Violence Effects on Municipal Internal Emigration Rates in Mexico: 1995-2015

Efectos de la violencia sobre las tasas de emigración interna municipal en México: 1995-2015

Oscar Rodríguez Chávez[1]

ABSTRACT

This article explores the relationship between the increase of violence in Mexico and the rising level of internal municipal emigration before, during, and after the so-called *Mexican Drug War*, which started in 2007. Through a linear regression and multinomial logistic models, it is shown that violence has had a positive and significant effect on the increase of internal emigration rates, particularly in municipalities with the highest internal emigration rates during the 2005-2010 period. In addition, the effect of violence tends to be greater on female emigration rates compared to males. This indicates the increase of forced internal displacement in Mexico due to violence in recent years. However, more studies are needed to shed light on forced displacement and the effects of high violence levels on internal and international migration.

Keywords: 1. internal migration, 2. violence, 3. drug trafficking, 4. municipalities, 5. Mexico.

RESUMEN

Este artículo explora la relación entre el incremento de la violencia en México y el aumento de la emigración interna municipal antes, durante y después de la denominada *guerra contra el narcotráfico*, iniciada en 2007. Usando modelos de regresión lineal y logística multinomial se muestra que la violencia ha tenido un efecto significativo y positivo sobre el aumento de las tasas de emigración interna municipal, particularmente para los municipios con mayor tasa de emigración interna durante el periodo 2005-2010, además de que los efectos de la violencia han tendido a ser mayores para las tasas de emigración femeninas en comparación con las tasas masculinas. Esto apunta al incremento de los desplazamientos internos forzados por violencia en años recientes en México. Sin embargo, son necesarios análisis que ayuden a comprender los desplazamientos forzados en México, así como los efectos de los muy altos niveles de violencia sobre la migración interna e internacional.

Palabras clave: 1. migración interna, 2. violencia, 3. narcotráfico, 4. municipios, 5. México.

---

[1] El Colegio de la Frontera Norte, Mexico, oscarr@colef.mx, https://orcid.org/0000-0002-7255-0605

INTRODUCTION

Since the *Mexican Drug War* was started in December 2006 by the Mexican government, there has been an increase in violence and public insecurity, as a result of the confrontations between the armed forces and criminal groups, the struggle between drug cartels for drug production and distribution, and the increase in forced displacement due to insecurity and violence in different regions of the country (CMDPDH, 2014; CNDH, 2016; CONAPO, 2019a; IDMC, 2010). However, few empirical studies have tried to relate the increase in violence with the rising levels of forced internal displacement, and there are even fewer analyzes that attempt to quantify and characterize displaced people in recent years (Centro de Estudios Migratorios, 2020; CMDPDH, 2019; CONAPO, 2019b).

Due to the lack of official and statistical information on the magnitude and characteristics of forced internal displacement in the country, this study explores the relationship of violence with changes in municipal internal emigration for the 1995-2015 period. First, the existence of socio-economic and demographic differences of emigrants from municipalities with high levels of violence is determined, compared to the rest of the internal migrants in Mexico. Subsequently, the effects of violence on female and male municipal internal emigration are analyzed before, during, and after the so-called "Mexican Drug War."

FORCED DISPLACEMENTS IN MEXICO AND THE WORLD

Worldwide internal and external forced displacements have increased in the last two decades by 89.8 percent, from 37.3 million people in 1996 to 70.8 million in 2018, while the population grew in the same period has been by 31.6 percent (ACNUR, 2016, 2019; World Bank, 2020). Despite this, most of the migration research in the world continues to focus on labor and /or economic migration, leaving out forced displacements caused by different kinds of violence, natural disasters, or mega construction projects that force individuals and families to leave their homes and move to other places within or outside their countries (ACNUR, 2019, ONU, 1998).

Depending on the international borders crossed by people, studies that address the relationship between forced displacement and different types of violence can be divided into forced internal displacement and forced external displacement (refugees or asylum seekers). Although there can be many and varied types of violence and perpetrators, most of the empirical research has focused on collective violence inflicted by different criminal, communal, and guerrilla groups, or by the State itself against certain groups of individuals, or the population at large (ACNUR, 2016; OMS, 2002).

There are several reasons why people are forced to leave their homes due to the increase in violence; however, research conducted in America (Alvarado & Massey, 2010; Morrison, 1993; Ramírez & Meza, 2012) and Africa (Bariagaber, 1997) concur that individuals and/or

families decide to move to other regions or countries when a *violence threshold* is exceeded; in other words, until the costs of staying in their homes are greater than the costs of displacement. In addition to the economic costs of traveling, displacement also implies the loss, at least temporarily, of their assets and sources of income. For this reason, leaving their homes is a drastic action people take when they face imminent life and safety-threatening risk.

As Morrison (1993) and Bariagaber (1997) note, while some of the displaced persons can leave their homes in a matter of hours or days —particularly as a result of direct threats or violent actions— other displaced people make this decision after months and even years of violence, reaching a point where they can no longer continue their productive activities or where the safety of a member or the whole family is imminently jeopardized.

The socio-economic and demographic characteristics of the forcibly displaced people can be very diverse, particularly in contexts of generalized violence within a country or region. However, studies such as those of Pareja and Domínguez (2014), of the National Center for Historical Memory (CNMH, 2015), and that of Hennion (2014), show that women and children are among the most common displaced persons because they are more vulnerable to violent events that may occur in their home region.

On the other hand, as revealed by the research of Bariagaber (1997), in Africa, and of Sayago (2011), in Latin America, most of these movements occur at a short distance, particularly because of the displaced people's desire to return to their home region in the short or medium term. In addition to this, longer travel distances mean higher travel costs, which makes it impossible for most people to travel to places further away. In this regard, Bariagaber's study (1997) demonstrates that internal or external forced displacements are conditioned by the size of the violent conflict, the distance between home regions and international borders, as well as by the social and family networks that can help people reduce several economic and social costs of moving within or outside their countries.

In the case of Mexico, forced displacement dates back to the 1970s and 1990s, particularly due to communal, agrarian, and megaproject conflicts in Guerrero, Oaxaca, and Chiapas; however, this phenomenon grew substantially in the 1990s as a result of the uprising of the Zapatista Army of National Liberation (EZLN), displacing up to 30,000 people in Chiapas between 1994 and 2011 (CMDPDH, 2014; Rubio Díaz-Leal, 2014). Nevertheless, as documented by the Mexican Commission for the Defense and Promotion of Human Rights (CMDPDH, 2014), the National Human Rights Commission (CNDH, 2016), and the Internal Displacement Monitoring Center (IDMC, 2020), forced displacements caused by violence apparently increased in Mexico after a change in the security strategy in 2007.

In this regard, in a first effort to relate violence to international migration to the United States, Alvarado and Massey (2010) analyze how violence impacts the probability of emigration in four Latin American countries between 1979-2003. The authors find that for

the specific case of Mexico, there is an inverse relationship between the increase in violence and the probability of people emigrating to the United States; the number of emigrants reduces when violence escalates. They conclude that the increase in violence has a greater impact on lower social classes, which limits their international migration, as they do not have sufficient economic resources to migrate. Furthermore, the country's social and political status has prevented violence from driving out the middle and upper social classes.

In a subsequent investigation by Ramírez and Meza (2012), the authors analyze the relationship of criminal violence in Mexico with international emigration to the United States for the 2005-2010 period, given the increase in violence recorded after a change in the security strategy in 2007. The authors conduct an analysis at a municipal level where they find evidence of an increase in migration to the United States as a result of an escalation of violence in the municipality. However, they also mention that this is not a linear relationship because until violence exceeds a certain level (or threshold), it has an impact on emigration rates, but before exceeding this threshold, it reduces the levels of international emigration in Mexico.

For their part, Acosta and Cruz (2016) analyze the economic and social factors associated with internal migration in Mexico for the 1995-2010 period, determining that during the 2005-2010 period, violence had a negative and significant effect on a state's probability of having a positive net balance, increasing internal emigration flows and reducing internal immigration flows in states with high rates of violence; for instance, Chihuahua, Durango, and Tamaulipas, all highly violent states, saw a reduction in their net migratory balances during this period. Therefore, the authors conclude that, for the 2005-2010 period, variables related to social conditions and quality of life have a significant impact on internal migration in Mexico.

On the other hand, to show the causal effect of violence on emigration rates in regions and municipalities with higher levels of violence, Gutiérrez and Rivero (2012) measure the violence effect on municipal internal migration based on counterfactual models, showing that during 2010 violence increased internal migration in municipalities with high levels of violence. However, this analysis excludes the period before the implementation of the 2007 security strategy; therefore, it does not show the possible changes in forced internal displacement as a result of this security strategy implementation.

In short, it can be stated that forced displacements, both internal and external, show differences in relation to economic or labor migration since it is a phenomenon in which people are forced to migrate, leaving behind their possessions and patrimony to try to safeguard their lives. Although this may be a planned event that results from evaluating the pros and cons of leaving or staying, the outcome is the loss of social and economic well-being caused by leaving their homes, which affects women and children the most.

However, in Mexico, most of the research has focused on international migration (Alvarado & Massey, 2010; Ramírez & Meza, 2012), leaving out forced internal displacement, ignoring if the socio-economic and demographic characteristics are different from the rest of the migrants, during a time of change where violence escalated in northern Mexico and municipalities of Guerrero and Michoacán, as a result of the federal security strategy (Arteaga-Botello, Dávila-Cervantes, & Pardo-Montaño, 2019; CMDPDH, 2019; CONAPO, 2019a).

This article contributes to the violence effect evaluation on female and male municipal internal emigration rates for three different periods, trying to find differences before, during, and after the change in the 2007 government security strategy. Furthermore, it analyzes whether the impact of violence between 1995 and 2015 is the same at different levels of internal emigration, since, as mentioned above, the violence effect may be greater in municipalities with higher emigration rates if violence exceeds the costs of staying in their home regions, leading to the departure of hundreds and even thousands of people and/or families from some communities and municipalities of the country.

This article is based on the hypothesis that there is a significant effect of violence on the increase in female and male municipal internal emigration rates, which has escalated after the implementation of the 2007 security strategy. However, regional differences in the rising level of violence have had a differentiated impact on emigration rates, where the greatest effects have been on municipalities with higher rates of internal emigration and higher rates of violence; therefore, it is expected that the effect of violence will be different at distinct levels of municipal internal emigration.

DATA

This article uses microdata from the Population and Housing Censuses (CPV in Spanish) of 2000 and 2010 (INEGI, 2018a) and the data from the Intercensal Survey (EI in Spanish) 2015 prepared by the National Institute of Statistics and Geography (INEGI, 2018b). Census data provide information about people's home municipalities at the time of the census and five previous years for the 1995-2000, 2005-2010, and 2010-2015 periods, calculating municipal internal migration indicators for the total number of municipalities at the beginning of each period (2,428 municipalities in 1995; 2,454 in 2005; and 2,456 in 2010).[2]

These indicators are complemented by other control indicators for the economic, social, and demographic determinants of internal migration in Mexico proposed by Acosta and Cruz (2016), Massey et al. (1993), and Gutiérrez and Rivero (2012). Given the availability and periodicity of the data, this analysis shows variations according to the information obtained

---

[2]The 2005 Population Count is not included and, therefore, the period 2000-2005 is left out because it does not allow to determine people's municipality of residence five years earlier.

for each five-year period, which represents a limitation of the data sources and the findings obtained (see results tables).

Variables

Due to the lack of statistics on forced internal displacement at the municipal level in Mexico, the dependent variables are the male, female, and total emigration rates per municipality for the periods 1995-2000, 2005-2010, and 2010-2015 estimated from the question of the place of residence five years earlier, which is defined as:

$$TEIm_i = \frac{MI_{ij}}{POB_j}*1000$$

Where:

$TEIm_{ij}$: Intermunicipal emigration rate of municipality i from year t to t+4

MI_i: Total emigrants from municipality i from year t to t+4

POB_i: Total population of the municipality i half of the period t to t+4

The analysis of internal emigration rates is limited to the municipalities at the beginning of each period because including recently created municipalities would result in miscalculations of their emigration rates, as well as the lack of data available for the analysis.

Violence, an independent variable of interest, is measured from the five-year homicide rate per 1000 inhabitants at the municipal level, which is constructed with the administrative records of deaths from INEGI (2020), particularly data on homicides per municipality. The World Health Organization (OMS, 2002) points out that this variable provides a measure of the degree of violence and insecurity that occurs in a region or country as it is a comparable indicator and with fewer underreporting problems than other crimes. Furthermore, it has been used by other studies on violence in Mexico and Latin America, such as those by Alvarado and Massey (2010), Enamorado, López-Calva, and Rodríguez-Castelán (2014), and Gutiérrez and Rivero (2012).

Social, economic, and demographic indicators obtained from INEGI (2018a, 2018b), the National Population Council (CONAPO, 2013, 2015), and the National Council for the Evaluation of Social Development Policy (CONEVAL, 2015) are considered independent control variables. They are presented in Table 1, which shows its definition, type of indicator, source of collection, and availability over time. The Absolute Migration Intensity Index (IAIM in Spanish) and the Absolute Municipal Marginalization Degree (GAMM in Spanish) are used because they allow making comparisons between the municipalities over different years (2000 and 2010), unlike the Migratory Intensity Index (IIM in Spanish) and of the Marginalization Index (IM in Spanish), which only allow making comparisons for the same year (CONAPO, 2015).

Table 1. Operationalization of Municipal Indicators Associated with Internal
Migration in Mexico (2000-2015)

	Indicator	Definition (type)	Source of information	Available years
	Internal emigration *(dependent variable)*	Internal municipal emigration rate per thousand inhabitants (continuous)	CPV and EI (INEGI)	2000, 2010, and 2015
	Violence (*independent variable of interest*)	Five-year municipal homicide rate per thousand inhabitants (continuous)	Administrative records (INEGI)	1990-2016
Social	Marginalization	Municipal marginalization degree: very low, low, medium, high, and very high (categorical)	CONAPO	2000 and 2010
Social	Migratory networks (internal)	Percentage of the population born in another municipality in Mexico (continuous)	CPV and EI (INEGI)	2000, 2010, and 2015
Social	Migration networks (international)	Absolute index of migration intensity at the municipal level (continuous)	CONAPO	2000 and 2010
Social	Inequality	Gini index at the municipal level (continued)	CONEVAL	1990, 2000, 2005, and 2010
Economic	Salary	Median earned income / 1000 per municipality (continuous)	CPV and EI15 (INEGI)	2000, 2010, and 2015
Economic	Employment	Percentage of the unemployed population at the municipal level (continued)	CPV and EI15 (INEGI)	2000, 2010, and 2015
Demographic	Population pressure	Ratio of the population aged 14 to 25 among the population aged 45 to 64 x 100 (continuous)	CPV and EI15 (INEGI)	2000, 2010, and 2015
Demographic	Education level	Municipal average of the schooling years of the population aged 15 years and over (continuous)	CPV and EI15 (INEGI)	2000, 2010, and 2015
Demographic	Urbanization	Population at the municipal level: Rural - less than 15,000 inh. Urban - 15,000 or more inh. (dichotomous)	CPV and EI15 (INEGI)	2000, 2010, and 2015

Source: Compilation based on the variables proposed by Acosta and Cruz (2016), Gutiérrez and Rivero (2012), Massey et al. (1993).

METHODS

First, the socio-economic and demographic characteristics of emigrants from municipalities with very high violence rates are explored with regard to the characteristics of emigrants from municipalities with very low violence rates. Emigrant's home municipalities are divided into five equal-sized groups according to their levels of violence: very high, high, medium, low, and very low violence using their five-year homicide rates per 1,000 inhabitants as an indicator.

Subsequently, for the analysis of the economic, demographic, and social factors associated with the municipal internal emigration rates (female, male and total), we start from log-linear models (linear regression of the logarithm of the dependent variable) to determine if, in particular, violence effect is significant on municipal emigration rates for the 1995-2000, 2005-2010, and 2010-2015 periods. This type of model is used because the internal emigration rate (dependent variable) cannot take negative values, so simple linear regressions cannot be used, and logarithmic transformations must be applied to municipal internal emigration rates (Gordon, 2015). This type of model makes it possible to determine which of the proposed variables in the models have had a significant effect on the increase or reduction of municipal internal emigration rates in the selected periods.

Finally, to test whether the effect of violence on emigration rates is significant for different levels of emigration, multinomial logistic regression models are developed, in which the dependent variable is defined from the classification of municipalities into five equal-sized groups according to their internal emigration rates: very low, low, medium, high and very high internal emigration, taking the very low internal emigration as a reference category of the dependent variable. These models are used to compare the effect of the factors on different degrees of emigration, and particularly, to compare whether the effect of violence, if any, shows variations between different levels of emigration (Gordon, 2015).

SOCIO-ECONOMIC AND DEMOGRAPHIC CHARACTERISTICS OF MIGRANTS FROM MUNICIPALITIES WITH HIGH LEVELS OF VIOLENCE

This section analyzes the socio-economic and demographic characteristics of migrants from municipalities with very high levels of violence (quintile V), which are compared with data for emigrants from municipalities with very low levels of violence (quintile I) to identify the differences that may result from different levels of violence in their home municipalities. As can be observed in Table 2, emigrants from municipalities with very high and very low violence tend to be mostly working-age women between 25 and 28 years old. However, as of 2010, the age of emigrants from municipalities with very high violence increases, and a growth of 9.7% is observed when comparing their average age between 2000 and 2015.

In general, the average schooling of migrants from municipalities in quintile I and quintile V tends to increase over time (from 9 to 11 years), but as of 2010, there is a significant

increase in the schooling of migrants from municipalities in quintile V (very high violence), from 8.6 years in 2000 to 10.3 years in 2010 (an increase of 19.8%), while there is a decrease of 2.2% for migrants from municipalities with very low violence in the same period.

Most of the emigrants in the three analyzed periods are married or live together; however, there is a higher percentage of widowers or separated emigrants from municipalities with very high violence compared to migrants from municipalities with very low violence, particularly in 2010 when the difference between the two groups was of 2.6% points, that is, 38.2% more widowers or separated emigrants from municipalities with high violence.

Throughout the three periods, emigrants from quintile I show higher percentages of indigenous language speakers compared to emigrants from quintile V. While emigrants from quintile V tended to show higher percentages of female headship in 1995 and 2010, this changed in 2015 because quintile V had a lower percentage of female-headed households, with a difference of 1.6% points between quintiles.

In the three analyzed periods, it is observed that emigrants from municipalities with high violence show higher percentages of unemployment after migration than migrants from municipalities with low violence. Migrants from municipalities with high violence show the highest level of unemployment, registering 3% of their population aged 15 to 64 years, particularly in 2010. That said, the previous data does not provide information to learn if they were also unemployed before the migration; therefore, surveys are necessary to determine the characteristics of people before and after their displacement.

Table 2. Socio-Economic and Demographic Characteristics of Emigrants
According to the Level of Violence in Their Home Municipality: 1995-2015

Characteristics	2000		2010		2015	
	Quintile I	Quintile V	Quintile I	Quintile V	Quintile I	Quintile V
Sex (%)						
Men	48.5	47.6	45.7	48.4	48.5	48.8
Women	51.5	52.4	54.3	51.6	51.5	51.2
Age (years)						
Average	25.9	25.8	26.7	28.2	28.0	28.3
Median	24	23	23	26	25	26
Schooling (years)						
Average	8.9	8.6	8.7	10.3	10.5	10.8
Median	9	9	9	9	9	10
Marital status (%) Consensual union / Married	63.7	57.1	58.5	57.0	59.1	58.7
Widowed / Separated	5.6	7.2	6.8	9.4	7.3	8.4
Single	30.6	35.7	34.7	33.6	33.6	32.9
Indigenous language (%)	8.3	7.5	20.5	4.4	17.3	3.6

Female headship (%)	14.5	20.3	23.0	24.2	27.4	25.8
Employment status (%)						
Employed	62.2	61.0	58.0	60.0	60.5	59.1
Unemployed	0.8	0.9	1.9	3.0	1.7	2.1
Inactive	36.9	38.1	40.0	37.0	37.9	38.8
Destination place (%)						
Under 15.000 inh.	24.7	28.6	39.7	29.1	36.6	31.4
15,000 or more inh.	75.3	71.4	60.3	70.9	63.4	68.6

Source: Compilation based on data from CPV 2000 and 2010, EI 2015, and administrative records (INEGI, 2018a, 2018b, 2020).

Although most migrants from highly violent municipalities are employed, there has been a percentage increase in unemployed migrants after their emigration in recent years; this may have an even more negative effect on their vulnerability condition compared to other groups of migrants, particularly those who were displaced due to violence and insecurity.

In short, migrants from municipalities with very high violence (quintile V) are mostly working-age women with an education that in recent years has tended to increase to little more than secondary education. Even though most of these migrants are married or living in consensual unions, there is a high percentage of widowers and separated persons with respect to migrants from municipalities with very low violence during the three analyzed periods. This could be associated with other factors, such as the increase in homicides related to organized crime in these municipalities and family disintegration as a result of violence.

Economic, Demographic, and Social Differences of Mexico's Municipalities According to Their Levels of Internal Emigration for the 1995-2015 Period

The country's municipalities were divided into five equal-sized groups according to their level of internal emigration (quintiles) to compare their municipal economic, social, and demographic conditions (Table 3). The first quintile (I) contains the municipalities with a lower emigration rate, whereas the last quintile (V) contains the ones with the highest emigration rate.

During the 1995-2000 period, the highest homicide rates were registered in the extreme quintiles, the lowest and highest emigration rates, with a higher average for municipalities with very high internal emigration (16.28% higher than those of quintile I). Furthermore, the higher the level of municipal emigration, the lower the marginalization, so that quintile V had the lowest average marginalization and quintile I the highest. Regarding population size, it showed a higher average for municipalities with higher rates of internal emigration.

During the 2005-2010 period, municipalities with the highest rates of internal emigration have higher averages of violence and, when comparing quintile V with quintile I, there is a difference of 42.6%. For its part, marginalization continues to show an inverse relationship

with the emigration rate since municipalities with very high internal emigration show lower levels of marginalization.

Regarding the variables associated with social and family networks for the 2005-2010 period, the percentage of the population born in other municipalities of Mexico, a *proxy* of internal migratory networks, is higher for municipalities with higher rates of internal emigration, as was expected. While the absolute migratory intensity index to the United States, a *proxy* for international migratory networks, presents an inverse effect where higher rates of migratory intensity are related to municipalities with lower rates of internal emigration.

Concerning economic variables, the relationship between salaries and the emigration rate is positive: the higher the averages, the higher the internal emigration rate. As for the unemployed population, percentages are higher in the municipalities with the highest internal emigration.

Finally, in the 2010-2015 period, similar relationships are observed to those of the previous period, where municipalities with greater internal emigration have higher averages of violence compared to municipalities with a lower emigration rate, in addition to lower levels of marginalization when compared with the municipalities with the lowest emigration rates. As for the variables associated with migratory networks, internal networks continue to show a direct relationship with the level of emigration, and international networks show an inverse relationship with internal emigration.

Table 3. Demographic, Economic, and Social Conditions of the Municipalities According to the Level of Municipal Internal Emigration (Quintiles), 1995-2015

	Averages	I	II	III	IV	V	Total
1995-2000	Homicide rate	0.86	0.78	0.73	0.86	1.00	0.85
	Marginalization index	0.43	0.03	-0.09	-0.12	-0.26	0.00
	Gini index	0.38	0.40	0.41	0.41	0.41	0.40
	Population	12,470	27,182	36,741	45,975	65,323	37,527
2005 - 2010	Homicide rate	0.54	0.51	0.60	0.71	0.77	0.63
	Marginalization index	0.54	0.20	-0.09	-0.18	-0.46	0.00
	% born in another municipality	3.81	5.35	8.03	10.66	14.33	8.44
	Absolute migratory intensity index	4.32	4.05	3.93	3.54	3.31	3.83
	Gini index	0.39	0.41	0.42	0.43	0.42	0.42
	$ salary / 1000	1,214	1,332	1,438	1,504	1,686	1,435
	% Unemployed population	0.90	0.93	1.08	1.06	1.10	1.01
	Population pressure	61.97	58.95	59.00	57.75	61.78	59.89

	Population	9,173	22,504	33,020	61,988	83,799	42,080
	Homicide rate	0.67	0.87	1.00	1.30	1.52	1.07
	Marginalization index	0.53	0.20	-0.07	-0.23	- 0.42	0.00
2010-2015	% born in another municipality	4.60	6.83	9.12	10.42	12.91	8.77
	Absolute migratory intensity index	4.77	3.80	3.60	3.52	3.01	3.74
	Gini index	0.34	0.37	0.38	0.39	0.39	0.37
	$ salary / 1000	2,595	2,928	3,101	3,231	3,578	3,086
	% Unemployed population	3.71	4.37	4.76	4.36	4.67	4.37
	Population pressure	68.27	69.43	71.83	74.72	79.51	72.75
	Population	18,052	27,855	43,885	52,449	86,512	45,740

Source: Compilation based on data from CONAPO (2013, 2015), CONEVAL (2015), and INEGI (2018a, 2018b, 2020).

Regarding the factors associated with the economic conditions of the municipalities during the 2010-2015 period, higher Gini indices and wages are averaged for municipalities with very high rates of internal emigration compared to municipalities with very low rates of emigration. Similar to the unemployed population, there are, on average, higher percentages of the unemployed population in municipalities with high emigration rates. As for the variables associated with demographic conditions, municipalities with higher levels of emigration have greater demographic pressure and larger population sizes.

Effects of Violence on Municipal Internal Emigration Rates in Mexico: 1995-2015

In this section, the results of the linear regression models of the dependent variable logarithm are analyzed to determine the effects and significance of the proposed variables on female, male and total municipal internal emigration rates for each of the three studied periods (log-linear models). Given the inclusion of different variables in the models due to their availability over time, comparisons between different periods are not possible.

Table 4 presents the results of the models for the 1995-2000 period, where the effect of violence on internal emigration rates is positive and significant when keeping the other social, economic, and demographic proposed conditions constant. However, the coefficients show that the effect of violence is higher for female emigration rates compared to male emigration rates, which indicates that female emigration has a lower tolerance for growing violence in Mexico's municipalities.

Other factors with a significant and positive effect on municipal emigration rates for the 1995-2000 period are the municipality being an urban area, as well as income inequality measured from the Gini indices, where an increase in the Gini index or income inequality index causes an increase in male, female and total emigration rates. On the contrary,

marginalization has a significant and negative effect on the growth of municipal internal emigration rates, where the greater the degree of marginalization there is a greater reduction in the three internal emigration rates (Table 4).

Table 4. Results of the Linear Regression Models of the Logarithm
of Municipal Internal Emigration for the 1995-2000 Period

Variable	Female E.		Male E.		Total E.	
	Coef.		Coef.		Coef.	
Homicide rates	1.068	***	1.037	*	1.052	***
Size (rural)	1		1		1	
Urban	1.128	**	1.12	**	1.137	***
Gini Index	1.033	***	1.046	***	1.039	***
Marginalization (Very Low)	1		1		1	
Low	0.871		0.805	**	0.859	*
Medium	0.808	**	0.755	***	0.779	***
High	0.836	*	0.783	**	0.806	**
Very High	0.649	***	0.618	***	0.621	***

*** $p < .001$ ** $p < .01$ *** $p < .05$; reference category in parentheses, N = 2,322

Source: Compilation based on data from INEGI (2018a, 2020), CONAPO (2013), and CONEVAL (2015).

Table 5 presents the results for the 2005-2010 and 2010-2015 periods. During the 2005-2010 period, violence increased in various regions of Mexico, as well as the implementation of the "Mexican Drug War" security strategy in 2007. This table shows that in this period, the effect of violence on the logarithm of internal emigration rates is significant and positive for female, male, and total emigration. However, the effect of violence on male emigration rates is nearly equal to the effect on female emigration rates, which may be associated with increasing organized-crime related homicides, particularly of males, as has been noted in other research studies (Aburto et al., 2016; Enamorado, López-Calva, & Rodríguez-Castelán, 2014, Vélez et al., 2015).

Other variables associated with the increase in the logarithm of emigration rates from 2005 to 2010 are demographic pressure, a municipality being an urban area, inequality, and internal migration networks measured from the percentages of the population born in other municipalities, where its effects are significant and positive on the increase in municipal internal emigration. On the contrary, the greatest degrees of marginalization and the highest number of international migratory networks measured from the absolute index of migratory intensity towards the United States have significant effects on the reduction of municipal internal emigration rates in this period.

Table 5 also shows the results for the 2010-2015 period, where the highest homicide rates were recorded in the three studied periods. This model finds that the estimated effect of violence on the logarithm of municipal internal emigration rates is significant for the three emigration rates: female, male and total, where a slightly greater effect on the rates of female emigration is again observed compared to male emigration rates. This may be associated with the generalized increase in violence towards different regions of the country, causing a greater impact on the increase in women's forced displacement. As Arteaga-Botello, Dávila-Cervantes, and Pardo-Montaño (2019) have noted, the increase in criminal violence since 2005 has targeted some regions and municipalities in northwestern and southern Mexico.

Population pressure, income inequality, and internal migration networks continue to have a positive and significant effect on the growth of municipal internal emigration rates in the 2010-2015 period. Regarding the variables with a significant and negative effect on emigration rates, marginalization and international migratory networks associated with lower municipal internal emigration rates continue to persist.

Therefore, once the models have considered other economic, social, and demographic factors, the violence effect on the logarithm of emigration rates throughout the three studied periods has been positive and significant; increased violence in municipalities is associated with the rising levels in both male and female internal emigration rates.

Although the effect of violence on female emigration rates is greater compared to male emigration rates, there was an increase in male emigration rates when compared to female emigration rates during the increase in violence, and the implementation of the security strategy occurred in the 2005-2010 period. This could be associated with the fact that most of the increase in violence during this period occurred in male homicide rates, and therefore, in an increase in men forced internal displacement.

Table 5. Results of the Linear Regression Models of the Logarithm of Municipal Internal Emigration for the 2005-2010 and 2010-2015 Periods

Variable	Internal emigration (2005-2010)						Internal emigration (2010-2015)					
	Female		Male		Total		Female		Male		Total	
	Coef		Coef		Coef		Coef		Coef		Coef	
Homicide rate	1.08	***	1.083	***	1.088	***	1.033	***	1.027	**	1.032	***
Population pressure	1.003	**	1.004	***	1.004	***	1.004	***	1.005	***	1.004	***
Size (rural)	1		1		1		1		1		1	
Urban	1.134	**	1.195	***	1.14	***	0.963		1.012		0.966	
Salary / 1000	0.976		1.129	*	1		1.048	*	1.072	**	1.051	*
% unemployment	0.989		1.015		0.99		1.007		1.008		1.01	*
Gini Index	1.029	***	1.03	***	1.034	***	1.022	***	1.026	***	1.025	***
Marginalization (Very Low)	1		1		1		1		1		1	
Low	0.963		0.959		0.952		0.864	*	0.858	*	0.865	*
Medium	0.872		0.826	*	0.831	*	0.919		0.853	*	0.879	*
High	0.846		0.787	**	0.805	**	0.869		0.837	*	0.847	*
Very High	0.547	***	0.595	***	0.521	***	0.733	***	0.717	***	0.705	***
Migratory networks Mexico	1.019	***	1.018	***	1.018	***	1.008	***	1.007	***	1.007	***
Migratory networks US	0.971	***	0.968	***	0.968	***	0.975	***	0.964	***	0.969	***

***p < .001 ** p <.01 *p<.05; reference category in parentheses, N = 2,372 in the 2005-2010 period and 2,425 in the 2010-2015 period.

Source: Compilation based on data from INEGI (2018a, 2020), CONAPO (2013), and CONEVAL (2015)

Changes in the Violence Effect According to Levels of Internal Emigration: 1995-2015

Multinomial logistic regression models are estimated to determine whether there are differences in the effect of violence on different levels (quintiles) of internal emigration, defining quintile I (the one with the lowest emigration rates) as the reference category. The results of the 1995-2000 period corresponding model are shown in Table 6, where violence has a significant and positive effect on the relative risk of a municipality having a very high emigration rate, but not for the rest of the quintiles with low, medium and high internal emigration.

Table 6. Relative Risk Ratios of the Multinomial Logistic Model of the
Municipal Internal Emigration Degree: 1995-2000

Variable	Very low	Low	Medium	High	Very High
Homicide rate		0.989	0 .936	1.069	1.197**
Size (rural)		1	1	1	1
Urban		1.966***	3.200***	2.583***	1.726**
Gini Index	Reference	1.093***	1.135***	1.161***	1.229***
Degree of marginalization (Very low)		1	1	1	1
Low		0.736	0.537	0.566	0.352 *
Medium		0.534	0.333**	0.285**	0.263**
High		0.316**	0.319**	0.374**	0.269**
Very High		0.418*	0.291**	0.246***	0.161***

*** $p < .001$ ** $p <.01$ * $p<.05$; reference category in parentheses, N = 2,379

Source: Compilation based on data from INEGI (2018a, 2020), CONAPO (2013), and CONEVAL (2015).

For the rest of the variables of the 1995-2000 period, positive and significant effects are observed of a municipality having a greater relative risk of having low, medium, high, and very high rates of internal emigration associated with urban municipalities and with high-income inequality. On the contrary, a municipality having higher degrees of marginalization is associated with a lower relative risk of a municipality having medium, high, and very high rates of internal migration (Table 6).

For the 2005-2010 period, Table 7 shows that the increase in homicide rates escalates the relative risk of a municipality having high and very high emigration rates, which is something similar to what happens if the condition of an urban municipality is compared to rural municipalities, where being an urban municipality increases the risk of the municipality having higher rates of emigration, particularly medium and high rates.

Inequality continues to show a significant and positive effect on the risk of higher emigration rates for the 2005-2010 period, similar to the percentage of the population born in another municipality, where an increase in inequality or the percentage of the population

born in a different municipality causes an increase in the risk of a municipality having high and very high rates of internal emigration. On the contrary, the increase in the absolute migratory intensity index to the United States reduces the risk of high and very high rates of municipal internal emigration, and the degree of marginalization, particularly very high marginalization, has a significant and negative effect on reducing the risk of a municipality having high and very high emigration rates during this period (Table 7).

Finally, for the 2010-2015 period, Table 7 shows that the effect of an increase in the homicide rate is associated with an increase in high and very high rates of internal emigration. Furthermore, population pressure shows a significant and positive effect on the risk of a higher emigration rate, similar to the condition of an urban municipality, the percentage of the unemployed population, income inequality, and the percentage of the population born in a different municipality within Mexico.

The absolute migratory intensity index has a significant and negative effect on the risk of high emigration rates. As for the degree of marginalization, a very high degree of marginalization has a significant and negative effect that reduces the relative risk of a municipality having medium, high, and very high emigration rates in the period (Table 7).

Once other economic, social, and demographic conditions associated with internal emigration are kept constant, the increase in homicide rates only shows positive and significant effects on the relative risk of a municipality having high and very high rates of internal emigration, while no significant effects of low or medium emigration rates are observed in the three analyzed periods. The foregoing statement seems to agree with the hypothesis that when a maximum level of violence is exceeded, people decide to migrate from their home communities; because before exceeding the threshold, the costs of migration are greater than the costs of staying in their home regions.

Table 7. Relative Risk Ratios of the Multinomial Logistic Model of the Municipal Internal Emigration Degree: 1995-2000

Variable	Internal emigration (2005-2010)					Internal emigration (2010-2015)				
	Very low	Low	Medium	High	Very High	Very low	Low	Medium	High	Very High
Homicide rate		0.953	1.15	1.302**	1.310**		1.131	1.198**	1.294***	1.273***
Population pressure		0.999	1.004	1.003	1.013**		1.008*	1.012**	1.019***	1.026***
Size (rural)		1	1	1	1		1	1	1	1
Urban	Reference	2.211***	2.963***	2.973***	1.686**	Reference	1.527**	1.482*	1.432*	0.81
Salary / 1000		0.999	0.667	0.786	1.288		1.048	0.915	0.926	1.397**
% unemployment		0.978	1.014	0.99	1.011		1.042*	1.072***	1.03	1.060**
Gini index		1.062***	1.105***	1.117***	1.126***		1.098***	1.112***	1.146***	1.140***
Marginalization (Very Low)		1	1	1	1		1	1	1	1
Low		1.2	0.682	0.644	0.699		0.962	0.479	0.391	0.392
Medium		0.767	0.279**	0.367*	0.369*		1.045	0.357*	0.431	0.49
High		0.727	0.299*	0.429	0.421		0.942	0.407	0.386	0.475
Very High		0.499	0.157***	0.188**	0.144***		1.022	0.281*	0.239**	0.392
Migratory networks Mexico		1.031	1.084***	1.120***	1.143***		1.023	1.043**	1.051***	1.066***
Migratory networks U.S.		0.958**	0.944***	0.915***	0.886***		0.920***	0.908***	0.902***	0.857***

***p< .001 ** p<.01 *p<.05; reference category in parenthesis, N= 2,390 in the 2005-2010 period and 2,408 in the 2010-2015 period.

Source: Compilation based on data from INEGI (2018a, 2020), CONAPO (2013), and CONEVAL (2015).

CONCLUSIONS

In this article, linear and multinomial models were developed to determine the effect of violence on municipal internal emigration rates in three different periods: before, during, and after the "Mexican Drug War," the federal security strategy initiated in December 2006 by former President Felipe Calderón (IDMC, 2010). The purpose of the analysis was to identify the effects of this strategy on male and female emigration rates at a municipal level, and indirectly, the effect of violence on the increase in forced internal displacement in Mexico in recent years. On the other hand, the effect of violence was analyzed to learn if there were differences at distinct degrees of internal emigration to examine the hypothesis of the violence threshold.

The empirical results show that the increase in violence has greater significant effects on female emigration rates in two of the three studied periods: 1995-2000 and 2010-2015. As for the 2005-2010 period, the effect of violence on male emigration rates was similar to that of female emigration rates when homicide rates, particularly male homicide rates, escalated as a result of the "Mexican Drug War" and the confrontations between criminal groups. The foregoing statement seems to be consistent with other qualitative studies, such as those conducted by the CMDPDH (2019), that show that most of the forced internal displacement in Mexico in recent years has been of women and children.

Furthermore, the violence effect appears to be non-linear since the increase in violence had a significant effect on the relative risk of a municipality having high and very high emigration rates for the three analyzed periods, but not for other quintiles of lower emigration rates. Therefore, this article contributes to the hypothesis of the violence threshold; in other words, people decide to leave their home regions when the costs of violence exceed the costs of migrating, since before reaching this point, violence does not have significant effects on emigration rates.

Although the purpose of this analysis was not to determine the level or levels of violence at which people decide to move to safeguard their lives —since it is believed that they depend on the individual, family, and context characteristics—, the results showed that particularly 20% of the municipalities with the highest homicide rates present significant differences in their internal emigration rates, when compared with the rest of the municipalities, particularly when compared with 20 percent of the municipalities with the lowest homicide rates.

Therefore, this analysis contributes to highlighting the social effects of the increase in violence in Mexico as a result of the *Mexican Drug War*, and particularly of the increase in internal migration in Mexico caused by the increase in forced displacement. This article also shows the need for policies and care strategies differentiated by sex for victims of forced displacement in regions where confrontations between criminal groups and the armed forces

have led to the highest homicide rates recorded in the country in the last twenty years, in addition to various social and economic problems, both for the population that has migrated and for the population that has remained in these communities.

However, this article leaves out the spatial analysis of the increase in violence and migration within the country that can help to focus economic and political efforts to assist the victims, as well as the possible spatial effect on the decisions of people who have been forced to displace in recent years. Nor does it analyze the effect of violence on people's individual decisions to migrate within or outside Mexico. Nor the possible levels or thresholds of violence at which individuals and families decide to leave their home regions.

Future work could investigate the existence of communities' "clusters" with high rates of violence and migration, as well as determine causal effects of violence on internal or international emigration. Furthermore, qualitative studies could explore how the individual and family decisions of displaced persons are reached in Mexico, as well as their social, economic, and demographic effects.

Translation: Bárbara Ramírez De Valdez

REFERENCES

Aburto, J., Beltrán-Sánchez, H., García-Guerrero, V. M., & Canudas-Romo, V. (2016). Homicides in Mexico reversed life expectancy gains for men and slowed them for women, 2000-10. Health Affairs, *35*(1), 88-95. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5453309/

Alto Comisionado de las Naciones Unidas para los Refugiados (ACNUR). (2016). *Tendencias globales desplazamiento forzado en 2015. Forzados a huir*. Suiza: Alto Comisionado de las Naciones Unidas para los Refugiados. Retrieved from http://www.acnur.org/t3/fileadmin/Documentos/Publicaciones/2016/10627.pdf

(ACNUR). (2019). *Tendencias globales desplazamiento forzado en 2018*. Suiza: Alto Comisionado de las Naciones Unidas para los Refugiados. Retrieved from https://www.acnur.org/5d09c37c4.pdf

Acosta, F., & Cruz, R. (2016). Factores económicos y sociales asociados a la migración interna en México. In F. Acosta & R. Cruz (Eds.), *Migración interna en México. Tendencias recientes en la movilidad interestata*l (pp. 115-148). Tijuana: El Colef.

Alvarado, S., & Massey, D. (2010). In Search of Peace: Structural Adjustment, Violence, and International Migration. The ANNALS of the American Academy of Political and Social Science, 630, 137-161. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3011825/

Arteaga-Botello, N., Dávila-Cervantes, C., & Pardo-Montaño, A. (2019). Necro-spaces and

Violent Homicides in Mexico. *International Journal of Conflict and Violence*, 13, 1-14. Retrieved from https://www.ijcv.org/index.php/ijcv/article/view/3125/pdf

Bariagaber, A. (1997). Political violence and the uprooted in the horn of Africa- A study of refugee flows from Ethiopia. *Journal of Black Studies*, *28*(1), 26-42.

Centro de Estudios Migratorios. (2020). *Migración interna por violencia o inseguridad en México. Análisis sociopolítico basado en datos de la ENADID 2018*. Contextos. Investigaciones sobre movilidad humana. Mexico: Secretaría de Gobernación/ Unidad de Política Migratoria. Retrieved from http://www.politicamigratoria.gob.mx/work/models/PoliticaMigratoria/CEM/Publicaciones/Revistas/Contextos/Contextos01.pdf

Comisión Mexicana de Defensa y Promoción de los Derechos Humanos (CMDPDH). (2014). *Desplazamiento Interno Forzado en México*. Mexico: *Author*. Retrieved from http://www.cmdpdh.org/publicaciones-pdf/cmdpdh-desplazamiento-web.pdf

(CMDPDH). (2019). *Entre la invisibilidad y el abandono: un acercamiento cuantitativo al desplazamiento interno forzado en México*. Mexico: Comisión Mexicana de Defensa y Promoción de los Derechos Humanos. Retrieved from http://www.cmdpdh.org/publicaciones-pdf/cmdpdh-entre-la-invisibilidad-y-el-abandano-acercamiento-cuantitativo-al-desplazamiento-interno-forzado-en-mexico.pdf

Comisión Nacional de los Derechos Humanos (CNDH). (2016). *Informe especial sobre desplazamiento forzado interno (DFI) en México*. Mexico: Comisión Nacional de los Derechos Humanos. Retrieved from http://www.cndh.org.mx/sites/all/doc/Informes/Especiales/2016_IE_Desplazados.pdf

Centro Nacional de Memoria Histórica (CNMH). (2015). *Una nación desplazada: Informe Nacional del Desplazamiento Forzado en Colombia*. Bogotá: Centro Nacional de Memoria Histórica. Retrieved from http://www.centrodememoriahistorica.gov.co/descargas/informes2015/nacion-desplazada/una-nacion-desplazada.pdf

Consejo Nacional de Población (CONAPO). (2013). *Índice Absoluto de Marginación 2000-2010*. México: Secretaría de Gobernación. Retrieved from http://www.conapo.gob.mx/work/models/CONAPO/Resource/1755/1/images/IAM_00-04.pdf

(CONAPO). (2015). *Índice Absoluto de Intensidad Migratoria. México-Estados Unidos 2000-2010*. Mexico: Secretaría de Gobernación. Retrieved from http://omi.gob.mx/es/OMI/Indice_Absoluto_de_Intensidad_Migratoria_Mexico_Estados_Unidos_2000-2010

(CONAPO). (2019a). La violencia como causa de desplazamiento interno forzado. Aproximaciones a su análisis en México. Mexico: Secretaría de Gobernación.

Retrieved from
https://www.gob.mx/cms/uploads/attachment/file/456109/Desplaz_2019_web_color-comp.pdf

(CONAPO). (2019b). *Perfil sociodemográfico de la población que cambio de vivienda o lugar de residencia para protegerse de la delincuencia*. Mexico: Secretaría de Gobernación. Retrieved from https://www.gob.mx/cms/uploads/attachment/file/514162/PERFIL_SOCIODEMOGRAFICO_final_ISBN.pdf

Consejo Nacional de Evaluación de la Política de Desarrollo Social (CONEVAL). (2015). *Indicadores de pobreza, pobreza por ingresos, rezago social y Gini a nivel municipal, 1990, 2000, 2005 y 2010*. Mexico: *Author*. Retrieved from https://datos.gob.mx/busca/dataset/indicadores-de-pobreza-pobreza-por-ingresos-rezago-social-y-gini-a-nivel-municipal1990-200-2010

Enamorado, T., López-Calva, L., & Rodríguez-Castelán, C. (2014). Income Inequality and Violent Crime Evidence from México's Drug War. *Policy Research Working Paper. World Ban*. (6935), 1-31. Retrieved from http://documents.worldbank.org/curated/en/236161468299090847/pdf/WPS6935.pdf

Gordon, R. A. (2015). *Regression analysis for the Social Sciences*. Nueva York: Routledge.

Gutiérrez, E., & Rivero, E. (2012). Elaboración de diagnóstico: Desplazamiento interno en México. [Internal document]. Versión institucional y resumida. Retrieved from http://cmdpdh.org/temas/desplazamiento/wp-content/uploads/2019/04/2012005-am-mexico-Mexico-forced-displacement-en-1.pdf

Hennion, C. (2014). El desplazamiento y la violencia contra las mujeres en Afganistán. *Migraciones Forzadas*, (46), 34. Retrieved from https://www.fmreview.org/sites/fmr/files/FMRdownloads/es/afganistan/hennion.pdf

Internal Displacement Monitoring Centre (IDMC). (2010). *Informe del Observatorio de Desplazamiento Interno del Consejo Noruego para Refugiados sobre el desplazamiento forzado en México a consecuencia de la violencia de los cárteles de la droga*. Switzerland: Internal Displacement Monitoring Centre. Retrieved from http://www.acnur.org/t3/fileadmin/Documentos/Proteccion/2011/7627.pdf?view=1

(IDMC). (2020). Internal displacement in Mexico. Country information 2019. [Web site] Retrieved from https://www.internal-displacement.org/countries/mexico

Instituto Nacional de Estadística y Geografía (INEGI). (2018a). Censo de Población y Vivienda 2000 y 2010. Retrieved from https://www.inegi.org.mx/programas/ccpv/

(INEGI). (2018b). Encuesta Intercensal 2015. Instituto Nacional de Estadística y Geografía. Retrieved from https://www.inegi.org.mx/programas/intercensal/2015/

(INEGI). (2020). Registros administrativos. Estadísticas vitales. Defunciones por homicidios. Retrieved from

https://www.inegi.org.mx/sistemas/olap/proyectos/bd/continuas/mortalidad/defuncioneshom.asp?s=est

Massey, D., Arango, J., Hugo, G., Kouaouci, A., Pellegrino, A., & Taylor, J. (1993). Theories of international migration a review and appraisal population and development review. *Population and Development Review*, *19*(3), 431-466.

Morrison, A. (1993). Violence or Economics: What Drives Internal Migration in Guatemala? *Economic Development and Cultural Change*, *41*(4), 817-831.

Organización Mundial de la Salud (OMS). (2002). *Informe mundial sobre la violencia y la salud: resumen*. Washington, D. C: Organización Mundial de la Salud. Retrieved from http://whqlibdoc.who.int/publications/2002/9275324220_spa.pdf

Organización de las Naciones Unidas (ONU). (1998). Los Principios Rectores de los Desplazamientos Internos de la Organización de las Naciones Unidas. Derechos Humanos, éxodos en masa y personas desplazadas. [Electronic document] Organización de las Naciones Unidas/Consejo Económico y Social. Retrieved from https://www.acnur.org/fileadmin/Documentos/BDL/2001/0022.pdf

Pareja, A. J., & Domínguez, I. (2014). Violencia contra la mujer y desplazamiento forzado. Análisis de las estrategias de vida de jefas de hogar en Medellín. *Acta Sociológica*, (65), 151-171. Retrieved from http://www.revistas.unam.mx/index.php/ras/article/view/46674/42088

Ramírez, T., & Meza, L. (2012). Inseguridad pública y migración internacional en México. In T. Ramírez & M. A. Castillo (Coords.), *El estado de la migración. México ante los recientes desafíos de la migración internacional* (pp. 269-298). Mexico City: Consejo Nacional de Población.

Rubio Díaz-Leal, L. (2014). *Desplazamiento interno inducido por la violencia: Una experiencia global, una realidad mexicana*. Mexico: Instituto Tecnológico Autónomo de México. Retrieved from http://www.cmdpdh.org/publicaciones-pdf/libro_desplazamiento_una_realidad_mexicana.pdf

Sayago, J. (2016). Desplazamiento Forzoso en Colombia: Expulsión y Movilidad, dos dinámicas que interactúan. (Master's Thesis). Universidad Nacional de Colombia, Colombia.

Vélez Salas, D. Vélez Salas, M. A., Martell Izquierdo, E., Rodríguez Chávez, O., & Fernández Hernández, J. (2015). Homicidio: una mirada a la violencia en México. Mexico City: Observatorio Nacional Ciudadano de Seguridad, Justicia y Legalidad. Retrieved from https://onc.org.mx/uploads/ONC-HOMICIDIO-COMPLETO-baja.pdf

World Bank. (2020). Población mundial 1960-2018. Datos del Banco Mundial. Retrieved from http://datos.bancomundial.org/indicador/SP.POP.TOTL