# Individual and household characteristics of Mexican return migration by community of return in 2005

Claudia Masferrer Population Research Center University of Texas at Austin

Bryan Roberts L.L. Institute of Latin American Studies University of Texas at Austin

Paper prepared to be presented at the 2009 Meeting of the Population Association of America

## Individual and household characteristics of Mexican return migration by community of return in 2005

Claudia Masferrer and Bryan Roberts University of Texas at Austin

#### **ABSTRACT**

Stopping migration in the United States has not been achieved with recent border enforcement and people from all over the world continue to arrive. Some suggest that this enforcement may be locking people inside the country and threatening the previous temporary character of the migration of workers by transforming it into immigration. The authors have previously worked on the relationship between Mexican return migration and the rural-urban duality, its relationship with poverty at the community level and have characterized the localities that are attractive to return to. They now present a profile or typology of Mexican returnees using the complete set of individual and household records of the 2005 Mexican population count regarding their sociodemographic characteristics as well as their poverty condition, with the objective of understanding how they are living after the migratory experience and of indirectly estimating the characteristics of people who do not return to their places of origin.

#### INTRODUCTION

Mexican migration to the United States has a long history and is getting more complex as time goes on. Massey and Zenteno point out that "Social scientists have long noted that international migration is characterized by a strong internal momentum: Once a particular migration stream has been initiated, for whatever reason, it tends to persist and grow over time" (1999). The temporary character of the migration of workers has transformed itself into immigration.

Stopping migration has not been achieved by border enforcement in recent years and people, not only from Mexico but from other countries, continue to arrive legally and illegally to the United States. It is in this context of the momentum of Mexican migration to the United States that the understanding of return migration is of great importance.

Our analysis is part of a continuing policy discussion of the merits of increasing temporary or guest worker programs, of how to approach a comprehensive migration reform and legalization of undocumented Mexicans and how to increase (or decrease) the number of working visas. In this sense, policy regarding return migration should be thought out in terms of the relationships between returnees and the members of the community of origin and of destination.

This work describes the general trends in return migration addressing the following questions: To which types of communities was it more attractive to return in 2005? How does rural or urban origin affect the rate of return migration? What is the relationship between return migration and marginality at the community level? Next, this paper will present a profile or typology of Mexican returnees addressing the following research questions: who are the people that were in the United States in 2000 but are in Mexico in 2005? How are they living after the migration experience? What are the individual and household characteristics of the returnees and those of their dwellings? Are there different types of returnees going back to different types of localities? Who are the returnees living in localities with high degrees of marginality and poverty? What is the relationship between the different profiles of returnees and the geography of Mexico?

#### LITERATURE REVIEW

## **Temporary and Permanent Migration Systems**

Roberts, Frank and Lozano (1995) explain how the temporary pattern of Mexican migration in the pre 1970s period, where migrants mainly came from and went to rural areas, changed after the 1970s such that they increasingly moved to urban areas and originated, as well, from urban areas. The temporary migration system rested on seasonal and/or unstable opportunities for employment in the place of destination and partial subsistence opportunities in the place of origin, which both stimulated labor migration and provided a basis for family survival. Changes in agriculture (specifically) and in the labor market (in general), both in Mexico and the United States influenced this change and led to a shift to a more permanent pattern of migration and migrant settlement in cities. They argue that a "permanent migration system rests on the lack of economic opportunities in the place of origin and the attraction of permanent work opportunities in the place of destination. The more abundant and stable are the work opportunities in the destination and the fewer are the legal barriers to obtaining them, the stronger will be the permanent migration system" (Roberts, Frank and Lozano, 1995).

The temporary or permanent character of Mexican migration to the United States is affected by the current environment of restrictions, both in terms of immigration enforcement and in terms of recent economic crises. Some argue that instead of preventing new entries, the enforced border is locking people in (Cornelius, 2006) (Massey, 2005b). Douglas Massey concludes that "repressive border-enforcement policies simply make it more difficult for such migrants to achieve their

ambition of returning home" (Massey, 2005b) and that "roughly speaking, the average probability of return migration went from around 45 percent before IRCA to around 25 percent today" (Massey, 2205a). We also need to consider the possibility that the persistence of a temporary migration system between Mexico and the US can be based not only on partial subsistence opportunities in communities of origin, but on opportunities elsewhere in rural or urban Mexico.

### **Defining and Theorizing Return Migration**

The rate of return migration indicates the relative preponderance of a permanent or temporary migration system, but there are a wide range of factors precipitating return migration and complicating the difference between the two types, including deportation. From a human rights perspective, everyone has the right to return to their country. The Universal Declaration of Human Rights of 1948, article 13(2) says that "Everyone has the right to leave any country, including his own, and to return to his country." On the other hand, Mexican migration to the United States is in a point in time where the definition of home and homeland may be unclear for those who have stayed a long time out of Mexico. Moreover, the right of return and the ability to move freely back and forth for Mexican undocumented workers is not recognized. A further complication is that many undocumented migrants have descendants born in the United States.

At an individual level, the literature of migration psychology (Fawcett, 2005) (Berry, 2001) includes in the conception of return migration the following subjective factors: attitudes, values, perceptions and intentions as well as the role of the life cycle and individual characteristics. James Fawcett summarizes some of the approaches for studying the decision process of migration in the field. For example, Fawcett (2005, p. 9) mentions Alan Richardson's approach that considers

the disposition to emigrate as a function of the «climate of emigration» at the origin, «energizing factors» stemming from dissatisfaction in attaining goals, and a «directional component» that is a function of information and place perceptions. Within this broad framework «disposition to action» factors come into play, involving personality variables, strength of family ties, and so on.

The previous conception of the decisions to emigrate can also be applied for studying return migration and we have to add to Richardson's function the options that the migrant has while being in the United States: stay in that particular place, move to another place in the United States, go back to the Mexican community where he was living before, go to Mexico to a different community, or go to somewhere else in the world. Once the migrant decides to leave the United States (voluntarily or forced) he faces the question: "But where in Mexico?" The experience he has gained during the migratory experience, the new traditions and values that have been adopted, the perceptions of Mexico (both the country and his community) and of the United States have made this individual very different than the one he was before.

In addition, family ties, pressures, expectations and perceptions may be also an element in the decisions he has to make; besides, taking into account the economic, political, and legal conditions of both his stay in the United States and his return to Mexico. On the other hand, going back to the same community of origin may not be an option for the same reasons that the migrant had for leaving in the first place. Black and Gent (2004) state that for refugees, "in practice, the experience of return may be more, rather than less problematic than the experience of exile" (Black and Gent, 2004, p. 8).

Black and Gent state that "return is often more about reconnecting with family and friends than economic conditions" (2005, p. 3) and note different problems associated with the following factors: the characteristics of the returnees, the experience before migration, in the country of destination, the conditions of return and its decision. The problems vary from competition for resources with local populations to a shock between local traditions and new ways of life adopted

after the migratory experience, people wanting to change the community, and other difficulties associated with the fact that both the migrant, his or her family and the community are not the same as before.

Belinda Reyes and Laura Mameesh find three patterns of trip duration that depend on the characteristics of the immigrants, as well as the opportunities available in the destinations. Using data from 1970 to 1990, they conclude that the economic factors at the destination are very important in predicting the length of the stay (Reyes and Mameesh, 2002). Belinda Reyes also studies return migration to western Mexico in 1990 and one of her findings is a relatively high rate of return (Reyes, 1997).

The work of Seth Gitter, Robert Gitter and Douglas Southgate studies the impact of return migration to Mexico at the individual level, focusing on employment when working age men returnees reside in Mexico using the Mexican Family Life Survey of 2002. They find that employment depends on age, education, marital status and geographic area. In this sense, those who return to northern states that are not on the U.S. border are more likely to be employed than those in border states (Gitter et al, 2008). David Lindstrom analyzes the relationship between return migration and economic opportunity in Mexico shows how the economic conditions in the community of origin affect the hazard rates of return and how this differs by legal documents, migration experience, social capital and local characteristics both in Mexico and in the United States (Lindstrom, 1996).

There is a vast literature studying areas of expulsion of migrants to the United States. One of the conclusions of recent studies show that migration is not restricted to traditional sending regions and that there exists new emerging zones with high degrees of migration intensity (Roberts and Hamilton, 2007; CONAPO, 2002). Data has shown that most of the migrants are not coming from the poorest municipalities. Actually, the degree of marginality and the index of migration intensity show an inverted U relationship. That is, municipalities with greatest and least marginality have lower migration intensity index (UNDP, 2007). A general finding is that even if return migration is larger in localities with low marginality and in states with low levels of poverty, it is not exclusive to such places.

Understanding return migration can thus be done at both the individual and the community level. At the individual level, people's decision to return to their country of origin can be based on a variety of reasons. These reasons can exercise their influence unpredictably as conditions change in countries of destination and origin or life course events alter the significance of family ties, making it difficult to distinguish between 'temporary' and 'permanent' migrants on the basis of their stated plans at the time of their departure. Also, migration enforcement policy can dramatically affect migrant choices as when tougher enforcement deters migrants from returning who otherwise would have gone back and forth between country of origin and destination. Also, increased deportation of migrants can force the return of those who would have chosen to stay.

There are, however, features of sending communities that enable us to make broad distinctions between types of return migrants that reflect the individual and community level variables that have been found to influence migration. We propose three main types of return migration, which we label circular, target and life stage migration. Historically, subsistence in many rural communities in Mexico depended on the temporary migration of adult males in the household. Children and female heads of household remained in the village and the difference between the costs of subsistence and what could be provided from local resources was provided by the earnings of the predominantly male migrants in the US. This circular form of migration could persist for many years and become an integral part of village economies.

As a type, circular migration differs from target migration in that target migration aims at raising capital for investment in projects back home. This will occur when there are local economic opportunities, but their exploitation depends on having cash, which is difficult to raise in the absence of credit systems for lower-income workers. The target migration type presupposes that

the migrant will not migrate again when the target is met, but will stay to enhance his or her business or farm. The third type is life stage migration, which occurs at two different life stages – among youth before marriage and family responsibilities and at older ages for retirement.

A youth culture of migration has been detected in various studies (Alarcón, 1992) (Kandel, 2002) in which it is part of the transition to adulthood to 'hacer el norte'. Return migration has also been reported as when elderly Mexican workers in the U.S. decide to return to their home communities where the costs of care and subsistence are lower. Even if these three types are separate concepts, they can easily overlap. For example, there could be target and life-stage migrants.

Return does not have to occur to the same locality of origin. This fact is not explicitly addressed in the literature to find out differences in the individuals that opt to go back to their locality and those who decide to look for new opportunities in Mexico, but in a different place where they left from. This work will try to fill this gap indirectly since the data available at this point does not allow an exhaustive analysis of this issue.

Finally, we would expect that places in Mexico with economic opportunities are attractive for returnees. However, we can expect that some people also return to their original localities where their family and social ties are. If we find that there are no returnees at places with high migration intensity, then we would have evidence against the temporary character of migration. We would also expect that return migration has decreased in later years due to immigration enforcement, as the literature review shows.

#### **DATA, MEASURES AND METHODS**

#### Data

For analysis at the locality level, this paper uses the 2000 Mexican Population Census and 2005 Mexican Population Count at the locality level. The databases aggregated at this level are referred to as *Integración Territorial* (ITER 2000 for the 2000 Census and ITER 2005 for the 2005 Count) by INEGI. In addition, this paper uses the ten percent sample of the 2000 Population Census and the complete set of individual and household records of the 2005 Mexican Population Count (Conteo). It presents some results at the household and community level that are not possible with the aggregated data that are generally available. The access to the restricted¹ data was possible due to an agreement between the University of Texas at Austin and the Mexican Ministry of Social Development (SEDESOL) to share data for research purposes. Special care was taken to assure the confidentiality of the data.

The only question regarding migration that is available in the 2005 Population Count is "In which state of Mexico or in which country were you living five years ago?" ("Hace 5 años, en octubre de 2000, ¿en qué estado de la República o en qué país vivía?"). Therefore, we define a returnee as somebody that was living in the United States five years before the census and is living in Mexico at the moment of the census. And consequently, we define return migration for 2005 as the population who 5 years ago or more lived in the United States in October of 2000 but is living in Mexico in October 2005. Return migration for 2000 is defined analogously.

The ITER 2005 database lists all the localities in Mexico. However, for confidentiality reasons, entries for localities with one or two dwellings are coded with missing values. These localities (83,161) are dropped for the analysis at the locality level and correspond to a total population of 454,500 people.

<sup>&</sup>lt;sup>1</sup> The ITER databases and the ten percent sample of the Census and Count are available at the webpage of INEGI while the individual and household records of the censuses and counts are restricted data.

The ITER2000 database does not contain information regarding the number of people living in the United States in 1995 but living in Mexico in 2000, even though the question was included in the general questionnaire. Publications from INEGI report a total number of 267,150 returnees for 2000 and give the totals by state and size of locality. However, the weighted data from the 10 percent sample of the 2000 Population Census gives an estimate of 260,650 returnees because it does not include all the localities. For this reason, the total of returnees for 2000 will vary depending on the data that is being used.

For analytical purposes, we will only include in the analysis at the individual and household level, non-institutionalized individuals, i.e. we will exclude 6,095 individuals that are homeless or that are living in collective dwellings like hotels, hospitals, orphanages, care homes for the elderly, religious institutions, jails, army facilities, refugee camps, etc. Of the 244,426 returnees, 97.51 percent live in individual residences while there are 5,888 living in collective dwellings<sup>2</sup>. Also, there are 199 homeless that were in 2000 in the United States. That is, there are 238,331 non-institutional non-homeless returnees in 2005.

It is worth noting that from these 199 homeless, the vast majority (about 85 percent) are living in border states: 130 are now in Baja California, 31 are in Tamaulipas and 11 in Sonora. The mean age for the homeless is 37.2 and ranges from 19 to 80. Only two of the homeless are women. Although 8 percent have had no formal education, 41 percent have primary education and 33 percent have some secondary education. There is no way of knowing how long they have been homeless in cities like Tijuana or Laredo. We do know, however, that these cities receive a high amount of deported people from the United States and that some would stay there temporarily while trying to go back to the United States.

#### **Measures and Methods**

We concentrate on a descriptive analysis of return migration focusing on the characteristics of returnees and their households, as well as the localities that attract these returnees. The analysis of the 2005 Population Count works with the universe of returnees and not with a sample because we are working with the complete records of the Count.

A main approach of this paper is to present a comparison of return migration for 2000 and 2005. The 2005 Population Count will be used to estimate the trends in return migration and the 2000 Population Census will be used to obtain estimates of migration propensity and marginality. Also, the information for 2000 provides the data to estimate a rate of return. There are many limitations with the data which are explained in the next section, but still the data is rich to have a sense of the trends in return migration in the last years.

We define and calculate a rate of return as those who were in Mexico in 2005, having been in the U.S. in 2000 over those who went to the United States from 1995 to 2000 and did not come back by 2000. The concept of rate of return, as defined here, may be misleading but note that it relates the total population that was living in the U.S. in 2000 and is living in Mexico in 2005, and the population that left for the U.S. before 2000; i.e. this rate is not defined from individual data, but aggregated. This rate cannot be calculated at the municipality or locality level, due to restrictions of data availability. We will compare some characteristics of returnees at states that have a rate greater than one (i.e. that attract more people than they send) with those at states will rates below one to indirectly estimate the characteristics of those that may not be returning to the place they originally left from<sup>3</sup>.

<sup>&</sup>lt;sup>2</sup> Collective dwellings refer to those places of a commercial, institutional or communal nature. People living in a collective dwelling share a common objective or interest, or obey to legal or military dispositions.

<sup>&</sup>lt;sup>3</sup> In future analysis, we intend to disaggregate these measures to a lower level of analysis.

The information regarding migration in 2000 that will be used is the Migration Intensity Index (MII), at the state and municipal level, for 2000 generated by the Mexican Population Council (CONAPO) as well as the ten percent sample of the 2000 Mexican Population Census (extended questionnaire focusing on migration). The MII includes information of the percentage of households that receive remittances, the percentage of households where one or more members left Mexico in the last five years to live in the U.S., the percentage of households with circulatory migrants, and the percentage of households with return migrants (CONAPO, 2002). The Degree of Migration Intensity (DMI) is the categorical version of the IIM.

Migration is measured in the Censuses and Counts based in a five year period. Therefore, circulatory migration is defined as the population that left to the United States during the five year period and returned to Mexico within the period. So, for example, 1995-2000 circulatory migration is defined as the population that left in the period of 1995 to 2000 (after the 1995 Population Count) and returned to Mexico before the census of 2000. Circulatory migration is captured in the extended questionnaire of the 2000 Population Census and cannot be measured for the period 2000-2005. The non-returnees (or out migrants), captured in the 2000 census, are those that left during the five year period and have not returned to Mexico by the end of the five year period. Then, non-returnees in 2000 are those who left between 1995 and 2000 and were still out in 2000. Return migration denotes the population that was in the United States at the beginning of the period but was in Mexico at the end of it.

The Marginality Index (*Índice de marginación*) produced by the National Council of Population is generated at the locality level using the technique of Principal Components and summarizes educational characteristics of the population (population that does not know how to write and read and population with incomplete basic education), as well as dwelling characteristics (access to drainage, electricity and water; crowdedness, material of the floor and existence of refrigerator). The Degree of Marginality is the categorical version of the Marginality Index (CONAPO, 2007).

Capacities poverty refers to households with an insufficient income to fulfill their food, education and health needs. CONEVAL defines three types of poverty (food, capacities and assets) and the relationship between return migration and the other two types are very similar to that shown in figure 9. Poverty estimations at the state level for 2005 are generated by CONEVAL using the 2005 Population Count and the 2005 Income and Expenditures Household Survey (CONEVAL, 2007).

The Mexican Law of Social Development dictates that poverty measurement has to have a multidimensional approach considering at least the following indicators: family income, access to food, access to health services, access to social security, dwelling quality and availability of space, access to basic services, education and social cohesion in the household. The Mexican Council of Evaluation of Social Development Policy (CONEVAL) is in charge of generating the official methodology that conveys these dimensions at the household level. The final version of the methodology has not been published yet so we will only describe the characteristics of the returnees in these dimensions (except for income).

The three migration types can be operationalized to a certain extent with the use of the Count data. Overall, we will estimate the differences between life stage migration and the other types in terms of the proportions of return migrants in young single ages and older ages. The difference between target and subsistence return migration can be estimated in terms of family status<sup>4</sup> (head of household) and level of economic development of the community –marginal communities with returning heads of households are examples of subsistence migration and more prosperous communities or urban communities with returning heads of household are examples of target migration. Note that the target could be of different kinds; for example, the target for a

8

<sup>&</sup>lt;sup>4</sup> In the Population Count there is no information available of marital status.

migrant leaving a city may be to save money for buying a house or pay a loan while the target for a migrant leaving a rural locality may be saving money to buy a cow but still his community could be of high marginality.

#### Limitations

It is important to note the limitations of the analyses. First, we acknowledge the limitations of the data, such as the problem of measurement and the inherent underestimation produced by counting only households present in Mexico. Also, we do not have information of the nationality or place of birth and some returnees will be non-Mexican expatriates.

Another analytical consideration that is worth noting is that since the data does not include place of birth, some individuals considered as returnees may be American expatriates. We know that places like Chapala in Jalisco, San Miguel de Allende in Guanajuato and Los Cabos in Baja California have had a traditional movement of expatriates (mainly from the U.S. and Canada) that go there after retirement (Sunil *et al*, 2007). In these three cities, there are 667 (0.28 %) individuals that were in 2000 in the United States that are 50 years old or more in 2005, which corresponds to a small fraction of the total number of returnees.

The data from the Population Count of 2005 does not have the date of departure and arrival, neither the place of origin or last emigration so we cannot determine if they returned to the original place they departed from. In absence of longitudinal data, the information cannot be completely related at the individual or household level to the 2000 Mexican Census. Neither do we have the causes of the emigration or remigration, nor the time of stay to assist in evaluating causality.

Second, the scarce information available at the locality level makes it difficult to relate return migration to important factors like job and other economic opportunities and we can only consider marginality and the size of the locality.

However, having the data at the individual and household level presents advantages. For example, we would expect differences in demographic characteristics of those returning to rural or urban areas, or to places with high or low migration intensity.

#### **RESULTS**

#### Trends in return migration

We find that, in absolute numbers, return migration decreased: from 290,944 people in 1995, and 267,150 people in 2000<sup>5</sup> to 242,533 returnees in 2005. The regions that attracted more returnees were the central region of Mexico, followed by the northern region. Of the 104,777 localities in the analysis, 84,812 (80.95 percent) do not have returnees and 19,965 (19.05 percent) have at least one returnee.

If we compare the number of returnees by region, we see that there was an increase in Northeastern, North Central and Gulf states while there was a decrease in the other regions. Note that more than half (137,315 or 56 percent) of the returnees are not coming back to traditional sending states, while the rest (105,218) comes back to traditional sending states. This may be a result of the changing patterns in migration due to the appearance of new origin areas of expulsion or to the development of new areas of attraction for returnees. However, there is no evidence showing a drastic change in the pattern at this level of aggregation.

<sup>&</sup>lt;sup>5</sup> Publications from INEGI report a total number of 267,150 returnees for 2000 and give the totals by state and size of locality. However, the weighted data from the 10 percent sample of the 2000 Population Census provides an estimation of 260,650 returnees because it does not include all the localities.

If we compare the return migration in 2000 and 2005 with circulatory migration in 1995-2000 (see Fig. 1), then we see that circulatory migration is sometimes larger than return migration, but in other cases the pattern is the opposite. Again, there does not seem to be a drastic change in for this period at this level of aggregation. However, we can see for example, that Michoacán and Baja California are very different in terms of circulatory and return migration in 2000, even if they are similar in the level of return migration in 2005; Michoacán having high levels of circulatory migration and Baja California having low levels of circulatory migration. Note that Michoacán is a traditional sending state, while the border state Baja California is not.

The case of Veracruz is interesting: note that it has high circulatory migration (1995-2000), high return migration in 2005 and low return migration in 2000. Before 2000, in Veracruz there was much less out migration so there was a smaller pool of possible returnees than in 2005. The large number of migrants that have left Veracruz did so more recently than from other states. This shows that return migration is path dependant and in future research; we will address how changing patterns in out migration relate to return.

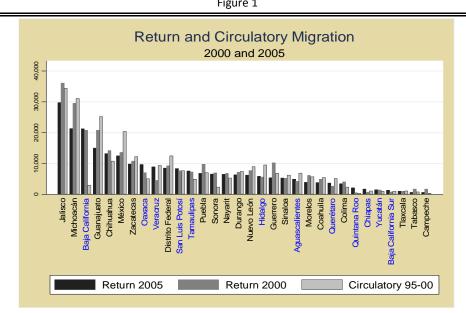


Figure 1

Source: 10 percent sample of the 2000 Population Census (extended questionnaire) and ITER2005 from the 2005 Population Count.

Note: States are shown in descendant order of return migration in 2005. The names of the states for which return migration increased are shown in orange

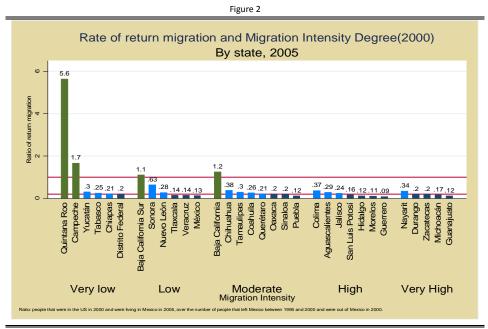
Note that there is no information in the database that tells us whether or not they lived in the locality before living in the United States in 2000. During the period of 1995 to 2000, 1,469,801 migrated to the U.S.; from these, 260,650 (17.7 %) people went back to Mexico before the Census in 2000 and 1,209,151 (82.3%) were still living in the U.S. in 2000. If we calculate the rate of return as those who were in Mexico in 2005, having been in the U.S. in 2000 over those who went to the United States from 1995 to 2000 and did not come back by 2000, we find a national rate of return of 0.2.

Rate of return (2000 to 2005) = 
$$\frac{\text{Were in the US in 2000, but were in Mexico in 2005}}{\text{Left Mexico from 1995 to 2000 and were out in 2000}} = \frac{242,533}{1,209,151} = 0.2$$

If we analyze this rate at the state level, only Quintana Roo, Campeche, Baja California Sur and Baja California have rates greater than 1. However, the states of Yucatán, Tabasco, Chiapas, Sonora, Tamaulipas, Querétaro, Colima, Aguascalientes, Jalisco and Nayarit have a rate of return

above the national average (see fig. 2). The first thing to note is that the states with a rate of return greater than one are not states considered traditional sending migrants states and they had in 2000 very low, low and moderate migration intensities. This could be a piece of evidence that returnees are not necessarily returning to their place of origin. From the second group of states, those with a rate of return above the national average are distributed in all the migration intensity degrees. Another thing to note is that the state with the highest rate of return is Quintana Roo and in 2000 this state had very low migration intensity. We will discuss later the role of Quintana Roo as an attractive place for returnees. Also, the states that have a rate of return greater than one are also states that are attractive for internal migration. The state with the highest percentage of its population of internal migrants is Quintana Roo (about 11.5%), followed by Baja California Sur (9%) and Baja California (7%).

In the calculation of the rate of return, we exclude from the denominator those migrants who left for the United States before 2000. Also, there is a lagged effect that we should account for, since the returnees counted in the 2005 Count may come from older migration waves and the period division is somewhat arbitrary.



Source: The Migration Intensity Degree for 2000 is generated by CONAPO and the rate of return for 2005 is calculated using the ten percent sample of the 2000 Population Census (extended questionnaire) and the ITER2005 database from the 2005 Population Cou

Figure 3 shows some basic socio-demographic characteristics of Mexican migration to the United States for the period 1990-2005. First, note that return migration has decreased in absolute numbers and the proportion of male and female returnees has remained fairly constant. Return migration by age groups shows a relative decrease of the distribution of returnees at the age of 20 to34 while there has been a relative increase of children and people of 50 years and older. Also, there has been a decrease of returnees to traditional migration states while the North, South and Southeast regions show an increase in returnees.

Figure 3

Basic Sociodemographic characteristics of Mexican Migration to the United States, 1990-2005

Sociodemographic characteristics	Return	Return migration fom the U.S. Differences			rences	-	Total migrants	Circulatory	Circulatory	Migrants that left in the period 1990-1995	Migrants that left in the period 1995-2000	Ratio: Circulatory/Non- returnees	
	1990-1995 <sup>1</sup>	1995-2000 <sup>1</sup>	2000-2005 1	2005 - 1995	2005 - 2000	in the period 1990-1995	in the period 1995-2000	migration 1990-1995 <sup>2</sup>	migration 1995-2000 <sup>2</sup>	and did not return by 1995 <sup>3</sup>	and did not return by	1995	2000
Absolutes Relative by row	290944	267150	244426	-46518	-22724	1712724 100	1469801 100	387907 22.6	260650 17.7	1324817 77.4	1209151 82.3		
Gender	100	100	100	0	0	100.0	100.0	100.0	100.0	100.0	100.0	1	1
Men	65.0	65.1	66.1	1.1	1.0	69.5	75.3	69.1	78.0	69.7	74.7	0.99	1.04
Women	35.0	34.9	33.9	-1.1	-1.0	30.5	24.7	30.9	22.0	30.3	25.3	1.02	0.87
Age groups	100	100	100	0	0	100	100	100	100	100	100	1	1
From 0 to 11 years 4	8.5	7.1	12.2	3.7	5.1	7.2	3.6	12.1	5.0	5.7	3.3	2.11	1.52
From 12 to 19 years	6.2	8.3	9.1	2.8	0.7	27.6	27.4	17.1	17.0	30.7	29.7	0.56	0.57
From 20 to 24 years	16.3	13.2	10.1	-6.2	-3.1	24.5	26.7	19.0	21.1	26.1	27.9	0.73	0.76
From 25 to 29 years	22.8	21.0	15.4	-7.4	-5.7	14.3	16.0	13.8	18.5	14.5	15.5	0.95	1.20
From 30 to 34 years	17.4	17.5	15.6	-1.8	-1.9	8.9	9.5	12.7	13.1	7.8	8.7	1.62	1.51
From 35 to 39 years	11.5	11.5	11.9	0.4	0.4	5.6	6.4	8.4	9.2	4.8	5.8	1.74	1.57
From 40 to 44 years	5.2	6.8	8.0	2.8	1.2	4.2	3.9	4.6	5.6	4.0	3.6	1.16	1.57
From 45 to 49 years	3.8	4.1	5.4	1.7	1.3	2.6	2.5	3.4	3.5	2.3	2.3	1.47	1.55
Of 50 years and older	8.3	10.5	12.4	4.1	2.0	5.1	3.9	8.9	6.9	4.0	3.3	2.21	2.12
Region of residence 5	100	100	100	0	0	100	100	100	100	100	100	1	1
Traditional	53.6	47.5	43.4	-10.2	-4.1	52.6	47.0	63.4	50.8	49.5	46.1	1.28	1.10
Northern	15.9	25.3	26.9	11.0	1.6	16.9	13.2	14.4	16.2	17.6	12.6	0.82	1.29
Central	19.4	17.9	17.3	-2.1	-0.7	19.4	25.2	17.3	23.5	20.0	25.5	0.87	0.92
South and Southeastern	11.1	9.3	12.5	1.4	3.2	11.1	14.7	4.9	9.5	12.9	15.8	0.38	0.60

#### Notes:

at the individual level. The 2005 Population Count does not provide information of circulatory migration or those who left in the period 2000-2005 and had not returned.

<sup>&</sup>lt;sup>1</sup> Population of 5 years and older that lived in 1990 (1995) in the United States and was living in Mexico in 1995 (2000) at the moment of the Count (Census).

<sup>&</sup>lt;sup>2</sup> Population that moved to the United States in the period 1990 to 1995 (1995 to 2000) and was living in Mexico in 1995 (2000) at the moment of the Count (Census).

<sup>&</sup>lt;sup>3</sup> Population that moved to the United States in the period 1990 to 1995 (1995 to 2000) and was not living in Mexico in 1995 (2000) at the moment of the Count (Census).

<sup>&</sup>lt;sup>4</sup> For return migrants, this age group includes only individuals from 5 to 11 years.

The traditional region includes: Aguascalientes, Colima, Durango, Guanajuato, Jalisco, Michoacán, Nayarit, San Luis Potosí y Zacatecas; the North: Baja California, Baja California Sur, Coahuila, Chihuahua, Nuevo León, Sinaloa, Sonora y Tamaulipas; the Central: Distrito Federal, Hidalgo, México, Morelos, Puebla, Querétaro y Tlaxcala; and the South and Southeastern: Campeche, Chiapas, Guerrero, Oaxaca, Quintana Roo, Tabasco, Veracruz y Yucatán.

Source: Estimates for 1990-200 were obtained from CONAPO and where generated using the ten percent sample of the 1995 Population Count and the 2000 Population Census. Estimates for 2005 were obtained by the authors using the 2005 Population Count

The ratio of circulatory migration and non-returnees also shows a different pattern for the traditional states and the other regions and it looks as if people are not returning to traditional regions as much as would be expected given their past patterns of international migration. Note that even if in absolute numbers there are more returnees there are less relative to their circulatory migration levels. For example, the percentage of circulatory migration at traditional states was 50.8 in 2000 while the percentage of non returnees was 46.1 (ratio equals 1.1) while the percentage of circulatory migration at Southern and Southeastern Mexico was 9.5 and the percentage of non-returnees was 15.8 (ratio equals 0.6). That is, people are more likely to be circular migrants in traditional states and less likely to be absent migrants while the reverse is true for other regions. In contrast with the traditional states, in all other regions except the North (for 1995-2000) there is a greater preponderance of absent migrants than circulatory migrants. Northern states in Mexico have a higher propensity to have documented migrants, for example people living in Ciudad Juárez can easily go back and forth to the El Paso and people in Tijuana may even commute daily to work in San Diego.

The evidence also supports the idea that some people may not be returning to the original places they left from but there seems to be evidence that temporary migration is not over. Temporary migration is still alive and well defined in traditional sending states; we could speculate that this is possible due to the traditional survival aspects of subsistence and target migration. On the other hand, for the states that have recently become important senders of migrants, circular migration for subsistence and target migration may be less common as a result of a greater absolute decline of opportunities in the sending communities and/or the recency of the out-migration.

However, the following question arises: why is return to traditional migration states declining? Two possible reasons could explain this. First, regions with a migratory tradition may have developed a greater facility for circular migration because of a more widespread possession of migration documents obtained in previous visits to the United States under immigration reform programs. It is also possible that those leaving traditional regions do not come back where they left from even if they return to Mexico.

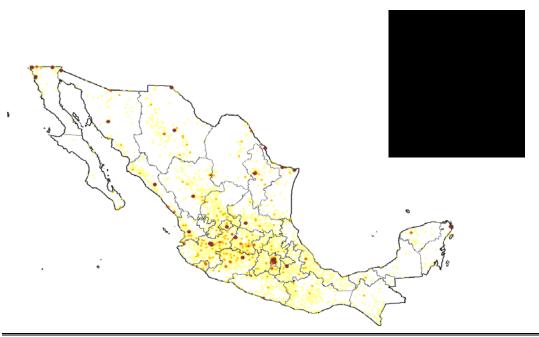
Figure 4 shows the map of Mexican return migration at the locality level in 2005 with return migration defined as a categorical variable. For example, we see that 11 of the 26 localities with more than 1000 returnees are in states that share a border with the United States. Additionally, central Mexico concentrates a large number of localities with existence of returnees.

Figure 5 shows the twenty five localities with most returnees for 2000 and 2005 where one of the things to note is the change in the position for this time period. In 2005, twenty five localities concentrate 24% of the returnees. These are all urban areas with the following characteristics: they are border cities, metropolitan areas, localities in traditional migration states or new tourist areas. 25% of all the returnees are moving from the U.S. into border states. The top localities are Tijuana, Guadalajara's Metropolitan Area, Ciudad Juárez, and Mexicali.

13

<sup>&</sup>lt;sup>6</sup> This result is even stronger if we remember that out migration from traditional states was very high in the past.

Figure 4
Map of Mexican Return Migration at the Locality Level, 2005



Source: Generated by the author using the 2005 Population Count

In 2000, 25 localities concentrated almost 20% of the returnees. The top localities are Guadalajara's Metropolitan Area, León, Morelia and the Mexico City Metropolitan Area. Notice that the pattern of the localities with most returnees changes in the period of 2000 and 2005. In 2000 there is a larger presence of localities in traditional migration states and near Mexico City. The position in 2000 of the localities with most returnees in 2005 is very different; although 16 are both in the top 25 in 2000 and 2005.

We can note new places of attraction for returnees in 2005: Mexicali, Matamoros, Ensenada, Nuevo Laredo, San Luis Río Colorado, Reynosa, Culiacán, Hermosillo and Cancún. All these places are in border states, except Cancún. From the data available, we cannot say that this is due to an increase in deportations from the United States or to an increase in employment opportunities product of tourism or the *maquiladora* industry. But this accounts for a change in the pattern of return migration.

There is a rural-urban duality with a bipolar distribution: 44.7% of the returnees are in rural localities with less than 15,000 habitants. Figure 6 shows return migration by size of locality for 2000 and 2005 and figure 7 shows the rate of return migration for 2005 by size of locality. The pattern of return migration by size of locality in 2005 is similar to that of 2000, but with a consistent decrease in absolute numbers, for all type of localities.

If we look at the rate of return migration, we see that the only areas with rate above average are medium sized localities: between 15,000 to 500,000 habitants (see fig. 7). This is coherent with the change in position of some of the twenty five localities with most returnees in 2005 with respect to 2000 shown before in figure 5. This could be explained by the temporary migration of traditional states (like Jalisco and Michoacán), emerging areas of migratory expulsion (like Veracruz) and the emerging areas of attraction in Mexico (like tourist Quintana Roo and Baja California Sur, and the northern border cities with employment opportunities in the industrial sectors).

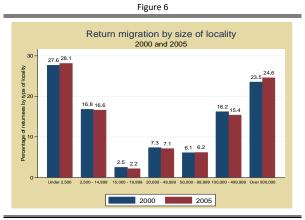
 $$\operatorname{\sc Figure} 5$$  The 25 localities with most returnees in 2000 and 2005

	2000							2005							
				Iotai							Iotai				
Position	State	Municipality	Locality	Population	Returnees '	Position in 2005	Position	State	Municipality	Locality	Population	Returnees	Position in 2000		
1	Jalisco	Guadalajara	Guadalajara	1,646,183	6,551	3	1	Baja California	Tijuana	Tijuana	1,286,187	10,843	25		
2	Jalisco	Zapopan	Zapopan	910,690	3,330	5	2	Chihuahua	Juárez	Juárez	1,301,452	5,414	12		
3	Guanajuato	León	León de los Aldama	1,020,818	3,102	14	3	Jalisco	Guadalajara	Guadalajara	1,600,894	4,031	1		
4	Michoacán de Ocampo	Morelia	Morelia	549,996	2,548	7	4	Baja California	Mexicali	Mexicali	653,046	3,526	81		
5	Distrito Federal	Gustavo A. Madero	Gustavo A. Madero	1,235,542	2,476	24	5	Jalisco	Zapopan	Zapopan	1,026,492	2,996	2		
6	México	Nezahualcóyotl	Ciudad Nezahualcóyotl	1,225,083	2,472	36	6	Chihuahua	Chihuahua	Chihuahua	748,518	2,472	9		
7	Aguascalientes	Aguascalientes	Aguascalientes	594,092	2,451	8	7	Michoacán de Ocampo	Morelia	Morelia	608,049	2,335	13		
8	México	Ecatepec de Morelos	Ecatepec de Morelos	1,621,827	2,427	23	8	Aguascalientes	Aguascalientes	Aguascalientes	663,671	2,196	7		
9	Chihuahua	Chihuahua	Chihuahua	657,876	2,236	6	9	Durango	Durango	Victoria de Durango	463,830	1,907	10		
10	Durango	Durango	Victoria de Durango (Durango)	427,135	2,207	9	10	Distrito Federal	Iztapalapa	Iztapalapa	1,820,888	1,828	11		
11	Distrito Federal	Iztapalapa	Iztapalapa	1,773,343	2,173	10	11	San Luis Potosí	San Luis Potosí	San Luis Potosí	685,934	1,787	14		
12	Chihuahua	Juárez	Juárez	1,187,275	1,878	2	12	Tamaulipas	Matamoros	Heroica Matamoros	422,711	1,713	216		
13	Michoacán de Ocampo	Puruándiro	El Pueblito	662	1,800 <sup>b</sup>	300	13	Baja California	Ensenada	Ensenada	260,075	1,594	45		
14	San Luis Potosí	San Luis Potosí	San Luis Potosí	629,208	1,741	11	14	Guanajuato	León	León de los Aldama	1,137,465	1,570	3		
15	Nuevo León	Monterrey	Monterrey	1,110,909	1,682	16	15	Nayarit	Tepic	Tepic	295,204	1,504	20		
16	México	Naucalpan de Juárez	Naucalpan de Juárez	835,053	1,631	50	16	Nuevo León	Monterrey	Monterrey	1,133,070	1,447	15		
17	Puebla	Puebla	Heroica Puebla de Zaragoza	1,271,673	1,485	22	17	Tamaulipas	Nuevo Laredo	Nuevo Laredo	348,387	1,416	129		
18	Coahuila	Torreón	Torreón	502,964	1,342	43	18	Sonora	San Luis Río Colorado	San Luis Río Colorado	138,796	1,368	189		
19	Nuevo León	Guadalupe	Ciudad Guadalupe	669,842	1,267	31	19	Tamaulipas	Reynosa	Reynosa	507,998	1,358	65		
20	Nayarit	Tepic	Tepic	265,817	1,213	15	20	Sinaloa	Culiacán	Culiacán Rosales	605,304	1,273	36		
21	Querétaro	Querétaro	Santiago de Querétaro	536,463	1,192	28	21	Sonora	Hermosillo	Hermosillo	641,791	1,271	133		
22	Jalisco	Tlaquepaque	Tlaquepaque	458,674	1,192	26	22	Puebla	Puebla	Heróica Puebla de Zaragoza	1,399,519	1,175	17		
23	Jalisco	Tonalá	Tonalá	315,278	1,144	38	23	México	Ecatepec de Morelos	Ecatepec de Morelos	1,687,549	1,108	8		
24	Distrito Federal	Tlalpan	Tlalpan	534,905	1,120	56	24	Distrito Federal	Gustavo A. Madero	Gustavo A. Madero	1,193,161	1,100	5		
25	Baja California	Tijuana	Tijuana	1,148,681	1,098	1	25	Quintana Roo	Benito Juárez	Cancún	526,701	1,084	137		
	Total (19.8% of tota	I returnees in the cou	ntry)		49,958			Total (24% of total	returnees in the count	ry)		58,316			

Note about the source: the estimations of 2000 are generated using the 10% sample of the 2000 Population Census; the weighted data is aggregated at the locality level because the database ITER 2000 does not contain the number of returnees in each locality. The ITER 2005 contains the variable of number of returnees in the locality for 2005.

<sup>&</sup>lt;sup>a</sup> Unlike the data for 2005 which is provided by the ITER2005 database, this number is an estimator using the weighted 10 % sample of the 2000 Population Census.

<sup>&</sup>lt;sup>b</sup> This estimator is inplausible since it is impossible to have more returnees than population in the locality. The cause of this may be related to the weight given to the observations in the 10% sample of the census.



Source: 2000 Population Census and 2000 Population Count



Figure 7

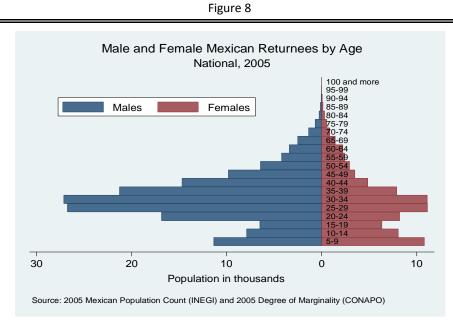
Note: the rate of return is defined as the quotient of the number who were in Mexico in 2005, having been in the U.S. in 2000 over those who went to the United States from 1995 to 2000 and did not come back by 2000

Source: 2000 Population Census and 2000 Population Count

.14

#### Who are the returnees?

Figure 8 shows the age pyramid for male and female Mexican returnees at the national level for 2005. First, note that the distribution of men and women is very similar for ages 5 to 20 and that these were between 0 to 15 years old in 2000 when they were in the United States. This may be evidence of children coming to Mexico together with other family members and they are likely to be living in nuclear family households. The youngest were most likely born in the United States.<sup>7</sup> Note that there is a higher predominance of men at almost every period and that this is more pronounced at the age periods of 25 to 39 years old. The age pyramids by degree of marginality show that the higher marginality of the locality, the more exaggerated is the predominance of men at these age groups.



<sup>7</sup> In 2005, there are 5,471 five year old returnees, 4,695 six year old returnees and 4,209 seven year old returnees. The percentage of returnees that are less than ten years old is 9.

The percentage of people that speak an indigenous language in the country is around 6.6 percent while only 3.3 percent of the returnees (8,044) speak an indigenous language. Of those who speak an indigenous language, 95.5 percent also speak Spanish. The indigenous returnees (203) that do not speak Spanish are mostly concentrated in Oaxaca, Chiapas and Guerrero, their mean age is 36.1 years old and 25 percent of them are 50 years and older.

Male returnees of 15 years and older have in average 8.2 years of schooling which is very similar to the national average for men (8.4 years of schooling). However, the average of years of schooling for female returnees of 15 years and older (9.16 years) is higher than the national level (7.9 years). Figure 9 shows the level of education and years of schooling of returnees that are 15 years and older by state.

Interestingly, the biggest differences of the mean years of schooling for returnees and non returnees are in Quintana Roo, Yucatán, Baja California Sur and Distrito Federal where returnees are better educated in this states. For Michoacán, Jalisco and San Luis Potosí, traditional sending states, the mean years of schooling is very similar for returnees and the state average; and in Zacatecas, also traditional migration state, it is even lower between returnees and the state average. In Veracruz, a new sending state, returnees are slightly better educated than the average in that state.

There are various possible explanations for these findings: in traditional migration states migrants may not need high levels of education to leave Mexico or to go back while returnees may be better educated in Distrito Federal because of the types of jobs returnees perform there. Also, it could be the case that returnees in Quintana Roo or Yucatán, two states with high tourist activity, may need higher levels of education to obtain jobs and may not be originally from there (neither state has high of out migration).

The 2005 Population Count does not include information on occupation or income. However, in Mexico social security is closely related to employment in the formal sector. The providers of public social security are (IMSS, ISSSTE, PEMEX, Defense or Marine) while private social security paid by individuals may be from Seguro Popular or a private institution. The most usual form of social security for people employed in the formal sector is IMSS. In some cases, children or other family members may receive social security as a beneficiary from the insurance of their parents or siblings. Also, someone may receive social security from more than one source.

Of the total number of returnees, 166,143 (69.7 percent) does not receive private or public social security or any health insurance, 21 percent receive social security from at least one public source and 9.5 from a private institution. This situation is contrasting to the national figure where 51 percent of the population does not have any source of social security or access to health services. That is, returnees are less likely to be formally employed.

Because of its relationship with employment, if we exclude from the analysis the population of less than 18 years old, we have the following for returnees of 18 years and older: 18.3 percent receive IMSS, 2.3 percent receive ISSSTE, only 0.4 percent receive it from PEMEX, Defense or Marine, and 5.6 percent obtained Seguro Popular, 3.6 percent have access to a private institution and 69.3 percent do not have access to any kind. On the other hand, at the national level for people in this same age range: 34.5 percent receive IMSS, 6 percent receive ISSTE, 1.2 percent PEMEX, Defense or Marine, 6.2 have Seguro Popular, 2.1 have private access to health services and 48.9 percent do not have access to any of these. Note that all the levels are lower for returnees except for access via a private institution. This may be because returnees are less likely to be employed in the formal sector so they need to pay or buy for health insurance from a private institution.

Figure 9

Level of education and years of schooling for returnees of 15 years and older by state, 2005

		Mean years								
			Lev	vel of educat	Years of	of schooling	Difference:			
State	Observations	No formal education	Incomplete Primary	Primary	Incomplete Secondary	Secondary and above	Mean	of all the population	Returnees-All	
Aguascalientes	3,978	6.6	20.4	19.1	6.8	47.1	8.4	8.7	-0.3	
Baja California	15,387	6.2	14.7	12.8	7.0	59.3	9.8	8.9	0.9	
Baja California Sur	991	4.9	10.4	8.0	4.6	72.1	11.7	8.9	2.8	
Campeche	497	11.6	20.1	16.9	3.5	47.9	9.0	7.9	1.1	
Coahuila	3,004	6.1	16.0	15.0	7.1	55.9	9.6	9.0	0.6	
Colima	2,586	8.4	20.0	18.1	6.4	47.2	8.6	8.4	0.2	
Chiapas	1,370	10.1	25.8	21.4	4.8	37.9	7.4	6.1	1.3	
Chihuahua	9,835	6.3	17.1	17.8	7.4	51.4	9.3	8.3	1.0	
Distrito Federal	6,747	4.7	10.1	9.5	4.9	70.8	11.9	10.2	1.7	
Durango	5,085	6.4	21.3	23.1	6.7	42.5	8.1	8.0	0.1	
Guanajuato	12,866	9.7	23.4	25.1	5.9	36.0	7.0	7.2	-0.2	
Guerrero	4,234	10.6	22.4	18.6	6.4	42.0	7.9	6.8	1.1	
Hidalgo	5,060	6.4	15.3	22.9	5.8	49.6	8.1	7.4	0.7	
Jalisco	23,634	7.6	22.5	21.0	6.9	42.0	8.2	8.2	0.0	
Estado de México	9,969	7.0	16.9	17.5	6.2	52.5	8.9	8.7	0.2	
Michoacán	17,530	9.6	27.0	22.2	7.3	33.9	7.0	6.9	0.1	
Morelos	3,083	8.7	17.8	16.2	5.8	51.5	8.8	8.4	0.4	
Nayarit	5,074	7.8	20.7	15.6	6.9	49.0	8.5	8.0	0.5	
Nuevo León	4,797	6.1	13.5	11.1	5.3	64.1	10.7	9.5	1.2	
Oaxaca	8,458	9.0	24.0	25.7	4.9	36.3	7.0	6.4	0.6	
Puebla	5,564	6.9	19.0	23.1	5.7	45.2	8.3	7.4	0.9	
Querétaro	3,059	6.4	16.8	24.2	4.9	47.7	8.6	8.3	0.3	
Quintana Roo	1,688	4.8	11.4	8.0	3.8	72.1	11.7	8.5	3.2	
San Luis Potosí	7,274	7.8	23.6	19.3	5.3	44.1	7.7	7.7	0.0	
Sinaloa	3,988	7.2	21.1	14.1	7.1	50.5	9.2	8.5	0.7	
Sonora	4,876	6.8	17.0	11.6	7.3	57.2	9.7	8.9	0.8	
Tabasco	473	8.6	21.4	15.1	4.2	50.6	8.9	8.0	0.9	
Tamaulipas	5,628	6.7	16.6	14.8	7.3	54.6	9.5	8.7	0.8	
Tlaxcala	801	6.5	10.9	17.3	5.0	60.4	9.2	8.3	0.9	
Veracruz	7,786	7.2	19.5	18.8	5.4	49.3	8.3	7.2	1.1	
Yucatán	1,202	4.5	15.9	11.4	5.5	62.7	10.6	7.6	3.0	
Zacatecas	8,287	7.2	28.4	25.9	6.9	31.7	6.9	7.2	-0.3	
Total	194,811	7.5	20.1	18.9	6.4	47.2	8.5	8.1	0.4	

Source: 2005 Population Count at the individual level

127,533 returnees are living in households where they are the only returnee. More than half of them (53 percent) are living in non-traditional migration states. From all the returnees, 5 percent live in unipersonal households, i.e. 12,295 returnees live alone. The state with the highest number of returnees living alone is Baja California (most of returnees living in Tijuana and Mexicali), followed by Jalisco (most of them in Guadalajara and Zapopan) and then Chihuahua (mostly in Ciudad Juárez). Another fact of returnees living alone is that they have a higher mean age (44 years) to returnees who are not living in unipersonal households (30 years). This is interesting because it may be evidence that some of those who returned did not do it to their communities of origin. Some of these could be retired, expatriates or labor migrants that decided to return to work in cities in border states. Jalisco is a traditional migrant state but the fact of having most of them in Guadalajara may suggest that some returnees came back to their state, but not to their community of origin.

Figure 10 shows the family relationship of returnees with the head of the household and the types of households where returnees are living. Note that most of the returnees live in nuclear families and are actually the head of the households. It may be surprising that the types of household for returnees is quite similar to the national distribution, where returnees are slightly more likely to be in extended families.

An interesting fact to point out here is that there are 155 domestic workers that were in the United States in 2000. As we would expect, the majority (80 percent) is female. The state with most domestic workers returnees is Distrito Federal (with 39) followed by Estado de México (20) and Jalisco (15). Their mean age is 31.7 years so they were in average 26.7 years in 2000 when they were in the United States.

Figure 10

Family relationship and type of household of returnees, 2005

	Household level								
Family re	lationship	Type of household							
	Frequency	Percent		Frequency	Percent	National %	Frequency	Percent	National %
Head	106,027	44.5	Nuclear family	157,416	66.1	69	104,847	62.8	68.3
Spouse, husband or partner	34,842	14.6	Extended family	61,067	25.6	22	44,435	26.6	22.4
Son or daughter	71,141	29.9	Mixed family	2,834	1.2	1	2,015	1.2	0.6
Domestic worker(s)	155	0.1	Family, not specified	1,893	0.8		1,221	0.7	0.7
Without family relationship	2,288	1.0	Unipersonal, not family	12,449	5.2	7	12,449	7.5	7.5
Other relationship	23,416	9.8	Non corresident family	2,420	1.0	1	1,878	1.1	0.5
Guest	26	0.0	Not specified	252	0.1		188	0.1	0.2
Not specified	436	0.2							
Total	238,331	100	Total	238,331	100	100	167,033	100	100.0

Source: 2005 Population Count at the individual and household level

If we compare some characteristics of the head of households without returnees and head of households with at least one returnee present we have the following differences. Households with return migration are more likely to be headed by men (80.8%) than those without (76.9%); heads of households with migration tend to have a lower average age (43.3 years) than the rest (45.8); return migration head of households are less likely to speak an indigenous language (4.4 % vs. 7.6); and they are less likely to have access to social security (28%) than head of households without return migration (44.5%).

Figure 11 shows some characteristics of households with returnees by state. It shows the percentage of households with the head being a returnee, and the spouse returnee. Also, for non uni-personal households, we show the distribution of those households that have only one returnee and for which all their members are returnees. This may be indicating a very different pattern of return migration since some places seem to be more attractive for whole families while others are not. Households where all members are returnees are likely to show family return migration where it could be possible that some (or all) of the children were born in the United States. Note that Baja California is the highest (14.7%), followed by Jalisco (14.3) while for Michoacán, this is high (7.3%) but not as high as Jalisco. Note that for Chihuahua, a border state, the percentage is also high (6.9).

Figure 12 shows some household and dwelling characteristics by size of locality and by presence of returnees for 2005. First, note that in general the characteristics in terms of the quality of the buildings of returnees and non returnees is fairly similar (with households with returnees slightly better than the others) in urban areas than in rural localities of less than 2,500 people. In rural areas we see that returnees are much less likely to live in dwellings with a soil floor, are more likely to have access to tubed water and a sewage system. Even if electricity is almost everywhere in the nation, migrant households are better off compared to non returnees households. A similar pattern is seen when we compare the possession of certain goods of households with and without returnees where return households are more likely to possess some goods than are non-returnees.

At least three different reasons might explain this: households with returnees have more goods (like refrigerator, washing machine, computer or television) because migrants sent remittances or brought savings that made these households afford to buy some goods or change some of the infrastructure of the dwelling (for example, put cement to the soil floor); households that could send migrants to the United States were better-off before the migratory experience because the poorest households could not afford to send a migrant; if returnees did not return to the place from which they originally left, then maybe they will try to live in a place with better conditions (another house in the locality or a more prosperous locality).

 $\label{eq:Figure 11}$  Some characteristics of households with at least one returnee by state, 2005

		All h	Non Unipersonal households						
						Only one retu	rnee	All members are i	eturnees
State	Observations	Percent	With head of household a returnee	With spouse a returnee	Unipersonal households	Percent of non unipersonal households with one returnee	Percent of state	Percent of non unipersonal households with all members returnees	Percent of state
Aguascalientes	3,199	2.07	68.0	20.1	174	2.01	70.9	1.7	7.6
Baja California	10,186	6.59	69.3	30.7	1,923	6.29	50.4	14.7	15.3
Baja California Sur	685	0.44	69.2	30.8	157	0.45	49.3	1.2	18.9
Campeche	447	0.29	57.9	21.1	28	0.31	76.4	0.2	6.3
Coahuila	2,274	1.47	61.0	25.2	250	1.45	63.6	1.9	9.6
Colima	1,902	1.23	64.7	25.9	200	1.14	59.8	1.7	10.7
Chiapas	1,358	0.88	47.3	17.3	55	1	86.2	0.3	2.3
Chihuahua	7,062	4.57	63.1	31.0	780	4.1	56.7	6.9	12.5
Distrito Federal	5,459	3.53	53.9	22.9	576	3.7	68.7	4.2	8.3
Durango	3,966	2.57	63.9	19.9	279	2.47	67.6	2.4	8.1
Guanajuato	11,062	7.16	68.7	13.2	588	7.69	79.2	4.5	5.0
Guerrero	3,678	2.38	59.2	16.1	246	2.46	73.8	1.7	4.8
Hidalgo	4,387	2.84	64.1	14.4	187	2.95	78.1	1.3	3.4
Jalisco	17,683	11.44	64.8	23.0	1,662	10.92	63.4	14.3	10.5
Estado de Mexico	8,647	5.59	56.3	20.5	421	5.71	75.6	3.5	5.3
Michoacan	13,949	9.02	66.8	18.2	835	8.84	70.6	7.3	7.0
Morelos	2,584	1.67	58.9	18.6	159	1.65	70.8	1.2	5.6
Nayarit	3,847	2.49	62.9	23.1	286	2.31	64.5	2.8	10.4
Nuevo Leon	3,619	2.34	57.9	28.4	335	2.22	63.1	2.9	10.5
Oaxaca	7,070	4.57	62.0	14.0	294	4.68	77.0	2.1	3.4
Puebla	4,860	3.14	59.3	16.2	256	3.28	76.7	1.8	4.0
Queretaro	2,598	1.68	69.4	16.4	119	1.73	77.0	1.1	5.9
Quintana Roo	1,196	0.77	66.1	30.3	205	0.79	57.3	1.6	15.1
San Luis Potosi	6,143	3.97	66.7	14.3	382	4.26	77.5	2.6	4.5
Sinaloa	3,065	1.98	57.2	25.8	207	1.84	65.4	2.0	9.1
Sonora	3,619	2.34	61.5	27.4	482	2.26	58.6	3.6	11.1
Tabasco	486	0.31	43.8	26.0	18	0.34	83.3	0.1	3.0
Tamaulipas	4,287	2.77	60.7	26.0	495	2.74	62.6	3.6	9.0
Tlaxcala	725	0.47	60.7	17.5	30	0.5	80.8	0.2	3.3
Veracruz	6,934	4.49	60.8	15.1	314	4.87	81.3	2.1	3.2
Yucatan	965	0.62	63.1	21.8	110	0.66	68.7	0.9	11.0
Zacatecas	6,642	4.3	69.4	16.2	396	4.36	73.4	3.5	7.3
Total	154,584	100	63.5	20.9	12.449	100	68.9	100	8.0

Source: 2005 Population Count at the individual and household level

Figure 12 also shows an interesting and important aspect of rural return migration: the extent of the predominance of agriculture in rural households. If we calculate the national percentage of households without returnees we have that only 14.5 percent are engaged in agricultural or forestry activities while 19.3 of those with returnees are. However, this is an inflated figure for agriculture in households with returnees because returnees are disproportionately living in rural areas. Now, if we disaggregate this by size of locality, we can see that in rural areas, households with returnees are less likely (41.8%) to be engaged in agriculture than those without returnees (43.5%). There is an opposite pattern for urban areas where households with returnees are more likely to be engaged in agriculture.

Next, we will explore the relationship of the presence of agriculture in two types of return migrants: subsistence and target returnees. We will define a subsistence head returnee as a head of household that lives in a locality with very high or high marginality and a subsistence son (or daughter) returnee a son (or daughter) that lives in a locality with very high or high marginality. Analogously, a target head (or son or daughter) returnee will be a head of household (or son or daughter) living in a locality with low or very low marginality.

Figure 12
Household and dwelling characteristics by size of locality and by presence of returnees, 2005

	Rura	al	Urban and se	mi-urban	Large urban Population > 500,000		
Household and dwelling characteristics	Population	< 2,500	Population: 499,9	-			
	No returnees	With a returnee	No returnees	With a returnee	No returnees	With a returnee	
Total (observations)	5,251,419	50,564	17,325,836	127,788	7,120,944	37,892	
Floor material of dwelling							
Soil	28.4	11.5	13.4	7.0	2.2	1.6	
Cement or firm	63.5	69.1	60.0	59.4	47.4	43.0	
Wood, mosaic or other	8.0	19.4	26.7	33.6	50.5	55.4	
Dwellings with electricity	92.8	97.2	97.1	98.4	99.6	99.5	
Dwellings with sanitary service	81.4	86.6	91.8	93.3	98.4	98.7	
Dwellings with access to tubed water	73.7	83.8	88.4	90.9	98.2	98.3	
Dwellings with access to a sewage system	60.6	75.4	83.9	87.7	98.7	98.8	
Assets							
Posession of refrigerator	54.8	78.7	75.3	85.6	93.1	94.6	
Posession of computer	2.9	5.3	15.3	14.7	30.8	33.5	
Posession of washing machine	34.5	56.7	57.4	66.6	80.0	78.4	
Does not posess television, refrigerator,							
computer nor washing machine	20.4	5.6	8.2	3.1	0.6	0.6	
Households where agricultural and/or forestry							
activities are performed	43.5	41.8	19.0	23.7	2.1	3.0	

Source: 2005 Population Count at the individual, household and locality level.

Figure 13 Some characteristics of Subsistance and Target Returnees, 2005

			Subs	istence	Та	rget	_
	Characteristic		Head	Son or daughter	Head	Son or daughter	All returnees
Total			15,443	9,353	77,027	53,567	238,331
		Total of rural areas	13,031	7,762	10,921	7,383	65,571
In household where agricultural or forestal	Rural: population <2,500	Observations Percent	5,670 43.5	4,635 59.7	2,942 26.9	3,033 41.1	26,931 41.1
activities are performed	Semi-rural: population of 2,500 to 14,999	Total of semirural areas Observations Percent	2,040 642 31.5	1,323 534 40.4	12,239 1,841 15.0	8,378 1,823 21.8	38,774 8,094 20.9
In a traditional migration	on state	Observations Percent	6,025 39.0	3,193 34.1	35,053 45.5	24,415 45.6	104,454 43.8
In a U.S. border state		Observations Percent	247 1.6	150 1.6	21,808 28.3	15,189 28.4	55,227 23.4
Mean age			37	21.7	39.6	18	31.4
		Nuclear Extended family Mixed family	79.4 14.4	59.1 39.4	69.7 13.8	74.1 24.3	66.0 25.6
Type of household (per	Type of household (percent)		0.3 0.6 5.1	0.5 1.0 -	0.8 0.6 13.7	0.9 0.8 -	1.2 0.8 5.2
		Non familiar corresidents Not specified	0.1 0.0	0.0 0.0	1.3 0.1	0.0 0.0	1.0 0.1

Notes: the percentages may not add to 100 due to rounding effects. A subsistence returnee is defined here as a head (or son or daughter) of household in a locality of very high or high marginality. A target returnee is defined here as a head (or son or daughter) of household living in a locality of low or very low margnality.

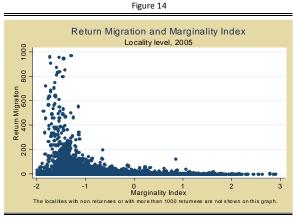
Source: 2005 Population Count

Figure 13 shows some characteristics of the households and returnees that we defined as subsistence and target. Both in rural and semi-rural areas, subsistence returnees are more likely to be in households engaged in agriculture or forestry than target returnees. This pattern is also shown for sons and daughters. Also, a larger proportion of target returnees are in traditional migration states and in border states than subsistence returnees. The target heads are on average older than subsistence heads while target sons (or daughters) are in average younger than subsistence sons. Subsistence heads are more likely to be in nuclear households or in extended family households, and less likely to be living alone than target head of households.

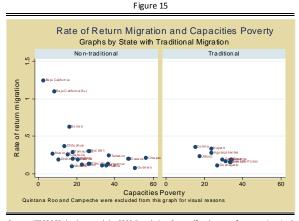
Data show that most of the migrants are not coming from the poorest municipalities. Actually, the degree of marginality and the index of migration intensity show an inverted U relationship. That is, municipalities with greatest and least marginality have lower migration intensity index (UNDP, 2007).

Figure 14 shows a graph of return migration and marginality index in 2005. The localities with zero returnees or with more than 1000 returnees are not shown on this graph for visual reasons. A general finding is that even if return migration is larger in localities with low marginality and in states with low levels of poverty, it is not exclusive to such places. In this sense, we see that return migration follows a similar inverted U pattern with marginality as does out migration itself.

Figure 15 shows the rate of return migration and capacities poverty at the state level, for 2005, differentiating between traditional and non-traditional migration. For visual reasons, Quintana Roo and Campeche (non-traditional migration states) are excluded of this figure. The rate of return migration for Quintana Roo is 5.6 and for Campeche, 1.7. The percentage of population in capacities poverty in Quintana Roo is 16 and in Campeche, 27.3. Regarding the relationship between the rate of return migration and poverty at the state level, we observe a similar pattern to that of marginality. However, states with low levels of capacities poverty differ in their rates of return migration, which can indicate that there are other conditions associated with choosing a place to return to.







Source: ITER2005 database and the 2000 Population Census (for the rate of return migration) and estimations of capacities poverty from CONEVAL. The rate of return migration for Quintana Roo is 5.6 and for Campeche, 1.7. The percentage of population in capacities poverty in Quintana Roo is 16 and in Campeche, 27.3.

There is a further puzzle to solve: there is a strong suggestion that people are not going back to where they came from but to places with better economic opportunities or where they might stay temporarily (specially border cities) because they want to go back to the United States or because they were trying to cross in 2005. In order to estimate indirectly the characteristics of

those that do not return to the state they left from, we will compare the characteristics of those that return to states that have a rate of return above one with those returnees at states with a rate of return below one.

As discussed before, the states that have a rate of return greater than one (see Fig. 2) are Quintana Roo, Campeche, Baja California and Baja California Sur and we will refer to these as having "rate above" and the other 28 states will be referred as having "rate below"<sup>8</sup>. Of the 238,331 returnees, 90.2 percent are in states with a rate below while only 9.8 percent (23,393) are in states with rate above. Returnees living in states with rate above are less likely to be women (61%) than those in states with rate below (66%), their mean age is slightly greater (32.9 years compared to 31.3 years) and are more likely to be better educated since the mean years of schooling is 8.9 years while for those in states with rate below the mean years of schooling is 7.5.

Family relationship of returnees with the head of household presents some differences between states with rate above and below. Returnees in states with rate above are less likely to be head of households (43.5% v.s. 44.5%), more likely to be son or daughter of the head (24.3% v.s. 30.5%) and more likely to have no family relationship with the head (2.6% v.s. 0.8%). Related to these, the types of households are different. In states with rate above, households are less likely to be nuclear (61.2% v.s. 66.6%), less likely to be extended family (22.7% v.s. 25.9%), more likely to be mixed families (2.6% v.s. 1%), more likely to be unipersonal (9.9% v.s. 4.7%) and more likely to be corresident with no family relationship (2.8% v.s. 0.8%) than in states with rate below.

Some possible reasons for these differences are: If a returnee comes back to a different place, then it is probable that that person lives alone and is therefore a head of household now. If this person comes back to the same place he left from, then it is possible that the person went back to a nuclear or extended family (to his family or got married and created a new family or is living with other family members) and be there a son (or daughter) of the head, or be the head. However, the data doesn't allow us to explain this completely.

Figure 5 shows some characteristics of the 25 localities with the largest number of returnees and that concentrate about 25 percent of the returnees (55,608). Recall that these localities where either in metropolitan areas, border states, states with traditional out migration or new tourist areas. We will briefly compare some characteristics of the returnees that live in these 25 localities and those who don't. Returnees in the "top 25" localities have a slightly lower mean age (30.8 v.s. 31.6 years), are less likely to be men (60.2% v.s. 67%) and are likely to be better educated (8.7 v.s. 7.3 mean years of schooling) than those living in other localities. Similarly to those living in states with rate above, returnees in these "top" localities are less likely to be living in nuclear families (62.8% v.s. 67%), almost as likely to be in extended families (25.3% v.s. 25.7%), more likely to be unipersonal households (7.05% v.s. 4.7%), more likely to be corresiding with non-family members (1.9% v.s. 0.7%) and more likely to be in mixed families (2% v.s. 1%) than returnees in the rest of the localities.

<sup>&</sup>lt;sup>8</sup> These labels ("rate above" and "rate below") may be confusing but we thought they were appropriate because of the way we are defining this rate but they just differentiate the states that had greater or lower return migration in 2005 given the level of their out (non-return) migration in 2000.

<sup>&</sup>lt;sup>9</sup> There could be a bias created with emigrated sons that returned to different places where they left from so we could be inflating the return of sons in villages. In order to control for this and for families going back together to different places, these figures should be compared with the information of the ten percent sample of the 2000 Census.

#### CONCLUSIONS

From the exploratory analysis, there is no evidence that the temporary character of Mexican migration to the U.S. is over. The findings of this work suggest the existence of a duality between temporary and permanent migration.

A general finding is that even if return migration is larger in localities with low marginality and in states with low levels of poverty, it is not exclusive to such places. Return migration follows a similar inverted U pattern with marginality as migration itself (UNDP, 2007).

We have showed evidence that support the idea that people don't necessarily come back to the places from where they left. The localities that are more attractive to return to are urban areas with the following characteristics: they are border cities, metropolitan areas, localities in traditional migration states or new tourist areas. This could be explained by the temporary migration of traditional states (like Jalisco and Michoacán), emerging areas of migratory expulsion (like Veracruz) and the emerging areas of attraction in Mexico (like the tourists Quintana Roo and Baja California Sur, and the northern border cities with employment opportunities in the industrial sectors).

The fact that traditional sending states have more circulatory than return migration compared to other regions that have less circulatory migration could be partly because of the stage in the pattern of migration each state is in. For example, the migratory stage of Veracruz (a new important source of migrants) is very different to the case of Jalisco (a state with migratory tradition) or to Quintana Roo (where a city like Cancun has attracted large amount of returnees, as well as internal migrants). In this analysis, we have made the distinction between traditional and non-traditional sending states. However, we should ask ourselves if this distinction makes any sense giving the changing patterns of return migration. The migration intensity index and other information on migration will be updated using information of the 2010 Census (if there is an extended questionnaire in the ten percent sample).

#### **BIBLIOGRAPHY**

Alarcón, Rafael (1992). "Norteñización: Self-Perpetuating Migration from a Mexican Town" in *U.S.-Mexico Relations: Labor Market Interdependence* edited by Jorge Bustamante, Raúl A. Hinojosa and Clark Reynolds. Stanford University Press, pg. 302-318

Black, Richard and Saskia Gent. 2004. Defining, Measuring and Influencing Sustainable Return: The Case of the Balkans. Working Paper T7. Sussex, Development Research Centre on Migration, Globalisation and Poverty.

-----. 2005. "Defining, Measuring and Influencing Sustainable Return," Briefing, 3: 1-4

Berry, John. 2001. "A Psychology of Immigration," Journal of Social Issues, 57(3):615-631

Cassarino, Jean-Pierre. 2004. "Theorising Return Migration: The Conceptual Approach to Return Migrants Revisited," International Journal on Multicultural Societies, 6(2):253-279

Chin, H.C., & Quddus, M.A. (2003). Modeling count data with excess zeroes: an empirical application to traffic accidents. Sociological Methods and Research, 32, 90-111.

- Consejo Nacional de Evaluación de la Política de Desarrollo Social (CONEVAL). 2007. Mapas de pobreza por ingresos 2005 (State and Municipality databases), www.coneval.gob.mx
- Consejo Nacional de Población (CONAPO). 2002. Índice de intensidad migratoria México-Estados Unidos 2000. Mexico, CONAPO
- Consejo Nacional de Población (CONAPO). 2007. *Índice de Marginación a nivel localidad 2005*. Mexico, CONAPO
- Cornelius, Wayne and Jessa Lewis. 2006. *Impacts of Border Enforcement on Mexican Migration. The View from Sending Communities.* United States, Lynne Rienner Publishers
- Fawcett, James. 1985. "Migration Psychology: New Behavioral Models," Population and Environment, 8(1-2):5-14
- Gitter, Seth, Robert Gitter and Douglas Southgate. 2008. "The Impact of Return Migration to Mexico," Estudios Económicos, 23(1):3-23
- Gmelch, George. 1980. "Return migration," Annual Review of Anthropology, 9:135-159
- Hagan, Jacqueline, Karl Eschbach and Nestor Rodríguez. 2008. "U.S. Deportation Policy, Family Separation, and Circular Migration," International Migration Review, 42(1):64-88
- Kandel, William and Douglas Massey (2002). "The Culture of Mexican Migration: A Theoretical and Empirical Analysis," Social Forces, 80(3): 981-1004
- Lambert, D. (1992). Zero-inflated Poisson regression, with an application to defects in manufacturing. Technometrics, 34, 1-14.
- Lindstrom, David. 1996. "Economic Opportunity in Mexico and Return Migration from the United States," Demography, 33(3):357-374
- Massey, Douglas. 2005a. "Backfire at the Border. Why Enforcement Without Legalization Cannot Stop Illegal Immigration," Executive Summary. Center for Trade Policy Studies, Washington D.C., CATO Institute
- -----. 2005b. "Five Myths about Immigration: Common misconceptions Underlying U.S. Border Enforcement Policy." *Immigration Policy in Focus* 4 (6). Washington, D.C. Immigration Policy Center.
- Massey, Douglas and Rene Zenteno. 1999. "The dynamics of mass migration." *Proceedings of the National Academy of Sciences* 96 (8): 5328-5335.
- Reyes, Belinda. 1997. Dynamics of Immigration: Return Migration to Western Mexico. San Francisco, Public Policy Institute of California.
- Reyes, Belinda and Laura Mameesh. 2002. "Why Does Immigrant Trip Duration Vary Across U.S. Destinations?," Social Sciences Quarterly, 83 (2): 580-593

- Riosmena, Fernando and Douglas Massey. 2004. Una comparación de los determinantes de la migración de retorno de latinoamericanos en los Estados Unidos. *Conference paper presented in the First Congress of the Association of Latin American Population (ALAP) in Brazil*
- Roberts, Bryan. 1995. "Socially Expected Durations and the Economic Adjustment of Immigrants" in *The Economic Sociology of Immigration: essays on networks, ethnicity, and entrepreneurship* edited by Alejandro Portes. New York, United States: Rusell Sage Foundation
- Roberts, Bryan, Reanne Frank and Fernando Lozano-Ascencio. 1999. "Transnational migrant communities and Mexican migration to the US," Ethnic and Racial Studies, 22(2):238-266
- Roberts, Bryan and Erin Hamilton. 2007. "La nueva geografía de la emigración: zonas emergentes de atracción y expulsión, continuidad y cambio." Chapter in *El país transnacional: migración mexicana y cambio social a través de la frontera* edited by Marina Ariza and Alejandro Portes. Mexico City, Mexico: The Institute for Social Studies of the National Autonomous University of Mexico (UNAM)
- Sunil, T.S., Viviana Rojas and Don E. Bradley (2007). "United States' international retirement migration: the reasons for retiring to the environs of Lake Chapala, Mexico," Ageing and Society, 27(): 489-510
- United Nations Development Program (UNDP). 2007. *Informe sobre desarrollo humano México 2006-2007. Migración y desarrollo humano*. Mexico, Mundi Prensa-UNDP
- United States. Department of Homeland Security. 2007. *Yearbook of Immigration Statistics: 2006*. Washington, D.C.: U.S. Department of Homeland Security, Office of Immigration Statistics.