Internal Migration in Mexico in the year 2000

Rodrigo Pimienta Lastra[*]
Marta Vera Bolaños[**]
Michael Shea[***]
Elena M. Gutiérrez C. [****]

Abstract:

This study, based on the Census sample of 2000, sought to identify permanent internal migratory flows: people settled in a geographical entity different from that in which they were born. The aim was to establish the volume of migration and the characteristics of the localities (birth and residence) and, at the same time, provide interpretations of these phenomena within some established theoretical frameworks. Methodologically, the principal flows of migration between states of the Republic were established and correlated with the size of the localities to which migrants are attracted. It was found that, the age groups and genders of migrants are reinterpreted, as are their choice of destinations, to give a picture of internal migration different from that suggested in general models, especially those originating in the first world. The role of women in migration in Mexico seems particularly important. A new interpretation of the migration of children is suggested.

Resumen:

Este estudio, basado en la muestra censal del 2000, identifica los flujos migratorios internos permanentes: personas asentadas en un lugar distinto al de su nacimiento. El objetivo es establecer el volumen de la migración y una característica importante de las localidades de origen y destino: su tamaño. Al mismo tiempo se busca interpretar este fenómeno dentro de algunos marcos teóricos establecidos. Metodológicamente, los flujos principales entre los estados de la República fueron establecidos y correlacionados con el tamaño de las localidades a las cuales los migrantes llegaron. Se encontró que, los grupos de edad y géneros de los migrantes junto con sus elecciones de destino fueron reinterpretados para proporcionar una visión de la migración interna diferente de lo que se sugiere en los modelos generales, especialmente los que vienen del primer mundo. El papel de la

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[*] *Profesor Investigador de la Universidad Autónoma Metropolitana: plrd6334@correo.xoc.uam.mx*

[**] *Profesora investigadora de la Universidad Autónoma del Estado de México: vera@alestra.net.mx*

[***] *Profesor Investigador de la Universidad Autónoma Metropolitana: meguca0307@yahoo.com.mx*

[****] *Profesora Investigadora de la Universidad Autónoma Metropolitana: emgcard@correo.xoc.uam.mx*

mujer en la migración en México parece particularmente importante. En adición, se sugiere una nueva interpretación de la migración de los niños.

Key words/ Palabras clave:
Internal migration Mexico, mexican demography, geographical mobility, migration by sex, migration by size of locality / Migración interna en México, demografía mexicana, movilidad geográfica, migración por sexo, migración por tamaño de localidad.

Introduction

At a time when Mexico was witnessing a concentration of population in its cities, several other phenomena were contributing to the transformation of Mexican society. Three factors were changing the dynamics of the country's demography: a considerable increase in the size of the population, a simultaneous acceleration in the speed of this increase and an important degree of geographical mobility.

With regards to the first factor: between 1940 and 2000, Mexico's population increased 4.96 times, going from 19,653,552 to 97,483,412. This increase was accompanied by a change in population density, particularly in certain regions of the country (for example Mexico City and Veracruz but not Sinaloa or Durango) and this resulted in environmental and social pressure in these areas. After the political crisis of the first thirty years of the century, the postrevolutionary political system managed to establish a certain degree of stability which became the basis of the economic growth of the country between 1940 and 1981. If this period of time is divided into intervals which correspond to the taking of censuses, it can be observed that the population grew an average of 1.8% annually. If this had become the median growth rate, the population would have doubled in 38.3 years. However, an acceleration began in the following two decades which presented annual growth rates of 2.89% and 3.3% respectively. If maintained, the first would have doubled the population in 24 years and the second in 21 years. In fact, the highest rate (3.4%) was reached between 1970 and 1980. This would have doubled the population in only 20.3 years.

In 1982 the economic growth which had characterized the country since the Second World War stalled. The population, however, did not stop growing although it did slow

down a little. The median annual growth rate between 1980 and 1990 fell to 2.16% which meant that the population grew more slowly: it would have taken 32 years to double. Between 1990 and 2000 it continued to slow down, falling to an annual rate of 1.83%, which would have led to its doubling in 37.8 years. Nevertheless, although the rate of growth was falling, a factor known as demographic inertia was in operation: there was, at this period, a relatively high concentration of women of child-bearing age and this resulted in a continuous growth of population.

The third factor mentioned above was geographical mobility. This can alter the rhythm of growth of a population within a geographical area. Changes in the spatial distribution of Mexico's population have taken place through a constant increase in internal migration. While in 1940 10.6% (2,081,000 people) of the population had emigrated from their birth state to live elsewhere, between 1960 and 1990 the number had passed from 12.5% (4,365,000 people) to 17.2% (13 976 000 people). By the year 2000 it had reached 19.2% (18.752 million people).This figure remains practically the same in relative terms in the year 2010 at 19.3% (21.722 million migrants). This means that approximately 1 in 5 Mexicans live in a state of the federation different from the one they were born in.

During the 1970s important population movements took place which were linked to the growth of the cities, the job market and the increase in the infrastructure of communication. In these years 4 great metropolitan zones were the demographic poles of attraction: Mexico City, Guadalajara, Monterrey and Puebla. This tendency has been evident throughout the recent history of Mexico. In 1940 only 20% of the population lived in places with 15,000 or more inhabitants. The increase in this percentage was continuous throughout the last century: by 1960 the proportion was 36.6%, by 1970 44.9%, by 1990 57.4% and by 2000 61% (the authors' estimations based on data from INEGI, 1992, 2002).

The pattern of human settlement became polarized in such a way that a large number of places held a smaller number of people while some zones concentrated a very large population. Perhaps it would be a good idea to clarify this point. It happened that, from one census to the next, places with larger populations (100,000 or more inhabitants)

increased in number, while places with less than 100,000 inhabitants became more common without the number of their inhabitants having increased. Their populations may, in fact, have fallen.

If we take into account the above, in the year 1980 there were 125,000 localities with fewer than 15,000 inhabitants and these made up 46.8% of the population of the country (32,242,146 people). At the same time, there were 300 places with 15,000 or more inhabitants and these accounted for 53.2% of the population (36,604,687 people). These proportions had changed by the year 2000 when, although the number of districts with fewer than 15,000 inhabitants increased to 198,856, the percentage of people living in them fell to 39.1% (38,064,204). On the other hand, those districts having 15,000 or more inhabitants not only increased their number to 513 but also increased their share of the population of the country to 60.9% (38,064,204 people) (INEGI, 1984, 2002).

A problem which has been emerging since the middle of the last century and is now accelerating is the territorial distribution of the migrating groups. The aim of this article is to analyze the directions of the permanent flows of internal migration in Mexico, using data obtained during the General Census of Population and Dwellings (2000) carried out by the Institute National of Estadística, Geografía and Informatica (INEGI). These movements may be analyzed from several theoretical points of view. There are the classical analysts such as Ravenstein (1885) and Fairchild (1930). There are the analysts from middle of the last century such as Petersen (1958), Germani (1968), Lee (1966), Todaro (1969) y Muñoz y Oliveira (1982). Finally, there are such contemporary authors as Simmons (1991) y Lacomba (2001).

If a theoretical framework for the present study were to be sought, it might be found in the work of Ravenstein who mentions that most migrants (and especially women) move only a short distance from their place of origin. This is the case of Mexico State and the Federal District. When they travel a long distance, it is to some great commercial or industrial center. This is the case of Baja California. However, parameters and data change

over time. For example, more women than men now migrate and they do not restrict themselves to short distances.

Other interpretations are possible. An author such as Germani emphasizes the importance of ease of communication between place of origin and place of migration in his analysis of expulsion and attraction. The economic interpretation of the neoclassic writers, on the other hand, emphasizes the importance of the supply and demand of labour when explaining geographical differences.

This study, based on the Census sample of 2000, sought to identify permanent internal migratory flows: people settled in a geographical entity different from that in which they were born. The aim was to establish the volume of migration and the characteristics of the localities and, at the same time, provide interpretations of these phenomena within some established theoretical frameworks.

Materials and Methods

In the year 2000, between the 7th and 18th of February, the INEGI carried out the XIIth General Census of Population and Dwellings, fixing the official date as the 14th. At the same time, an investigation was carried out by means of a questionnaire added on to the census form. This was applied to a sample of 2.2 million dwellings. The aim was to collect more information about some sociodemographic variables which would not have been possible in the census alone. The variables were to be examined both at municipal level and in localities of 50,000 or more citizens.
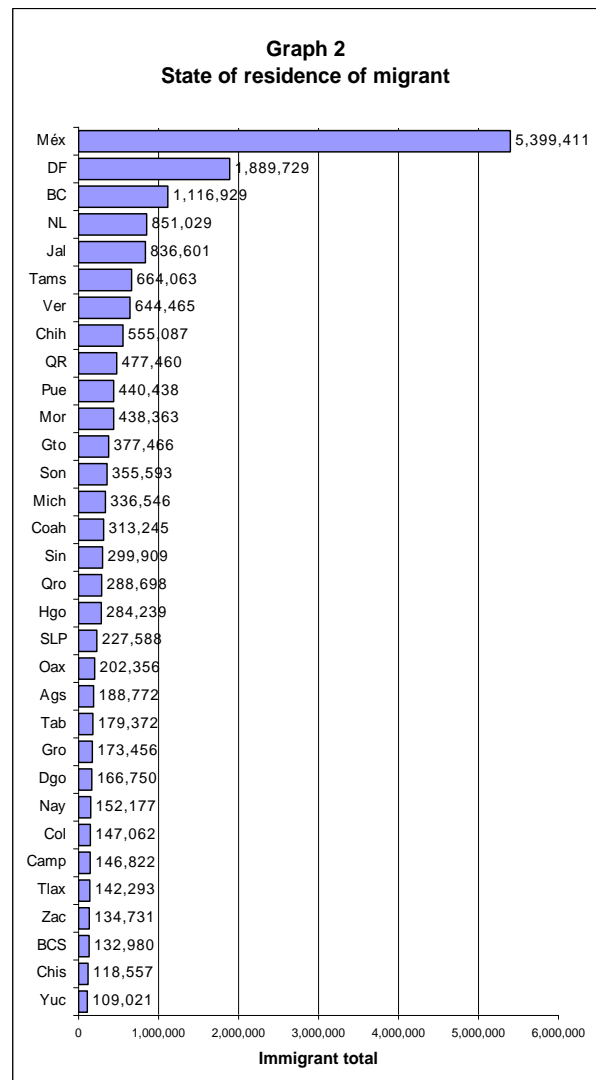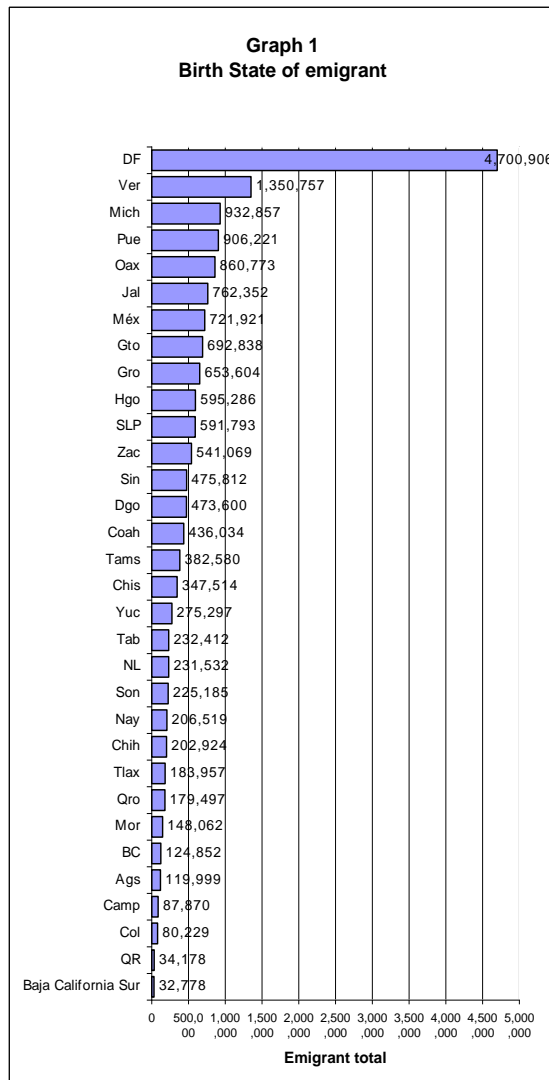
Two registers on the census were used: that of homes and dwellings and that of personal characteristics. These were unified using mathematical techniques that related the socioeconomic characteristics of each individual with the socioeconomic characteristics of his dwelling. In addition, taking this file as a starting point, another file was constructed with which emigrants from each state of the republic were traced to their destinations with the aim of obtaining estimation of their number, age and sex.

Two of the most important variables in migration processes are age and sex because they have a direct impact both on those regions which act as magnets and those which emigrants tend to ignore. They affect not only the structure of the populations but also a number of other important factors such as the demand for certain kinds of services. Age distribution confronts both donating and receiving societies with problems which vary with the age of the migrating individuals. Examples are the demand for food, living accommodation, education, health and jobs. To sum up, the most diverse phenomena vary with age: economic, social, cultural, physiological and psychological factors (c.f. Bourgeois-Pichat, 1976).

Results

1. Analysis of the migratory flows between the states of the republic

With the aim of identifying the states which provide most interstate emigrants and those states which receive them, both the place of birth of the emigrant and place of residence of the immigrant were identified (see Graphs 1 and 2). In the year 2000, the Federal District (Mexico City) accounted for 26.4% (4.7 million people) emigrants, followed by Veracruz with 7.6% (1.3 million). Both may be considered zones of very high emigration.

Graph 1
Birth State of emigrant

State	Emigrant total
DF	4,700,906
Ver	1,350,757
Mich	932,857
Pue	906,221
Oax	860,773
Jal	762,352
Méx	721,921
Gto	692,838
Gro	653,604
Hgo	595,286
SLP	591,793
Zac	541,069
Sin	475,812
Dgo	473,600
Coah	436,034
Tams	382,580
Chis	347,514
Yuc	275,297
Tab	232,412
NL	231,532
Son	225,185
Nay	206,519
Chih	202,924
Tlax	183,957
Qro	179,497
Mor	148,062
BC	124,852
Ags	119,999
Camp	87,870
Col	80,229
QR	34,178
Baja California Sur	32,778

Emigrant total

Graph 2
State of residence of migrant

State	Immigrant total
Méx	5,399,411
DF	1,889,729
BC	1,116,929
NL	851,029
Jal	836,601
Tams	664,063
Ver	644,465
Chih	555,087
QR	477,460
Pue	440,438
Mor	438,363
Gto	377,466
Son	355,593
Mich	336,546
Coah	313,245
Sin	299,909
Qro	288,698
Hgo	284,239
SLP	227,588
Oax	202,356
Ags	188,772
Tab	179,372
Gro	173,456
Dgo	166,750
Nay	152,177
Col	147,062
Camp	146,822
Tlax	142,293
Zac	134,731
BCS	132,980
Chis	118,557
Yuc	109,021

Immigrant total

Source: Authors' own calculation based on date from the census sample of the XIIth General Census of Population and Dwellings.

The other states fall into four clearly defined groups. a) Those of high emigration: Michoacán (5.2%), Puebla (5%) and Oaxaca (4.8%) with a total of 2 699 851 people (15.2% of this population). b) Those of moderately high emigration: Jalisco (4.3%), Mexico State (4.1%), Guanajuato (3.9%), Guerrero (3.7%), Hidalgo (3.4%), San Luis Potosi (3.3%) and Zacatecas (3%) with a total of 4 558 863 people (25.6% of this population). c) Those of moderate emigration: Sinaloa (2.7%), Durango (2.7%), Coahuila (2.5%), Tamaulipas (2.2%) and Chiapas (2%) with a total of 2 115 540 people (11.9%). d) Those of low emigration: all the rest with a total of 2 365 291 people (13.3%).

The states where these citizens find their new homes may be divided into three groups. a) Those of very high immigration: Mexico State (30.4% or 5 399 411 people), Mexico City (10.7% or 1 889 729 people) and Baja California (6.3% or 1,116,929 people). b) Those of high immigration: Nuevo León (4.8%), Jalisco (4.7%), Tamaulipas (3.7%), Veracruz (3.6%), and Chihuahua (3.1%) with a total of 20% (3 551 245 people). c) Those of low immigration: all the rest with an average of 32.8% of immigrants (5,883,894 people).

From all of the above, it is clear that three administrative entities receive most immigrants: Mexico State, which absorbs population mainly from Mexico City, (60.7% or 3,278,641 people), Puebla (5.7% or 305,303 people) and Hidalgo (5.1% or 272,230). The second is Mexico City which receives population from Mexico State (17% or 321,319 people), Puebla (11.8% or 223,416 people) and Oaxaca (10% or 188,991 people). The third is Baja California which attracts population from Sinaloa (16% or 185,235 people), Jalisco (13.1% or 146,437 people) and Sonora (9.8% or 109,349 people). Baja California also receives immigrants en route to the United States.

2. Migratory flows according to the size of locality

The flow of migrants by the size of their place of birth was analysed. Localities were divided into those with more and those with fewer than 15,000 inhabitants. Population arriving from Guatemala, the United States and other unspecified countries was also taken into account.

Table 1 shows that, of the people (18,752,687) who left their place of birth to reside in other parts of the republic, 5.1% (961,479 people) were of unspecified origin or had come from abroad. Of this 5.1%, 3.3% (617,793 people) chose to live in places with 15,000 or more inhabitants and only 1.8% (343,686 people) in places with fewer than 15,000 inhabitants. In the case of internal migrants (17,791,208 people) the difference is even more dramatic. 83.1% (14,780,168) took up residence in places with 15,000 or more inhabitants

while only 16.9% (3,011,040) chose those with fewer than 15,000. Larger places are evidently more attractive.

Migrants from the places of very high or high emigration, mentioned earlier, also preferred destinations with larger populations. 89.3% (4,196,009) of those from Mexico City chose entities with 15,000 or more inhabitants, only 10.7% (504,897) chose the smaller places. Of those who emigrated from Veracruz, 83.3% (1,125,496) chose localities of 15,000 or more as their destination and only 16.7% chose smaller places. This pattern is repeated in places of high migration such as Michoacán with 82.1% (766,043 people), Puebla 83.4% (755,912) and Oaxaca 82.1% (706,322) with migrants choosing localities of more than 15,000 people. It is repeated again in the localities identified as of moderately high, moderate and low emigration. From 70% to 85.5% of emigrants from these places chose the larger destinations.

Table 1. Flows of migrants by size of locality at state level

Place of Birth	Emigrants from the state to localities of:			Place of Residence	Immigrants to the state to localities of:		
	15000 or More inhabitants	Fewer than 15000	Total		15000 or More inhabitants	Fewer than 15000	Total
Aguascalientes	89643	30356	119999	Aguascalientes	163891	24881	188772
Baja California	91835	33017	124852	Baja California	940564	176365	1116929
Baja California Sur	26441	6337	32778	Baja California Sur	96545	36435	132980
Campeche	71446	16424	87870	Campeche	83292	63530	146822
Coahuila	372605	63429	436034	Coahuila	284703	28542	313245
Colima	56139	24090	80229	Colima	110550	36512	147062
Chiapas	259908	87606	347514	Chiapas	79816	38741	118557
Chihuahua	153238	49686	202924	Chihuahua	503009	52078	555087
Distrito Federal	4196009	504897	4700906	Distrito Federal	1872690	17039	1889729
Durango	389689	83911	473600	Durango	105577	61173	166750
Guanajuato	587625	105213	692838	Guanajuato	298668	78798	377466
Guerrero	493754	159850	653604	Guerrero	109919	63537	173456
Hidalgo	500582	94704	595286	Hidalgo	130770	153469	284239
Jalisco	587116	175236	762352	Jalisco	685012	151589	836601
México	568058	153863	721921	México	5003890	395521	5399411
Michoacán	766043	166814	932857	Michoacán	215084	121462	336546
Morelos	114435	33627	148062	Morelos	309789	128574	438363
Nayarit	168764	37755	206519	Nayarit	65923	86254	152177
Nuevo León	192343	39189	231532	Nuevo León	787384	63645	851029
Oaxaca	706322	154451	860773	Oaxaca	93052	109304	202356
Puebla	755912	150309	906221	Puebla	314754	125684	440438
Queretaro	132397	47100	179497	Queretaro	238393	50305	288698
Quintana Roo	24272	9906	34178	Quintana Roo	394310	83150	477460
San Luis Potosí	500490	91303	591793	San Luis Potosí	158343	69245	227588
Sinaloa	396856	78956	475812	Sinaloa	166690	133219	299909
Sonora	168481	56704	225185	Sonora	277800	77793	355593
Tabasco	172196	60216	232412	Tabasco	111200	68172	179372
Tamaulipas	286891	95689	382580	Tamaulipas	568919	95144	664063
Tlaxcala	157165	26792	183957	Tlaxcala	72851	69442	142293
Veracruz	1125496	225261	1350757	Veracruz	382997	261468	644465
Yucatán	218045	57252	275297	Yucatán	96082	12939	109021
Zacatecas	449972	91097	541069	Zacatecas	57701	77030	134731
Total internal mig.	14780168	3011040	17791208	**Total**	14780168	3011040	17791208
Guatemala	6866	22290	29156				
USA	247660	110739	358399				
Otro País	118375	13777	132152				
No especificado	244892	196880	441772				
Total	15397961	3354726	18752687				

Source: Authors' own calculations based on the census sample of the XIIth General Census of Population and Dwellings.

N.B. The census total of internal migrants is 17 220 424 which is an overestimation of the sample of approximately 3.3%.

On arriving at their new place of residence in the states with very high immigration the newcomers choose to live in localities with higher populations: 92.7% (5,003,890 people) of those from Mexico State, 99.1% (1,872,690 people) of those form Mexico City and 84.2% (940,564 people) from Baja California did so. The proportions were similar in the states with high migration: Nuevo León (92.5%), Jalisco (81.9%), Tamaulipas (81.7%) and Chihuahua (90.6%). However, of those from Veracruz, also in this category, only

59.4% (382,997 people) settled in communities with higher populations, 40.6% (261,468 people) chose those with fewer than 15,000 inhabitants.

It is perhaps important to point out that, among the states of low immigration, the inhabitants of Hidalgo (54%), Oaxaca (54%), Nayarit (56.7%) and Zacatecas (57.2%) prefer to settle in the smaller communities.

When the net balance of migration is calculated, taking into account the size of the locality and the total net balance of migration (see Tables 2 and 3) it can be noted that two different groups have been formed: one has a positive total net balance and the other has a negative total net balance. The states in the first group include Tamaulipas, Jalisco and Aguascalientes. Their net balance of migrants in places of less than 15,000 inhabitants is negative but it is positive in those of more than 15,000. The second group includes Tlaxcala, Tabasco and Nayarit. Here the situation is reversed with a positive balance for the smaller localities and a negative one for the larger ones.

The first group – that with a positive net balance – can be divided into four categories.[1]

a)   Mexico State is a place of very high attraction. It has the largest net positive balance (4,677,490). In fact, both the larger and the smaller administrative units show positive balances. However, the larger places received 4,435,832 people which is eighteen times the number received by places with fewer than 15,000 inhabitants (241,658 people).
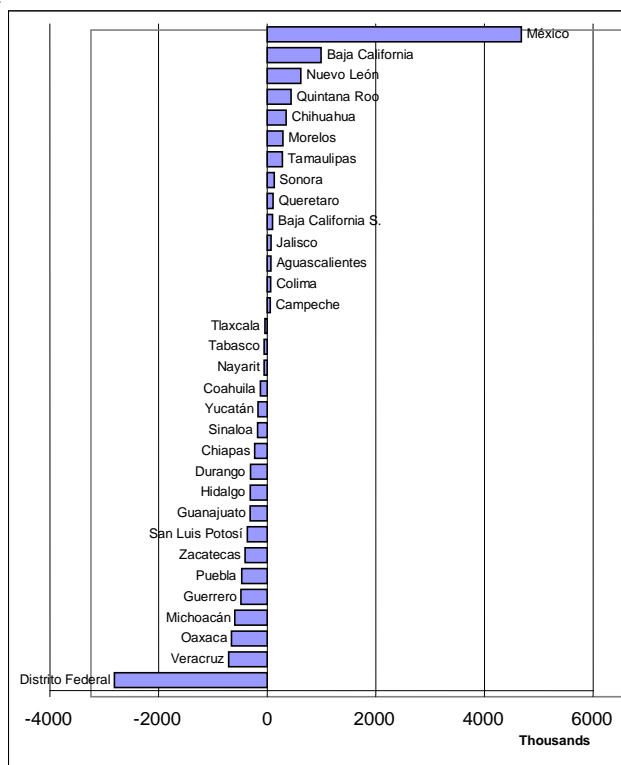
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[1] *Using the same multivariate statistical method (cluster analysis) the following categories can be identified): 1) very highly attractive (Mexico-State); highly attractive (Baja California & Nuevo León); moderately attractive (Q. Roo, Chihuahua, Morelos and Tamaulipas); low attraction (Sonora, Querétaro, Baja California Sur, Jalisco, Aguascalientes, Colima and Campeche). 2) Very highly expulsive (Mexico City); highly expulsive (Veracruz, Oaxaca and Michoacán); moderately expulsive (Guerrero, Puebla, Zacatecas, San Luis Potosí, Guanajuato, Hidalgo and Durango). Low expulsion: Chiapas, Sinaloa, Yucatán, Coahuila, Nayarit, Tabasco, Tlaxcala.*

b)	Highly attractive were two administrative entities in the north of the country: Baja California and Nuevo León. Their net migratory balances were 992,077 and 619,497 respectively. These states also present positive balances in both the larger and smaller localities. Nevertheless, the difference between the two is striking: the larger localities received 6 times as many as the smaller ones in Baja California and 24 times as many Nuevo León.

c)	In the case of the states which were moderately attractive, Quintana Roo, Chihuahua and Morelos, the imbalance between migrations to the larger and the smaller localities was 5, 10 and 2 times respectively. The situation of Tamaulipas is different. The migration to the larger localities has a positive net balance (282,028 people) while the smaller communities have a negative net balance (-545 people).

d)	Among the states of low attraction, there are considerable differences in the way the larger and smaller localities are affected by migration. In Sonora, the larger entities are formed by 5.2 times as many people as the smaller. In Querétaro, the proportion is 33.1 times, in Colima 4.4 times and in Baja California Sur only 2.4 times. Both Jalisco (-23,647 people) and Aguascalientes (-5,475 people) show a large loss of population in the smaller localities. In Campeche, on the other hand this situation is reversed: 4 times as many people prefer the smaller localities to the larger ones.

Table 2. Net balance of migration by size of locality

Graph 3. Net balance migration in the total population

State	Net balance migration on localities of:		
	15000 or More inhabitants	Fewer than 15000	Total
Distrito Federal	-2323319	-487858	-2811177
Veracruz	-742499	36207	-706292
Oaxaca	-613270	-45147	-658417
Michoacán	-550959	-45352	-596311
Guerrero	-383835	-96313	-480148
Puebla	-441158	-24625	-465783
Zacatecas	-392271	-14067	-406338
San Luis Potosí	-342147	-22058	-364205
Guanajuato	-288957	-26415	-315372
Hidalgo	-369812	58765	-311047
Durango	-284112	-22738	-306850
Chiapas	-180092	-48865	-228957
Sinaloa	-230166	54263	-175903
Yucatán	-121963	-44313	-166276
Coahuila	-87902	-34887	-122789
Nayarit	-102841	48499	-54342
Tabasco	-60996	7956	-53040
Tlaxcala	-84314	42650	-41664
Campeche	11846	47106	58952
Colima	54411	12422	66833
Aguascalientes	74248	-5475	68773
Jalisco	97896	-23647	74249
Baja California S.	70104	30098	100202
Queretaro	105996	3205	109201
Sonora	109319	21089	130408
Tamaulipas	282028	-545	281483
Morelos	195354	94947	290301
Chihuahua	349771	2392	352163
Quintana Roo	370038	73244	443282
Nuevo León	595041	24456	619497
Baja California	848729	143348	992077
México	4435832	241658	4677490

Source: Authors' own calculation based on date from the census sample of the XIIth General Census of Population and Dwellings.

The second group consists of those states with a negative net migratory balance. Mexico City may be categorised as very highly expulsive (-2,811,177 people). Both larger and smaller entities have net negative balances. This is followed by those categorised as highly expulsive - Veracruz, Oaxaca and Michoacán –although the first of these shows positive net balance in the smaller localities.

In the states characterized as moderately expulsive –Guerrero, Puebla, Zacatecas, San Luis Potosí, Guanajuato and Durango- migrants prefer the larger localities by wide margin: 4, 18, 28, 15, 11 and 12 times more respectively. Only in Hidalgo do migrants

prefer the smaller places. Moreover, the larger localities, not only show a negative balance but this balance is one of the largest (-369,812 people).

Within the group of states characterised as of low expulsion, two kinds of relationship between the two sizes of locality may be distinguished. In the first group, the net balances are negative in both the larger and the smaller localities. This is the case in Chiapas, Yucatan and Coahuila where the larger localities are three times more favoured: 3.7, 2.8 and 2.5 times respectively. In the second group, the larger localities have a negative balance and the smaller ones a positive balance. This is the case of Sinaloa, Nayarit, Tabasco and Tlaxcala which can almost be considered as places in equilibrium, because, although their net balances are negative, they are smallest in the whole Republic.

Structure of migrant population by age and sex

Most of this population is of working age. In the year 2000 the proportion of internal migrants between the ages of 15 and 54 was 68.3% (see Graph 4). Their average age was 32.9 years for males and 33.7 years for females. In the case of the larger localities the average ages were 34 for men and 35 for women. In the smaller localities these averages were considerable lower: 30.6 for men and 30.2 for women. This last case is the only one in which the average age of males is (slightly) higher than that of the females. In general, the men are younger. However, although the average age of migrant men and women shows little difference, the difference between them and the non-migratory population is considerable: males average 25.7 years and females 26.6 years.

The age structure of a population is affected by migration. A population ages if the young people leave, because proportionally more older people will remain. On the other hand, the opposite will happen if the population receives or can retain younger people. The median age has been used to find a value which lies at the centre of the distribution of the age data.

In the year 2000 the median age of internal migrants to places of more than 15,000 inhabitants was 32 for both sexes. On the other hand, it was 27 for both sexes when migrants to smaller localities are considered. In all cases it is a positive asymmetric distribution which is the same as that for the population of the country as a whole where the median age for males is 22 and for females 23.[2] The form of the curves can be clearly appreciated in graphs 5 and 6. Note that the graphs permit a comparison of the age distribution in the kinds of locality.

Graph 4. Pyramid of age groups of the migrant population of Mexico
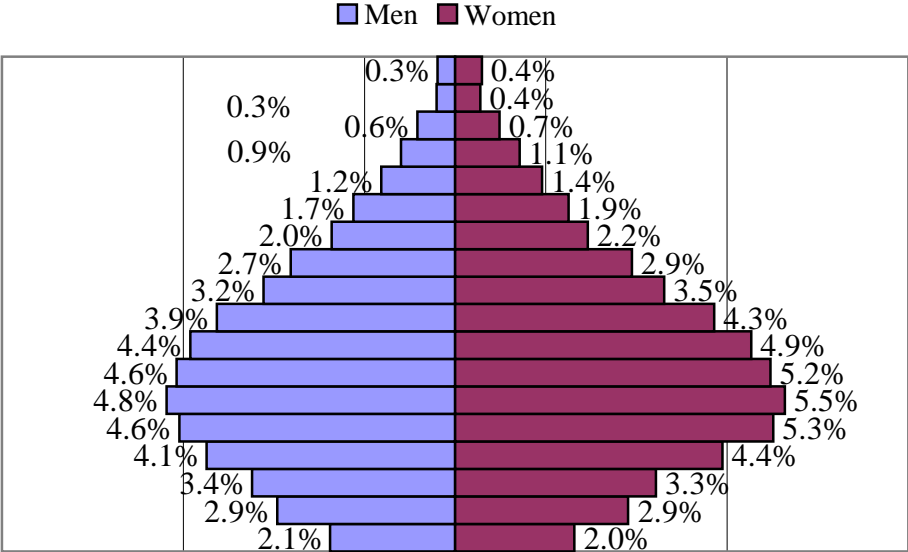
Source: Authors' own calculations based on data from the census sample of the XII
General Census of Population and Dwellings

The tendencies are well defined and confirm the idea of selection by gender overlooked in more traditional analyses. There are more women than men in almost all the age groups.
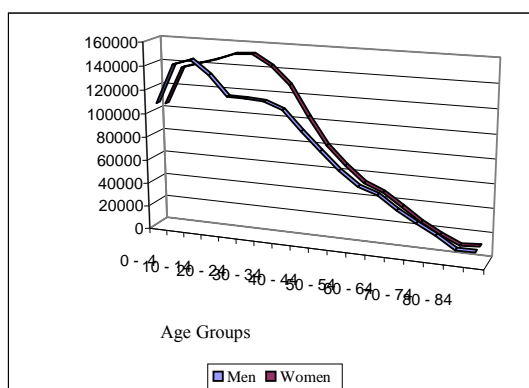
[2] *In calculating the median age, those who did not specify their age have not been included*

Taking the internal migrants as a whole, 47.9% were males and 52.1% were females (see Graph 7). Only among those under 15 was the ratio of males/females greater than 100. Among those between the ages of 15 and 54, for every 90 males who migrate there were 100 females. This is the ratio for migrants to the larger populations. For migrants to populations of fewer than 15,000 the balance is weighted even more towards women: for every 100 women there are only 87 men.

Graph 5. Total number of migrants by group in localities of 15,000 or more inhabitants
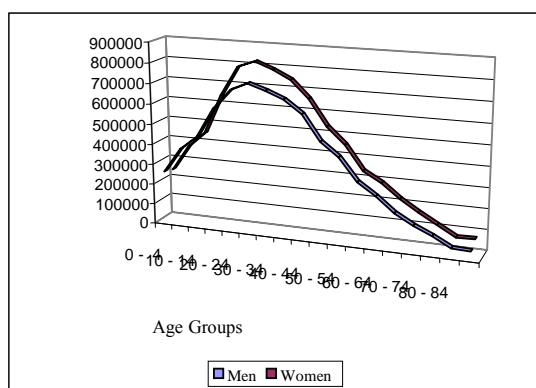
Graph 6. Total number of migrants by group in localities of fewer than 15,000 inhabitants

Source: Authors own calculation based on date from the census sample of the XIIth General Census of Population and Dwellings

Graph 7. Percentage of the population of Mexico who are internal migrants by sex

It can also be observed that the pattern of migration by size of locality, in the youngest age groups, does not correspond to that observed in the studies carried out by first world researchers (and which they have tried to make general). The generally accepted model of migrant behaviour according to age group may be taken to be that established by Rogers (1978) and used by Pimienta (2002):

> The regularities observed in the pattern of migration are not surprising: young adults show the highest rates of migration because they are less attached to their communities. Their children are, normally, not at school. They are not usually proprietors but rather they rent the place where they live and losing seniority in their workplace is not yet an important factor in their lives. Given that children migrate as part of the family unit, their pattern of migration is the same as that of their parents. Consequently given that very small children have younger parents, their geographical mobility is greater than that of adolescents. Finally, the small peak in the age profile between 62 and 65 years represents migration after retirement.

This implies that the migration of small children would be higher in the earlier than in the later years of childhood. However, such a pattern is not reflected in the present data. In both the larger and the smaller destinations the curve grows from left to right, just the opposite of what the above quotation would predict.

Possible interpretations which may be given to this situation (which is most obvious in localities with 15,000 or more inhabitants) are the following: first, that this represents permanent migration, were the children migrate with the whole family during the first years of life; second, one or both parents migrate without small children as a family survival strategy leaving the care of the children to one of the parents, the grandparents or some other relative or friend; third, some children in the last stage of childhood (perhaps 12 years or more) may migrate by themselves with the aim of helping their parents to support the family economically (Pimienta 2010, Becerra 2007, Pimienta 2001).The highest point of the curve of migrants of both sexes to localities of 15,000 or more occurs between the ages of 25 and 29; afterwards, it descends gently because the large number of migrants of both sexes in movement continues until the 40-44 year age group.

In the smaller localities, the curve of migration is different from that just described. Both the general tendency and actual level of migration differs depending on the gender of the migrant in those of less than 54.

In the early years of life, from the 0-4 age group to the 10-14 age group, more males than females migrate. Moreover, the proportion of both sexes is greater than that of the same age groups seen in the larger localities. It is probable that these small children migrate with their mothers. It seems possible that these women migrate without their husband or partner given the difference in the level of migration between the two sexes: women outnumber men by a wide margin in the age range of 15 to 49 years.

The curve which refers to women increases to reach its highest point in the 25-29 age group. The difference between this and the curve for the men- which reaches its highest point in the 10-14 age group- could hardly be more marked. From this age group, the number of migrating males decreases slowly until the 20-24 year age group is reached when there is a levelling off to form a plateau which continues to the 35-39 age group. Afterwards the curve descends continuously through the age groups to meet that of the women after the age of 50.

The shape of the curve for adults at the age of retirement does not reflect Rogers' general pattern either; there is no slight peak between the ages of 62 and 65.

Discussion

The analysis of migration, like most social phenomena, can be carried out from various points of view. This study has a quantitative perspective and also seeks to clarify factors such as age group gender and size of locality.

It may be interesting to examine here some specific cases. Mexico City and Veracruz have the largest number of emigrants, followed by Michoacán, Puebla and Oaxaca. Zones which act as magnets for immigrants are Mexico State, Mexico City and Baja California. The appearance of the capital in both lists needs to be explained. An intense exchange of migrants exists between Mexico City and its large neighbour Mexico State. This is not only because of geography but also because of the great economic importance of both. In addition a large number of the administrative districts of Mexico State are effectively integrated into the metropolis which is Mexico City. If the information about migration from these states is crossed with the information from the National Council for the evaluation of social policy (CONEVAL), Baja California and the Federal District show little social underdevelopment while Mexico State is almost on the same level. These are factors of attraction for migrants which may be decisive in explaining this phenomenon (CONEVAL, 2001). To this, it would be to necessary to add that the Federal District and Mexico State are the two most important centres of manufacturing industry in the Republic,

producing 17.28% and 15.42% respectively of the national production at prices of the year 2000.

Baja California is a state with low emigration and high immigration. This may seem paradoxical because it´s industrial production is very modest and it occupies ninth place among the states of the Republic in its contribution to the National GNP with a participation of only 3.99%. However, two factors make Baja California attractive: first its frontier with the USA which makes it a staging post on the route to the north and all that this implies; second, the industry of "maquila" has a great demand for labour.

At the other extreme from these states are those which attract fewer migrants and have less emigration such as Chiapas and Yucatan in the first case and Quintana Roo and Baja California Sur in the second. Indexes of underdevelopment go from very high, in the case of Chiapas, to medium in Yucatan and Quintana Roo and low in Baja California. These states contribute less than 1% of GNP, although Quintana Roo has a modest participation in the restaurant and hotel sector where it occupies eighth position with 3.51%. These states hold little attraction for internal migrants.

Having said all this, perhaps it would be wise to qualify the information. Chiapas, Yucatan and Quintana Roo form part of what has been called "the south-east region" to which Campeche, Guerrero, Oaxaca, Puebla, Tabasco and Veracruz should be added. These states have a very interesting exchange of internal migrants both between themselves and within the region generally (Pimienta, 2006: 409-435). There is also the case of Quintana Roo, a state which attracts migrants but only 2.7% which puts the state in ninth place.

Taking the country as a whole, it can be seen that, in the year 2000, 1 in 5 Mexicans lived in a state different from that in which he/she was born. Of these, slightly more than half (52.1%) were women. This divergence is maintained throughout the migrants' working years: of those aged between 15 and 54, 36% were women compared to 32.3% men. It thus becomes necessary to examine more closely the structure of the migrant population. In Graph 4, the unequal percentages of the two sexes in each quinquennial age group may be

appreciated. Males outnumber females only in children under 14. From 15 years onwards the relationship changes: in the remaining age groups there are always more women than men. Who are the migrants? Perhaps the structure of the migrant population might offer us some clues. It can be seen that the base of the pyramid of migrants is very narrow and it widens as age increases. It is possible that those who are migrating are unmarried or young couples without children. They may be parents migrating singly or with their partner but without their children. That is, they have taken this course as a strategy to ensure the survival of the family.

Using this information as a basis, it can be established that the greatest flow of migration takes place during the years from 15 to 54: the working years. It reaches its highest point in the 25-29 age group, without losing sight of the importance of those between the ages of 10 and 14. One possible interpretation of this last group is that they are migrating because their home background can no longer support them.

It is possible that these results may be revealing a change in the demographic variables: migration seems to offer particular difficulties in identifying and interpreting the patterns suggested by general models. A case in point is that of Andrei Rogers (1978: 146-147) which some have tried to apply generally. However, it does not seem to explain adequately the internal migration in Mexico.

Finally the recent appearance of the data of the XIIIth General Census of population of dwellings together with the census sample of the same year, which the authors are beginning to analyze, offers the possibility of establishing recent changes and tendencies in the patterns of behaviour of internal migrants. Among the data already analyzed are the following phenomena. The number of people at present living in a state different from that of their birth increased by only 0.1%. That is, the figure remains stable at 19.3%, although in absolute terms the number increased by 2,969,975. The Federal District and Veracruz remain states with high emigration (increases of 14.1% and 22.2% respectively). The Federal District and Mexico State remain states which are highly attractive (increases of 5.6% and 6.1%). In the same way Quintana Roo and Baja California Sur have relatively

little emigration while Chiapas and Yucatan have relatively little immigration. Migratory movements by size of locality present the following tendencies: 1) localities of 15 000 habitants or more show an increase of 13.2%; 2) those of fewer than 15 000 habitants show an increase of 33.6%; 3) the migratory profiles by size of locality present important changes from those in the census of 2000,.

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