel Ángel Castillo García, "The Regularisation of Temporary Migrant Agricultural Workers in México," in *Combating the Illegal Employment of Foreign Workers* (France: OECD, 2000), for a detailed discussion of the flow of agricultural workers across the Mexico-Guatemala border, and Manuel Ángel Castillo García, "The Mexico-Guatemala Border: New Controls on Transborder Migrations in View of Recent Integration Schemes?," *Frontera Norte* 15, no. 29 (2003): 35–64, for a general discussion of movement across this border.

civil conflicts subsided and were resolved, but flows of non-refugees seeking to settle in the United States emerged and grew substantially in the 2000s.[22] Risks that migrants have encountered crossing through the Mexico-Guatemala border region have been analyzed for at least two decades.[23]

Since the 1980s, flows of Northern Triangle migrants to Mexico comprise the following key migrant types:

- Border-zone residents crossing the border on short-term trips for various purposes,

- Seasonal or daily agricultural workers,

- Those migrating to Mexico to settle permanently,

- Those migrating to Mexico as refugees, and

- Transit migrants crossing Mexico to get to the United States.

Movement of the first two types—border-zone residents and agricultural workers—is not of material importance for this study. They will therefore not be discussed further in this section.

4.4.1. Migrants Intending to Settle in Mexico

Two key types of migrant flows go from the Northern Triangle to settle in Mexico: legal flows and unauthorized flows.

4.4.1.1. Legal Immigrant Flows

Table 4.7 gives the number of permissions for permanent residency issued by the Mexican immigration authority, the Instituto Nacional de Migracion (INM), during 2009–2017.[24] For 2009–2012, the issuance of permanent residency permissions granted by Mexican embassies and consulates abroad is not included, but the data for 2013–2017 cover all permissions. In that period, roughly 6,000 permissions were issued to Northern Triangle nationals per year, and this accounted for 14 percent of all permissions granted.

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[22] See Manuel Ángel Castillo García, "Mexico: Caught between the United States and Central America" (Washington, DC: Migration Policy Institute, Migration Information Source, 2006) and María Cristina García, *Seeking Refuge: Central American Migration to Mexico, the United States, and Canada* (Berkeley and Los Angeles: University of California Press, 2006).

[23] See Olivia Ruiz Marrujo, "Los riesgos de cruzar. La migración centroamericana en la frontera México-Guatemala," *Frontera Norte* 13, no. 25 (2001): 7–41, for a mapping of risks in this border region in the late 1990s.

[24] Tables are available in Boletín Estadístico Annual, "Documentación y condición de estancia en México" section, http://www.politicamigratoria.gob.mx/es_mx/SEGOB/Boletines_Estadisticos.

Table 4.7. Mexican Permanent Residency Permissions

	2009	2010	2011	2012	2013	2014	2015	2016	2017
	FM2s (immigrant) issued by INM[A]				Permanent Resident Cards (TRPs) issued[B]				
Total	**23,852**	**26,180**	**21,464**	**17,764**	**62,990**	**43,481**	**34,406**	**35,906**	**32,778**
Canada	586	748	849	830	3,465	1,964	1,785	1,676	1,296
U.S.	2,882	4,026	4,260	3,949	14,420	9,373	7,096	6,754	5,374
Central America	*4,948*	*4,768*	*3,290*	*1,324*	*8,568*	*7,141*	*5,275*	*6,684*	*7,005*
El Salvador	796	708	564	258	1,613	1,210	1,136	1,772	2,260
Guatemala	2,080	1,799	1,234	413	3,139	2,640	1,609	1,670	1,784
Honduras	1,406	1,544	984	320	2,409	2,269	1,798	2,559	2,453
Caribbean	*2,059*	*2,141*	*1,945*	*2,029*	*3,884*	*3,169*	*3,037*	*2,884*	*2,602*
Cuba	1,735	1,847	1,719	1,821	3,249	2,674	2,611	2,416	2,129
South America	*6,771*	*7,826*	*5,701*	*4,770*	*13,859*	*10,471*	*8,092*	*8,414*	*8,448*
Europa	*3,367*	*3,544*	*3,066*	*2,928*	*9,761*	*6,263*	*4,989*	*5,211*	*4,329*
Asia	*2,977*	*2,875*	*2,140*	*1,728*	*8,492*	*4,658*	*3,764*	*3,813*	*3,202*
China	*1,958*	*1,736*	*1,144*	*838*	*5,222*	*2,619*	*2,226*	*2,127*	*1,454*

Source: INM.

A: Does not include FM2s issued by Mexican embassies and consulates abroad.

B: Includes all TRPs issued by the Mexican government.

4.4.1.2. Unauthorized Migrant Flows

Data on apprehensions by immigration authorities are usually used to illustrate the size of unauthorized migrant flows entering a country. However, as mentioned earlier, apprehensions prevent migrants from entering a country. What is really required is an estimate of the number of successful illegal entries. In the case of the flow of unauthorized Northern Triangle migrants into Mexico, there is another major problem: many of these migrants intend to transit Mexico to go to the United States.[25]

The only source of data on unauthorized migrants entering Mexico that asks if their final destination is Mexico or the United States is the EMIF-Sur survey. One module of this survey that questions migrants deported by INM upon their arrival in their home country captures large samples of these migrants.[26] Table 4.8 shows unauthorized migrants captured by the survey broken down by final destination. Guatemala unsurprisingly has a large share of migrants headed to Mexico due to crossings by border residents and seasonal agricultural workers. The large majority of El Salvadorans and Hondurans deported by Mexico were headed to the United States, confirming anecdotal evidence that these

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[25] See Chapter 6, Section 6.1, for figures showing apprehensions by the INM of Northern Triangle nationals.

[26] The module that interviews migrants as they are leaving Guatemala on their way to Mexico ("From Guatemala") captures almost no migrants from El Salvador and Honduras whose final destination is Mexico. See Appendix A for more details on the EMIF-Sur survey.

unauthorized flows consist primarily of migrants in transit to the United States. The shares headed to Mexico increased significantly in 2017, but this is due to a collapse in the number of migrants headed to the United States, not an increase in the absolute number headed to Mexico.

For the purposes of better understanding the North American migrant flow picture, it would be useful to have an estimate of the total size of the flows for which samples are provided in Table 4.8. The nature of the EMIF-Sur survey's methodology leads to inherent challenges in estimating total flow magnitudes using its samples.[27]

Table 4.8. Unauthorized Migrants Deported by Mexico: Final Destination

	2009	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017ᴬ**
Guatemala									
Mexico	2,018	2,774	2,521	2,772	1,824	1,662	1,813	918	302
United States	1,906	1,706	1,203	1,709	1,951	1,523	1,363	871	201
"Other"	0	0	1	6	6	30	0	3	0
% going to Mexico	51%	62%	68%	62%	48%	52%	57%	51%	60%
El Salvador									
Mexico	165	238	280	310	378	497	740	547	226
United States	829	1,468	1,483	2,073	2,410	2,870	3,558	2,588	642
"Other"	0	1	0	2	0	5	0	0	0
% going to Mexico	17%	14%	16%	13%	14%	15%	17%	17%	26%
Honduras									
Mexico	39	27	57	82	38	139	141	255	164
United States	1,539	1,708	1,589	1,634	1,793	1,677	1,091	1,435	403
"Other"	0	0	37	85	73	84	0	0	0
% going to Mexico	2%	2%	3%	5%	2%	7%	11%	15%	29%

Source: Tabulated from EMIF-Sur survey, "Deported by Mexico" module, question 13 (2017 questionnaire).
A: First half of 2017 only.

4.4.2. Migrants Coming to Mexico as Refugees

Mexico has experienced significant inflows of refugees in the 20th century. In the 1930s, 76,000 Spanish refugees came to Mexico due to the Spanish Civil War. More recently, large refugee flows came from Central America due to civil wars. Nicaraguans began coming in the 1970s and continued arriving into the 1990s, but they were never recognized as refugees in Mexico.[28] In the late 1970s-early 1980s, 180,000 refugees who were fleeing civil war came from El Salvador to Mexico, and an estimated 200,000

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[27] See Appendix A, Section A.3 for further discussion.

[28] Garcia, *Seeking Refuge*.

Guatemalan refugees began to arrive in the spring of 1981.[29] The Comisión Mexicana de Ayuda a Refugiados (COMAR) was established at this time to cope with the Guatemalan refugee wave, and COMAR and newly-established non-governmental organizations (NGOs) worked closely with the United Nations High Commissioner for Refugees (UNHCR) to process and settle these refugees. In 1982, 46,000 Guatemalans were officially given refugee status and were initially required to remain in refugee settlement camps close to the southern border, but these camps enjoyed unusual arrangements and quickly became villages formally incorporated into the Mexican political-administrative system.[30] Although Guatemalans were recognized as refugees, El Salvadorans were not, and many settled in Mexican cities and sought to avoid being deported for being in undocumented status. As civil conflict in Guatemala subsided, the Mexican government established a voluntary repatriation program that resulted in the return of roughly 43,000 refugees during 1993–1999. A remaining 22,000 refugees who chose to permanently live in Mexico were regularized through a special program that was initiated in 1996.[31] The El Salvadoran refugees were never given official refugee status. Unlike the Guatemalan refugees, they generally did not stay in the border region but migrated to the Valley of Mexico and settled into communities around Mexico City.

Some of these undocumented refugees may also have eventually left Mexico for the United States. Castillo found that

> Although some Central American migrants in the 1980s attempted to find low-wage work in Mexico, they quickly learned that local labor markets were quite limited and earnings were not high enough to consider settling. Therefore, the flow continued north to the United States, with Mexico becoming a transit country.[32]

This is consistent with the analysis in Chapter 3 finding that, for most Northern Triangle migrants, Mexico is not an attractive destination for economic migration compared to the United States.

Mexico became a signatory to key international refugee/asylum agreements only in 2000.[33] The government subsequently passed new laws and created new frameworks and

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[29]   See Luis Ortiz Monasterio, "Guatemalan Refugees in Mexico: A Happy Ending," Organization of American States (OAS), Department of International Legal Affairs, n.d., https://www.oas.org/juridico/english/ortize.html; Garcia, *Seeking Refuge*; and Castillo Garcia, "Mexico: Caught between the United States and Central America."

[30]   Garcia, *Seeking Refuge*; Monasterio, "Guatemalan Refugees in Mexico"; and Castillo Garcia, "Mexico: Caught between the United States and Central America." A total of 18,000 refugees were also relocated to sites further north.

[31]   See Garcia, *Seeking Refuge*; and Castillo Garcia, "Mexico: Caught between the United States and Central America." The Guatemalan and Mexican governments worked together to implement the repatriation program.

[32]   Castillo Garcia, "Mexico: Caught between the United States and Central America," 3.

[33]   The 1951 Convention and the 1967 Protocol.

procedures for processing asylum applications.[34] Table 4.9 shows the number of applications to become refugees in Mexico during 2013–2017.[35] The number of applications from Northern Triangle citizens did rise significantly over this period and equaled roughly 8,000 in both 2016 and 2017. Importantly, there was no increase in these applications in 2017, when the flow of asylum seekers to the United States fell sharply. It therefore does not seem that there was any substitution of asylum seekers from a U.S. destination to a Mexico destination.[36]

It is also unclear whether those applying for refugee status in Mexico really intend to stay in Mexico. Some may apply for refugee status in Mexico to facilitate their transit through Mexico, as being a refugee confers temporary status and protections. COMAR has done surveys of refugees that apparently confirm that many of those who apply to be a refugee actually intend to migrate to the United States and not stay in Mexico.[37]

It is also important to note that Mexico receives almost no applications from UACs. This stands in stark contrast to the United States, which has received many tens of thousands of UACs since 2011. The almost complete absence of a flow of UACs to Mexico suggests that they have few family members with whom to reunify there.

Table 4.9. Applications for Refugee Status in Mexico

	2013	2014	2015	2016	2017
All Applications					
Total	**1,296**	**2,137**	**3,424**	**8,796**	**14,596**
Honduras	530	1,035	1,560	4,129	4,272
El Salvador	309	626	1,476	3,493	3,708
Guatemala	48	108	102	437	676
All other countries	409	368	286	737	5,940
Unaccompanied Juvenile Applications					
Total	**63**	**78**	**142**	**242**	**259**
Honduras	40	46	64	124	153
El Salvador	10	19	65	87	62
Guatemala	5	10	10	18	21
All other countries	8	3	3	13	23

Source: Comisión Mexicana de Ayuda a Refugiados (COMAR).

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[34] Castillo Garcia, "Mexico: Caught between the United States and Central America."

[35] Mexico does not have a process for obtaining asylum, and all asylum seekers are termed refugees.

[36] In 2015 and 2016, a flow of El Salvadoran asylum seekers to Costa Rica also emerged, with roughly 1,500 applications made in 2016. Asylum applications by Guatemalans and Hondurans in Costa Rica have remained negligible. See Appendix B for relevant data.

[37] Communication from INM. We have been unable to obtain data from these surveys.

4.4.3. Transit Migrants through Mexico

The flow of migrants from Central American countries transiting Mexico to get to the United States first emerged in the 1980s due to civil wars and internal conflicts in El Salvador, Guatemala, and Nicaragua. The initial wave of migrants established communities in the United States that subsequently attracted migrants who were not fleeing conflicts but seeking opportunities in the United States.[38] Table 4.1, on page 33, suggests that these flows comprised significant numbers of those migrating legally and illegally to the United States. Evidence on the characteristics of transit migration through Mexico is reviewed here. Most of this evidence comes from the EMIF-Sur migrant survey.

4.4.3.1. Total Monetary Cost of Transit Migration

An important variable affecting migrant decisions to make an unauthorized trip to Mexico or the United States is the total monetary expenditures that they will have to pay on smuggling fees, transport, food, and other related needs. The EMIF-Sur survey asks adult migrants who were deported by Mexico and the United States about the total monetary expenditures paid on their trip (up until they were caught by law enforcement authorities), and whether they had borrowed any money to finance those costs. Table 4.10 gives average expenditure values, and the percentage of the migrant sample reporting whether or not they had done any borrowing. Values are given for three separate groups: those deported by Mexico whose final destination was Mexico, those deported by Mexico whose final destination was the United States, and those deported by the United States.

The values in this table generally correspond to a priori expectations. Average expenditures are lowest for Guatemalans going to Mexico, three times more for Guatemalans going to the United States who were caught in Mexico, and 44 times more for Guatemalans going to the United States who were caught in the United States. El Salvadorans and Hondurans spend significantly more than Guatemalans to get to Mexico, which is logical given that they have to transit into Guatemala before going to Mexico. As in the case of Guatemala, these amounts are much less than what they spend to get to the United States. The average across all values reported to EMIF-Sur by those who were deported by the United States during 2009–2017 is roughly $3,000.

The average values reported by those who were going to the United States and were deported by Mexico are much less than the values for those who were deported by the United States. This may be due to two reasons. First, those who are unable to get through Mexico may not be responsible for some or all of the smuggling fee, which may have resulted from an implicit contract with the smuggler that the fee be paid only in the event of successful entry into the United States. Second, some migrants may not use a smuggler to get into Mexico, and only use a smuggler to get into the United States.

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[38]   See Castillo García, "The Mexico-Guatemala Border," 53–4.

Table 4.10. Total Trip Expenditures and Percent Borrowing Funds

	2009	2010	2011	2012	2013	2014	2015	2016	2017
	Average Total Monetary Expenditures On Trip								
Deported by Mexico – destination Mexico									
Guatemala	$51	$64	$60	$47	$80	$66	$54	$60	$76
El Salvador	$267	$194	$161	$170	$205	$237	$262	$313	$272
Honduras	$196	$96	$144	$128	$246	$217	$175	$257	$208
Deported by Mexico – destination U.S.									
Guatemala	$124	$159	$133	$154	$181	$219	$245	$223	$209
El Salvador	$358	$269	$231	$296	$617	$591	$746	$1,063	$1,000
Honduras	$268	$432	$218	$163	$171	$202	$227	$287	$286
Deported by U.S.									
Guatemala	$2,326	$2,319	$2,482	$2,991	$2,585	$2,601	$2,813	$3,013	$3,159
El Salvador	$3,218	$3,249	$3,713	$3,358	$3,627	$3,543	$4,082	$4,247	$3,159
Honduras	$1,201	$1,588	$1,537	$1,244	$2,330	$2,876	$3,244	$3,862	$5,112
	Percentage Who Borrowed Funds for Trip Expenditures								
Deported by Mexico – destination Mexico									
Guatemala	5%	7%	17%	18%	22%	14%	16%	13%	4%
El Salvador	20%	1%	0%	11%	12%	23%	45%	63%	57%
Honduras	13%	43%	68%	58%	21%	40%	38%	33%	28%
Deported by Mexico – destination U.S.									
Guatemala	18%	13%	15%	25%	24%	21%	29%	26%	10%
El Salvador	21%	4%	3%	14%	29%	40%	51%	69%	63%
Honduras	57%	74%	70%	69%	57%	54%	55%	35%	21%
Deported by U.S.									
Guatemala	57%	46%	57%	82%	87%	86%	76%	85%	87%
El Salvador	54%	55%	69%	62%	65%	64%	73%	81%	77%
Honduras	68%	55%	78%	71%	63%	62%	69%	65%	85%

Source: For those deported by Mexican authorities, total monetary cost data calculated from EMIF-Sur survey, "Deported by U.S." module, question 33.1 (2017 questionnaire): "How much money did you spend since leaving your home until (being arrested) (surrendering) in Mexico?" Borrowing data tabulated from same module, question 33.1.1: "Did you borrow some of that money?" For those deported by U.S. authorities, total monetary cost data tabulated from EMIF-Sur survey, "Deported by U.S." module, question 28 (2017 questionnaire): "In total (including payment of the smuggler), how much money did you spend since leaving your home to go to the United States, on this last trip?". Borrowing data tabulated from same module, question 28.1: "Did you borrow some of that money?"

4.4.3.2. Dangers and Mistreatment Encountered on Trip

Potential dangers and mistreatment faced by Northern Triangle migrants who transit Mexico and cross into the United States have received extensive discussion in media accounts of migration from Northern Triangle countries. The risk of these outcomes will be taken into account by potential migrants contemplating making this journey. One source

of data on the degree to which dangers and mistreatment were actually encountered is the EMIF-Sur survey, which asks adult migrants several questions on whether they experienced these outcomes. These questions have only been asked in the 2016 and 2017 surveys. Table 4.11 gives percentages of migrants who report having experienced a particular danger in 2016 or the first half of 2017.[39] For assault or robbery (a single statistic), one of the most serious risks, Guatemalan migrants transiting Mexico reported low rates of less than 2 percent, El Salvadoran migrants higher rates of 5–8 percent, and Honduran migrants a quite substantial risk of 16–23 percent. Reported rates for assault or robbery while crossing into the United States are roughly 4 percent for Guatemalans and Hondurans, and 1 percent or less for El Salvadorans. The other risks for which significant risk is reported include extreme cold or heat, and lack of food or water. It is important to note that these are reported risks faced by adult migrants, not juveniles, who are excluded from the EMIF-Sur sample.[40]

Table 4.12 gives percentages of migrants who report having experienced particular mistreatments from the Mexican public during their transit of Mexico in 2016 or the first half of 2017. Reported rates of mistreatments are quite low, 1 percent or less in most cases.

Table 4.13 gives percentages of migrants who report having experienced a particular mistreatment by the Mexican immigration authority in 2016 or the first half of 2017. Somewhat significant rates of verbal abuse are reported by El Salvadoran and Honduran migrants (10–20 percent), who also report rates of physical abuse at 6–8 percent. Other risks have very low reported rates, generally of 1 percent or less.

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[39] Reports on dangers encountered when transiting Mexico are from those who were caught and deported by Mexico, and reports on dangers encountered during crossing from Mexico to the United States are from those who were caught and deported by the United States.

[40] No systematic survey evidence is available for risks faced by juvenile migrants. It is also important to note that migrants who are killed are by definition not captured in the EMIF-Sur survey, and it is not clear how well the survey captures those who are severely injured.

Table 4.11. Dangers Encountered on Trip

	Extreme Cold or Heat	Lack of Food or Water	Dizziness or Fainting	Risk of Drowning in a Canal or River	Falling or Hurting Yourself	Getting Lost on the Road	Attacked by Wild Animals	Abandoned by Smuggler	Assault or Robbery	Vehicle Accident	Discriminatory Violence	Road Accident	Falling off Train
	On your way through the Mexican territory, did you face any of the following situations?												
Guatemala													
Male	14.1%	7.6%	0.8%	0.1%	0.1%	0.1%	0.2%	0.2%	1.8%	0.1%	0.2%	0.1%	0.1%
Female	13.3%	7.1%	0.7%	0.7%	0.3%	0.7%	0.3%	0.3%	1.7%	0.3%	0.3%	0.3%	0.3%
El Salvador													
Male	9.7%	7.9%	1.2%	0.3%	0.5%	0.5%	0.1%	0.1%	7.7%	0.1%	0.0%	0.0%	0.1%
Female	7.8%	6.4%	1.4%	0.0%	0.0%	0.5%	0.0%	0.2%	5.3%	0.2%	0.0%	0.1%	0.0%
Honduras													
Male	26.1%	34.6%	5.1%	0.9%	0.3%	3.4%	0.4%	0.0%	23.3%	0.3%	0.1%	0.6%	0.5%
Female	34.4%	37.8%	8.9%	2.2%	3.3%	3.3%	0.0%	0.0%	15.6%	0.0%	1.1%	0.0%	0.0%
	During the crossing from Mexico to the United States, did you face any of the following situations?												
Guatemala													
Male	22.8%	20.3%	1.2%	2.6%	0.6%	5.6%	1.0%	1.3%	4.7%	0.3%	0.2%	0.3%	na
Female	21.9%	17.8%	0.0%	2.0%	1.8%	3.8%	1.2%	1.2%	4.4%	0.0%	1.2%	0.3%	na
El Salvador													
Male	9.2%	6.7%	1.5%	0.7%	0.5%	1.0%	0.2%	0.3%	1.0%	0.1%	0.0%	0.0%	na
Female	6.2%	4.7%	0.7%	0.2%	0.5%	0.5%	0.0%	0.2%	0.2%	0.0%	0.0%	0.0%	na
Honduras													
Male	2.0%	0.4%	0.2%	9.6%	0.3%	0.8%	1.8%	0.2%	4.6%	0.0%	0.0%	0.1%	na
Female	1.2%	0.0%	0.0%	9.9%	0.0%	0.0%	4.1%	0.0%	3.5%	0.0%	0.0%	0.0%	Na

Source: Tabulated from EMIF-Sur survey: "Deported by Mexico" module, question 23, and "Deported by U.S." module, question 29 (2017 questionnaire).

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Table 4.12. Mistreatment While in Mexico

	Physically Attacked	Ridicule, Insults, or Shouting	Detained without Justification	Threatened to Call Immigration Authorities	Verbally Assaulted to Return to Home Country	Denied Entry to Public Place	Other
Deported by Mexico							
Guatemala							
Male	1.2%	2.5%	0.4%	0.3%	0.3%	0.3%	0.1%
Female	0.4%	2.5%	0.4%	0.0%	0.4%	0.0%	0.0%
El Salvador							
Male	1.2%	1.2%	0.2%	0.5%	0.2%	0.1%	0.0%
Female	1.2%	0.8%	0.2%	0.2%	0.1%	0.2%	0.2%
Honduras							
Male	0.4%	0.7%	0.1%	0.0%	0.0%	0.1%	0.0%
Female	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Deported by U.S.							
Guatemala							
Male	0.8%	1.1%	0.5%	0.3%	0.2%	0.1%	0.2%
Female	0.3%	0.9%	0.3%	0.0%	0.0%	0.0%	0.3%
El Salvador							
Male	1.2%	0.9%	0.3%	0.6%	0.2%	0.0%	0.1%
Female	0.0%	0.2%	0.2%	0.2%	0.0%	0.0%	0.0%
Honduras							
Male	0.2%	0.6%	0.1%	0.0%	0.1%	0.0%	0.0%
Female	0.0%	1.2%	0.6%	0.0%	0.0%	0.0%	0.0%

Source: Tabulated from EMIF-Sur survey: "Deported by Mexico" module, question 25 and "Deported by U.S." module, question 24 (2017 questionnaires).

Table 4.13. Mistreatment by Mexican Immigration Authorities

	Jeers, Scorn, Insults, or Shouting	Physical Aggression	Shooting, Electric Shocks, Toxic Gases	Theft of Property	Kidnapping	Extortion	Other
Guatemala							
Male	7.0%	2.3%	0.5%	1.4%	0.3%	0.5%	0.1%
Female	7.0%	1.1%	0.4%	0.7%	0.4%	0.7%	0.4%
El Salvador							
Male	15.1%	5.7%	0.7%	2.6%	0.2%	0.9%	0.1%
Female	22.3%	6.6%	0.8%	2.3%	0.1%	0.5%	0.0%
Honduras							
Male	10.7%	5.7%	1.1%	0.5%	0.0%	0.3%	0.1%
Female	18.9%	7.8%	0.0%	0.0%	0.0%	0.0%	0.0%

Source: Tabulated from EMIF-Sur survey, "Deported by Mexico" module, question 34.3 (2017 questionnaire): "During your encounter and detention by Mexican immigration officers or police officers, were you the object of…:"

4.4.3.3. Time in Transit in Mexico

Table 4.14 gives the average number of days that Northern Triangle migrants report their transit through Mexico required. These data are from the EMIF-Sur survey and are collected from migrants who were deported by the United States, indicating that they successfully completed their transit through Mexico.[41]

Table 4.14. Days Spent in Transit in Mexico

	2009	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Guatemala	26	24	21	22	20	19	27	28	24
El Salvador	23	24	27	32	27	20	24	21	22
Honduras	24	28	27	27	24	25	31	26	28

Source: Tabulated from EMIF-Sur survey: "Deported by U.S." module, question 21 (2017 questionnaire).

Some migrants may work during their transit journey through Mexico. The EMIF-Sur survey asks migrants deported by the United States if they worked while in Mexico on the way to the United States. Table 4.15 shows that the percentage of migrants who work in Mexico is generally very low, and that this activity is uncommon.

Table 4.15. Working in Mexico during Transit to U.S.

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[41]   Values are also reported only for those who did not work in Mexico. Very small numbers of migrants report having worked in Mexico, but they also report very long stays in Mexico. These are migrants whose final destination was Mexico and who managed to avoid deportation from Mexico for very long periods of time.

	2009	2010	2011	2012	2013	2014	2015	2016	2017
Guatemala									
Yes	72	63	57	19	7	20	35	32	23
No	2,483	2,143	2,038	2,359	3,565	2,383	1,397	1,531	681
% who worked	3%	3%	3%	1%	0%	1%	2%	2%	3%
El Salvador									
Yes	39	26	20	51	46	27	22	14	23
No	859	1,290	1,469	1,647	2,168	2,350	2,206	1,997	770
% who worked	4%	2%	1%	3%	2%	1%	1%	1%	3%
Honduras									
Yes	16	64	76	17	53	61	55	36	34
No	1,258	1,387	1,550	1,661	1,074	1,468	1,236	800	302
% who worked	1%	4%	5%	1%	5%	4%	4%	4%	10%

Source: Tabulated from EMIF-Sur survey: "Deported by U.S." module – question 22: "During your trip through the Mexican territory to go to the United States, did you work in Mexico?"

4.5. Migrant Flows, Family Reunification, and Social Networks

A potentially important motivation for migrating from a Northern Triangle country to Mexico or the United States is to reunify with family members who have already migrated there, or to join with friends who have previously migrated there. In both cases, family or friends constitute a "social network" that can support the migrant's trip to the United States, ease their entry into the country, support them financially, provide them with a place to live, and help them to find jobs. Chapter 5 will evaluate the influence on migration decisions of having family members in the United States. Empirical evidence on the degree to which Northern Triangle migrants actually or potentially unify with family and/or friends is reviewed here.[42]

No evidence is available on this for Northern Triangle migrants going to Mexico. Almost no UACs go to Mexico as asylum seekers, so evidence analogous to the U.S. government administrative data presented below is not available. The EMIF-Sur survey asks migrants deported by Mexico whose final destination is the United States. if they have family and/or friends in the United States. However, they do not ask migrants whose final destination is Mexico if they have family and/or friends in Mexico. The lack of interest in asking this question to migrants whose

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[42] Mincer (1978) provides a theoretical analysis of family migration decisions. Empirical research on migration and family reunification finds that the size of flows of migrants reunifying with a "pioneer migrant" through what is often termed "chain migration" is significant. Junge et al (2013) estimate a "family reunification multiplier" using data on immigration into Denmark during 1980-2009 and find that on average 1.6 immigrants eventually reunify with a pioneer migrant. Jasso and Rosenzweig (2012) analyze sponsorship of children by immigrants to the U.S. using data of the New Immigrant Survey. Donato and Sisk (2015) analyze data from the Latin American Migrant Project migrant survey and find that children from El Salvador, Guatemala, Mexico, and Nicaragua are more likely to migrate to the United States with a parent or after a parent has migrated, emphasizing the importance of family reunification in juvenile migration. Indeed, the legal U.S. immigration system is based primarily on the principle of family reunification, and the large majority of immigration visas are allocated to people who are reunifying with a family member already legally resident in the U.S.

final destination is Mexico may be suggestive that this flow is believed to be quite small and of little material interest.
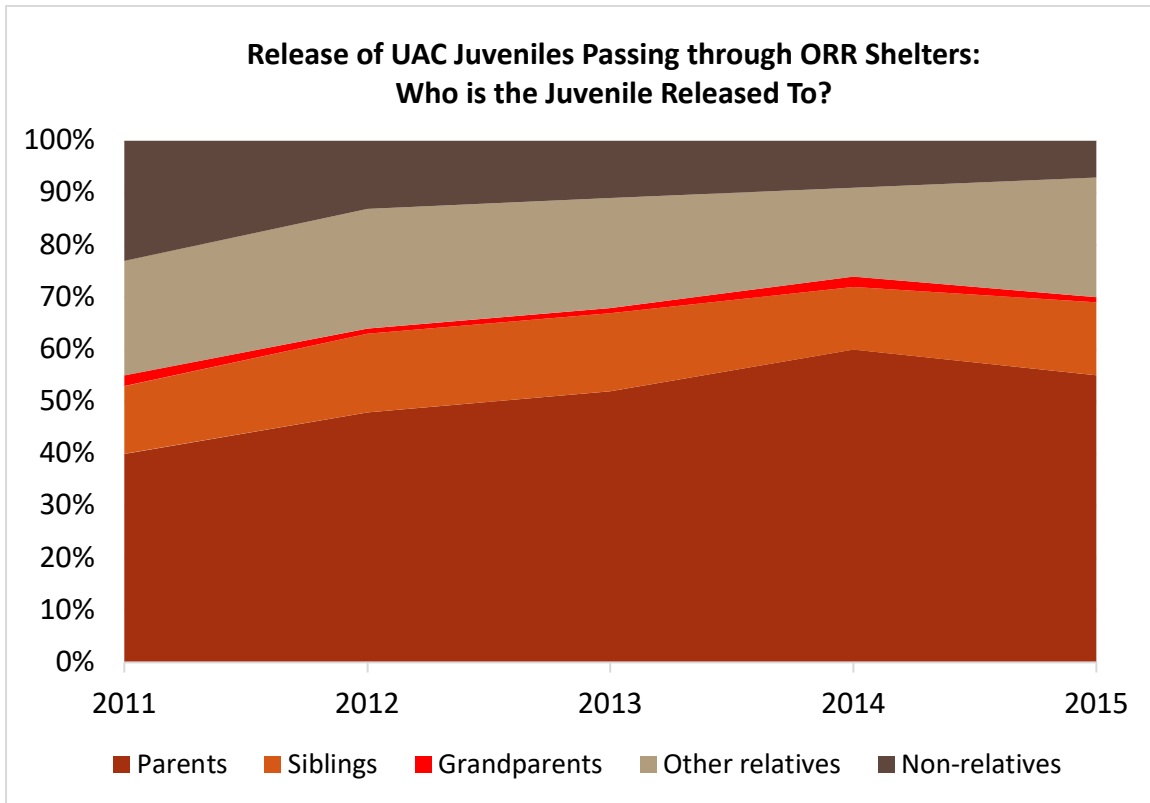
4.5.1. Juvenile Migrants Going to the United States

As discussed in Section 4.3, a majority of the Northern Triangle migrants going to the United States as asylum seekers are juveniles and are either UACs or AACs. Evidence on the degree to which UACs unify with family members can be determined directly from U.S. administrative records. When UACs are apprehended at the U.S.-Mexico border, they are placed in shelters run by the Office of Refugee Resettlement (ORR), and then released to a suitable sponsor. In its annual reports to the U.S. Congress, ORR publishes the number of UACs released to various types of sponsors.

Figure 4.1 shows the percentage breakdown of sponsors and shows that during 2011–2015, roughly half of UACs were released to a biological parent, and 40 percent to other family members such as siblings, grandparents, and aunts or uncles. The large majority of UACs thus reunify with a family member.

Similar data are not reported for AACs, who arrive in the United States with an adult guardian. The degree to which these children and their guardian unify with family members is thus unclear. Data on adult migrants from the EMIF-Sur survey presented below suggest that many of these migrants are also likely reunifying with family present in the United States.

Release of UAC Juveniles Passing through ORR Shelters: Who is the Juvenile Released To?

Source: Annual reports of the Office of Refugee Resettlement, U.S. Department of Health and Human Services.

Figure 4.1. Release of UAC Juveniles Passing through ORR Shelters: Who is the Juvenile Released To?

4.5.2. Adult Migrants Going to the United States

Table 4.16 shows the percentage of Northern Triangle adult migrants deported by the United States, and by Mexico (who indicated the United States as their final destination), who reported having family members and/or friends in the United States. The large majority of migrants deported by the United States—generally 80 percent or higher—had family members and/or friends in the United States. The majority of those deported by Mexico also reported having family members and/or friends in the United States, although percentages are often somewhat less than for those deported by the United States. These data suggest the large majority of adult Northern Triangle migrants usually have family members and/or friends already present in the United States. It is important to note that the EMIF-Sur does not ask the migrant if they intend to unify with a family member or a friend, only whether family members and/or friends are present in the United States. What these data do suggest is that a large majority of Northern Triangle adult migrants *potentially* have access to family or social network support.

Table 4.16. Percentage of Migrants with Family Members and/or Friends in the U.S.

	2009	2010	2011	2012	2013	2014	2015	2016	2017

Deported by U.S.									
Guatemala									
Men	76%	80%	79%	82%	81%	84%	84%	87%	81%
Women	82%	77%	76%	80%	80%	86%	87%	82%	84%
El Salvador									
Men	95%	98%	99%	97%	95%	95%	98%	98%	99%
Women	94%	97%	98%	97%	95%	96%	99%	98%	98%
Honduras									
Men	95%	98%	92%	77%	78%	82%	81%	86%	87%
Women	96%	98%	98%	84%	90%	84%	82%	86%	92%
Deported by Mexico – Final Destination is U.S.									
Guatemala									
Men	61%	50%	59%	50%	64%	67%	61%	68%	79%
Women	76%	64%	68%	56%	68%	71%	67%	72%	90%
El Salvador									
Men	80%	84%	93%	91%	88%	92%	92%	89%	91%
Women	79%	86%	93%	95%	92%	94%	95%	94%	95%
Honduras									
Men	75%	74%	49%	55%	33%	53%	71%	82%	84%
Women	93%	94%	91%	87%	79%	76%	75%	84%	86%

Source: Tabulated from EMIF-Sur survey: "Deported by Mexico" module, question 50 and "Deported by U.S." module, question 24 (2017 questionnaires): "Do you have family or friends in the United States?"

For those migrants deported by Mexico who say that they have friends and/or family in the United States, the EMIF-Sur survey asks them if those family or friends helped them to make the trip. Table 4.17 shows that in most cases, the majority report receiving help for the trip.

Table 4.17. Percentage of Those with Friends and/or Family Receiving Help for Trip from Them (migrants deported by Mexico only)

	2009	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Guatemala									
Men	37%	45%	57%	62%	81%	77%	77%	60%	60%
Women	54%	57%	70%	78%	90%	83%	86%	72%	56%
El Salvador									
Men	50%	46%	33%	40%	51%	41%	28%	51%	58%
Women	56%	56%	34%	34%	60%	60%	60%	70%	66%
Honduras									
Men	43%	69%	80%	63%	84%	66%	58%	44%	51%
Women	82%	92%	98%	94%	98%	86%	69%	55%	100%

Source: Tabulated from EMIF-Sur survey: "Deported by Mexico" module, question 50.1 (2017 questionnaire): "Did you receive help from those relatives or friends to make this trip?"

5. Why Have Asylum Seeker Flows Risen?

Evidence presented in previous chapters shows that the flow of asylum seekers to the United States from Northern Triangle countries rose dramatically after 2011. Since this surge became the focus of national attention in 2014, there have been efforts to understand why it has occurred. Many media accounts and academic research efforts argue that its primary cause is high rates of crime and violence in Northern Triangle countries.[43] Others have argued that actual and perceived changes in U.S. immigration policies explain the surge and its dynamics over time.

Although the asylum seeker surge has attracted a great deal of attention in recent years, there are relatively few rigorous studies that have tested hypotheses on the emergence of the surge and its dynamics. A broader research literature does exist on the relationship between crime and migration, and between civil war and migration, and studies generally find significant relationships between crime or violence and migration.[44] An early study by William Stanley found evidence that violence associated with the civil war in El Salvador caused emigration to the United States as captured by apprehensions on the U.S.-Mexico border.[45] Catalina Amuedo-Dorantes and Thitima Puttitanun analyze the relationship between annual flows of UACs from Mexico, El Salvador, Guatemala, and Honduras to the United States during 2007–2013 and root-cause variables, and they conclude that violence (as measured by the murder rate), economic conditions (as measured by the real per-capita income), and passage of the Williams Wilberforce Trafficking Victims Protection Reauthorization Act (TVPRA) in 2008 all significantly affected these flows.[46] Hiskey et al. analyze LAPOP survey data for Guatemala, El Salvador, and Honduras in 2014 and

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[43] Some have argued that migration from Northern Triangle countries does not follow the pattern that has typically been observed in flows such as that from Mexico to the United States—that the latter is a migration flow driven mainly by economic factors, whereas the former flow is influenced heavily by high rates of internal conflict, violence, and crime. See Hiskey et al., "Leaving the Devil You Know," 8–10, for further discussion.

[44] See Pratikshya Bohra-Mishra and Douglas S. Massey, "Individual Decisions to Migrate During Civil Conflict," *Demography* 48, no. 2 (2011): 401–24, for a review of literature on civil war and migration, and Sukanya Basu and Sarah Pearlman, "Violence and Migration: Evidence from Mexico's Drug War," Working paper, 2013, http://irving.vassar.edu/faculty/sp/MexicoMigrationandDrugWar_submission.pdf, for a review of literature on crime and migration. Studies sometimes find that a non-linear relationship exists such that rising low levels of violence do not lead to significant outflows, but that emigration becomes significant as violence intensifies to high levels. Bohra-Mishra and Massey, for example, review literature on civil conflict and migration, analyze internal and international migration in Nepal during its civil war, and find evidence of a non-linear relationship. Morrison, "Violence or Economics," finds evidence of non-linearity between violence in Guatemala in the late 1970s and internal migration. Studies also sometimes find no evidence of a relationship between crime and migration. Basu and Pearlman, for example, evaluate the relationship of the outbreak of violence in Mexico to conflict between drug cartels in the late 2000s and find no evidence that it led to either internal or international migration.

[45] William D. Stanley, "Economic Migrants or Refugees from Violence? A Time-Series Analysis of Salvadoran Migration to the United States," *Latin American Research Review* 22, no. 1 (1987): 132–54.

[46] Catalina Amuedo-Dorantes and Thitima Puttitanun, "DACA and the Surge in Unaccompanied Minors at the US-Mexico Border," *International Migration* 54, no 4 (2016): 102–17. As discussed in Chapter 4, the number of UACs recorded by USBP was too low in 2007 due to lack of widespread use of the UAC designator in USBP records, and this data artifact may have led to the positive significance of TVPRA.

find that the intention of adults in these countries to migrate in the next three years is significantly related to economic and family-network measures in the case of Guatemala, and to crime and family-network measures in the case of El Salvador and Honduras.[47] Michael Clemens analyzes the relationship between UAC apprehensions and root-cause variables at the level of municipality in the Northern Triangle countries during 2011–2016 and finds that the current and lagged murder rate is significantly correlated with these flows.[48] Katharine Donato and Blake Sisk analyze data from the Latin American Migrant Project migrant survey and find that children from El Salvador, Guatemala, Mexico, and Nicaragua are more likely to migrate to the United States with a parent or after a parent has migrated, emphasizing the importance of family reunification in juvenile migration.[49]

This chapter analyzes evidence on the relationship between migration from Northern Triangle countries and potential root causes. It first reviews survey data on what migrants have themselves cited as their reason(s) for emigrating. It then evaluates evidence from U.S. administrative records on what happens to Northern Triangle migrants once they arrive at the U.S. border. Data from the LAPOP survey is then analyzed that relates the intention to migrate to root-cause variables, broadening Hiskey et al.'s analysis to use of panel data for 2006–2016 and evaluation of the relative importance of individual root-cause variables. The flows of UACs to the United States during 2008–2016 are then analyzed in a cross-country context using annual data for 16 Western Hemisphere countries. Clemens' research is then extended by incorporating a family reunification variable. The impact of a "natural experiment," the implementation of a gang truce in El Salvador in 2012, on juvenile migrant flows from that country to the United States is evaluated. The chapter concludes with a qualitative analysis of the impacts of policy changes on juvenile migrant flows from the Northern Triangle to the United States.

The various data and analyses presented in this chapter lead to an overall conclusion that unification with family and/or friends in the United States is a more significant correlate with migration to the United States from the Northern Triangle than exposure to crime and violence. Given steady unauthorized migration of adults to the United States in the 2000s and 2010s, a juvenile migrant surge from the Northern Triangle countries was inevitable even if crime and violence had been at significantly lower levels. It is also clear that policies have played an important role in affecting these flows. Change in policies in the United States and Mexico are associated with the very beginning of the surge in late 2011 and breakpoints in the fluctuation of flow since then.

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[47]   Hiskey et al., "Leaving the Devil You Know."

[48]   Michael Clemens, "Violence, Development, and Migration Waves: Evidence from Central American Child Migrant Apprehensions," Working Paper 459 (Washington, DC: Center for Global Development, July 2017).

[49]   Katharine M. Donato and Blake Sisk, "Children's Migration to the United States from Mexico and Central America: Evidence from the Mexican and Latin American Migration Projects," *Journal on Migration and Human Security* 3, no. 1 (2015): 58–79.

It should be noted that there is an important endogeneity in the relationship between juvenile emigration and violence in Northern Triangle countries. Emigration of a parent to the United States who leaves family behind increases the vulnerability of that family to crime and violence, and large-scale emigration of adults may make entire neighborhoods vulnerable. Susan Berk-Seligson et al. carried out a large-scale interview project in Central America in 2014 and found that "[t]here is near universal agreement in the stakeholder interviews that the major factor associated with youths dropping out of school and joining violent gangs is the 'broken home' ('la familia desintegrada')."[50] Emigration of parents by definition creates a "broken home." A publication by the World Bank notes that many families in Central America became separated due to emigration of parents, and that children in families with weak parenting are more likely to become victims and perpetrators of criminal acts.[51] Castillo Garcia, in "The Mexico-Guatemala Border," states that

> little has been said regarding the internal effects of emigration from the Central American societies. The few available studies on the profile of emigrants lead to an obvious conclusion: Most are old enough to participate in the workforce and, thus, their ongoing departure is costly for national capacities in terms of human capital. Moreover, a series of collateral effects exist, especially concerning family disintegration, whose consequences start to emerge in different ways, mainly in family abandonment as well as behavioral irregularities, especially among the most vulnerable members of the family unit.[52].

How to best deal with this endogeneity in empirical research is unclear and an important task for future research.

5.1. Evidence from Surveys: Migrant Statements

Survey administrators have interviewed migrants who have left Northern Triangle countries, to try to determine why they left their country. Evidence is available on both juvenile migrants and adult migrants.

5.1.1. UNHCR Juvenile Migrant Interviews

UNHCR conducted interviews in May–August 2013 with 302 migrant juveniles from Northern Triangle countries between the ages of 12 and 17 who had been apprehended by U.S.

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[50] Susan Berk-Seligson, Diana Orcés, Georgina Pizzolitto, Mitchell A. Seligson, and Carole J. Wilson, *Impact Evaluation of USAID's Community-Based Crime and Violence Prevention Approach in Central America: Regional Report for El Salvador, Guatemala, Honduras, and Panama* (Nashville, TN: Vanderbilt University, The Latin American Public Opinion Project (LAPOP), 2014).

[51] World Bank, *Crime and Violence in Central America: A Development Challenge* (Washington, DC: The World Bank, Sustainable Development Department and Poverty Reduction and Economic Management Unit, Latin America and the Caribbean Region, 2011).

[52] Castillo García, "The Mexico-Guatemala Border," 55.

law enforcement at the U.S.-Mexico border.[53] The large majority of the juveniles were interviewed at ORR shelters, where UACs are placed prior to release to a sponsor. Table 5.1 shows the number of times the juveniles mentioned specific root causes for why they came to the United States (respondents were permitted to identify multiple reasons). Reunifying with family and seeking life opportunities were mentioned most often, followed by violence in society and abuse in the home.[54]

Table 5.1. Frequency of Mentioning Root Cause: 2014 UNHCR Interviews with Juvenile Migrants

	Guatemala	El Salvador	Honduras
Family or opportunity, deprivation	113	90	101
Violence in society	20	69	43
Abuse in home	23	21	24
Other	39	36	33

Source: UNHCR, *Children on the Run* (Washington, DC: UNHCR Regional Office for the United States and the Caribbean, 2014), figures on pp. 9–10. "Family and opportunity" were not listed separately but given as one category.

5.1.2. EMIF-Sur Survey

The EMIF-Sur survey asks adult Northern Triangle migrants who were deported by the United States (the "Deported by U.S." module) and deported by Mexico (the "Deported by Mexico" module) why they left or are leaving their country.[55] This question was asked starting in the 2014 EMIF-Sur survey. Table 5.2 shows responses of surveyed migrants deported by the United States by reason. Because a "violence and insecurity" response was not included until 2017, a percentage breakdown is only given for 2017. The large majority of responses in all years is economic incentives. Only in the case of El Salvador was violence cited at a significant rate (19 percent).[56] Table 5.3 shows reasons given by those deported by Mexican authorities, broken down by whether their final destination was Mexico or the United States. The large majority of responses in all years and for both final destinations is economic incentives. Only in the case of El Salvador was violence cited in some years at significant rates (roughly 20 to 30 percent.) These responses

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[53] UNHCR, *Children on the Run* (Washington, DC: UNHCR Regional Office for the United States and the Caribbean, 2014), 60. The majority of juveniles interviewed were boys (71 percent), and juveniles who were 16 or 17 years old (68 percent).

[54] Although family reunification and opportunities were mentioned the most number of times in the interviews, the report generally focuses exclusively on the problem of violence in society, in particular exposure to youth gangs and criminal risks, and violent abuse as the key root-cause motive. The report cites numerous stories of individual experiences, and all of these involved criminal victimization or violent home abuse.

[55] This question is also asked by the "From Guatemala" module, which captures Guatemalans, El Salvadorans, and Hondurans who are transiting through Guatemala on their way to Mexico or the United States. However, very small numbers of El Salvadoran and Honduran migrants are captured by this module.

[56] The sample of migrants deported by the United States may include relatively few migrants who sought asylum based on exposure to violence. Table A.2 in Appendix A, however, shows that this module captured a significant number of migrants in 2017 who reported that they had applied for asylum.

are for all adult migrants. Responses can be tabulated for young adults aged 18–25 years old only, which may correlate better to responses that UACs might give. These tabulations show almost identical response distributions to those for all adults.

Table 5.2. Reason for Leaving Country: "Deported by U.S." Module

	2014	2015	2016	2017	(2017: % breakdown)
Guatemala					
Economic incentives	2,305	1,323	1,481	684	95%
Violence	*	*	*	7	1%
Family	47	75	64	26	4%
Other	97	77	80	6	1%
El Salvador					
Economic incentives	2,314	2,186	1,957	580	73%
Violence	*	*	*	149	19%
Family	39	40	50	67	8%
Other	45	4	9	2	0%
Honduras					
Economic incentives	1,471	1,267	813	328	96%
Violence	*	*	*	6	2%
Family	23	8	6	5	1%
Other	80	43	28	2	1%

Source: Tabulated from EMIF-Sur "Deported by U.S." module, question 13.12 (2017 questionnaire): "Why did you leave your country on this occasion?"

* A "violence" answer option was not available for this question in these years.

Table 5.3. Reasons for Leaving Country: "Deported by Mexico" Module

	Final Destination is Mexico				Final Destination is U.S.			
	2014	**2015**	**2016**	**2017**	**2014**	**2015**	**2016**	**2017**
Number of responses								
Guatemala								
Economic incentives	1054	1517	790	258	1050	1351	867	200
Violence	1	0	2	0	2	2	3	0
Family	15	8	2	1	56	4	0	1
Other	589	288	122	41	414	6	1	0
El Salvador								
Economic incentives	353	529	531	156	1902	2358	2531	476
Violence	1	200	2	46	8	1172	8	116
Family	25	8	5	18	231	25	34	43
Other	118	3	8	6	729	3	15	7
Honduras								
Economic incentives	98	107	230	148	1186	955	1400	389
Violence	5	21	3	13	26	83	10	10
Family	19	12	4	1	290	44	7	2
Other	17	1	17	2	175	9	18	2
Percentage breakdown								
Guatemala								
Economic incentives	64%	84%	86%	86%	69%	99%	100%	100%
Violence	0%	0%	0%	0%	0%	0%	0%	0%
Family	1%	0%	0%	0%	4%	0%	0%	0%
Other	36%	16%	13%	14%	27%	0%	0%	0%
El Salvador								
Economic incentives	71%	71%	97%	69%	66%	66%	98%	74%
Violence	0%	27%	0%	20%	0%	33%	0%	18%
Family	5%	1%	1%	8%	8%	1%	1%	7%
Other	24%	0%	1%	3%	25%	0%	1%	1%
Honduras								
Economic incentives	71%	76%	91%	90%	71%	88%	98%	97%
Violence	4%	15%	1%	8%	2%	8%	1%	2%
Family	14%	9%	2%	1%	17%	4%	0%	0%
Other	12%	1%	7%	1%	10%	1%	1%	0%

Source: Tabulated from EMIF-Sur "Deported by Mexico" module, question 12.11 (2017 questionnaire): "Why did you leave your country on this occasion?"

The migrant sample obtained by the EMIF-Sur survey of those deported by the U.S. is not representative of the asylum seeker flow to the U.S., because this sample consists of adult migrants who either did not claim asylum or lost an asylum case and were subsequently deported. It is thus not surprising that the large majority of these migrants cite economic opportunity as their main motivation. The migrant sample obtained by EMIF-Sur of those deported by Mexico is likely a

more representative sample of the overall flow of Northern Triangle migrants to the U.S., because very few migrants arriving in Mexico claim asylum or apply for a humanitarian transit visa.[57] However, this sample consists of migrants who both intend and do not intend to claim asylum at the U.S. border, and there is no question in the EMIF-Sur survey that can be used to identify those intending to claim asylum versus those not intending to do so.

5.2. Evidence from Migrant Outcomes in the United States

One challenge in using these data is that many cases in immigration court are still pending. Table ES-8 gives rates resulting from a plausible assumption on pending cases and shows that this rate for Guatemala and Honduras is 5% or less, and for El Salvador roughly 10%. These low rates are due to the fact that many apprehended adults do not actually apply for asylum (which suggests crime and violence was not actually the reason for their emigration), and of those that do, many lose their asylum case (which means that U.S. immigration courts found the case to be insufficiently substantiated).

Although the EMIF sample is unrepresentative of the asylum-seeking population, data on all of those who are apprehended at the U.S.-Mexico border, and in particular whether or not they claim asylum and succeed or not in that claim, are available from U.S. administrative records. Table 5.4 shows outcomes for single-adult migrants who were apprehended in a particular year at the U.S.-Mexico border during 2012-2016.[58] Some apprehended migrants do not claim asylum by making a "credible fear" claim, even though this leads to deportation to their home country in most instances. Others claim credible fear but ultimately do not win their immigration court case and are ordered removed, and others claim credible fear and ultimately win permission to be legally present in the U.S. [59] This combination of migrant decisions (whether to claim credible fear or not) and court decisions (granting of asylum or not) can be used to assess the degree to which U.S. immigration courts find that asylum claims justify migration.

We focus here on the rate at which those who are apprehended both file an asylum claim and succeed in that claim. One challenge in developing this rate is that a significant number of cases

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[57] See Table 4.9 for the number of asylum (refugee) applications, Figure 7.1 for the number of humanitarian transit visa applications, and Figure 6.1 for the number of apprehensions by Mexican authorities. During 2013-2017, asylum humanitarian transit visa applications as a percentage of total adult returns was 7%. It is not clear how many asylum applicants and humanitarian transit visa applicants are by those who were apprehended for illegal entry into Mexico, so that 7% is an upper bound on the share of those who were apprehended and subsequently applied for asylum or a transit visa.

[58] Single adults are adults who are not part of an FMUA apprehension. Outcomes reported in this table were constructed by linking administrative records on apprehensions and detention held by DHS and immigration court records held by the Department of Justice's immigration court agency (EOIR). Values reflect outcomes as of March 31, 2017.

[59] Some migrants are explicitly granted relief to stay legally in the U.S. by the immigration court, whereas others have their court case terminated (which usually means that another government agency granted permission for legal residence) or administratively closed (which usually means that the government will not pursue a removal order for the migrant.) All three of these outcomes are treated here as a successful pursuit of an asylum claim.

in immigration court were still pending as of the date that the administrative data we had access to ends. It is possible to develop a rate by making an assumption on the degree to which pending cases will ultimately succeed or fail. We consider three scenarios: no pending cases get relief, pending cases achieve success at the 2013 rate, and all pending cases are ultimately successful. The first and last scenarios give lower and upper bounds to positive asylum outcomes as a percentage of all apprehensions, and the middle scenario gives a more plausible rate. The last three columns of Table 5.4 show that for Guatemala and Honduras, this rate is 5% or less under the first two pending-case scenarios, and very unlikely to exceed 10%. For El Salvador, the rate is plausibly around 10%. These low rates are due to two reasons. First, a large fraction of adults from the Northern Triangle do not actually apply for asylum after being apprehended, even though they have that option and the ultimate success of being released into the U.S. after claiming credible fear is quite high.[60] Second, of those who do claim credible fear, a majority do not win their case and are ordered removed. These results suggest that most single-adult migrants from the Northern Triangle did not file an asylum claim or lost their asylum case in immigration court. Given that exposure to violence is ultimately the basis for the asylum claims of Northern Triangle migrants, these low rates call into question whether exposure to violence was the real reason underlying the emigration of most single-adults.

Table 5.5 shows outcomes for FMUA apprehensions during 2012-2016. Many of the cases of migrants apprehended as a family unit were still pending in immigration court as of March 31 2017, so that the assumption about the ultimate success rate for pending cases impacts results more for these apprehensions. As in the case of single adults, many FMUA migrants do not actually file an asylum claim. Unlike the case of single adults, however, the U.S. government cannot hold these migrants for more than 20 days, and many may decide after being released from a family detention center to not file an asylum claim and enter the immigration court process, so that they live in the U.S. in an unauthorized status. Many of these migrants are also issued a removal order by an immigration court, but this is usually because the migrant stopped attending their immigration court hearings, and an immigration judge issued a removal order for being *in absentia*. The positive asylum case outcome rate for FMUA migrants is higher than in the case of single adults, as is the permission-to-stay rate, but a significant number of these migrants either never apply for asylum or are ordered removed by an immigration court judge.[61]

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[60] See Chapter 6, section 6.4, and Figure 6.4 in particular.

[61] Unaccompanied children (UACs) are all entered into an immigration court process after being apprehended, so that there is no initial choice to claim credible fear or not.

Table 5.4. Northern Triangle Single-Adult Migrant Outcomes After Arrival at U.S.-Mexico Border

	No credible fear claim	Ordered removed, deported	Ordered removed, not deported	Credible fear claim			Case still pending[A]	Permission to stay rate[A,B]	Positive credible fear outcomes as % of all apprehensions:		
				Given permission to stay in U.S.					No pending get relief	Pending get relief at 2013 rate	All pending get relief
				Granted relief	Admin. closed	Terminated					
El Salvador											
2012	13,219	1,070	1,367	124	712	163	1,287	29%	6%	8%	13%
2013	16,698	2,455	2,020	144	1,556	255	5,419	30%	7%	13%	26%
2014	17,598	5,927	1,813	154	528	208	8,614	10%	3%	10%	27%
2015	12,130	4,073	452	58	30	60	5,911	3%	1%	9%	27%
2016	13,120	4,865	468	50	22	24	9,515	2%	0%	11%	34%
Guatemala											
2012	28,810	624	628	78	345	83	507	29%	2%	2%	3%
2013	39,779	1,157	1,129	100	844	144	2,069	32%	2%	4%	7%
2014	46,069	1,992	795	122	310	56	2,475	15%	1%	2%	6%
2015	26,526	1,739	245	35	22	21	2,144	4%	0%	3%	7%
2016	27,976	2,684	266	13	12	17	3,887	1%	0%	4%	11%
Honduras											
2012	24,532	605	844	75	263	127	765	24%	2%	2%	5%
2013	28,792	1,520	1,384	83	726	143	3,050	25%	3%	5%	11%
2014	31,690	2,581	1,112	118	221	62	3,335	10%	1%	3%	10%
2015	13,757	1,533	248	54	8	12	1,969	4%	0%	3%	12%
2016	16,197	2,716	330	34	10	3	3,836	2%	0%	4%	17%

A : As of March 2017.

B : This rate equals the ratio of migrants given permission to stay to those given permission plus those ordered removed.

Table 5.5. Northern Triangle FMUA Migrant Outcomes After Arrival at U.S.-Mexico Border

| | | | | Credible fear claim | | | | | | Positive credible fear outcomes as % of all apprehensions: | | |
| | | | | | Given permission to stay in U.S. | | | | | | | |
	No credible fear claim	Ordered removed, deported	Ordered removed, not deported	Granted relief	Admin. closed	Terminated	Case still pending[A]	Permission to stay rate[A,B]	No pending get relief	Pending get relief at 2013 rate	All pending get relief
	El Salvador										
2012	519	17	182	19	139	29	290	48%	16%	23%	40%
2013	1,506	12	291	32	363	59	1,260	60%	13%	24%	49%
2014	13,835	189	4,274	508	595	298	9,650	24%	5%	15%	38%
2015	7,264	130	2,173	372	153	104	8,669	21%	3%	17%	49%
2016	12,685	281	1,762	144	82	58	29,679	12%	1%	21%	67%
	Guatemala										
2012	333	22	105	8	107	18	126	51%	18%	24%	36%
2013	964	7	162	13	176	32	777	57%	10%	22%	47%
2014	11,482	170	3,173	463	554	175	9,007	26%	5%	16%	41%
2015	11,681	294	3,859	404	246	145	10,782	16%	3%	16%	42%
2016	20,075	301	3,920	126	142	76	25,854	8%	1%	17%	52%
	Honduras										
2012	451	24	193	21	73	21	262	35%	11%	17%	36%
2013	3,539	13	960	34	636	67	2,463	43%	10%	17%	41%
2014	33,256	345	12,052	665	1,341	494	21,745	17%	4%	11%	35%
2015	7,746	166	3,698	229	118	83	7,400	10%	2%	12%	40%
2016	10,209	284	3,132	91	67	37	20,835	5%	1%	15%	61%

A : As of March 2017.

B : This rate equals the ratio of migrants given permission to stay to those given permission plus those ordered removed.

5.3. Evidence from the Latin American Public Opinion Poll

The LAPOP survey is a very useful source of data that can be used to analyze the relationship between migration intentions and root causes. Since the mid-2000s, the survey has asked the following questions of nationally representative samples of adults over 17 years old in a stable set of Western Hemisphere countries:

- Q14 on intention to migrate: "Do you have any intention of going to live or work in another country in the next three years?"

- AOJ11: "Speaking of the neighborhood where you live and thinking of the possibility of being assaulted or robbed, do you feel very safe, somewhat safe, somewhat unsafe, or very unsafe?"

- VIC1ext: "Have you been a victim of any type of crime (robbery, burglary, assault, fraud, blackmail, extortion, violent threats) in the past 12 months?"

- Q10a: "Do you or someone else living in your household receive remittances, that is, economic assistance from abroad?"

- Q10d: "The salary that you receive and total household income is (good enough and can save), (good enough, with no major problems), (not enough, and are stretched), (not enough, and having a hard time).

By definition, this survey cannot observe people who have actually migrated, only people who are contemplating migrating. The variable that is a proxy for the decision to migrate is Q14, which is whether someone has the intention to migrate. Questions aoj11 and vic1ext are on perceived safety and actually being the victim of crime (a summary of responses to these questions is presented in Chapter 3). Q10a asks if the person's household receives economic assistance from abroad; this question is a good proxy for whether the person has a family member or friend in the potential destination country who could help them with their trip and/or settling upon arrival. Question Q10d captures whether a person might have a motive to migrate due to poor conditions in the home country.[62]

Responses to Q14 can be regressed on responses to the other questions (as well as sociodemographic and geographic controls) to assess the influences of root-cause variable on the intention to migrate. Hiskey et al. use LAPOP data for 2014 for the Northern Triangle countries to analyze the relationship between intention to migrate and explanatory variables, including being a victim of crime (the vic1ext variable), perception of risk of being assaulted or robbed (the aoj11 variable), receiving remittances from abroad, perception of family's economic situation, being

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[62] Although Q10d is the best variable in LAPOP to capture the economic motive for migrating, it is nonetheless problematic in capturing that motive, because even if the person's household is in good shape, the economic gains from migrating might be so high that it induces the person to leave.

unemployed, and several other variables collected by LAPOP for those countries in that year.[63] For El Salvador and Honduras, the authors indicate results suggest that coefficients on being a victim of crime and receiving remittances are highly significant in explaining intentions to migrate.[64] Although their results show clearly that the variable proxying for having family and access to a social network in the United States is highly significant, the authors focus exclusively on the results of being a victim of crime. However, it is not clear why they make such strong conclusions, given that no effort is made in the paper to determine whether being a victim of crime or receiving remittances is more important in explaining the intention to migrate.[65]

Hiskey et al. use only one year of LAPOP data, and they restrict analysis to only Northern Triangle countries. However, LAPOP data have been collected since the mid-2000s, and in many countries—Chapter 3 reviews responses to several LAPOP questions across countries and time. It will be useful to carry out regression analysis that takes advantage of the fact that the LAPOP survey has asked the core questions listed above in a stable set of countries since 2006. It will also be useful to determine which explanatory variables have more power than others to explain variance in the intention to migrate.

Key observations on the regression analysis presented here are:

- Ordinary Least Squares (OLS) linear probability models are estimated using the robust estimate of variance.

- Two regressions are carried out: one using a full set of countries (Mexico, Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, Panama, Peru, Paraguay, Dominican Republic, Haiti, and Jamaica), and one only using the Northern Triangle countries.

- Control variables are included in all regressions, including country and year dummies, as well as gender, age, and age squared.

- An important aspect of the survey is that it does not interview people younger than 18 years old; therefore, juveniles are not included. In order to get results that might be most applicable to juvenile migrants, in particular UACs (the large majority of

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[63] Hiskey et al., "Leaving the Devil You Know."

[64] Results for Guatemala showed no statistical significant of crime variables. Variables on perception of difficulties and dangers of crossing the border, as well as treatment of migrants in the United States, were included for El Salvador and Honduras, but were not statistically significant.

[65] For example, with respect to results for Hondurans, they write: "The one factor that does comport with standard accounts of migration is receipt of remittances, a measure we use to represent the depth of one's connection to a migrant living abroad. Here it appears that regardless of whether one is driven by economic or security reasons to consider emigration, having a friend or relative sending remittances makes emigration a more viable life strategy. The clear overall message from these results, though, is that experiences with crime influenced Hondurans thinking about emigration far more in 2014 than any perceived economic opportunities awaiting them in the U.S." (Hiskey et al., "Leaving the Devil You Know," 13)

which are aged 14–17 years old), we estimate relationships on samples restricted to migrants aged 18 and 19, as well as all migrants.

- Hiskey et al. included both the victim-of-crime variable and the perception-of-risk-of-assault/robbery variable as explanatory variables.[66] This approach can be questioned for two reasons. First, these variables are highly correlated. Second, the perception-of-risk variable is arguably a better measure to use to capture the impacts of crime and violence on the intention to migrate. A person may not have been a victim of crime in the last 12 months but may live in a neighborhood that they regard as quite dangerous, so that the perceived risk of crime is quite high, even though they have not yet realized a negative outcome. We present results for regressions that include each variable separately.

- The economic variable that is included here—question Q10d on satisfaction with current household income—is the best variable in the survey to capture a person's satisfaction with the level of income their household currently receives. However, this variable suffers from very important limitations. One limitation is that it does not capture the economic gain that the person expects to obtain from migrating. A person may report an unsatisfactory current level of income, but also not expect to improve their situation by migrating. Or, a person may report satisfaction with current level of income, but they anticipate a very large gain from migration. Another limitation is that empirical evidence suggests that very poor households migrate at low rates, because they do not have the resources to finance international relocation. The receiving-remittances response will be correlated with both the anticipated gain from migration and the ability to finance relocation. Because of these limitations, it is likely that the response to question Q10d will only very imperfectly capture the expected economic return to migration, and its impact on migration intention will be attenuated.

- The intention-to-migrate variable (Q14) has a value of 0 or 1 if the person does not or does intend to migrate, respectively. The gender variable has a value of 0 or 1 if the person is female or male, respectively. The victim-of-crime variable (vic1ext) has a value of 0 or 1 if the person has not or has been a victim of crime, respectively. The receives-remittances variable (Q14) has a value of 0 or 1 if the person does not or does receive remittances, respectively. The neighborhood safety variable (aoj11) has values of 0, 1, 2, or 3 if the person reports feeling "very safe," "somewhat safe," "somewhat unsafe," or "very unsafe," respectively. Feeling "very safe" is set as the base, so that coefficients are reported for the other three categories and represent the difference between being in that category or the base one. The economic situation variable (Q10d) has values of 1, 2, 3, or 4 if the person reports

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[66]   Hiskey et al., "Leaving the Devil You Know."

their household's situation as "good enough and can save," "good enough, with no major problems," "not enough, and are stretched," and "not enough, and having a hard time," respectively. The base is set at "good enough and can save."

Regression results are presented in Table 5.6 and suggest that exposure to crime risk and receiving remittances are statistically and quantitatively significant in all regressions. However, the impact of receiving remittances is much larger than the impact of exposure to crime risk, as coefficient values on the former is at least twice as large as values on the latter. The economic situation variable is often statistically significant and generally has a magnitude similar to that of the crime variables, but, as noted, this variable suffers important limitations with respect to its capturing economic incentives to migrate.

Table 5.7 shows how much variance in the intention-to-migrate variable is explained by including only control variables, and control variables plus one of the root-cause variables.[67] The improvement in explained variance resulting from adding a root-cause variable is very small for the crime-and-economic-situation variables, and substantial for the receives-remittance variable. This is additional strong evidence that the most important variable in explaining intention to migrate is whether a person has a family member or friend resident in the potential destination country. These results are consistent if all countries or just Northern Triangle countries are included in the sample, and if all adults or only 18–19 year-olds are included.

It is important to note that the influence of the remittance variable, which indicates whether someone has family and/or friends in the U.S. who is financially supporting them, is capturing both incentives for family reunification in order to improve the welfare of the household, and any differential ability of a household to finance and support a relocation between those with and without members already in the U.S. In terms of improving family welfare, this could be because of a pure desire of separated family members to live together as opposed to apart from each other, or to improve the welfare of migrants being brought to the U.S. in terms of their economic and safety prospects. However, variables related to economic conditions and crime or violence will control for improvement in the welfare of migrants for the latter reasons in these regressions, so that the influence of the remittance variable is capturing a taste for living together and/or improved ability to support a migration. These considerations apply to the regression analysis of Sections 5.4 and 5.5 as well.

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[67] Adjusted R^2 is the measure of explained variance reported in the table.

Table 5.6. Intent-to-Migrate Regressions

	All Countries: All adults		All Countries: 18–19 year-olds		Northern Triangle: All adults		Northern Triangle: 18–19 year olds	
Neighborhood safety: "Somewhat safe"	.01 (1.5)		.01 (0.6)		.01 (1.0)		.03 (1.0)	
"Somewhat unsafe"	.04*** (10.5)		.03* (1.9)		.04*** (5.2)		.02 (0.8)	
"Very unsafe"	.07*** (15.2)		.09*** (3.8)		.08*** (9.1)		.13*** (3.2)	
Victim of crime		.08*** (21.2)		.05*** (3.6)		.09*** (13.5)		.01 (0.5)
Receives remittances	.17*** (40.9)	.16*** (40.3)	.21*** (14.0)	.21*** (13.6)	.16*** (21.8)	.15*** (21.4)	.23*** (8.9)	.23*** (8.9)
Economic situation: "Good enough, can't save"	-.00 (-0.1)	.00 (0.4)	.01 (0.3)	.01 (0.4)	.02* (1.6)	.02* (1.9)	.04 (1.1)	.04 (1.0)
"Not enough"	.04*** (7.9)	.04*** (8.8)	.03 (1.6)	.03* (1.8)	.06*** (5.7)	.07*** (6.2)	.07** (2.0)	.07** (2.0)
"Hard time"	.05*** (8.9)	.06*** (10.5)	.04* (1.8)	.05** (2.0)	.09*** (7.7)	.10*** (8.6)	.05 (1.3)	.06 (1.4)
Gender	.07*** (27.8)	.07*** (26.2)	.10*** (8.5)	.09*** (7.9)	.09*** (17.7)	.08*** (16.5)	.15*** (7.0)	.14*** (6.7)
Age	-.01*** (-28.0)	-.01*** -(27.5)	.01 (1.3)	.01 (1.2)	-.01*** (-14.7)	-.01*** (-14.52)	-.00 (-0.0)	-.00 (-0.1)
Age^2	.00005*** (11.0)	.00005*** (10.7)	-		.00005*** (6.3)	.00005*** (6.4)	-	-
Constant	.42*** (38.3)	.43*** (39.4)	-.08 (-0.4)	-.06 (-0.3)	.39*** (18.4)	.38*** (18.6)	.11 (0.3)	.17 (0.4)
N	99,923	100,466	6,586	6,603	26,580	26,757	2,031	2,038
R^2	0.18	0.18	0.13	0.12	0.12	0.13	0.09	0.09

T-statistics in parentheses. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Table 5.7. Adjusted R2 for Regression Specifications

	All Countries: All adult migrants	All Countries: 18–19 year-olds only	Northern Triangle: All adult migrants	Northern Triangle: 18–19 year-olds only
Control variables only[A]	0.166	0.100	0.096	0.049
Controls and neighborhood safety	0.169	0.103	0.101	0.053
Controls and victim-of-crime	0.171	0.103	0.104	0.050
Controls and economic situation	0.163	0.097	0.099	0.046
Controls and receives-remittances	0.181	0.121	0.113	0.088

A: gender, age, age squared, country dummy variables, year dummy variables.

5.4. Cross-Country Analysis of Unaccompanied Children Flows

Section 5.1 evaluates data on the root causes that migrants cite as their reason for emigrating from the Northern Triangle, Section 5.2 analyzes outcomes for migrants after arriving at the U.S. border, and Section 5.3 evaluates the relationship between the intention to migrate and root causes. It is also possible to analyze the relationship between actual emigration outcomes—the number of apprehensions of asylum seekers—and measures of root-cause variables. In this section,[68] the annual flow of UACs to the United States from 16 Western Hemisphere countries is related to country-level root-cause measures. Although Northern Triangle migrants account for the large majority of the UAC flow, small positive flows from other countries in Latin America and the Caribbean have also occurred.

Key observations on the regression analysis presented here are:

- Estimation technique is OLS using the robust estimate of variance.

- The countries included are Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Jamaica, Nicaragua, Panama, Peru, and Venezuela.[69]

- The dependent variable used in this analysis is not the level of UAC apprehensions, but a UAC flow rate: the ratio of UAC apprehensions to the country's total juvenile

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[68] This section is a revised version of Whitley et al (2018).

[69] A significant number of UACs are Mexican nationals. Mexico is excluded from the cross-country analysis because the UAC flow from Mexico is unusual. A significant number of UACs are teenagers working for smuggling organizations and are apprehended while on the job. These UACs do not seek asylum and do not want to reside in the United States.

population. This measure reflects the likelihood that a child from a given country will be apprehended on the border.[70]

- The murder rate is used as a measure of crime and violence. The percentage of those answering "somewhat unsafe" and "very unsafe" to the neighborhood safety question of the LAPOP survey (aoj11) and "some" or "a lot" to the presence of gangs question (aoj17) are also used to capture crime/violence incentives to migrate.

- Per-capita GDP in constant PPP prices in home countries is used as a measure of economic motivation. This measure has an important limitation in capturing the economic incentive to migrate to the United States. What motivates migration is not the level of income in the home country, but the difference between income in the potential destination country and income in the home country. However, as Table 3.1 shows for Northern Triangle countries, the gaps between U.S. per capita GDP and per capita GDP in other countries are quite large and, more importantly, do not vary over time. In this regression, the impact of economic incentives is more likely to be captured by country-specific fixed effects, and not the per-capita GDP variable.

- The family reunification measure is the current or lagged flow of adult apprehensions as a percentage of total adult population in the source country to the U.S.[71] Using this measure assumes that fairly recent adult arrivals are likely to seek to bring family members to them from their home country. This measure is also consistent with the measure used in Section 5.5 below.

- Control variables are included in all regressions, including country and year dummies.

We also regress single-adult apprehensions on the root-cause economic and crime/violence variables to assess their influence on the flow of adults to the U.S. in an annual cross-country context.[72]

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[70] This rate has been substantially higher for El Salvador and Honduras than for Guatemala throughout the period 2000–2016.

[71] A rate variable of adult apprehensions to adult male population was also tried, and results for all specifications are robust to using this alternative.

[72] Single-adult apprehensions are an imperfect measure of flow, because many adults seek to evade at the border, and a significant fraction succeed in doing so, so that apprehensions are correlated with successful illegal entries but will diverge from them depending on enforcement outcomes such as the probability of apprehending someone trying to evade. Evidence suggests that single adults seek to evade at a higher rate than asylum seekers, who have presented themselves to U.S. enforcement authorities at a very high rate in recent years: see Chapter 6 for more extensive discussion and review of evidence on this.

Table 5.9 displays regression results. For the UAC regressions that include the murder rate as the measure of crime and violence risk, both the contemporary and lagged value of the adult apprehension rate are statistically and quantitatively significant in all specifications. When all root-cause variables are included, the adult apprehension rate and the murder rate are statistically significant, and per-capita income is not. However, neither alternative measure of crime and violence (neighborhood safety and gang presence) is statistically significant.[73] The evidence on the impact of crime and violence on UAC flows in a cross-country context is thus mixed.

For the adult apprehension regressions, if lagged adult apprehensions are not included, per-capita income is statistically significant if the murder rate and gang presence are used as the crime/violence indicator, but none of the crime/violence indicators (murder rate and perceptions of neighborhood safety or gang presence) are significant in any specification. If lagged apprehensions are included in the specification with the murder rate, neither root-cause variable is significant. These results suggest that economic conditions influence the flow of Northern Triangle adults to the U.S., but not crime and violence conditions.

As noted in the previous section, the influence of the variable capturing family reunification (in this case, the adult apprehension rate) captures both incentives for family reunification in order to improve the welfare of the household that is independent from other explanatory variables, and any differential ability of a household to finance and support a relocation between those with and without members already in the U.S.

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[73] Because the LAPOP survey is only conducted biannually as opposed to every year, these regressions differ significantly from the regressions using the murder rate in terms of their time sample. The lagged adult apprehension rate also had to be dropped given that one explanatory variable was available only at a biannual frequency.

Table 5.9. Cross-Country UAC Flow Regressions

Dependent variable:	Ratio of UAC apprehensions to juvenile population			Ratio of adult apprehensions to adult population			
Adult apprehension Rate	0.33** (2.1)	1.1*** (2.9)	1.1*** (3.0)				
Lagged adult apprehension rate	0.34* (1.7)						0.53*** (4.4)
Per-capita income	-0.001 (-1.6)	-0.003 (-1.6)	-0.004 (-1.5)	-0.002*** (-2.7)	-0.003* (-1.7)	-0.002 (-1.5)	-0.006 (-1.0)
Murder rate	0.32* (1.9)			0.11 (0.9)			0.02 (0.1)
Neighborhood safety (LAPOP)		-0.003 (-1.3)				-0.002 (-1.2)	
Gang presence (LAPOP)			0.005 (1.3)		0.002 (0.5)		
Constant	-0.0001 (-0.2)	0.004 (1.3)	0.001 (0.5)	0.002*** (3.3)	0.004*** (2.7)	0.004** (2.1)	0.001* (1.6)
R^2adj	0.61	0.58	0.58	0.72	0.81	0.83	0.81

Country and year fixed effects are included in all regressions. Estimation technique is OLS with White diagonal standard error estimation. ***, **, and * denote statistical significance at the 1%, 5%, and 10% level, respectively.

5.5. Cross-Municipality Analysis of Juvenile Asylum Seeker Flows

The analysis in Section 5.4 is of annual flows across several countries. Another approach to evaluating the influence of root-cause variables on asylum seeker flows to the United States is to focus on the Northern Triangle countries only, but take advantage of variation across municipalities in these countries. There is significant variation in the murder rate across cities and towns in these countries. Clemens analyzes the relationship between UAC apprehensions and root-cause variables at the level of municipality in the Northern Triangle countries during 2011–2016 and finds that the current and lagged murder rate is significantly correlated with these flows.[74] Although Clemens includes a range of explanatory variables in his regressions, including municipality and year fixed effects, he does not include any variable related to family reunification. Northern Triangle municipality-level analysis is extended here to incorporate such a variable. Guatemala is not included in our analysis due to lack of data on the murder rate at the municipality level.

5.5.1. Migrant Apprehension Data

Data on migrant apprehensions were obtained from CBP, which records information on the gender, age, citizenship, and municipality and department (state) of origin of each person they detain for illegal entry into the United States as well as the border station in which the apprehension was made.[75] They also record whether or not a person claims asylum and whether minors are unaccompanied (UAC) or accompanied (AAC).

Between 1999 and 2018, CBP reported 1,045,513 records of detained migrants from El Salvador and Honduras.[76] In order to address concerns about identifiable and sensitive information, we aggregate the individual-level data to obtain counts of detained migrants by month, origin municipality and border station, as well as month-origin-border station counts by gender, juvenile status, and whether the juvenile was a UAC or AAC. Approximately 67 percent of the sample was male, and 70 percent were non-juveniles. Slightly over 1/3 of the overall population claimed asylum, but 82 percent of juveniles requested asylum.

Migrants' origin municipalities were recorded in text for each observation. In order to account for typos and misspellings by CBP field agents, we calculated the string distance between each CBP-recorded origin against a set of correctly spelled municipality names. Any CBP-recorded municipalities that required fewer than three character insertions or deletions were deemed to be the same municipality. This process reduced the 45,322 recorded municipalities to 493 unique

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[74] Clemens, "Violence, Development, and Migration Waves."

[75] The U.S. Border Patrol is organized into nine sectors along the U.S.-Mexico border. Each sector is subdivided into multiple stations, some of which have border frontier mileage as part of their boundaries, and some of which are located only in the interior of the United States.

[76] Municipality-level crime data is not available from Guatemala so the analysis focuses only on El Salvador and Honduras.

municipalities. Because the department field is filled in less consistently than the municipality field, we drop the observations for municipality names that exist in more than one department within a given country (e.g., there are two municipalities named San Jose). We then create a balanced panel of migrant flows for each municipality and each month in the sample by filling in municipality-month-of-sample observations for which there were no observed migrants with a zero.

5.5.2. Murder Data

The governments of Honduras and El Salvador each provided annual murder counts by municipality. Honduras provided murder data for the period 2008–2017, and El Salvador provided murder data for 2003–2017. In each case, it is possible to observe total murders, murders of males, and murders of females.[77]

5.5.3. Demographic and Economic Data

Supplementary regional economic and demographic data were obtained from the Global Data Lab. The Global Data Lab provides a dataset of time-varying social, economic, and population measures based on household-level survey datasets (e.g., national census). The Global Data Lab provides annual estimates of each of these measures by using smoothing methods to interpolate values between surveys and across space.

Three variables reported by the Global Data Lab are used in our analysis: average years of education for individuals over 20, the infant mortality rate, and the International Wealth Index, which is a value between 0 and 100 that represents the wealth of households. In Honduras, these values are reported at the department level, while in El Salvador the data are available for four zonas that each contain multiple departments.

Data on the unemployment rate and GDP per capita were also obtained from the World Bank. These values are only available at the annual, national level.

5.5.4. Population Data

Municipality-level population data are available from each country's national census. The most recent census in El Salvador was conducted in 2007, and in Honduras in 2013. Projection data are available for both countries for later years. We assign each municipality its 2014 population in order to ensure consistency between the countries.

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[77] We also considered an alternative measure of violence perceptions using Google Trends data on searches for "asesinato" (murder), "matar" (kill), "rape" (violación), and "gang" (pandilla). The coefficients on asesinato and violación were positive and statistically significant and the coefficient on matar was negative and statistically significant. Other controls were not statistically different. We chose not to focus on these results because the impacts of using Google Trends data to measure crime drivers has not been studied.

5.5.5. Data Construction and Aggregation

Each dataset is combined using fuzzy string matching based on the number of letters that need to be added or removed to make two municipality names match each other. This process was performed separately for El Salvador and Honduras to allow municipality names to be shared by each country. This results in 437 unique country-municipality combinations across a ten-year timeframe between 2008 and 2017.

Migration rates for each municipality-month-of-sample are calculated by dividing the number of observed migrants by the total population in the origin municipality in 2014. This procedure is also performed to derive a murder rate and migration rates that are unique to each subset of the data (e.g., juveniles, males). Note that these values are not directly migration rates among a subset because subsample populations are unknown (i.e., the juvenile murder rate is total juvenile murders divided by total population rather than by juvenile population).

Finally, migration rates across months in each year are aggregated to compute an annual panel dataset.

5.5.6. Methodology

In order to estimate the effect of various factors on migration, we estimate:

$$MigRate_{csmy} = \alpha + \beta_1 MurderRate_{cy} + \beta_2 ReunificationRate_{csmy} + \beta_3 Demographic_{cy} + \tau_{my} + \eta_{cs} + \epsilon_{cmsy}$$

where:

- MigRate is the apprehension rate of municipality c, at station s, in month m, and year y;
- MurderRate is the MurderRate for municipality, c, in year , in year, y;
- Demographic is a matrix of department or zona specific economic and demographic controls; and
- ReunificationRate is measured as the lag of the adult apprehension rate between a municipality and station. This relies on the assumption that a large number of adults from a given municipality being detained at a particular station is likely to be correlated with a large number of adults from that municipality successfully entering the United States through that pathway. This variable captures the influence of the desire to reunify a family after migration of "pioneer" adult family members and is a key innovation of our analysis.

Idiosyncratic standard errors are clustered at the municipality level to account for heteroskedasticity and autocorrelation.

We rely on η and τ, a series of municipality-station-specific fixed effects and month-of-sample-specific fixed effects, to capture time-invariant characteristics of the municipalities that

influence migration as well as a location-invariant characteristic that influences migration. Municipality-station fixed effects will capture, for example, a municipality's distance to major roads and highways that will facilitate access to migration and global economic conditions. Time fixed effects will capture, for example, the impact of a policy change variable that affects all municipalities to the same degree.

As was the case in the previous section's regression analysis, economic variables included in these regressions suffer an important limitation in capturing the economic incentive to migrate to the United States. What motivates migration is not the level of income in the home country, but the difference between income in the potential destination country and income in the home country. However, the gaps between U.S. economic conditions and economic conditions in the Northern Triangle are very large and, more importantly, do not vary over time. In the regressions estimated here, the impacts of economic incentives are more likely to be captured by location-specific fixed effects than by the included variables.

5.5.7. Estimation Results

Regression results are presented in Table 5.10–Table 5.12. Results presented in Table 5.10 suggest that a municipality's contemporaneous murder rate is statistically significant if economic variables are not included, but insignificant if they are included, and that the effect provides little explanatory power to the model after controlling for time-invariant municipality characteristics. There is important heterogeneity to consider in these results though, as there is some evidence that male juvenile migration responds to contemporaneous murder rates.[78] Results presented in Table 5.11 show a similar pattern for the 1-year lagged murder rate. Setting aside the issue of statistical significance, these results suggest that each additional murder per 100,000 residents is associated with about a 0.001 increase in the total juvenile migration rate (total number of juvenile migrants per 100,000 people in the home municipality) at each of the 49 border sites included in the analysis. As a result, a one murder per 100,000 increase in a home municipality has the result of increasing total apprehensions per 100,000 residents at the origin by about 0.4.

The reunification variable has a statistically significant effect on migration flows in all regressions, is robust to the exclusion or inclusion of the economic variables, and provides a significant increase in explanatory power of the model after controlling for time-invariant municipality characteristics (as captured by change in the R^2 measure). Each additional one person per 100,000 who was captured from a particular municipality at a given Border Patrol site two years prior, results in around a 0.075 person per 100,000 increase in contemporaneous migrants. Results presented in Table 5.12 show that this effect is robust to substituting a 1-year reunification lag for the 2-year lag.

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[78] We also considered a model that examined migrants under 10 years old and 11-17-year old migrants separately. The older category showed some responsiveness to contemporaneous murder rates.

There is little consistent evidence that juvenile migrant flows are responding to economic conditions in the origin. There is no statistically significant effect of large-scale quality of life measures like education or infant mortality on flows, although this is unsurprising, because the location-specific fixed effects capture much of this variation. There is some evidence that male juvenile migration and UAC migration decrease as GDP per capita in the home country rises, although this effect is small compared to the reunification effect. Surprisingly, increases in the home-country unemployment rate appear to reduce UAC migration, although what could be driving this effect is unclear.

While the results generally suggest that family reunification is the dominant factor in determining migration flows, it is important to note that reunification may be enabling juveniles to migrate for other reasons rather than directly inducing the move. This could cause the family reunification variable to capture the effect of those underlying motives leading to an underestimate of the importance of other variables.[79] Clemens notes the possibility of a dynamic process of violence-related migration waves due to a link between an initial violence-related migration flow and subsequent "snowball" flows linked to the initial flow. In this case, the effect of violence should be viewed as not only the contemporaneous increase in migration but also the subsequent migration that occurred because the initial, violence-motivated migrant set up a network. However, it is important to note that even if such "snowballing" migration has been happening, it will not affect the general conclusion that a lack of asylum opportunities in the United States will result in diversion to Mexico, because potential Northern Triangle juvenile migrants will not have a family structure that will facilitate migration to Mexico.

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[79] We also considered a model in which family reunification and the murder rate were interacted. If family reunification only mattered through its ability to facilitate migration due to crime, we would expect this interaction term to be positive (i.e., migration rates are more responsive to crime when family reunification opportunities are high). We failed to find a statistically significant effect of the interaction term and the point estimate was negative.

Table 5.10. Juvenile Regressions

	Dependent Variable								
	Juvenile Apprehension Rate			**Male Juvenile Apprehension Rate**			**Female Juvenile Apprehension Rate**		
Murder Rate	0.0008***	0.0008***	0.0004	0.0005***	0.0005***	0.0003*	0.0003***	0.0003***	0.0001
	(3.3)	(3.6)	(1.4)	(3.5)	(3.8)	(1.7)	(2.8)	(2.9)	(0.98)
Reunification – 2 Year Lag		0.0604***	0.0687***		0.0347***	0.0377***		0.0257***	0.0310***
		(7.4)	(6.3)		(7.5)	(6.8)		(7.2)	(5.6)
Wealth Index			0.0056			0.0034			0.0021
			(0.74)			(0.78)			(0.59)
Infant Mortality			0.0179			0.0113			0.0066
			(0.82)			(0.02)			(0.60)
Years of Education			0.0594			0.0268			0.0326
			(0.91)			(0.04)			(0.03)
GDP Per Capita			-0.0004			-0.0003**			-0.0001
			(-1.6)			(-2.2)			(-0.77)
Unemployment Rate			-0.0218			-0.0324			0.0107
			(-0.26)			(0.05)			(0.04)
R^2adj	-0.008	0.095	0.049	-0.008	0.090	0.042	-0.008	0.063	0.033

T-statistics in parentheses. *, **, and *** denote statistical significance at the 10-percent, 5-percent, and 1-percent level, respectively.

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Table 5.11. Lagged Murder Rate

	Dependent Variable								
	Juvenile Apprehension Rate			**AAC Apprehension Rate**			**UAC Apprehension Rate**		
Murder Rate – 1 Year Lag	0.0008***	0.0007***	0.0004	0.0005***	0.0004***	0.0003**	0.0003**	0.0002***	-0.00001
	(3.1)	(3.4)	(1.4)	(3.1)	(3.5)	(2.2)	(2.4)	(2.3)	(-0.11)
Reunification – 2 Year Lag		0.0604***	0.0687***		0.0329***	0.0364***		0.0264***	0.0312***
		(7.4)	(6.3)		(6.2)	(5.4)		(9.3)	(7.9)
Wealth Index			0.0052			0.0044			-0.0001
			(0.67)			(1.0)			(-0.25)
Infant Mortality			0.0180			0.0042			0.0111
			(0.83)			(0.32)			(1.4)
Years of Education			0.0663			0.0289			0.0453
			(0.98)			(0.76)			(1.4)
GDP Per Capita			-0.0004			-0.0001			-0.0003***
			(-1.5)			(-0.4)			(-3.2)
Unemployment Rate			-0.0367			0.0720			-0.1071***
			(-0.42)			(1.4)			(-3.0)
R^2adj	-0.009	0.095	0.049	-0.009	0.075	0.035	-0.008	0.069	0.033

T-statistics in parentheses. *, **, and *** denote statistical significance at the 10-percent, 5-percent, and 1-percent level, respectively.

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Table 5.12. 1-Year Lagged Reunification

	Dependent Variable								
	Juvenile Apprehension Rate			**AAC Apprehension Rate**			**UAC Apprehension Rate**		
Murder Rate	0.0008***	0.0008***	0.0004	0.0003*	0.0003**	0.0002	0.0005***	0.0005***	0.0002
	(3.3)	(3.6)	(1.4)	(2.3)	(2.4)	(1.4)	(4.0)	(4.1)	(1.2)
Reunification – 1 Year Lag		0.0604***	0.0687***		0.0329***	0.0364***		0.0264***	0.0312***
		(7.4)	(6.3)		(6.2)	(5.4)		(9.3)	(7.9)
Wealth Index			0.0055			0.0052			-0.0013
			(0.67)			(1.2)			(-0.35)
Infant Mortality			0.0179			0.0043			0.0108
			(0.82)			(0.32)			(1.4)
Years of Education			0.0594			0.0185			0.0502
			(0.91)			(0.50)			(0.03)
GDP Per Capita			-0.0004			-0.0001			-0.0003***
			(-1.6)			(-0.6)			(-0.77)
Unemployment Rate			-0.0218			0.0834			-0.1049***
			(-0.26)			(1.6)			(-2.9)
R^2adj	-0.008	0.095	0.049	-0.008	0.075	0.035	-0.008	0.069	0.033

T-statistics in parentheses. *, **, and *** denote statistical significance at the 10-percent, 5-percent, and 1-percent level, respectively.

5.6. A Natural Experiment: The Gang Truce in El Salvador

Figure 5.1 shows the monthly murder rate in El Salvador graphed together with apprehensions of juvenile El Salvadoran migrants during 2002–2014. The murder rate was quite high during 2004–2011, and the level of juvenile apprehensions was quite low. The beginning of the juvenile migrant surge is dated to late 2011, and El Salvadoran apprehensions began to rise then, as did apprehensions of Guatemalan and Honduran juvenile migrants.

In March 2012, a truce was arranged between El Salvador's two largest gangs (MS-13 and 18th Street).

The murder rate fell dramatically, from 6.6 per month per 100,000 population in February 2012 to 2.6 in April 2012. This constitutes the equivalent of a natural experiment in which crime and violence conditions were exogenously lowered by a very substantial amount. The gang truce held until May 2013, when it was formally abandoned. During the period March 2012–May 2013, the murder rate hovered at a low level of 3 per month, and even after the abandonment of the gang truce, it took some time to rise back to pre-truce levels. Although murder outcomes declined dramatically in the truce period, juvenile migrant flow as captured by apprehensions did not fall, but rose by 93 percent. No impact of the truce on juvenile migrant outflow is evident in the data. It may be that the truce did not enjoy credibility and was expected to fail, but it did hold for over a year, and it produced a dramatic impact on the murder rate. The lack of any impact on juvenile migrant outflow is additional evidence that calls into question the degree to which crime and violence impact the decision to migrate.

El Salvador: Monthly Juvenile Migrant Apprehensions and Murder Rate
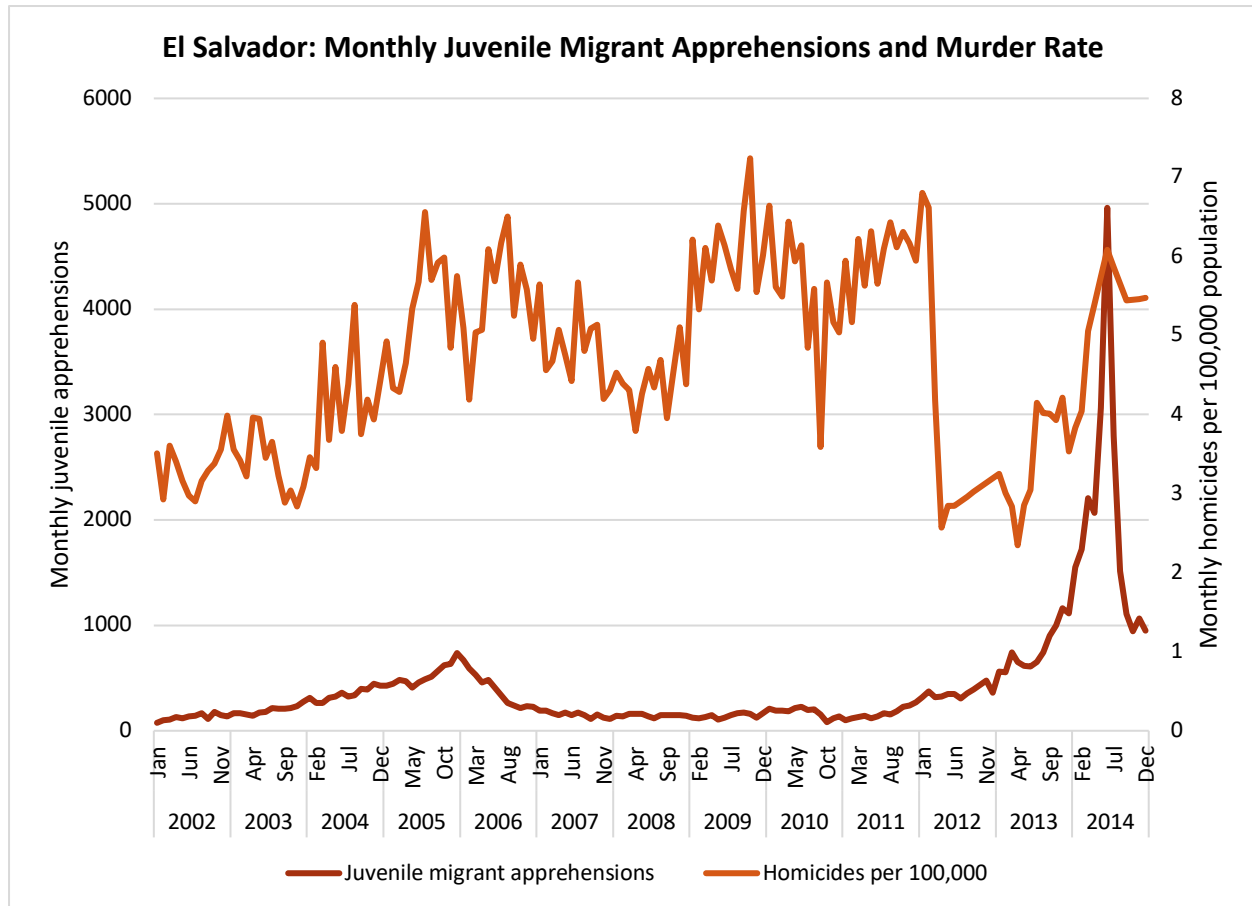
Figure 5.1. El Salvador: Monthly Juvenile Migrant Apprehensions and Murder Rate

5.7. Immigration Policies and Asylum Seeker Flows

The juvenile migrant surge from the Northern Triangle began in late 2011, which is apparent in the data and has also been noted by analysts.[80] Figure 5.2 graphs these flows using a logarithmic scale to better illustrate surge dynamics. After building steadily for several years, the surge reached its first peak in the late spring of 2014. Since then, the flow of these migrants has fluctuated dramatically. Although root causes such as family reunification, poverty, and violence can explain why migrants want to come to the United States, it seems implausible that they can explain the specific dynamics of this surge. Northern Triangle countries have long been poor and dangerous, and migration of "pioneer" adults was at significant levels throughout the 2000s. Why did the surge begin when it did, and what can explain the sharp fluctuations in its magnitude since then?

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[80]   Four years ago, UNHCR noted that "Beginning in October 2011, the U.S. Government recorded a dramatic rise – commonly referred to in the United States as 'the surge' – in the number of unaccompanied and separated children arriving to the United States from these same three countries – El Salvador, Guatemala and Honduras." (UNHCR, *Children on the Run*, 4).

It is also important to note that prior to when the surge started in late 2011, change in the flows of juvenile migrants to the United States were not highly correlated across the three countries, but became highly correlated once the surge began. Table 5.13 shows correlation coefficients for monthly growth rates in the pre-surge and surge eras. For the original series, correlations rise from the pre-surge to the surge era. Some portion of correlation is due to seasonal factors in the apprehension series, which can be removed using a standard deseasonalization procedure (Census X-13). After seasonality is removed, the increase in correlation from the pre-surge to the surge era is even more pronounced. The high correlation of growth in apprehensions across the three countries in the surge era suggests that these flows are responding to common underlying factors.

Table 5.13. Monthly Growth Rate Correlations: Juvenile Migrant Apprehensions

	El Salvador-Honduras	El Salvador-Guatemala	Honduras-Guatemala
Original series			
Pre-surge era[A]	0.72	0.29	0.41
Surge era[B]	0.89	0.83	0.87
Deseasonalized series[C]			
Pre-surge era	0.46	-0.02	0.10
Surge era	0.86	0.86	0.88

All juvenile migrants were apprehended by USBP or deemed inadmissible by the OFO.
A: November 1999–September 2011.
B: October 2011–March 2017.
C: Original series deseasonalized with Census X-13 program.

Change in policies and perceptions of policies that affect migrants from all three countries can plausibly explain surge dynamics. The surge began soon after a major change in Mexican immigration policies. Mexico went from a tough immigration regime to a liberalized regime during 2008–2011. In 2008, the Mexican government decriminalized being present in Mexico without authorization. In March 2011, a new immigration law was passed that significantly weakened interior enforcement (e.g. at worksites).

Mexican immigration enforcement personnel were no longer permitted to carry firearms, tasers, mace, or any type of motion restraints (handcuffs etc.). These policy changes have apparently facilitated smuggling operations and made them less costly.[81] The INM also stopped returning Northern Triangle migrants to their home countries using formal deportation, which

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[81] See Laura V. González-Murphy and Rey Koslowski, "Understanding Mexico's Changing Immigration Laws," Working paper (Washington, DC: Woodrow Wilson International Center for Scholars – Mexico Institute, 2011), for a review of Mexican immigration law prior to the 2011 reform. We have not been able to identify any academic literature on the changes in Mexican policies and practices. Impacts of changing the law cited here are from observations made by the INM in discussion with them.

meant that no consequences were imposed on migrants after being apprehended by immigration authorities.[82]

In the first surge buildup, several policies may have had an impact on the incentives of juvenile migrants to come to the United States. The Deferred Action for Childhood Arrivals (DACA) executive action was carried out in June 2012, and the Senate Comprehensive Immigration Reform (CIR) bill was passed in June 2013. As Figure 5.2 shows, the surge accelerated in months immediately after these two events. After a peak was reached in June 2014, a range of enforcement actions were carried out in the United States and Mexico during July–August 2014, and the flow of juvenile migrants fell dramatically. Policies that may have subsequently affected flow include the Deferred Action for Parents of Americans (DAPA) executive action (November 2014), the announcement by the Department of Homeland Security (DHS) that general deterrence is no longer being invoked as a factor in custody determination (June 2015), and Operation Border Guardian (January 2016).[83] Flows fell dramatically after the January 2017 presidential inauguration.[84]

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[82] See Chapter 6, Section 6.1.

[83] Operation Border Guardian involved the detention of roughly 200 migrants who had arrived in the United States as UACs, had lost their asylum case and exhausted appeals in immigration court, and had become adults by the time they were detained.

[84] It would be useful to augment analysis based on visual examination of Figure 5.2 with formal statistical analysis of whether a policy change caused a turning point in apprehensions. It has not proven possible to identify such a technique. Econometricians typically include time-specific dummy variables into regressions to capture the impact of things like change in policies. Figure 5.2 shows that such analysis would have to be conducted at the monthly frequency to be credible. There are major challenges to implementing analysis of these flows at the monthly frequency, including obtaining monthly data on explanatory variables and developing credible modeling of lags in response of flows to explanatory variables.

Deseasonalized Juvenile Migrant Apprehensions (logarithmic scale)
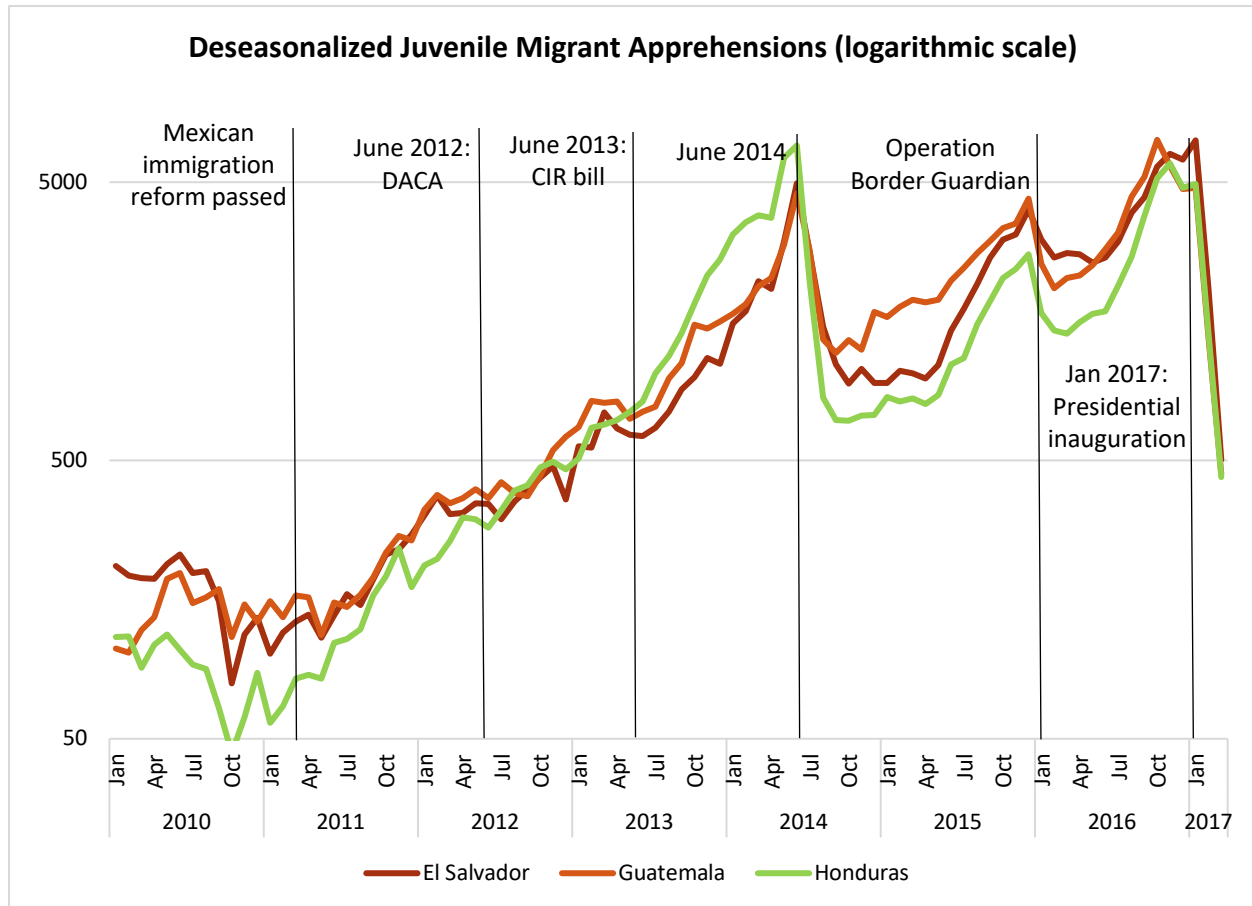
Figure 5.2. Deseasonalized Juvenile Migrant Apprehensions (logarithmic scale)

A plausible story that can explain the dynamics of the flow of juvenile migrants from Northern Triangle countries involves both root causes and policies. Root causes provide the underlying motivation for migration. Passing of the new Mexican immigration law in 2011 made smuggling easier and led to the initial emergence of these flows. The surge accelerated as the U.S. government undertook measures in 2012 and 2013 that affected perceptions of policies towards unauthorized immigrants. After initially peaking in 2014, the flows have fluctuated dramatically since then due to actual and perceived changes in U.S. and Mexican policies. Finally, some of this fluctuation may reflect substitution to or away from evasion at the U.S. border, which is analyzed in Chapter 6.

6. Immigration Enforcement, Asylum, and Migrant Choice

Migrants from the Northern Triangle must make a choice between entering Mexico or the United States illegally and trying to avoid being caught by border enforcement authorities, or pursuing entry as an asylum seeker. As discussed in Chapter 2, at both the Guatemala-Mexico and U.S.-Mexico borders, a similar process takes place with respect to how migrants attempt illegal entry. Migrants first make a decision to leave their home and move to the border region. They then attempt to cross the border illegally, with or without the help of a smuggler. If they manage to evade border enforcement officials who patrol near the border and check traffic at checkpoints deeper into the country, they successfully enter the country and make their way to their final destination. If they are caught, they are processed by enforcement agencies and ultimately returned to their home country, and they may be subjected to a consequence for illegal entry. Those who claim asylum to enforcement authorities may not try to evade enforcement authorities but instead seek them out in order to present themselves and make an asylum claim. Some who try to evade but who are apprehended may opportunistically claim asylum in order to have a chance of succeeding in entering.

We will refer to those attempting to evade enforcement authorities as "traditionals," because for many decades, almost all unauthorized migrants to the United States sought to evade enforcement authorities and did not claim asylum upon apprehension. Many juvenile asylum seekers are believed to self-present to enforcement authorities rather than try to evade: they or their smugglers try to find enforcement agents soon after they cross the border and turn themselves in.

Migrants must think through the benefits and costs of the decision on how to attempt entry. The migrant's ultimate goal is to effect successful entry, and to remain in the destination country after effecting entry. These benefits and costs depend on whether the migrant is a juvenile or adult, the likelihood that they will be detained after encountering enforcement authorities, and the likelihood that the asylum process will result in lawful permission to remain in the United States or a removal order, and the chance that the removal order will be effected. Table 6.1 summarizes key benefits and costs associated with the basic decision to evade or seek asylum and related outcomes.

Table 6.1. Key Benefits and Costs Associated with Decision to Evade or Seek Asylum

Decision	Outcome		Benefits	Costs
Evade	Successful		Entry effected. No contact with enforcement authorities	No chance at obtaining lawful status
	Unsuccessful	Juvenile	Can claim asylum	
		Adult: detained	Can make another entry attempt after removal	Removed
		Adult: not detained, or released	Entry effected	
Seek asylum	Successful		Lawful status as U.S. resident.	Risks from contact with authorities. Costs of going through asylum process.
	Unsuccessful	Detained	Can make another entry attempt after removal	Removed
		Not detained, or released	Entry effected	Removal risk (low)

Immigration enforcement affects migrant perceptions of benefits and costs through its impact on the chance of being able to successfully illegally enter Mexico or the United States, and then to continue to reside there without being apprehended and removed. If it becomes more difficult and costly to successfully evade border enforcement authorities, seeking asylum will become more attractive. If a migrant is detained while undergoing an asylum adjudication process, and/or if the chance of being deported if asylum is not granted is high, seeking asylum will become less attractive.

In this chapter, evidence on parameters affecting the relative attractiveness of traditional evasion versus seeking asylum is reviewed.

6.1. Evasion at the Guatemala-Mexico Border

Mexico's southern border is with Guatemala (541 miles) and Belize (155 miles). The border with Belize is a remote river border, and little cross-border movement of migrants is believed to take place across it. The border with Guatemala includes sections of land and river, as well as remote and populated regions. Northern Triangle migrants are believed to travel almost exclusively across this border. The Mexican immigration enforcement authority, the INM, relies little on fencing and technology, but has established checkpoints in the highway network that extend deep into the Mexican interior. Migrants began traveling on the top of freight trains in response to increased enforcement on the highway network, but the INM has carried out enforcement against

train use in recent years. Those who are apprehended by the INM are returned to their home country by bus.[85]

The large majority of apprehensions and removals (returns) made by the INM have been of Northern Triangle nationals.[86] Figure 6.1 shows monthly removals of all Northern Triangle migrants during 2001–2017, and Figure 6.2 shows removals of juvenile Northern Triangle migrants during 2009–2017. The surge in adult migration to the United States in the mid-2000s, and the surge of juvenile migration to the United States in more recent years, respectively, are reflected in these graphs. The sharp drop in flow after the U.S. election in November 2016 and subsequent rebound after April 2017 are also apparent.
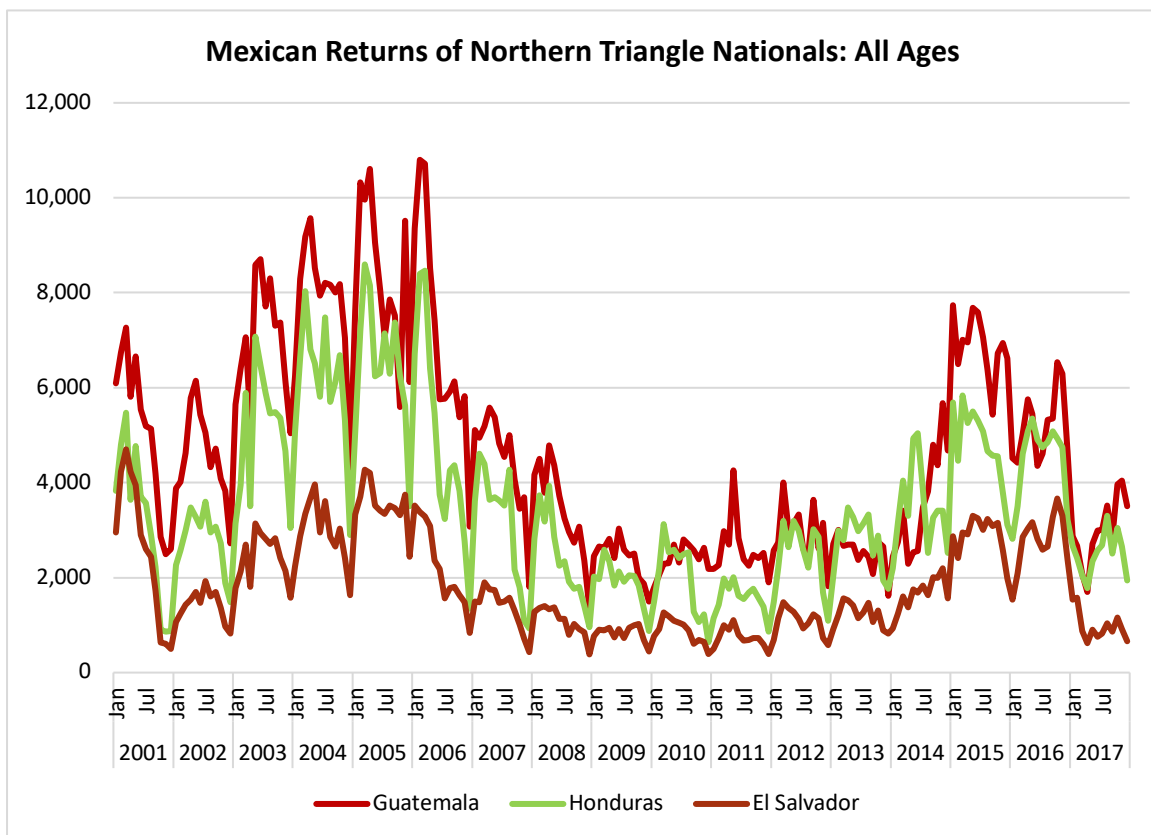
Source: Instituto Nacional de Migración.

Figure 6.1. Mexican Returns of Northern Triangle Nationals: All Ages

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[85] See Castillo Garcia, "Mexico: Caught between the United States and Central America," 3–4, for a discussion of Mexican border enforcement in the mid-2000s era.

[86] During 2007–2017, returns of Northern Triangle nationals accounted for 96 percent of all returns.
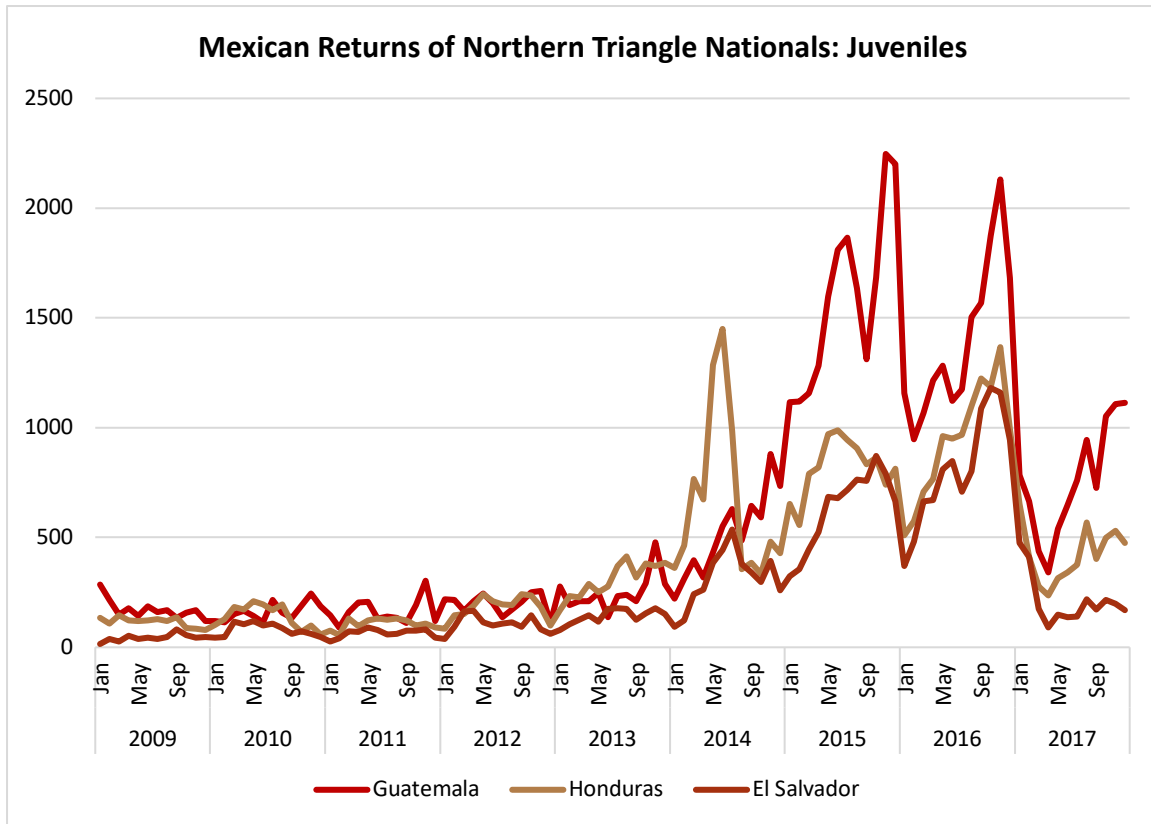
Source: Instituto Nacional de Migración

Figure 6.2. Mexican Returns of Northern Triangle Nationals: Juveniles

6.1.1. Probability of Apprehension

A key border security outcome relevant for migrant decision making is the probability of apprehension, or the chance (on average) that someone attempting illegal entry is caught. One way to measure the probability of apprehension is to calculate the recidivist ratio, which is the ratio of recidivist apprehensions (all apprehensions after the first one) to total apprehensions. If the rate of at-the-border deterrence (the chance that someone gives up and goes home after being caught) equals zero, this ratio equals the probability of apprehension. If the rate of at-the-border deterrence is greater than zero, this ratio is a lower bound to the true value of the probability of apprehension. Table 6.2 gives recidivism ratios calculated from data provided by the EMIF-Sur survey, which asks migrants how many times they were caught by Mexican immigration authorities in the last 12 months. These values are not corrected for at-the-border deterrence and are thus lower bounds. For Guatemalans, the ratio is very low, and even if it was corrected for at-the-border deterrence, it is unlikely that it would exceed 15 percent. For El Salvador, the ratio is significantly higher through 2013 and then drops. For Honduras, the ratio is higher still, and also drops after 2013. Guatemalans seem to have a relatively low probability of being caught illegally entering Mexico, and El Salvador and Honduras a higher one.

Table 6.2. Mexican Border Enforcement: Recidivism Ratios

	2009	2010	2011	2012	2013	2014	2015	2016	2017
Guatemala									
Total apprehensions	4,054	4,615	3,762	4,970	3,968	3,297	3,399	1,781	475
Recidivist apprehensions	199	231	94	849	333	162	425	258	44
Recidivist ratio	5%	5%	2%	17%	8%	5%	13%	14%	9%
El Salvador									
Total apprehensions	1,268	2,436	2,501	2,963	4,057	3,922	4,758	3,649	952
Recidivist apprehensions	447	1,221	1,212	1,021	2,095	982	760	815	166
Recidivist ratio	35%	50%	48%	34%	52%	25%	16%	22%	17%
Honduras									
Total apprehensions	2,399	2,710	2,851	2,518	2,583	2,450	1,576	2,154	690
Recidivist apprehensions	1,517	1,797	2,068	1,481	1,381	1,140	638	781	205
Recidivist ratio	63%	66%	73%	59%	53%	47%	40%	36%	30%

Source: Calculated from tabulations of EMIF-Sur "Deported by Mexico" module, question 31 (2017 questionnaire): "In the last 12 months, counting this occasion, how many times were you returned to Guatemala/El Salvador/Honduras by the Mexican immigration authorities?"

6.1.2. Consequences of Apprehension

Another key outcome that a migrant will take into account is if any consequence is imposed on them after being caught. A migrant who will be banned from future legal immigration or prosecuted criminally for illegal entry will take these possibilities into account when making decisions on whether and how to migrate.

In the case of Mexican enforcement, apprehensions are resolved through formal deportation, voluntary (or "assisted") return, or return of a minor. Figure 6.3 shows INM returns by resolution type. The large majority of people apprehended are subject to "voluntary return," which involves no penalty other than returning them to their home country. The only type of return that could involve any significant consequence is a formal deportation, and they became insignificant after 2011.[87]

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[87] This change may have been due to Mexico's liberalization of immigration enforcement during 2008–2011(see Chapter 5, Section 5.7).

INM Returns by Resolution Type
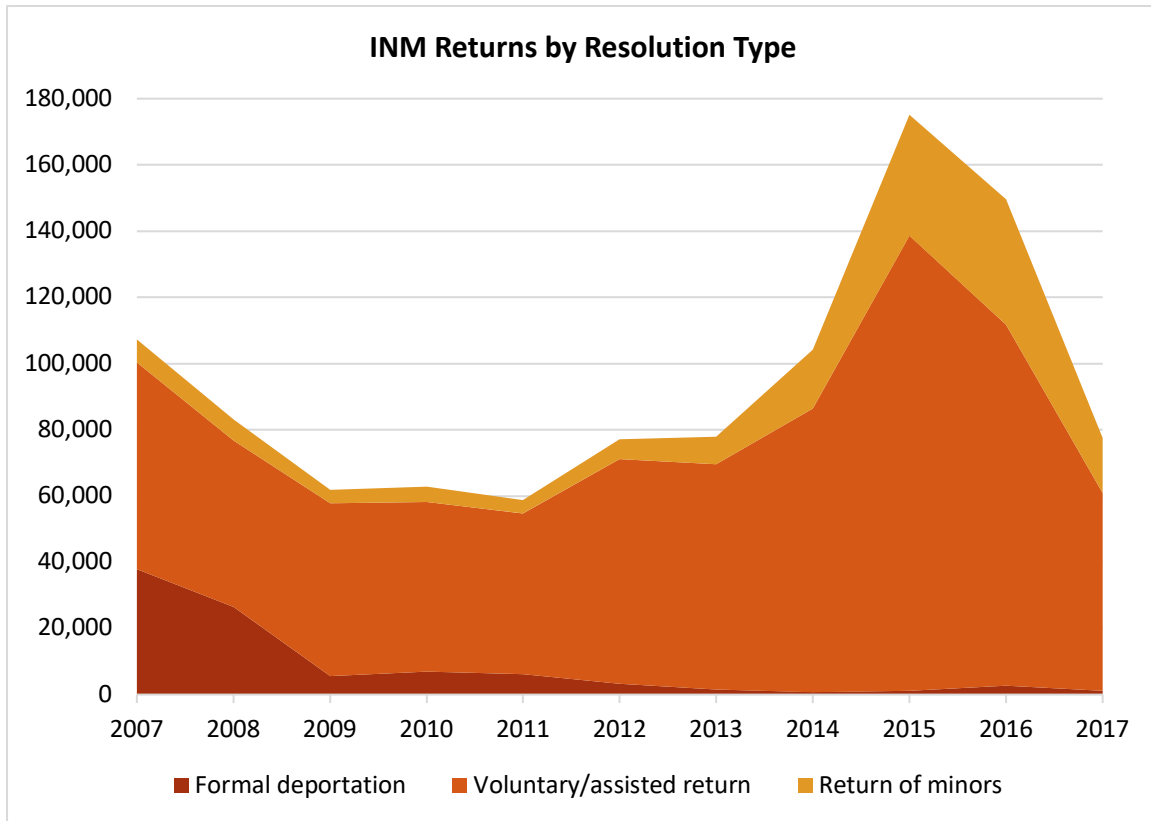
Source: Instituto Nacional de Migración.

Figure 6.3. INM Returns by Resolution Type

6.2. Asylum Seeker Success Rate: Mexico

The Mexican refugee authority, COMAR, processes all refugee applications filed with the Mexican government. Table 6.3 gives data on new applications, completed applications and their outcomes, and the percentage of applications that were successful for migrants from Northern Triangle countries, which account for the majority of refugee applications in Mexico. Application success is defined as the percentage of applications that are "recognized" or receive "complementary protection," both of which entitle the applicant to refugee protections under Mexican law. Application success rates are generally a bit higher than 50 percent for Guatemala and Honduras in recent years, and roughly 66 percent for El Salvador.

The success rate at issue here, however, is whether the migrant successfully enters Mexico by seeking asylum. An asylum applicant might not achieve application success, but if they are not detained and returned to their home country, they may still achieve entry success. It is not clear what policies are implemented by the Mexican government with respect to asylum seekers, and in

particular whether they are detained while their case is being processed. It is therefore not possible to assess the entry success rate.[88]

COMAR is required by Mexican law to process a refugee application within two months. In recent years, however, backlogs greater than two months have built up due to inadequate agency resources to process large volumes of applications.

Table 6.3. Mexican Refugee Application Outcomes

	New applications	Applicants concluding procedure[A]	Recognized	Complementary protection	Not recognized	% successful[B]
Guatemala						
2013	48	31	7	1	23	26%
2014	108	70	28	9	33	53%
2015	102	69	27	7	35	49%
2016	437	326	142	41	143	56%
2017	676	239	55	68	116	51%
El Salvador						
2013	309	232	97	1	134	42%
2014	626	451	152	19	280	38%
2015	1476	1088	474	69	545	50%
2016	3493	2489	1412	262	815	67%
2017	3708	1509	525	441	543	64%
Honduras						
2013	530	367	110	26	232	37%
2014	1035	659	236	39	384	42%
2015	1560	1055	379	70	606	43%
2016	4129	2864	1254	348	1262	56%
2017	4272	1537	378	392	767	50%

Source: COMAR.

A: Applicants that do not complete procedure include abandonments, dismissed applications, and applications that are still pending at end of the year.

B: Recognized applications and those receiving complementary protection as percentage of concluded procedures.

6.3. Evasion at the U.S.-Mexico Border

Illegal entry into the United States across the U.S.-Mexico Border has been the focus of an enormous amount of analysis spanning four decades.[89] Recent research suggests that the

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[88] Given the liberalized immigration policies introduced by the 2011 law, it seems unlikely that asylum seekers are detained, but this has not been confirmed.

[89] See Bryan Roberts, Edward Alden, and John Whitley, *Illegal Immigration to the United States: How Effective is Enforcement?* (Washington, DC: Council on Foreign Relations, 2013); Gordon Hanson, "Illegal Migration from Mexico to the United States," *Journal of Economic Literature* 44, no. 4 2006): 869–924; and the website of the

probability of apprehension of migrants attempting to evade border enforcement authorities between POEs has been roughly 60 percent in recent years. Until 2005, almost all people caught attempting illegal entry on the U.S.-Mexico border were subjected to voluntary return if they were a Mexican national, or given a notice to appear in immigration court and released into the U.S. interior if they were not a Mexican national. This has changed dramatically since then. The large majority of Mexican nationals are now subjected to a consequence of some kind by the U.S. government. More importantly for the purposes of this study, non-Mexican nationals who are caught are detained, subjected to expedited release, and flown back to their home country. For Northern Triangle migrants, this is a major consequence, because it means that they do not achieve their goal of successful entry into the United States, and they must repeat another costly trip if they want to try again to enter the United States.

6.4. Asylum Seeker Success Rate: United States

Those seeking the benefit of staying in the United States by pursuing an asylum claim in U.S. immigration court fall into several key groups:

- CF adult: an adult who claims "credible fear";

- RF adult: an adult who claims "reasonable fear". If a person has previously received an order of removal from the United States, they must claim reasonable fear;

- FMUA: family member units – adult(s) and the child/children accompanying them; and

- UAC: unaccompanied children.

For all of these groups, success—from the migrant's viewpoint—is being able to reside in the United States, which involves not being removed from the United States. Being removed requires both that an immigration court issue an order of removal, and that the removal order is effected.[90] Successful cases in immigration court are defined here as cases that end with a granting of relief, an administrative closure, or a termination.[91] Even if a migrant receives an order of removal, they still can achieve success if that order is not effected. This depends critically on whether the migrant is on the detained or non-detained immigration court docket. For those ordered removed who are on the non-detained docket, only a very small percentage are actually removed. The large majority of those on the detained docket, however, are removed.

Mexican Migration Project (http://mmp.opr.princeton.edu/) for overviews of the issues and references to previous academic literature.

[90] Migrants may also agree to voluntarily depart. That outcome is defined here as unsuccessful.

[91] In many instances, migrants are granted relief and are given legal status to reside in the United States. In other instances, when cases are terminated or administratively closed, the migrant is neither given formal legal permission to reside in the United States nor issued an order of removal. These outcomes are also defined as successes, because no removal order is issued.

The success rate is calculated here as this ratio: (number staying)/(number staying + number removed).

Data through March 2017 are used to calculate success rates for the groups of migrants described above.[92] Figure 6.4 shows the success rate for CF adults during FY 2012–2016. Because CF adults are detained at a much higher rate than FMUA and UAC migrants, their success rate should be the lowest. During this period, the success rate ranged between 60 and 80 percent. Figure 6.5 shows the success rate for FMUA migrants, which is essentially 100 percent in all years. Very few of these migrants are ever removed even if an order of removal is issued by the immigration court, because almost all of these migrants are on the non-detained docket. Success rate for UACs would be very similar.
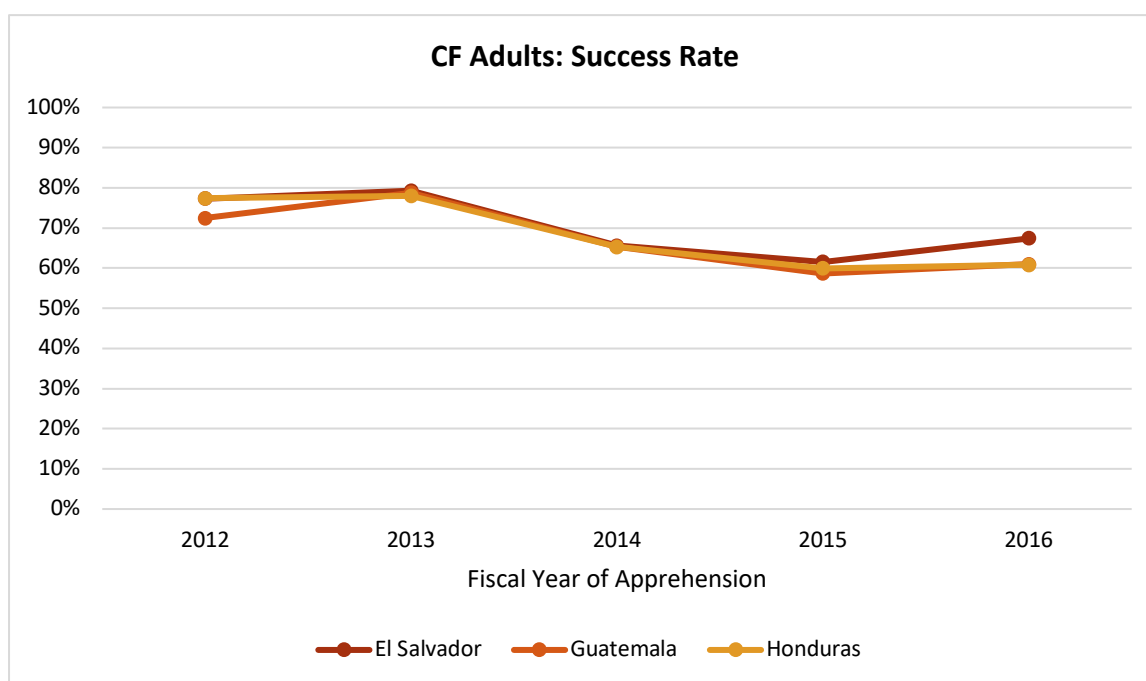
CF Adults: Success Rate

Source: Calculated from linked DHS apprehension and detention records and Executive Office for Immigration Review (EOIR) case records.

Figure 6.4. CF Adults: Success Rate

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[92] Pending cases are included in both the numerator and denominator. Almost all pending cases prior to FY 2017 are on the non-detained docket, and those on this docket who are ultimately ordered removed are unlikely to actually be removed.

FMUA: Success Rate
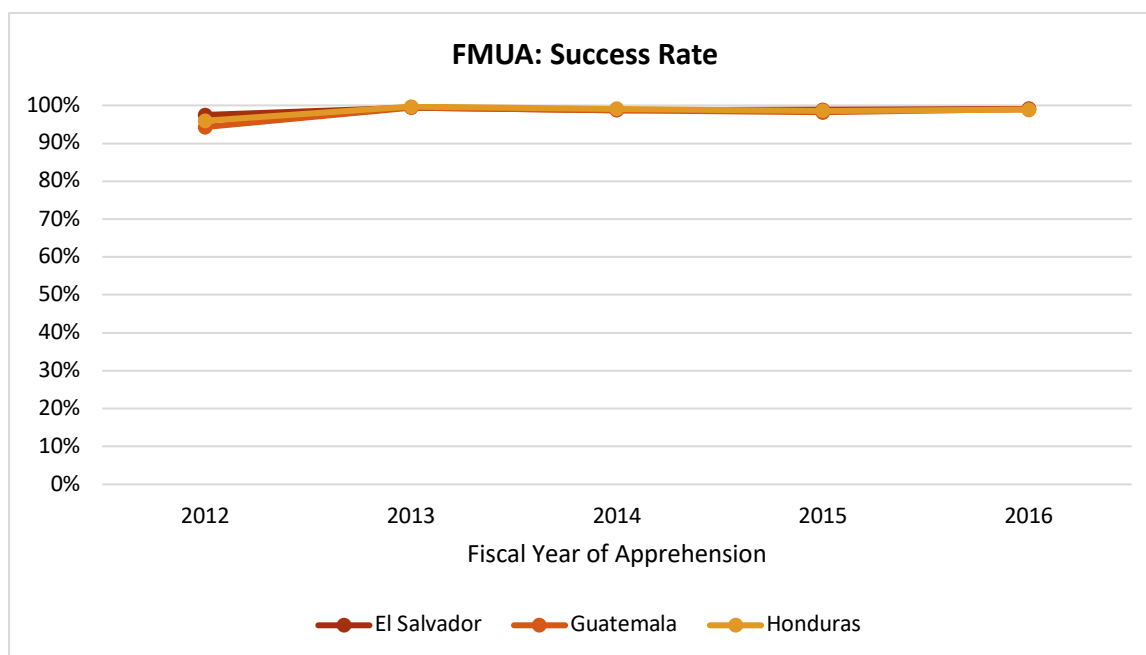
Source: Calculated from linked DHS apprehension and detention records and Executive Office for Immigration Review (EOIR) case records.

Figure 6.5. FMUA: Success Rate

6.5. Evasion at the U.S.-Mexico Border

A key decision that Northern Triangle migrants have to make when they get to the U.S.-Mexico border is whether to try to evade U.S. border enforcement authorities or present themselves to them and claim asylum. It is believed that many UACs and AACs and their adult companion(s) present to enforcement agents. Evidence is analyzed here to evaluate that belief.

The large majority of Northern Triangle migrants (including asylum seekers) enter the United States in southern Texas, and specifically in the USBP's Rio Grande Valley sector. This sector has a network of interior traffic checkpoints that are major chokepoints in the road network north of the immediate border region. Migrants who are intent on evasion and succeed in making it through the immediate border area will sometimes be apprehended at or near the interior traffic checkpoints.[93] Those who present to law enforcement, however, will do this near the border and not travel many miles north to present at a traffic checkpoint. We can thus evaluate whether there are systematic differences in the ratio of interior (checkpoint) apprehensions to total apprehensions for asylum-seeking groups and a control group of those believed to be evaders (adults who do not claim credible fear). If the ratios of interior to total apprehensions of the asylum-seeking group and the "traditional" evader group are similar, the two groups are likely choosing to evade versus self-present at similar rates. If, however, the ratio of interior to total apprehensions of the asylum-

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[93]   About a quarter of recent apprehensions in this sector are made several miles north of the border at or around the checkpoints.

seeking group is much less than the other group, the asylum-seeking group is likely choosing to evade at a much lower rate.

Figure 6.6 shows the ratio of interior apprehensions to total apprehensions for "traditional" evaders, adults who do not claim credible fear, and adults who claim credible fear. These ratios were roughly the same from late 2009 to mid-2012, but the ratio for CF adults then fell sharply and was much less than the ratio for evaders during the asylum-seeker surge era. This suggests that the rate of evasion of CF adults dropped dramatically, and the rate of presenting to law enforcement rose to a high level. Figure 6.7 and Figure 6.8 show that the same dynamic happened to an even greater extent with UACs and AACs from the Northern Triangle, and with Northern Triangle FMUA apprehensions. In contrast, Figure 6.9 and Figure 6.10 show that the divergence did not happen with Mexican FMUA apprehensions and UAC apprehensions younger than 14 years old. Mexican nationals are not subject to the same rules as Northern Triangle nationals regarding asylum screening at the border, and it would be expected that they would seek to evade at a higher rate.[94]

This analysis is compelling evidence that the rate of presentation by Northern Triangle asylum seekers rose sharply after 2012, and that presentation rates were very high during 2014–2018. It is also very important to note that there is no apparent rise in the evasion rate in 2017.

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[94] Mexican UACs older than 13 years are excluded because these children are often working for smuggling organizations and have no intention of remaining in the United States after being apprehended.
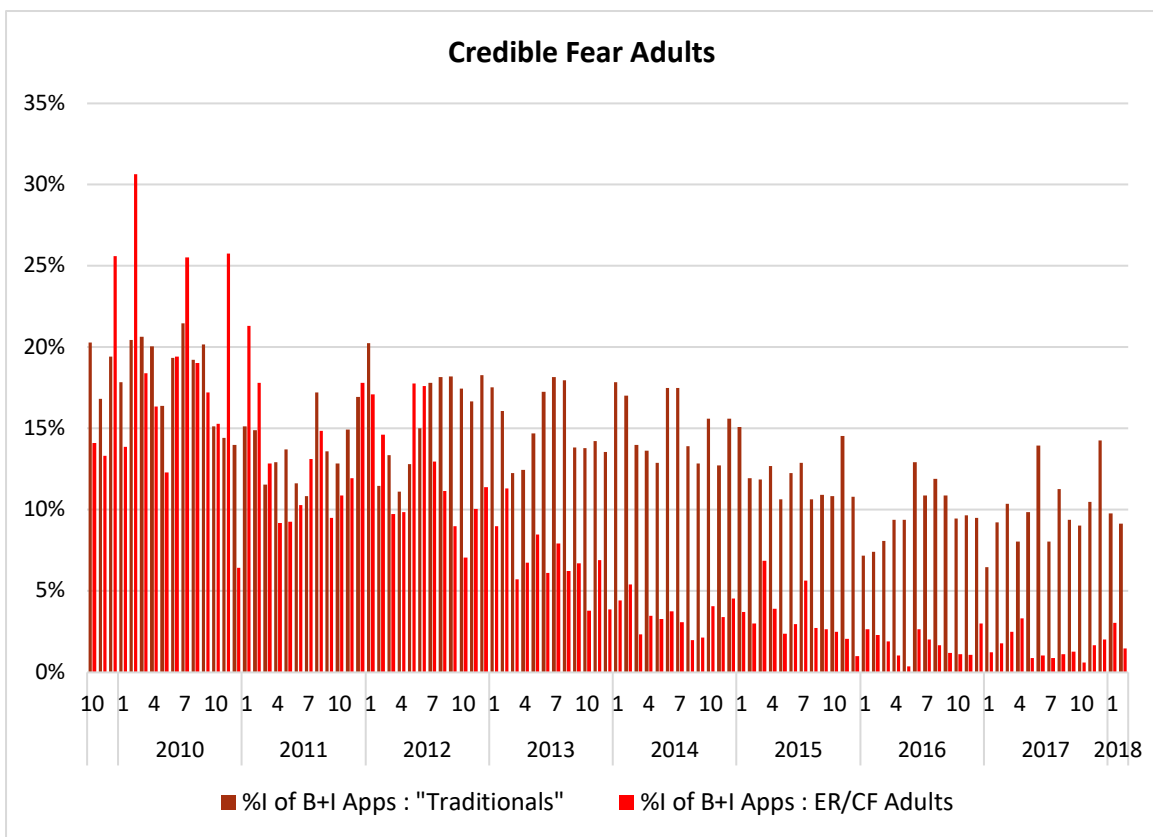
Figure 6.6. Credible Fear Adults
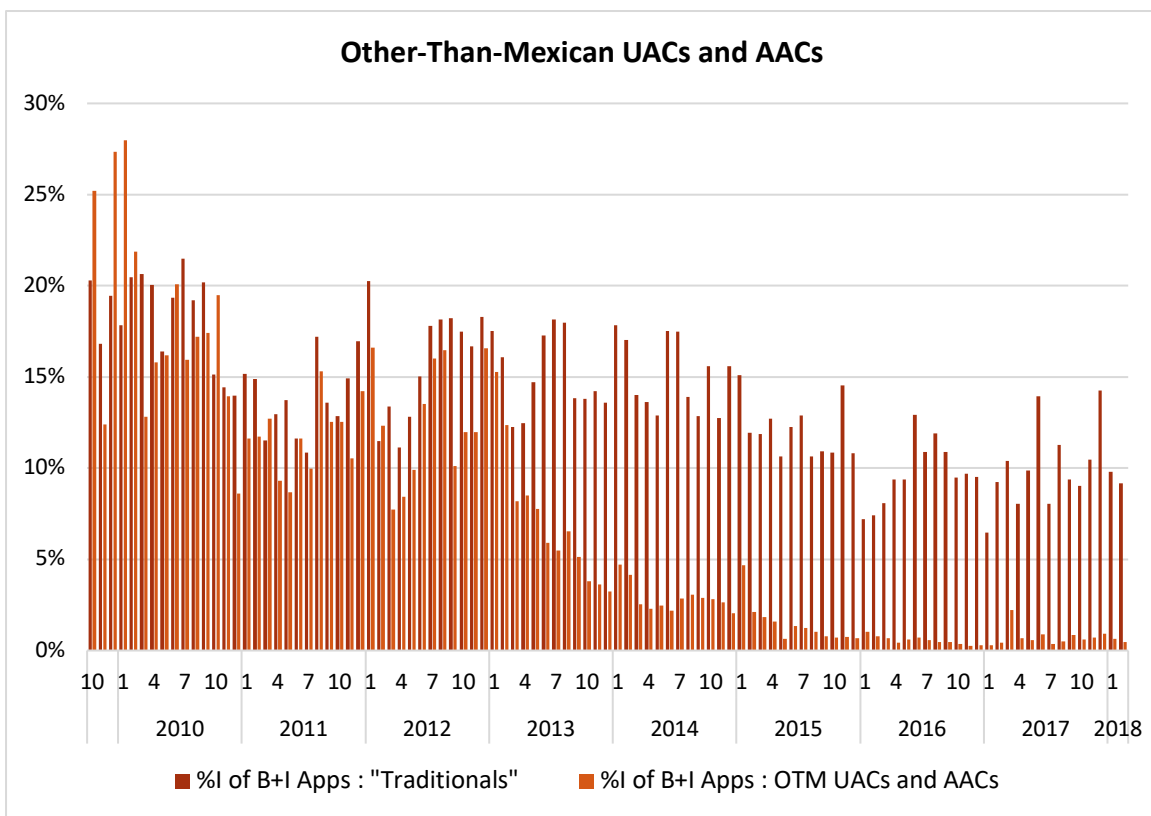
Figure 6.7. Other-Than-Mexican UACs and AACs
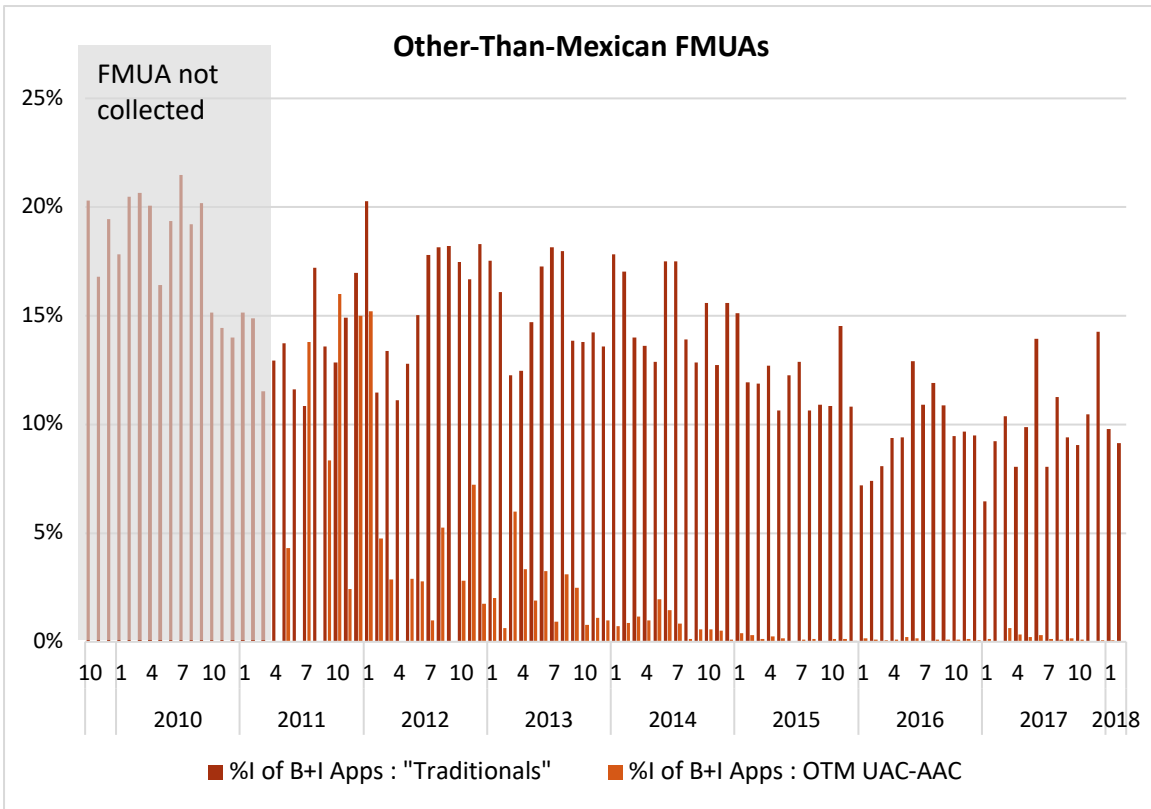
Figure 6.8. Other-Than-Mexican FMUAs
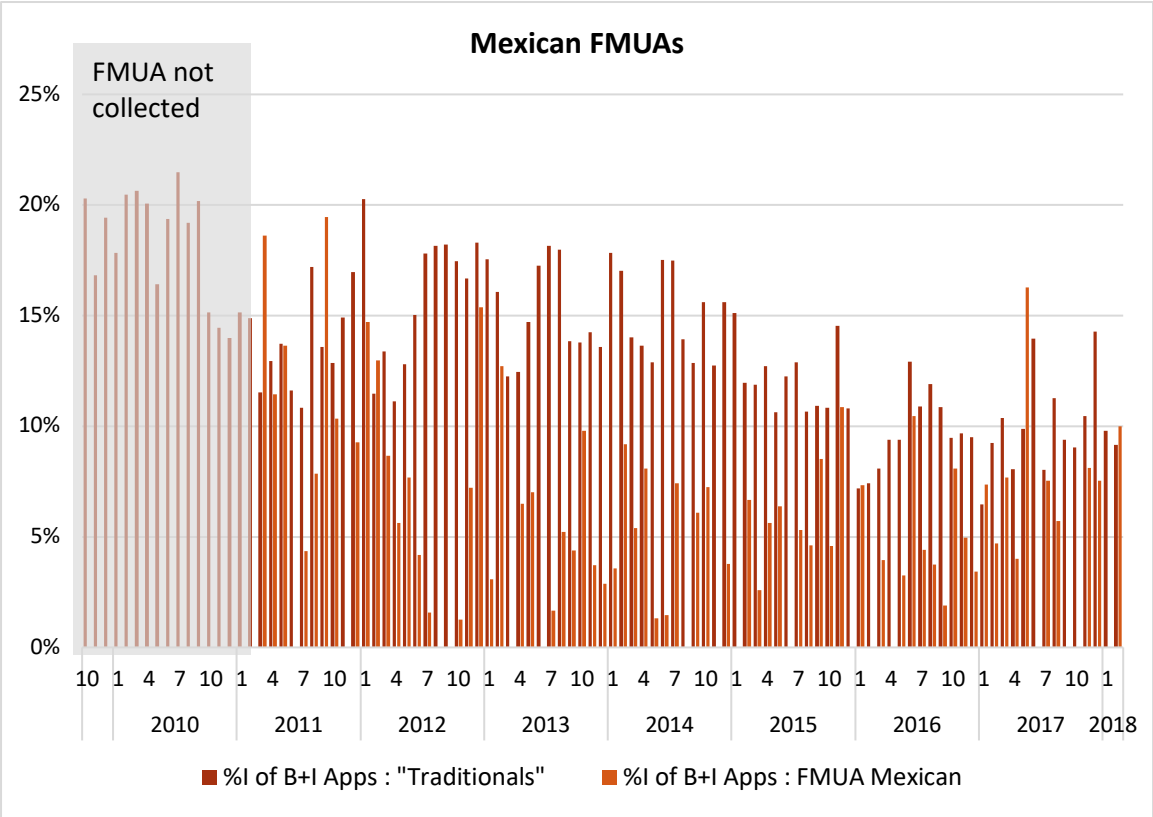
Figure 6.9. Mexican FMUAs
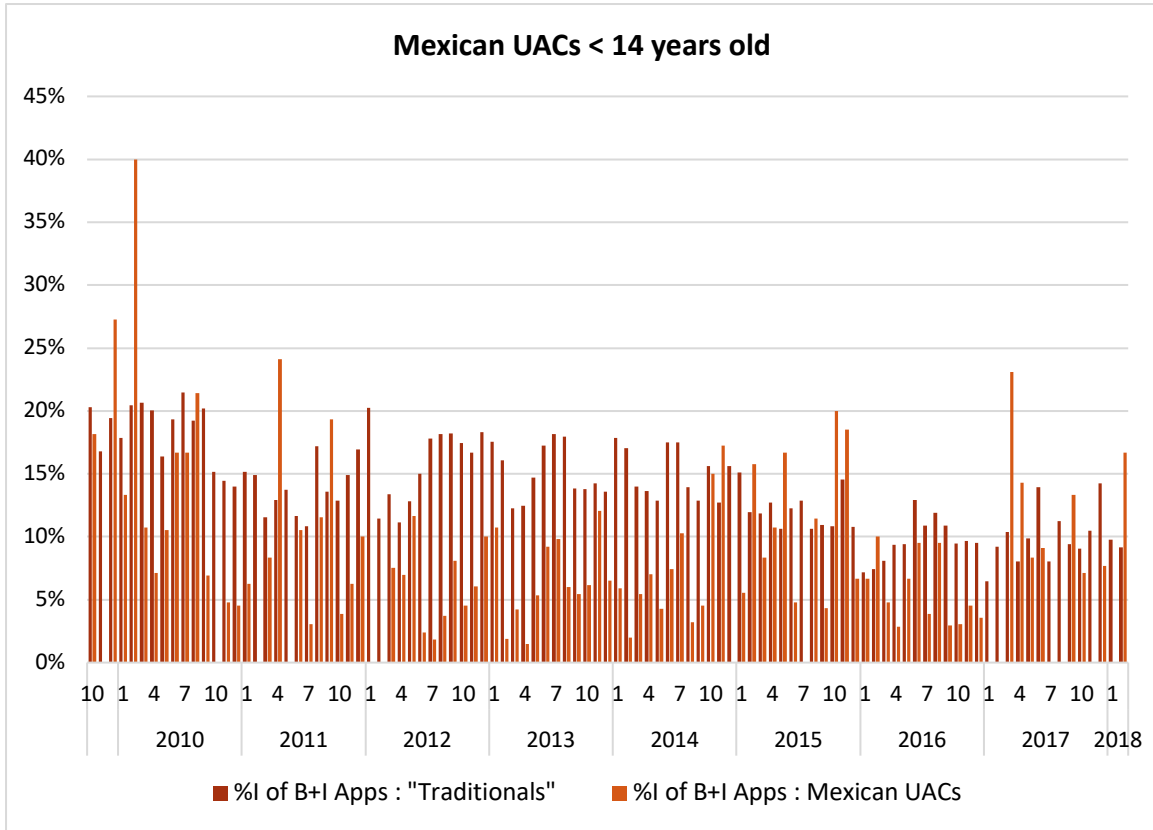
Figure 6.10. Mexican UACs < 14 years old

6.6. Migrant Choice and Enforcement: Summary

The review of evidence on border enforcement and asylum processing presented here suggests the following observations:

- There is a significant chance of being apprehended on the Guatemala-Mexico border, although this change has declined after 2013. However, there are no consequences after being caught other than being returned to one's home country.

- Although the successful entry rate through asylum seeking is not clear, unless asylum applicants are detained, it is probably close to 100 percent.

- Evidence presented in Chapter 4 suggests that the trip from Guatemala to Mexico is not costly monetarily, and the transit trip through Mexico is not particularly dangerous.

- There is a significant chance of being apprehended at the U.S.-Mexico border, equal to roughly 60 percent. Non-asylum seekers who are apprehended suffer a major consequence; they are flown back to their home country.

- CF adult asylum seekers have a relatively high successful entry rate, and UAC and FMUA asylum seekers have an almost 100 percent entry success rate.

- The rate of evasion by asylum seekers fell dramatically after 2012, and the rate at which they presented to border enforcement authorities rose to a very high level at the same time.

7. Impacts of Closing U.S. Asylum Channel

An assessment of the likely impacts of closing the U.S. asylum channel must begin with a review of what the evidence suggests about the historical flows of asylum seekers from Northern Triangle countries. Table 7.1 presents a set of key indicators related to migrant choice between the United States and Mexico as final destinations. Over the past two decades, almost all Northern Triangle migrants have gone to the United States rather than to Mexico. The legal and unauthorized populations of Northern Triangle immigrants resident in the United States are 21 and 25 times higher, respectively, than the reported population resident in Mexico in 2015. In the 2000s, this flow primarily consisted of adults who sought to evade border enforcement, and in the 2010s, a large flow of juvenile asylum seekers was added to the flow of adults. During 2013–2016, the total flow of Northern Triangle asylum seekers to the United States was 34 times higher than the flow to Mexico, and the flow of unaccompanied asylum seekers to Mexico was essentially zero. Asylum seekers from the Northern Triangle overwhelmingly chose the United States as a final destination, in spite of the fact that an illegal trip to the United States is much more expensive than to Mexico (roughly $3,000 compared to $160).

It is not surprising that the United States is the final destination for almost all migrants leaving the Northern Triangle. A migrant can expect to increase their wage by 1,200 percent by going to the United States, but by only 10 percent by going to Mexico. The economic gain from migrating to Mexico is very small and unlikely to justify the cost of migrating. Crime and violence are almost always cited as the key driver of the asylum seeker flow, and murder rates are much lower in both Mexico and the United States than in Northern Triangle countries. But other evidence on crime and violence risk, such as perception of neighborhood safety, suggests that although the United States does have a significant advantage over the Northern Triangle countries, Mexico does not. Juvenile migrants themselves state that their primary reason for going to the United States is for economic opportunities (Table 5.1.) Evidence from U.S. administrative records (Table 5.4) indicates that most adult Northern Triangle migrants either do not claim asylum or lose their asylum case in immigration court, suggesting that the motivations of these migrants are not related to reasons that would justify an asylum claim. Family reunification is also a major primary motivation for migrating to the United States. Most Northern Triangle migrants have family members already in the United States (Figure 4.1, Table 4.16). The statistical analysis developed in this study to understand the relationship between root causes and the intention or decision to migrate suggests that family reunification is a key motivating factor, economic opportunity has been the dominant factor that has motivated adult migrants to come to the United States, and family reunification and economic opportunities have played a key role in motivating juvenile migrants.

Crime and violence conditions may also be a contributing factor influencing migration, although evidence is mixed.

Although Northern Triangle migrants who do not claim asylum face a significant chance of being caught attempting illegal entry and suffer a major consequence if they are caught, this is not the case for asylum seekers. For juvenile asylum seekers, successful entry into the United States is basically guaranteed (Figure 6.5), and for adult asylum seekers, successful entry is more likely than not (Figure 6.4). This creates powerful incentives for migrants to use the asylum channel as opposed to evasion, and evidence suggests that very few migrants who intend to claim asylum try to evade at the border (Figure 6.6–Figure 6.10.)

Finally, the dynamics of the juvenile migrant surge is likely related to actual and perceived policy changes in the United States and Mexico. The surge began soon after Mexico adopted a new liberalized immigration law, accelerated after key events in the United States in 2012 and 2013, and fluctuated sharply in response to key events in the United States starting in the summer of 2014.

Table 7.1. Key Summary Indicators

Northern Triangle immigrant population in 2015	
U.S. – unauthorized	1,650,000
U.S. – legal	1,380,000
Mexico	66,457
Northern Triangle asylum seeker flows during 2013–2016	
To the U.S.	472,058
To Mexico	13,853
Northern Triangle UAC asylum seeker flows during 2013–2016	
To the U.S.	158,527
To Mexico	498
Wage gap	
U.S./Northern Triangle	13
Mexico/Northern Triangle	1.1
Murder rate (2009–2016 average)	
U.S.	5
Mexico	19
Northern Triangle	60
% reporting they live in an unsafe neighborhood (2010–2016 average)	
U.S.	12%
Mexico	42%
Northern Triangle	38%
Total illegal trip costs (2009–2017 average)	
Final destination is U.S.	$2,944
Final destination is Mexico	$159

These findings suggest that there will be very little diversion of asylum seeker flow from the United States to Mexico if seeking asylum in the United States is not an option. Asylum seekers coming to the United States are clearly motivated by economic opportunities and family reunification, and possibly by crime and violence conditions. In the case of juveniles, the presence of family members already in the destination country is a major factor in explaining their migration decision, and whereas there are very large communities of Northern Triangle immigrants in the U.S., there are very small communities in Mexico. Mexico lacks a family "magnet" for juvenile migrants, which is reflected in the almost non-existent applications for asylum in Mexico by unaccompanied children. Although the murder rate in Mexico is lower than in Northern Triangle countries, crime perception indicators on neighborhood safety and gang presence suggest that Northern Triangle residents perceive essentially no difference between crime and violence conditions in their countries and Mexico. Therefore, there will be very little diversion of asylum seeker flow from the United States to Mexico as a final destination because there is very little economic gain from migrating to Mexico, there are very few Northern Triangle migrants already resident in Mexico with whom to reunify and who can provide social network support, and it is not clear that there is any significant gain with respect to exposure to crime and violence.

Rather than divert to Mexico, migrants who are currently entering the United States through the asylum channel will either continue coming to the United States and trying to enter the United States illegally through evasion at the border, or not migrate from their home country. Crossings across the Mexico-Guatemala border into Mexico will decline, but there will still be crossings into Mexico for transit to the United States. Developments in 2017 are useful in illuminating what might happen in this regard.

7.1. Developments in 2017 and Their Implications

The flow of Northern Triangle asylum seekers to the United States has fluctuated sharply since the summer of 2014, and this has likely been the result of changing perceptions of U.S. policy. The most dramatic fall took place in the months after the U.S. presidential election: the total number of UAC and FMUA apprehensions in the U.S.-Mexico border region fell by 90 percent from November 2016 to April 2017. This was likely driven by a perception that major changes in U.S. immigration and border enforcement policies were imminent, including policies on asylum seekers. This episode is arguably the historical event that is the closest available to an actual closing of the asylum channel. There are several important points that can be made given the data that are currently available:

- There was no change in the annual number of refugee applications made by Northern Triangle nationals in Mexico from 2016 to 2017, which equaled roughly 8,000 in each year (see Table 4.9). It therefore does not seem that there was any significant substitution of asylum seekers from a U.S. destination to a Mexico destination. Given the sharp fall in U.S. apprehensions during November 2016–

April 2017 and the sharp rise that happened after April 2017, it is necessary to conduct analysis using monthly data to best understand whether any substitution from the United States to Mexico as a final destination took place, but COMAR does not make monthly data available on its website, and we have been unable to get these data from the Mexican government to date. Analysis of monthly apprehension/asylum data is an important task for future research.

- Data that are made available at a monthly frequency come from an issuance by the INM of visitor cards for humanitarian reasons (TVRH). These non-immigrant visas are issued to those seeking refugee status or political asylum, or who have been a victim of a crime.[95] The temporary status conferred by a TVRH can be converted to permanent residency through an application process. As in the case of the refugee application, the TVRH is attractive as a method to enter Mexico legally, either in order to migrate to Mexico as a refugee, or to transit Mexico on the way to the United States. Of TVRHs issued during 2014–2017, 61 percent were to Northern Triangle nationals.

- Figure 7.1 shows data on monthly issuances of TVRHs to Northern Triangle nationals in this period. Issuance grew over 2014–2016. Immediately after the November 2016 U.S. presidential election, issuance fell sharply, and remained at depressed levels through July 2017, when they rose dramatically to higher levels through the end of the year. These dynamics suggest that issuance of TVRHs move with the flow of Northern Triangle asylum seekers headed to the United States. Importantly, the number of TVRHs fell in the period when asylum seeker flow to the United States was depressed, suggesting that that Northern Triangle asylum seekers did not divert to Mexico as the United States became an unattractive destination.

- Data on evasion versus presenting at the U.S.-Mexico border that are reviewed in Chapter 6 show no increase in the evasion rate in 2017.

The lack of substitution to either Mexico or evasion at the border by asylum seekers in the first half of 2017 suggests that the number of migrants leaving their home in the Northern Triangle fell dramatically. In the immediate aftermath of the election, there may have been a perception that the new administration would pursue a generalized enforcement buildup, both at the border and in the interior, and that policies on the ability to seek asylum in the United States would change. Migrants did not want to pursue any entry channel to the United States because the perceived risk of not effecting entry through all of them rose. If this is an accurate explanation of what happened in 2017, the degree to which Northern Triangle migrants continue coming to the United States and

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[95] For details about the TVRH and the application process for it, see http://www.inm.gob.mx/static /Tramites_2013/permanecer_mexico/cambio_condicion/VISITANTE_POR_RAZONES_HUMANITARIAS.pd f .

try to evade versus not migrate at all will depend on whether a closing of the asylum channel is an isolated policy change or part of a larger package of measures that affect perceptions of the ability to successfully illegally enter and reside in the United States.

Mexico: Issuance of Visitor Cards for Humanitarian Reasons (TVRH)
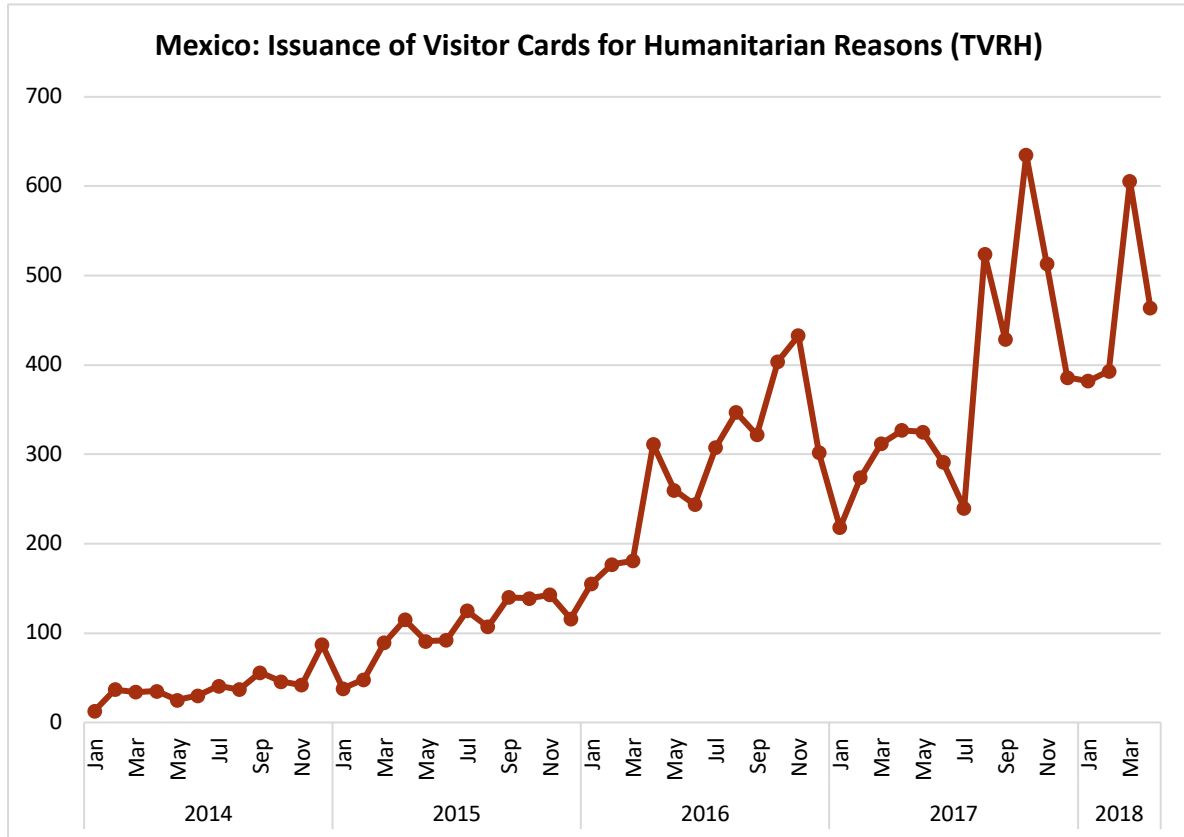
Source: INM.

Figure 7.1. Mexico: Issuance of Visitor Cards for Humanitarian Reasons (TVRH)

8. Case Studies of Other Recent Asylum Seeker Flow Experiences

This chapter will examine four case studies (Germany, Norway, Finland, and Canada) to better understand the impact of national policies on the migrant flow of asylum seekers in each respective country. Most European countries saw a surge of asylum seekers in 2015 and 2016 coinciding with the conflict in Syria. Germany, Norway, and Finland were observed to understand the impact of this surge on domestic policies regarding asylum seekers. In Canada, the discussion focuses on the impact of the November 2016 U.S. presidential election on refugee flow from the United States.

8.1. Background

Asylum seekers, as defined by the United Nations Educational, Scientific and Cultural Organization (UNESCO), are people who leave their home country, have applied for protection as refugees in another country, and are awaiting the determination of their refugee status.[96] The number of first-time applications to Europe from asylum seekers originating from Syria, Afghanistan, and Iraq quadrupled between 2013 and 2015.[97] The vicious conflict in Syria began as another Arab Spring uprising in 2011 and mushroomed into a brutal proxy war that has drawn in regional and global powers.[98] As a result, families began fleeing their homes and, by 2015, the number of Syrian refugees had reached four million.[99] The burgeoning presence of the Islamic State in Iraq and Syria (ISIS) in 2013 added to the volatility in the already war-torn Syria.[100] The violence and instability brought on by ISIS also had an impact on Syria's neighbor, Iraq, as a sharp increase in Iraqi refugees fleeing the country was observed beginning in 2014.[101] In Afghanistan,

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[96] "Asylum Seeker," UNESCO, http://www.unesco.org/new/en/social-and-human-sciences/themes/international-migration/glossary/asylum-seeker/.

[97] Phillip. Connor, "Number of Refugees to Europe Surges to Record 1.3 Million in 2015," Pew Research Center, August 2, 2016, http://www.pewglobal.org/2016/08/02/number-of-refugees-to-europe-surges-to-record-1-3-million-in-2015/.

[98] "Syria: The story of the conflict," British Broadcasting Company (BBC), March 11, 2016, http://www.bbc.com/news/world-middle-east-26116868.

[99] "Seven Years On: Timeline of the Syria Crisis - UNHCR Philippines," UNHCR, March 8, 2018, http://www.unhcr.org/ph/13427-seven-years-timeline-syria-crisis.html.

[100] "ISIS Fast Facts," CNN, December 12, 2017, https://www.cnn.com/2014/08/08/world/isis-fast-facts/index.html.

[101] "Sharp increase in Iraqi refugees fleeing ISIS into Jordan and Turkey," United Nations, September 23, 2014, http://www.unhcr.org/en-us/news/briefing/2014/9/54214cfe9/sharp-increase-iraqi-refugees-fleeing-isis-jordan-turkey.html.

along with an authoritarian and corrupt government, the civil unrest resulting from the presence of anti-government forces, such as the Taliban, has led to many fleeing the country.[102]

8.2. Germany

Since 2012, Germany has been the primary destination for asylum seekers in Europe,[103] as illustrated in 2017 when Germany handled more asylum applications than all other European Union (EU) members combined.[104] The substantial increase in migration to Germany in recent years was driven by liberalized migration and asylum laws that came about in the early 2000s, combined with the fact that large cities in Germany were now hubs of economic activity[105] and that escalating conflicts were observed in countries near the EU.[106]

Initially, the cosmopolitan makeup of Germany and the low birthrate in the country contributed to a more welcoming environment for asylum seekers.[107] Although originally receptive to the arrival of refugees, the German government began to change its position when the country's capacity to handle incoming refugees was being exceeded. In 2015, at the peak of the Syrian migration crisis, the number of asylum applications received had increased by 135 percent (see Figure 8.1).[108]

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[102] Admir Skodo, "How Afghans became second-class asylum seekers," *The Independent*, February 22, 2017, https://www.independent.co.uk/news/how-afghans-became-second-class-asylum-seekers-a7591121.html; and Patricia Gossman, "Dispatches: Why Afghans are Leaving," Human Rights Watch, September 16, 2015, https://www.hrw.org/news/2015/09/16/dispatches-why-afghans-are-leaving.

[103] Connor, "Number of Refugees to Europe Surges to Record 1.3 Million in 2015."

[104] Nicole Goebel, "Asylum: Germany processes more applications than other EU states combined,"| *Deutsche Welle*, March 19, 2018, https://p.dw.com/p/2uZAM.

[105] Bruce Katz, Luise Noring, and Nantke Garrelts, "Cities and Refugees—The German Experience" (Washington, DC: The Brookings Institution, September 2016), https://www.brookings.edu/wp-content/uploads/2016/09/cs_20160920_citiesrefugees_germanexperience.pdf.

[106] Victoria Rietig and Andreas Müller, "The New Reality: Germany Adapts to Its Role as a Major Migrant Magnet," Migration Policy Institute, August 31, 2016, https://www.migrationpolicy.org/article/new-reality-germany-adapts-its-role-major-migrant-magnet.

[107] Natalie Ilsley, "Why Germany Is More Accepting of Asylum Seekers than the Rest of Europe," *Newsweek*, September 2, 2015, http://www.newsweek.com/migrants-germantgermanyasylum-seekersacceptingeu-migrant-crisismigrantsangela-600872.

[108] "Asylzahlen (Asylum Figures)," BAMF, http://www.bamf.de/DE/Infothek/Statistiken/Asylzahlen /asylzahlen-node.html.
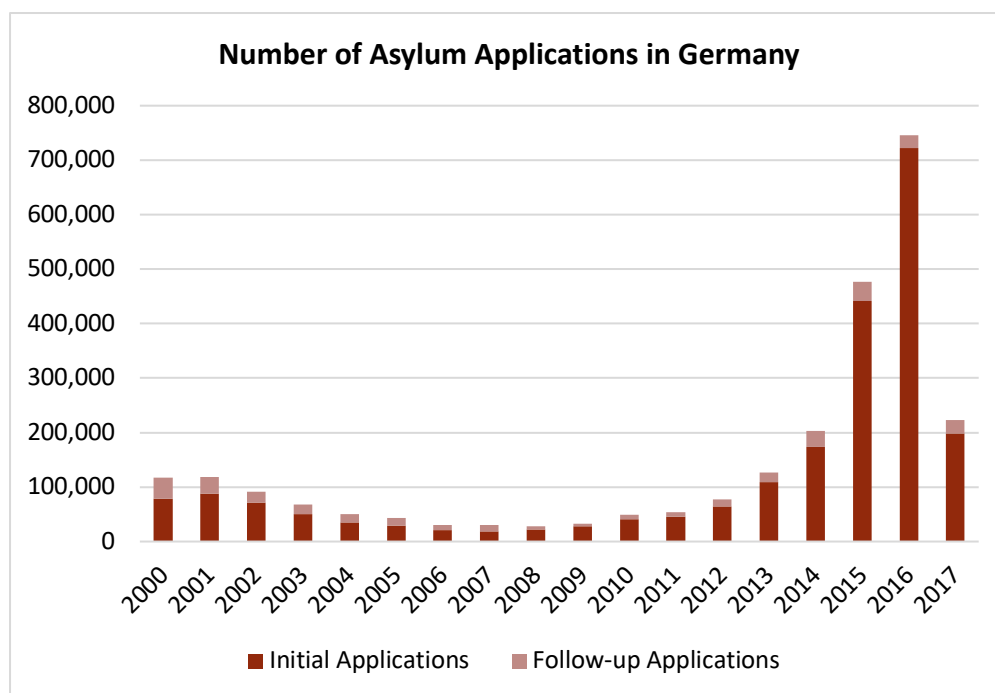
Source: Reprinted from Germany's Federal Office for Migration and Refugees (BAMF), http://www.bamf.de/DE/Infothek/Statistiken/Asylzahlen/asylzahlen-node.html.

Figure 8.1. Number of Asylum Applications in Germany 2000–2017

Taking in almost 760,000 asylum seekers that year, Germany was the leading European country to receive applicants, with more than half of all Syrian asylum applications in the region.[109] In 2016, the number of Syrians asylum seekers in Germany was more than double the amount of all the other asylum seekers in Germany combined (see Figure 8.2).[110]

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[109] Alberto Nardelli, "Germany receives nearly half of all Syrian asylum applicants," *The Guardian*, November 5, 2015, https://www.theguardian.com/world/2015/nov/05/asylum-applications-to-germany-see-160-rise.

[110] "Migration & integration," Destatis, Federal Statistical Office of Germany, 2018, https://www.destatis.de/EN/FactsFigures/SocietyState/Population/MigrationIntegration/MigrationIntegration.html.

People seeking protection
Selected citizenships, thousand
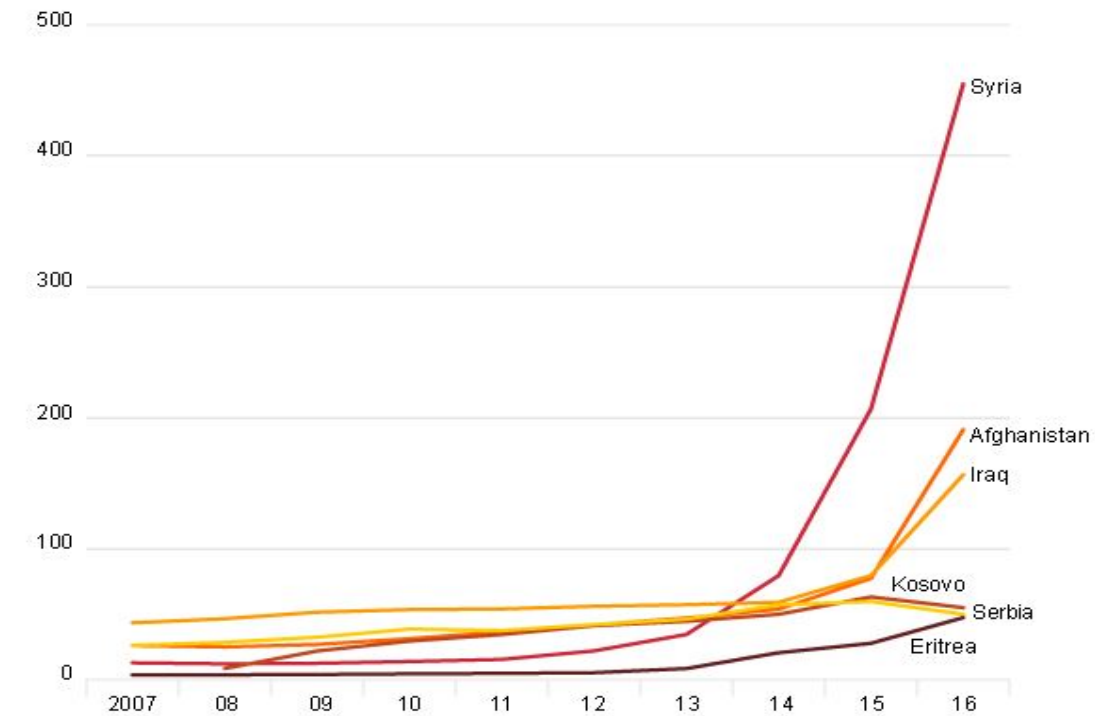
© Statistisches Bundesamt (Destatis), 2017

Source: "Migration & integration," Destatis, Federal Statistical Office of Germany, https://www.destatis.de/EN
/FactsFigures/SocietyState/Population/MigrationIntegration/MigrationIntegration.html.

Figure 8.2. People Seeking Protection in Germany 2007–2016

By September 2015, Germany announced it would temporarily block the free entrance of asylum seekers into the country.[111] Amidst the Syrian migration crisis, Germany began to seek a deal with Turkey to deal with the crisis. Other European countries joined in on the conversation, and by the following year, backed by German chancellor Angela Merkel, the EU struck a deal with Turkey to contain the crisis.[112] Under the agreement, Turkey would receive, among other incentives, 6 billion Euros, and in return, migrants attempting to enter the European block through

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[111] Laura King, "Germany temporarily restricts flow of asylum seekers," *Los Angeles Times*, September 13, 2015, http://www.latimes.com/world/europe/la-fg-germany-halts-refugee-flow-20150913-story.html.

[112] Anthony Faiola and Griff Witte, "E.U. strikes deal to return new migrants to Turkey," *The Washington Post*, March 18, 2016, https://www.washingtonpost.com/world/europe/europe-offers-deal-to-turkey-to-take-back-migrants/2016/03/18/809d80ba-ebab-11e5-bc08-3e03a5b41910_story.html.

the Aegean Sea would be sent back to Turkey.[113] Balkan countries also began to refuse the entry of migrants as their European counterparts became more reluctant to accept migrants passing through the Balkan countries.[114] Separately, starting in 2016, Germany began to provide financial incentives (as much as 6,000 Euros) to refugees to return to their home countries.[115] As a result of the steps Germany and other neighboring countries took towards reducing the migrant flow, Germany saw a 69 percent reduction in migrants arriving in the country in 2016 (280,000 arrivals in 2016 compared to the 890,000 arrivals in 2015).[116]

8.3. Norway

Similar to Germany, Norway also experienced a surge in asylum seekers during this timeframe. In 2015, the country saw the number of asylum applications received nearly triple from the previous year (see Figure 8.3).[117]

Source: Norwegian Directorate of Immigration (UDI), https://www.udi.no/en/statistics-and-analysis/statistics/.
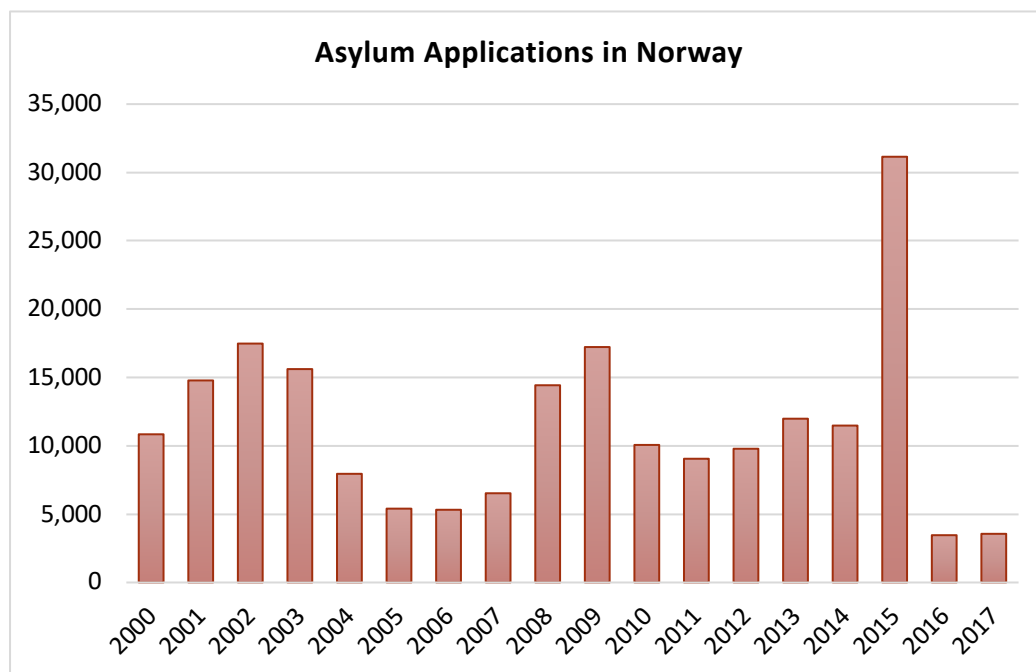
Figure 8.3. Asylum Applications in Norway 2000–2017

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[113] Ibid.

[114] Melissa Eddy, "Germany's Angela Merkel Agrees to Limits on Accepting Refugees," *The New York Times*, October 9, 2017, https://www.nytimes.com/2017/10/09/world/europe/germany-merkel-refugees.html.

[115] Faiola and Witte, "E.U. strikes deal to return new migrants to Turkey."

[116] Aamna Mohdin, "Efforts to keep foreigners out of Europe are working: Germany saw a 69% drop in migrants last year," Quartz, January 12, 2017, https://qz.com/883045/efforts-to-keep-foreigners-out-of-europe-are-working-germany-saw-a-69-drop-in-migrants-last-year/.

[117] "Annual reports from previous years," UDI (The Norwegian Directorate of Immigration), n.d., https://www.udi.no/en/statistics-and-analysis/annual-reports/annual-reports-from-previous-years/.

Syrians also constituted over a third of the asylum seekers in 2015 and continued to represent a sizeable portion of asylum applicants in the years since the migration crisis (see Figure 8.4).[118] With the routes through southern Europe often having deadly consequences (e.g., due to ships sinking while crossing the Mediterranean),[119] some Syrian migrants found their way to Europe by way of a longer, but faster, route through the Storskog-Borisoglebsky border, which is the only legal border crossing point between Norway and Russia.[120]

Asylum Applications in Norway by Citizenship

Source: Norwegian Directorate of Immigration (UDI), https://www.udi.no/en/statistics-and-analysis/statistics/.
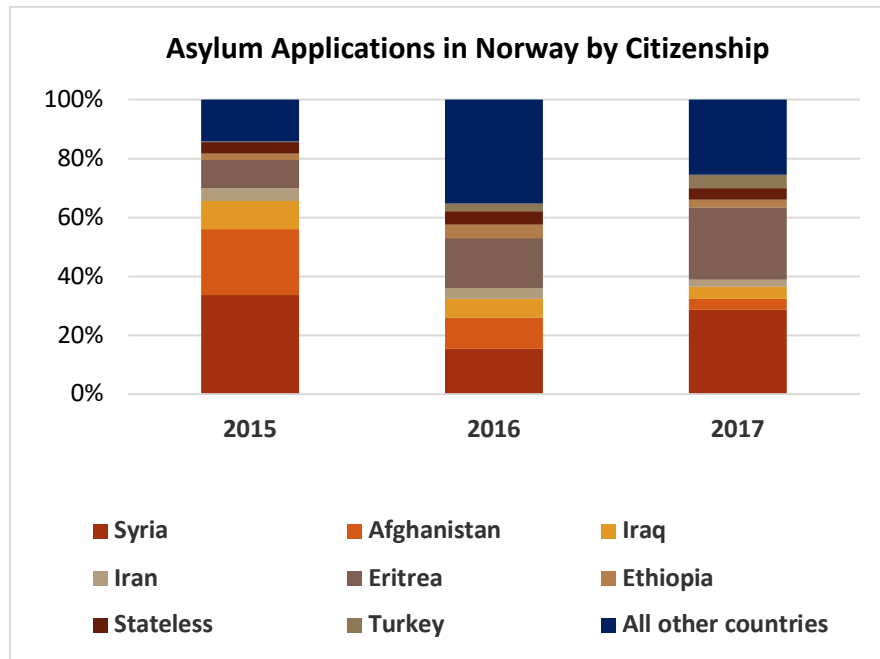
Figure 8.4. Asylum Applications in Norway by Citizenship 2015–2017

Overwhelmed by migrants, by 2015 Norway began to refuse to process applications for asylum seekers who were already residing in a "safe" third country.[121] Russia was considered to be one such country, and Norwegian authorities subsequently began to return people who had valid

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[118] "Asylum applications of unaccompanied minors lodged in Norway by nationality and month (2018)," UDI, https://www.udi.no/en/statistics-and-analysis/statistics/asylum-applications-of-unaccompanied-minors-lodged-in-norway-by-nationality-and-month-2018/.

[119] "Refugee shipwrecks claim another 23 lives off Greece," CBS News, October 30, 2015, https://www.cbsnews.com/news/europe-migrant-crisis-refugee-boats-sink-aegean-sea-greece-lesbos/.

[120] Kjetil Malkenes Hovland, "Syrian Refugees Take Arctic Route to Europe," *The Wall Street Journal*, September 3, 2015, https://www.wsj.com/articles/syrian-refugees-take-arctic-route-to-europe-1441273767.

[121] Organisation for Economic Cooperation and Development (OECD), "Recent developments in international migration movements and policies," June 29, 2017, https://doi.org/10.1787/migr_outlook-2017-4-en.

Russian visas back to Russia.[122] Towards the end of 2015, the Norwegian government also began to offer payments to refugees to return to their home countries. A family of four could potentially receive up to 80,000 kroner (or close to 10,000 U.S. dollars) in addition to traveling expenses.[123] By June 2016, the government was no longer permitting asylum seekers who did not have valid visas to enter Norway.[124] And in October 2016, Norway started erecting a 3-meter-high and 200-meter-long steel fence on the Norwegian side of the Norwegian-Russian border.[125] As a result of the aggressive policies and actions made by the Norwegian government, the number of asylum seekers dropped by 89 percent by the end of 2016.[126] In 2017, Norway had just over 3,500 asylum applications compared to over 31,000 applications the country received during the peak in 2015.[127]

8.4. Finland

The impact of the Syrian migration crisis was also felt in Finland, where the number of asylum applications increased by almost 800 percent in 2015 (see Figure 8.5).[128]

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[122] Patrick Reevell, "Norway Deports Biking Refugees Back to Russia," ABC News, January 20, 2016, https://abcnews.go.com/International/norway-deports-biking-refugees-back-russia/story?id=36405605.

[123] "Norway to asylum seekers: We'll pay you extra to leave," The Local Norway, April 25, 2016, https://www.thelocal.no/20160425/norway-ups-financial-incentive-for-asylum-seekers-to-leave.

[124] "Migrant crisis: Norway begins deportations to Russia," BBC, January 19, 2016, http://www.bbc.com/news/world-europe-35355727.

[125] "Norway's short but controversial fence on Russia's border," BBC, October 6, 2016, http://www.bbc.com/news/av/world-europe-37572671/norway-s-short-but-controversial-fence-on-russia-s-border.

[126] "Statistics on immigration," UDI, n.d., https://www.udi.no/en/statistics-and-analysis/statistics/.

[127] Ibid.

[128] "Annual number of asylum applications in Finland from 2005 to 2016," Statista, 2018, https://www.statista.com/statistics/523556/asylum-applications-in-finland/.
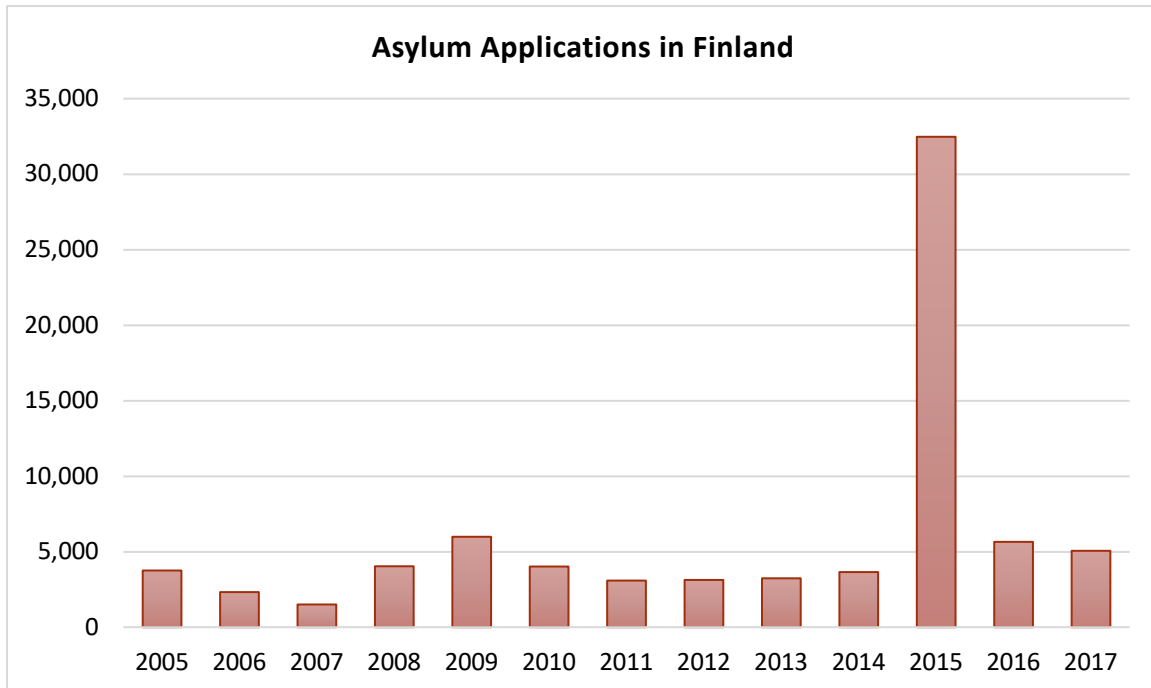
Asylum Applications in Finland

Figure 8.5. Asylum Applications in Finland 2005–2017

Finland was affected by Norway's aggressive policy changes regarding asylum seekers. As Norway started to enforce tougher asylum laws, entering through Storskog became difficult for refugees, many of whom had originally arrived by bicycle because Russia does not allow people to cross borders on foot.[129] As Norway began to deny entry to asylum seekers arriving on bikes, those asylum seekers began biking to Norway's neighbor, Finland. In particular, they headed for the northern Lapland region.[130] The complex dynamics of global power politics were also in play as some began to suspect that Russia was exploiting the migrant crisis to extract concessions, to influence individual nations' partnerships with NATO, or to disrupt EU sanctions against Russia.[131] Finland's defense minister also referenced Russia as the "most serious challenge" when

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[129] Siobhan O'Grady, "Norway to Refugees: If You Came on a Bike, You'll Probably Leave on a Bike," January 14, 2016, http://foreignpolicy.com/2016/01/14/norway-to-refugees-if-you-came-on-a-bike-youll-probably-leave-on-a-bike/.

[130] "Border Guard: Finland could see 7,500 asylum seekers enter from Russia," YLE Finland, November 1, 2016, https://yle.fi/uutiset/osasto/news/border_guard_finland_could_see_7500_asylum_seekers _enter_from_russia/8587431; and Adam Taylor, "Finland blocks refugees from cycling across Russian border into Lapland," *The Washington Post*, December 28, 2015, https://www.washingtonpost.com /news/worldviews/wp/2015/12/28/finland-blocks-refugees-from-cycling-across-russian-border-into-lapland/?utm_term=.b893b7de048e.

[131] Andrew Higgins, "E.U. Suspects Russian Agenda in Migrants' Shifting Arctic Route," *The New York Times*, April 2, 2016, https://www.nytimes.com/2016/04/03/world/europe/for-migrants-into-europe-a-road-less-traveled.html.

dealing with the migrant crisis.[132] In January 2016, following a meeting between Finland and Russia to discuss bilateral cooperation regarding immigration issues, the flow of migrants into Finland was suddenly drastically reduced (see Figure 8.6).[133]

2016 Asylum Applications in Finland (by month)
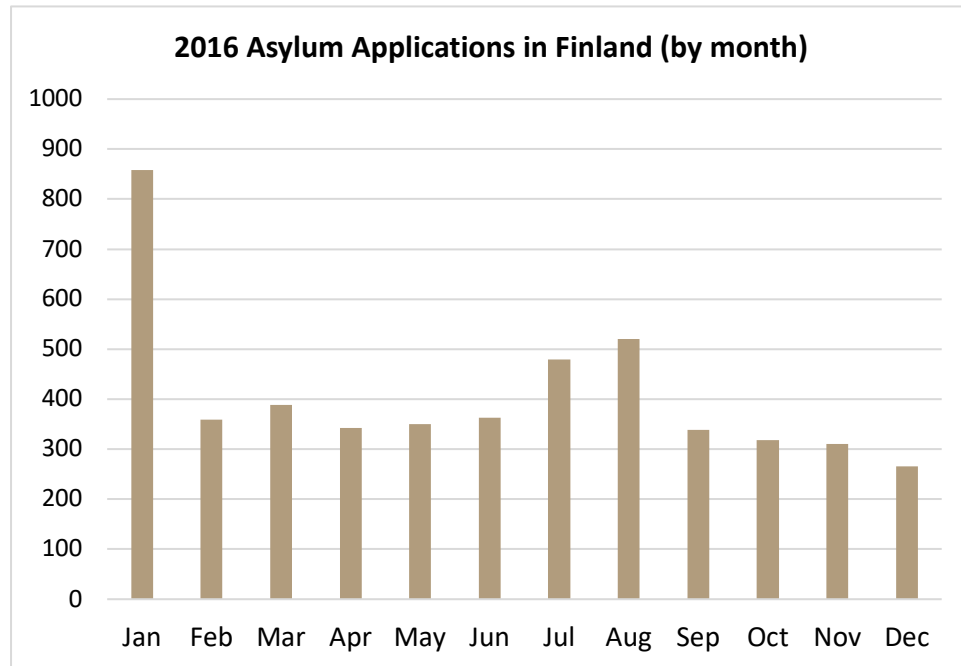
Source: Finnish Immigration Service, http://statistics.migri.fi/#applications/23330.

Figure 8.6. 2016 Asylum Applications in Finland (by month)

In addition to the agreement with Russia, Finland also announced new guidelines in May 2016 that made it more difficult for newly arriving asylum seekers (from countries such as Afghanistan, Iraq, and Somalia) to enter Finland,[134] while stricter family reunification was enacted in July 2016.[135] As a result, Finland also had a substantial reduction of asylum applications and, by the end of 2016, the number of applications had been reduced to less than a fifth of the total in 2015.[136]

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[132] John R. Schindler, "How the Kremlin Manipulates Europe's Refugee Crisis," Observer. April 6, 2016, http://observer.com/2016/04/how-the-kremlin-manipulates-europes-refugee-crisis/.

[133] "Border Guard," YLE Finland.

[134] "Humanitarian protection no longer granted; new guidelines issued for Afghanistan, Iraq and Somalia," Finnish Immigration Service, May 17, 2016, https://migri.fi/en/artikkeli/-/asset_publisher /humanitaarista-suojelua-ei-myonneta-enaa-uudet-maalinjaukset-afganistanista-irakista-ja-somaliasta; "Interior Minister defends official view of Iraq as safe for returnees," YLE Finland, May 20, 2016, https://yle.fi/uutiset/osasto/news/interior_minister_defends_official_view_of_iraq_as_safe_for_returnees/88974 06.

[135] "Amendments to family reunification criteria in force on 1 July," Ministry of the Interior, Finland, June 29, 2016, http://intermin.fi/en/artikkeli/-/asset_publisher/perheenyhdistamisen-muutokset-voimaan-1-7-.

[136] "Annual number of asylum applications in Finland from 2005 to 2016,"| Statista.

8.5. Canada

The trend for asylum seekers in Canada was different from that in European countries, in large part due to the geographical distance of Canada from the Middle East (which was the origin for a substantial portion of asylum seekers who had traveled to Europe during the migrant crisis). However, in Canada, the most recent spike in asylum seekers arriving to the country came, unexpectedly, from the United States. In early 2017, with a more unforgiving stance towards refugees, it was unclear whether the Trump administration would renew the temporary protected status, issued to the 50,000 Haitians whose lives had been uprooted by the 2010 Haitian earthquake, that was set to expire in July 2017.[137] As a preemptive measure, many Haitian refugees traveled north and illegally entered Canada during that summer, particularly in July and August that year. Particularly, in July 2017, the Canadian police intercepted more than three times the number of people illegally crossing the border than in June (see Figure 8.7).[138] This trend continued in August with the number nearly doubling from July. However, unbeknownst to many of the asylum seekers, Canada and the United States had enacted the Safe Third Country Agreement (STCA) in December 2004.[139] Under this provision, people seeking refugee status must make their claim for asylum in the first country in which they arrive, either in the United States or Canada.[140] In early 2018, the Trump administration further announced that the temporary protected status provided to nearly 200,000 El Salvadorans following the devastating 2001 earthquakes in El Salvador would not be renewed and is set to expire in September 2019.[141] The Canadian government has expressed concern regarding the impact this may have on Canada's immigration services.[142]

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[137] "New surge in migrants crossing US-Canada border," BBC, September 19, 2017, http://www.bbc.com/news/world-us-canada-41323916.

[138] "Asylum Claimants Processed by Canada Border Services Agency (CBSA) and Immigration, Refugees and Citizenship Canada (IRCC) Offices, January 2011 - April 2018," Government of Canada, last modified May 11, 2018, https://www.canada.ca/en/immigration-refugees-citizenship/services/refugees /asylum-claims/processed-claims.html.

[139] "Agreement between the Government of Canada and the Government of the United States of America for cooperation in the examination of refugee status claims from nationals of third countries." Government of Canada. Global Affairs Canada. December 29, 2004. http://www.treaty-accord.gc.ca/ details.aspx?id=104943.

[140] "Canada-U.S. Safe Third Country Agreement," Government of Canada, last modified June 23, 2016, https://www.canada.ca/en/immigration-refugees-citizenship/corporate/mandate/policies-operational-instructions-agreements/agreements/safe-third-country-agreement.html.

[141] "Temporary Protected Status Designated Country: El Salvador," U.S. Citizenship and Immigration Services (USCIS), last updated May 9, 2018, https://www.uscis.gov/humanitarian/temporary-protected-status/temporary-protected-status-designated-country-el-Salvador.

[142] Monique Scotti, "Canada braces for more asylum claims as Trump lifts protection for 200K Salvadorans, Global News Canada, January 8, 2018, https://globalnews.ca/news/3951763/asylum-seekers-canada-2018-el-salvador-tps/.

2017 Canadian Police Interceptions of Asylum Seekers Illegally Crossing U.S.-Canada Border
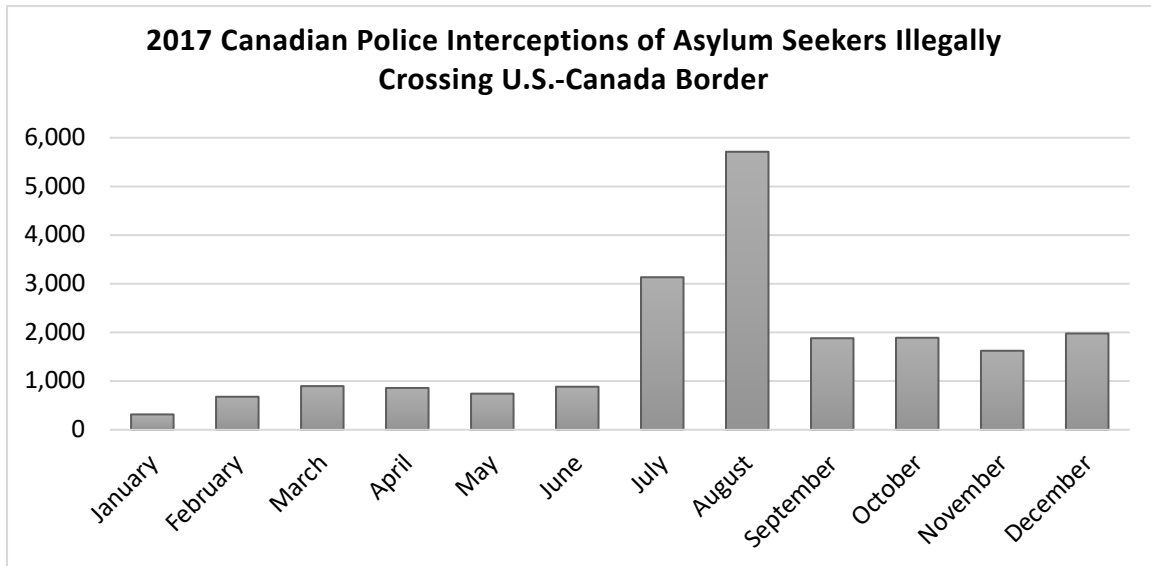
Source: Government of Canada, "Asylum Claimants Processed by CBSA and IRCC, January 2011 – April 2018," https://www.canada.ca/en/immigration-refugees-citizenship/services/refugees/asylum-claims/processed-claims.html.

Figure 8.7. 2017 Canadian Police Interceptions of Asylum Seekers Illegally Crossing U.S.-Canada Border

8.6. Conclusion

The recent migration crisis, primarily stemming from the violent conflict in Syria, had a wide-scale impact on many European countries. In the case of Germany, Norway, and Finland, the sudden increase of asylum seekers led to more isolationist domestic policies as the countries found it increasingly difficult to handle the large influx of asylum seekers to their communities. Aggressive measures taken to curb the flow of migrants proved successful for all three countries, as observed by the drastic reduction of asylum applications following the enactment of such measures. In the case of Canada, the situation is still progressing, and it may not be until late next year before there is a better understanding of how Canada will adjust its immigrant policies should there be a large influx of refugees from the United States.

Appendix A.
Data Sources

A.1. U.S. Administrative Records

Immigration enforcement administrative records used in this study include individual apprehension records of the U.S. Border Patrol (USBP) for the period October 1999–April 2018, and individual inadmissibility records of the Office of Field Operations (OFO) for the period October 2004–September 2016. These records contain fields that identify a person who was apprehended as an unaccompanied child (UAC), or as a member of a family unit apprehension (FMUA). The UAC and FMUA designators were not used systematically by U.S. border enforcement authorities until FY 2008 and 2011, respectively.[1]

The success rates for asylum claimants presented in Figure 6.4 and Figure 6.5 are derived from the linking of USBP and OFO apprehension/inadmissibility records to immigration court (EOIR) records, Immigration and Customs Enforcement (ICE) detention and removal records, and U.S. Citizenship and Immigration Services (USCIS) affirmative-asylum records.

A.2. Mexican Administrative Records

Administrative data on refugee applications and their processing by the Comisión Mexicana de Ayuda a Refugiados (COMAR) were obtained from COMAR's website at

https://www.gob.mx/comar/articulos/estadisticas-2013-2017?idiom=es

Administrative data related to legal immigration, immigration enforcement, and border crossings were obtained from Boletines Estadísticos of the Instituto Nacional de Migracion (INM), which are posted on the INM's website at

http://www.politicamigratoria.gob.mx/es_mx/SEGOB/Boletines_Estadisticos

A.3. EMIF Survey

The El Colegio de la Frontera Norte (COLEF) implements the Encuesta sobre Migración en la Frontera de México (EMIF) survey on both Mexico's northern border (EMIF-Norte) and southern border (EMIF-Sur).

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[1]   See John E. Whitley et al., "Assessing Southern Border Security," IDA Paper NS P-5304 REVISED (Alexandria, VA: Institute for Defense Analyses, May 2016), for details on apprehension and inadmissibility records and how they can be used to analyze border security.

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Use of the EMIF-Norte began in 1993 in order to measure the size and characteristics of migrant flows between Mexico and the United States. Use of the EMIF-Sur subsequently began in 2004 in order to better understand the flow of migrant workers across Mexico's southern border with Guatemala. The surveys are implemented by COLEF and managed by COLEF and a set of Mexican governmental institutions that support it. The EMIF website states that the general purposes of the EMIF-Sur survey are to

> increase understanding of the flows of migrants who cross between Mexico and Guatemala in order to work in Mexico or the United States, along with the undocumented migrants that cross Mexican territory and are returned to Guatemala, Honduras and El Salvador by Mexican and U.S. immigration officials. Also, to quantify the volume of migration flows and discover its main economic, social and demographic makeup, as well as the conditions and labor characteristics of the people who migrate.

COLEF publishes annual reports that summarize EMIF-Sur data and trends and estimates that are derived from them.[2]

The EMIF-Sur survey comprises four modules:

- "From Guatemala": This module samples migrants as they are coming from or through Guatemala on their way to Mexico or the United States and intend to stay in one of these countries for at least one month. The large majority of migrants captured in this module are Guatemalans traveling relatively short distances into Mexico to work temporarily or seasonally.

- "From Mexico": This module samples migrants who were not born in the United States or Mexico, are coming from one of these countries, who went to the United States or Mexico to work or search for work, and who intended to stay in the country for at least one month. This module captures migrants who are making a temporary visit to their home country. This study does not use data from this module.

- "Deported by Mexico": This module samples migrants who illegally entered Mexican territory and were apprehended and returned by Mexican enforcement authorities to their home country. Mexican authorities return Northern Triangle migrants by land on buses.

- "Deported by U.S.": This module samples migrants who illegally entered U.S. territory and were apprehended and returned by U.S. enforcement authorities to their home country. U.S. authorities return Northern Triangle migrants to their home country by airplane.

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[2] Data files for all EMIF-Norte and EMIF-Sur modules can be downloaded from the EMIF website at https://www.colef.mx/emif/eng/. Annual reports can be found in the website's "Results" section.

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EMIF deploys field researchers to sites through which migrants are known to travel. In the case of the "From Guatemala" and "From Mexico" modules, these sites are bus stations on the Mexico-Guatemala border. In the case of the "Deported by Mexico" module, these sites are bus stations on the Mexico-Guatemala border and in El Salvador and Honduras where buses containing returnees arrive. In the "Deported by U.S." module, these sites are the international airports in the capital cities of the three countries where returnees arrive. Sampling by the EMIF surveys is done in two stages. In the first stage, survey implementers decide on sites and timing with which to deploy field researchers based on available knowledge about flows. In the second stage, a pair of field researchers who are deployed to a particular site at a particular time sample from the migrants flowing through the site at that time. One researcher counts the total number of migrants who pass through the site; the other researcher randomly selects migrants from the flow and, if the migrant agrees, administers the questionnaire to them.

Table A.1 gives the number of migrants who responded to the survey by module and home (birth) country. For 2017, only the first two quarters of data for the calendar year have been made publicly available by COLEF. For the "From Guatemala" module, 97 percent of the migrant sample are Guatemalans, 3 percent are Hondurans, and there are almost no El Salvadorans. Sample sizes are quite large for all years and home countries for the "Deported by Mexico" and "Deported by U.S." modules.

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Table A.1. EMIF-Sur Module Sample Counts

	2009	2010	2011	2012	2013	2014	2015	2016	2017[A]	Total
"From Guatemala" Module										
El Salvadorans	**3**	**2**	**5**	**46**	**36**	**19**	**36**	**46**	**19**	**212**
Male	2	2	5	44	34	18	32	43	17	197
Female	1	0	0	2	2	1	4	3	2	15
Guatemalans	**7,042**	**7,260**	**8,884**	**10,533**	**11,015**	**10,486**	**10,247**	**9,888**	**2,843**	**78,198**
Male	5,181	5,336	7,412	9,207	9,821	9,794	9,594	9,176	2,641	68,162
Female	1,861	1,924	1,472	1,326	1,194	692	653	712	202	10,036
Hondurans	**6**	**11**	**8**	**677**	**555**	**240**	**239**	**245**	**102**	**2,083**
Male	5	8	6	622	513	227	215	227	93	1,916
Female	1	3	2	55	42	13	24	18	9	167
"Deported by Mexico" Module										
El Salvadorans	**994**	**1,707**	**1,763**	**2,385**	**2,788**	**3,372**	**4,298**	**3,135**	**868**	**21,310**
Male	752	1,371	1,435	2,198	2,384	2,777	3,242	2,330	763	17,252
Female	242	336	328	187	404	595	1,056	805	105	4,058
Guatemalans	**3,924**	**4,480**	**3,725**	**4,487**	**3,781**	**3,215**	**3,176**	**1,792**	**503**	**29,083**
Male	3,576	3,921	3,089	4,043	3,336	2,310	2,035	1,528	441	24,279
Female	348	559	636	444	445	905	1,141	264	62	4,804
Hondurans	**1,578**	**1,735**	**1,997**	**2,331**	**1,905**	**1,900**	**1,232**	**1,690**	**567**	**14,935**
Male	1,125	1,299	1,659	2,056	1,371	1,617	1,104	1,616	550	12,397
Female	453	436	338	275	534	283	128	74	17	2,538
"Deported by U.S." Module										
El Salvadorans	**898**	**1,316**	**1,489**	**1,700**	**2,230**	**2,399**	**2,230**	**2,016**	**799**	**15,077**
Male	771	1,138	1,328	1,625	2,044	1,928	1,893	1,719	692	13,138
Female	127	178	161	75	186	471	337	297	107	1,939
Guatemalans	**2,553**	**2,206**	**2,097**	**2,398**	**3,621**	**2,451**	**1,475**	**1,625**	**724**	**19,150**
Male	2,206	1,924	1,932	2,267	3,254	2,073	1,250	1,378	608	16,892
Female	347	282	165	131	367	378	225	247	116	2,258
Hondurans	**1,274**	**1,451**	**1,626**	**1,678**	**1,131**	**1,574**	**1,316**	**847**	**341**	**11,238**
Male	1,100	1,283	1,497	1,543	884	1,200	1,068	725	288	9,588
Female	174	168	129	135	247	374	248	122	53	1,650

Source: Tabulated from EMIF-Sur module data files.

A: First two quarters of 2017 only.

A.3.1. EMIF-Sur and Asylum Seeker/Refugee Flows

Given the importance of asylum/refugee flows to this study, it is important to assess the degree to which the EMIF-Sur survey captures asylum seekers (who are referred to as refugees in Mexico). The survey only began asking whether a respondent had applied for refugee/asylum status in Mexico or the United States in 2017. Table A.2 shows that almost none of the respondents who were deported from Mexico had applied for refugee status in Mexico, but that significant percentages of Guatemalans and El Salvadorans deported from the United States reported having applied for asylum, as well as a smaller percentage of Hondurans.

Table A.2. 2017 EMIF-Sur: % of Deportees Reporting Application for Refugee/Asylum Status

	Guatemala	El Salvador	Honduras
Deported from Mexico			
Male	2%	2%	0%
Female	2%	1%	6%
Total	*2%*	*2%*	*1%*
Deported from U.S.			
Male	15%	36%	6%
Female	24%	38%	4%
Total	*16%*	*37%*	*6%*

Source: Tabulated from 2017 EMIF-Sur "Deported from Mexico" module, question 34.12; and "Deported from U.S." module, question using data for question 35.8.

A.3.2. EMIF-Sur Wage Data

EMIF-Sur collects data on wages that migrants earned in their home country and/or destination country in three different modules: "From Guatemala," "Deported by Mexico," and "Deported by the U.S." Table A.3 reports the number of survey responses that provided a non-zero response to the module's question on wage earned in the home or destination country:

- **From Guatemala:** This module asks about wages earned in the migrant's home country and Mexico, but not about wages earned in the United States. Because this module primarily captures circular migration between Guatemala and Mexico, almost all observations are for Guatemalan nationals who have worked in both Guatemala and Mexico, and most of this module's responses by Guatemalans reported a wage earned in Mexico and in Guatemala, which is an ideal wage gap measure, as it reflects the migrant's realized outcomes in both countries. Because this module captures relatively few El Salvadorans and Hondurans, and circular migration between these countries and Mexico is much lower than in the case of Guatemala, the numbers of non-zero responses to the wage question for these nationals are fairly small.

- **Deported by Mexico:** This module has asked about the deported migrant's wage earned in their home country prior to deportation for all years during 2009–2017. It also asked about the wage the migrant earned in Mexico during 2009–2011, but this question was discontinued after 2011.

- **Deported by U.S.:** This module has asked about the deported migrant's wage earned in their home country and in the United States for all years during 2009–2017, but there is substantial variation in the rate of response across years and countries. Very few El Salvadorans answered these questions during 2009–2014, although significant numbers of responses for wage earned in El Salvador are

available during 2015–2017. Significant numbers of responses by Guatemalans and Hondurans are available during 2009–2011 and 2015–2017.

Table A.3. EMIF-Sur Wage Question Sample Counts

	2009	2010	2011	2012	2013	2014	2015	2016	2017
"From Guatemala" Module: Number Reporting a Wage Earned in:									
Both Guatemala and Mexico	79	1,520	1,906	2,275	3,364	4,382	2,752	1,909	163
El Salvador				78 (all years together)					
Honduras				245 (all years together)					
"Deported by Mexico" Module									
Guatemala Responses	*3,924*	*4,480*	*3,725*	*4,487*	*3,781*	*3,215*	*3,176*	*1,792*	*503*
Wage in Guatemala	1,921	2,958	2,295	2,185	1,509	781	505	322	83
Wage in Mexico	7	7	12	NA	NA	NA	NA	NA	NA
Wage in Both	1	4	6	NA	NA	NA	NA	NA	NA
El Salvador Responses	*994*	*1,707*	*1,763*	*2,385*	*2,788*	*3,372*	*4,298*	*3,135*	*868*
Wage in El Salvador	486	853	939	1,235	1,101	855	552	383	143
Wage in Mexico	39	56	29	NA	NA	NA	NA	NA	NA
Wage in Both	19	32	22	NA	NA	NA	NA	NA	NA
Honduras Responses	*1,578*	*1,735*	*1,683*	*1,801*	*1,904*	*1,900*	*1,232*	*1,690*	*567*
Wage in Honduras	748	1,069	1,018	1,138	1,359	1,394	989	1,312	419
Wage in Mexico	77	71	22	NA	NA	NA	NA	NA	NA
Wage in Both	45	63	19	NA	NA	NA	NA	NA	NA
"Deported by U.S." Module									
Guatemala Responses	*2,553*	*2,206*	*2,097*	*2,398*	*3,621*	*2,451*	*1,475*	*1,625*	*724*
Wage in Guatemala	233	170	132	24	12	2	231	202	149
Wage in US	448	281	289	64	23	12	16	8	3
Wage in Both	233	170	132	24	12	2	2	1	2
El Salvador Responses	*898*	*1,316*	*1,489*	*1,700*	*2,230*	*2,399*	*2,230*	*2,016*	*799*
Wage in El Salvador	0	2	1	0	0	0	333	225	63
Wage in US	0	3	1	0	0	0	0	2	1
Wage in Both	0	2	1	0	0	0	0	1	0
Honduras Responses	*1,274*	*1,451*	*1,626*	*1,678*	*1,131*	*1,574*	*1,316*	*847*	*341*
Wage in Honduras	133	93	19	2	5	7	503	303	109
Wage in US	161	104	19	2	18	19	26	14	6
Wage in Both	133	93	19	2	5	7	11	7	4

Source: "From Guatemala" counts are tabulated from responses to questions 9.7, 9.8, and 9.9 (wage in home country), and 28.8, 28.9, and 28.10 (wage in Mexico) (questions in 2017 questionnaire). "Deported by Mexico" counts are tabulated from responses to questions 11.2, 11.3, 11.4 (wage in home country), and 22.4, 22.5, and 22.6 (wage in Mexico) (questions in 2011 questionnaire). "Deported by U.S." counts are tabulated from responses to questions 13.7, 13.8, and 13.9 (wage in home country), and 38.2.1, 38.2.2, and 38.2.3 (wage in U.S.) (questions in 2017 questionnaire).

Wage questions included questions about how much the migrant earned per time unit (hour, day, week, month etc.). These wage data were reported in relevant national currency units (dollars, pesos, quetzals, or lempira). The migrant also reported how many hours per day and days per week

they worked, and for each frequency option, a weekly wage was calculated.[3] Weekly wages were then converted into U.S. dollar values using annual exchange rates obtained from the World Development Indicators database of the World Bank.

Table A.4 gives average weekly wages and average wage gaps derived from answers to relevant wage questions following this methodology. Values were not calculated for specific years, but rather for the entire available sample period of 2009–2017, due to few or no values being available for some modules for some years (see Table A.3). For the "From Guatemala" module, 18,350 Guatemalans reported both a wage earned in Guatemala and in Mexico, and the average of the ratio of the Mexico wage to the Guatemala wage is given.[4] Many fewer El Salvadorans and Hondurans reported a home-country wage, and the ratio of the average wage earned in Mexico to the average wage earned in El Salvador or Honduras is given.[5] For the "Deported by Mexico" and "Deported by U.S." modules, only data for migrants reporting both wages are used, and the average of the wage ratios is given.

Results suggest that migration to Mexico can be expected to lead to small increases in wage income. Average wage gaps for Mexico in Table A.4 range from 0.8 (a decrease of 20 percent) to 1.4 (an increase of 40 percent). Migration to Mexico results in at best a modest increase in expected wage. Migration to the United States, in contrast, leads to very large average expected-wage increases. Average wage gaps for the United States are roughly 13 (an increase of 1,200 percent) for Guatemala and 14 (an increase of 1,300 percent) for Honduras.[6]

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[3] For example, if the individual was paid hourly, that quantity was multiplied by hours worked per day and days worked per week. Or, if the individual was paid monthly, that quantity was divided by four.

[4] Annual values for this wage gap can be calculated, as large numbers of observations are available for each year. The average gap in 2009 was 1.44, 1.45 in 2010, 1.26 in 2011, 1.10 in 2012, 1.17 in 2013, 1.17 in 2014, 0.96 in 2015, 0.87 in 2016, and 1.02 in 2017. The average Mexico-Guatemala wage gap thus fell significantly after 2010 so that in recent years, it was at or slightly below parity. The reasons for this decline are not clear.

[5] The ratio of average wages is not the same as the average across individual wage ratios. The latter arguably better captures what a migrant might expect in terms of change in wage upon migration.

[6] Although too few observations are available for El Salvador to quantify the wage gap, its value will presumably be quite similar to that for Guatemala and Honduras.

Table A.4. EMIF-Sur Average Wages and Average Wage Gaps

	Guatemala	El Salvador	Honduras	Mexico	U.S.
"From-Guatemala" Module					
Average wage for those reporting any wage[A]		$74.52	$57.16	$62.04	
-Average wage ratio: Mexico to home country		0.8	1.1		
Average wage gap: those reporting both wages	1.1				
"Deported-by-Mexico" Module					
Average wage for those reporting both wages					
Guatemala	NA			NA	
El Salvador		$56.58		$63.72	
Honduras			$49.50	$41.78	
Average wage gap	NA	1.4	1.1		
"Deported-by-U.S." Module					
Average wage for those reporting both wages					
Guatemala	$66.57				$573.48
El Salvador		NA			
Honduras			$88.28		$626.25
Average wage gap	12.9	NA	14.0		

Sources: "From Guatemala" weekly wages are calculated from responses to questions 9.7, 9.8, and 9.9 (wage in home country), and 28.8, 28.9, and 28.10 (wage in Mexico) (2017 questionnaire) following methodology described in text. "Deported by Mexico" weekly wages are calculated from responses to questions 11.2, 11.3, 11.4 (wage in home country), and 22.4, 22.5, and 22.6 (wage in Mexico) (2011 questionnaire). "Deported by U.S." weekly wages are calculated from responses to questions 13.7, 13.8, and 13.9 (wage in home country), and 38.2.1, 38.2.2, and 38.2.3 (wage in U.S.) (2017 questionnaire).

A.4. Latin American Public Opinion Project (LAPOP) Survey

The LAPOP survey is a cross-country public opinion survey that began in the early 2000s and is conducted every two years. Starting in 2004, it has included many countries in the Western Hemisphere. The survey is administered to national probability samples of voting-age adults, and details on sample design for each country and survey year are available on the LAPOP website. National sample sizes have ranged between 600 and 4,500 and typically equal around 1,500. The LAPOP project is based at Vanderbilt University and has a network of partner academic and non-governmental (NGO) institutions throughout the Americas that functions as a consortium.[7]

Since 2004, the survey has asked a standard set of questions across countries, as well as questions tailored to issues relevant to individual countries and/or specific years. Broad topic areas of the survey include geographic and socio-demographic characteristics of the individual, economic conditions of the person's household, perceptions of crime and safety in the

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[7] The LAPOP survey is documented in great detail at the project website: https://www.vanderbilt.edu /lapop/.

neighborhood as well as being a victim of crime, attitudes to government and the political system, political participation, social participation, trust in institutions, and corruption.

Appendix B.
Northern Triangle Asylum-Seeker Flow to Costa Rica

Some flow of Northern Triangle asylum seekers to Costa Rica has been documented. Table B.1 gives data on these flows during 2011–2016 (data for 2017 has not yet been released). The total number of asylum applications to Costa Rica roughly doubled from 2013 to 2015, and then doubled again in 2016. There has been a significant increase in applications by El Salvadorans in 2015 and 2016, but applications by Guatemalans and Hondurans have remained negligible. As in the case of Mexico, the number of applications by Venezuelans rose dramatically in 2016.

Table B.1. New Asylum Applications in Costa Rica[A]

	2011	2012	2013	2014[B]	2015	2016	2017
Total applications	*964*	*1,170*	*954*	*NA*	*2,203*	*4,496*	*NA*
El Salvador	*	148	142	NA	801	1,471	NA
Guatemala	*	*	*	NA	*	*	NA
Honduras	*	*	*	NA	*	149	NA
Colombia	551	495	514	NA	583	669	NA
Venezuela	*	*	*	NA	280	1,423	NA
Other countries	413	527	298	NA	539	784	NA

Source: UNHCR Statistical Yearbooks, 2011–2016.

A: First-instance applications for 2011–2013.

B: The statistical appendix of the 2014 yearbook that is posted online does not contain tables for asylum applications.

* Number not reported; likely greater than zero but less than 100.

Appendix C.
Normalization of Crime Perceptions: Regression Analysis

If perceptions of crime and violence risk normalize such that people get used to high levels of risk, then systematic differences in risk perceptions across communities that have very different levels of actual risk will be attenuated. In the limit, normalization could lead to identical risk perceptions even when actual risk varies substantially. Normalization also implies that in a given community perceived risk will rise in the short run with the level of actual risk, but over the longer run, perceived risk will return to some normalized level.

We use LAPOP survey data on the neighborhood safety question (aoj11) to evaluate these two normalization hypotheses. Table C.1 presents results of regressions that relate individual responses to question aoj11 to the explanatory variables "Viccrime", a 0-1 indicator for whether the person reports being a victim of crime in the last 12 months, a 0-1 indicator for gender (0 is female), the person's age, year dummies, and country dummies, with Mexico being the base country. The first column gives results of estimating a linear probability model on an unbalanced panel of 28 countries during 2004-2016, and the second column for 28 countries in 2016 only.[150] Being a recent victim of crime is highly correlated with increased perceptions of neighborhood crime risk, as is being female.

Figure C.1 shows values of country dummy coefficients for the unbalanced 2004-2016 panel regression. These coefficients show the systematic difference in neighborhood safety perceptions of a country compared to Mexico after controlling for all other variables. Negative values imply that respondents in the country had systematically lower perceptions of the risk of being assaulted or robbed in their neighborhood than respondents in Mexico. Coefficients for El Salvador and Guatemala are very small, implying that people there perceive risk similar to people in Mexico after controlling for the other variables. The coefficient for Honduras is significantly negative, suggesting that people there perceive lower risk than in Mexico. Canada and the United States have the most negative coefficients, which is consistent with what one would expect *a priori*. The fact that there are systematic differences in these coefficients that generally correlate with what one might expect given measures of objective risk suggests that perceptions have not normalized to the degree that they are non-informative.

Individual responses to the LAPOP survey cannot be used to evaluate normalization of perceptions over time, because this requires having data over time on the same set of individuals, and completely different individuals are surveyed in LAPOP at different points in time. However,

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[150] Results are robust to estimating an ordered logit regression rather than a linear probability model. Regression results for 2016 are given because observations for Canada and the United States are available only for that year.

a panel data set can be constructed by calculating average values for the variables in the regressions in Table C.1 at the department level for El Salvador, Guatemala, and Honduras. Departments in these countries are equivalent to states in the U.S. One measure of actual crime conditions for a department in a given year is the murder rate for that department in that year. Another measure is the fraction of people in the LAPOP sample for a department who reported that they were a victim of crime in the last 12 months: the higher this fraction, the more crime was being committed in the department.

Table C.2 regresses department-year average response values to the neighborhood safety question (aoj11) on the percentage of the department sample that is male, average age, percentage of department sample that report being victimized by crime in the last 12 months, and the lagged value of this percentage. Normalization of crime perceptions is captured by the coefficient on the lagged value of the percentage reporting that they were victimized by crime: if this coefficient is negative, the value of the perception of neighborhood safety tends to fall after a shock that caused the percentage victimized by crime to rise, so that the perception variable is normalizing to a new level as people get used to a new level of criminal victimization.

Results suggest that across Northern Triangle departments, the average neighborhood safety perception value is significantly negatively correlated with a larger fraction of males and significantly positively correlated with a larger fraction of those victimized by crime. The coefficient on the lagged value of the percentage victimized by crime is positive and statistically insignificant, suggesting that the crime perception variable is not normalizing with respect to this measure of actual crime exposure.

Table C.1. Neighborhood Safety Perception Regressions

	All Countries: 2004-2016	All Countries: 2016
Victim of crime in last 12 months	0.41*** (79.3)	0.44*** (36.0)
Gender is male	-0.11*** (-27.5)	-0.15*** (-15.1)
Age	-0.0007*** (-5.9)	0.0001 (0.5)
N	216,590	34,897
R^2	0.08	0.13
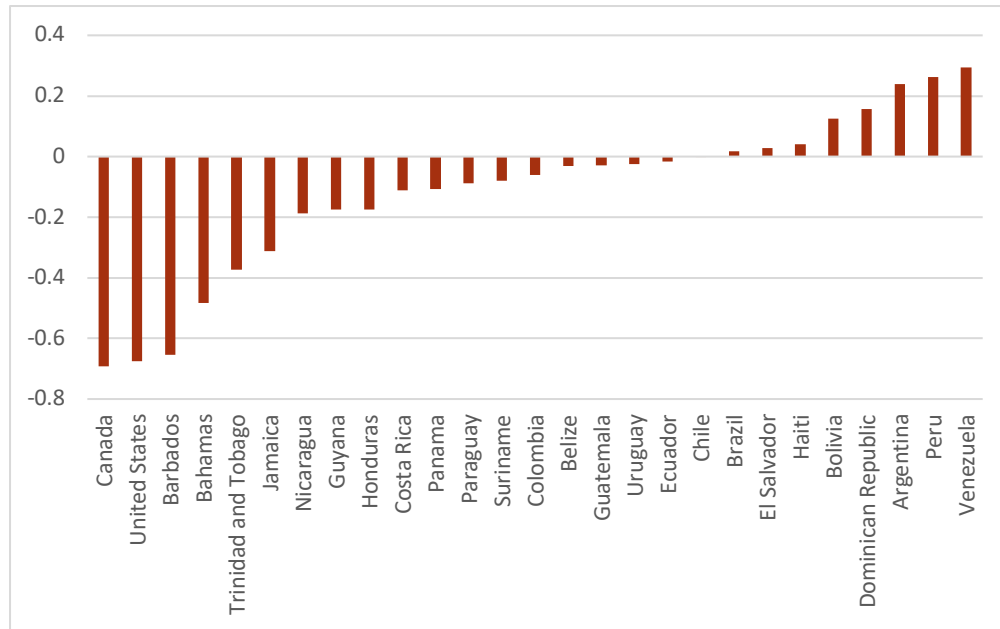
Figure C.1. County Dummy Coefficients: Panel Regression for 2004-2016

Table C.2. Neighborhood Safety Perception: Department Average Regressions

% victimized by crime in last 12 months	0.98***
	(4.0)
Lagged % victimized by crime in last 12 months	0.29
	(1.2)
% male	-2.1***
	(-3.1)
Average age	0.005
	(0.5)
N	326
R^2	0.34

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Abbreviations and Acronyms

AAC	Accompanied Child
BBC	British Broadcasting Company
CBP	Customs and Border Protection
CBSA	Canada Border Services Agency
CF	Credible Fear
CIR	Senate Comprehensive Immigration Reform
COLEF	Departamento de Estudios Culturales del Colegio de La Frontera Norte
COMAR	Comisión Mexicana de Ayuda a Refugiados
CREATE	Center for Risk and Economic Analysis of Terrorism Events
DACA	Deferred Action for Childhood Arrivals
DAPA	Deferred Action for Parents of Americans
DHS	Department of Homeland Security
EMIF	Encuesta sobre Migración en la Frontera de México
ENADID	National Survey of Demographic Dynamics
ENOE	Mexican National Survey of Occupation and Employment
EOIR	Executive Office for Immigration Review
EU	European Union
FMUA	Family Unit
GDP	Gross Domestic Product
IDA	Institute for Defense Analyses
INEGI	Instituto Nacional de Estadistica, Geografia, I Informatica
INM	Instituto Nacional de Migracion
IRCC	Immigration, Refugees and Citizenship Canada
LAPOP	Latin American Public Opinion Project
NGO	Non-Governmental Organization
OAS	Organization of American States
OECD	Organisation for Economic Cooperation and Development
OFO	Office of Field Operations
OLS	Ordinary Least Squares
ORR	Office of Refugee Resettlement
POE	Port of Entry
PPP	Purchasing-Power-Parity

RF	Reasonable Fear
STCA	Safe Third Country Agreement
TVPRA	Williams Wilberforce Trafficking Victims Protection Reauthorization Act
TVRH	Visitor Card for Humanitarian Reasons
U.S.	United States
UAC	Unaccompanied Child
UDI	Norwegian Directorate of Immigration
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNHCR	United Nations High Commissioner for Refugees
USBP	U.S. Border Patrol
USCIS	United States Citizenship and Immigration Services