Migration Watch Mexico

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Contents

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Editorial

The recent global crisis had clearly different impacts on migration and remittances. Among the zones most affected are the U.S. corridor—where Mexican immigrants are the majority among the Hispanic groups—in addition to the European continent, which receives immigrants from Africa, Asia and Latin America. The migrants least affected are those residing in Asia, since that region was able to maintain high growth levels.

In the case of Mexico, the impact of remittances has been significant. The levels observed are similar to those slightly more than four years ago, due to the high concentration of Mexican immigrants in the construction sector in the U.S. All things considered, as we have commented in previous issues of Migration Watch Mexico, the flexibility of the labor market has allowed partially compensating the loss of jobs in those sectors due to regional and sectorial migration, mainly in services. But it is necessary to recognize that in the U.S. we have observed a greater unemployment rate among migrants than among nationals.

However, we don't believe that this recent crisis implies a stagnation or a drastic change in the migratory dynamics of Mexicans toward the U.S. Not only has there not been a massive return of migrants as some pointed out at the beginning of the crisis, but the fundamental economic elements that motivate some workers to migrate continue: among these is the broad income spread, employment, poverty and population pyramids. In addition to these factors of attraction and expulsion of migratory flows, in this edition we have also analyzed an additional factor that has attracted the attention of numerous academics: the impact of climate change on migration. Although there is evidence in the sense of this having become an additional factor that explains migration, the situation in Mexico is not as dramatic as what is occurring in other parts of the world such as some regions of Africa and Asia.

Another topic for analysis that we include in this edition corresponds to the role played by social networks in migration, which among many other aspects reduces costs of information and transaction. For example, these networks allow sharing experiences, mitigating risks and locating employment opportunities. We conducted a review in economic literature of those aspects and also various exercises to prove the impact of the use of social networks on migrants' income. The results are solid; there is a clear connection.

Finally, we should mention that this year will be important for migration. The recent anti-immigrant law approved in Arizona will again vigorously place on the table the need for a better understanding of migration and of the mutual benefits for both the countries of origin and of destination. This opens, with great intensity, the need of a migratory agreement with the United States.

In November of this year, Mexico will be the venue of the Global Forum on Migration and Development, where reflections will be shared on the migratory situation, both government experiences as well as those of the civil society, which will allow a better design of public policies and the effort of the community in favor of migrants.

The Global Crisis and Its Effects on Migration and Remittances in Mexico

The recent international crisis has been profound and extensive. In view of this environment, there have been significant differential effects in the migratory flows and in the amounts of remittances that migrants send to their countries of origin. In this article, we will analyze in detail the impacts that have been registered in Mexico.

With the aim of identifying what has occurred in our country in the first two sections, the evolution of migration and the remittances in the different regions in the world are reviewed, with an emphasis on the Latin American case. Finally, we offer some perspectives toward the future.

Global migratory flows have not stopped, despite the crisis

The Population Division of the United Nations Organization estimates that currently (2010), there are 214 million international migrants, 3.1% of the world population, 60% of whom is located in developed countries. Europe is the continent where the highest number of migrants is concentrated (70 million), followed by Asia (61 million) and North America (50 million).

Due to the recent economic crisis, some persons and institutions anticipated a massive return of migrants to their countries of origin. However, up to now, there is no evidence of massive returns in large quantities; on the contrary, even though at a lower proportion, persons have continued to emigrate. Even in some regions, the rate at which the number of international immigrants was growing was accelerated, such as the case of Asia and Latin America where, in the 2000-2005 period, growth was an annual average of 1.2% and rose, respectively, to 2% and 1.7% in the next five years (2005-2010).

In North America and Europe, the number of immigrants also grew in the first half of this decade, but what was particularly significant was that it was at the highest rates in the world of 2.5% and 2.2%, respectively. Even though it decelerated in the next five years, the growth rates still remained high; an annual 1.9% in North America and 1.6% in Europe.

The effects of the crisis on the reception of remittances have been heterogeneous among the receiving regions

According to World Bank estimates the remittance flows in the world had grown in an accelerated manner since the end of the decade of the nineteen eighties and reached a historic maximum of US$444 billion in 2008. Since 1988, 2009 was the first year where a regression of 5.3% in dollars was registered. In Europe and Central Asia, the highest decrease was shown in percentage terms in 2009, of 14.7%. In the group, of note are Armenia, Kazakhstan, Azerbaijan, where decreases of 30% were observed.

The next group includes the countries of Latin America and the Caribbean, which, in that same year, dropped 9.6%. Of that group, countries with the greatest drops in percentage terms are Mexico (15.7%), Colombia (12.5%), Jamaica (12%), Honduras (10.6%) and

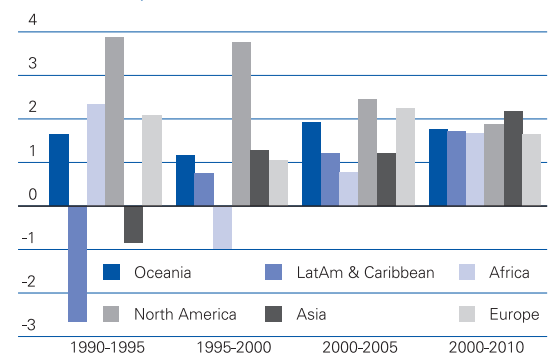### International Migrants by Main Regions
Balances, millions of persons
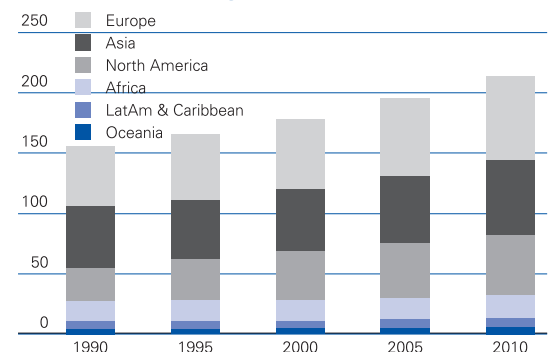
Source: UN, Population Division, International Migration 2009
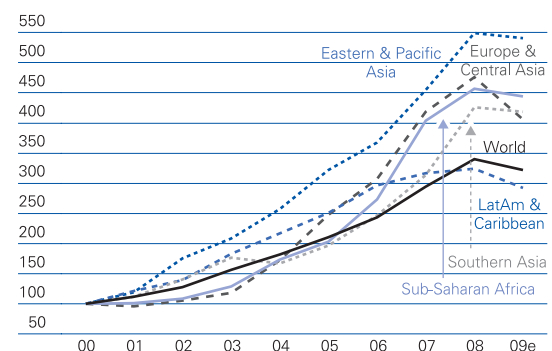
International Migrants by Main Regions
Growth rate, %

Source: UN, Population Division, International Migration 2009
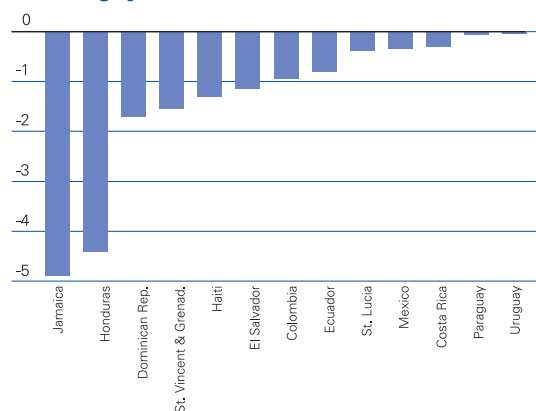
Revenue from Remittances in Different Regions
Index 2000 = 100

Source: World Bank

Latin America and the Caribbean: Change in Remittances as % of GDP 2007-2008
Percentage points

Source: BBVA Bancomer with World Bank data

Panorama of Remittances Flow in Different Regions

	2007	2008	2009e	2010f	2011f
Billions of dollars					
Developing countries	289	338	317	322	334
Eastern and Pacific Asia	71	86	85	85	89
Europe and Central Asia	51	58	49	51	53
LatAm and the Caribbean	63	65	58	59	61
Middle East & North Africa	31	35	32	33	34
Southern Asia	54	73	72	73	76
Sub-Saharan Africa	19	21	21	21	22
Low income countries	25	32	32	33	34
Middle income countries	265	306	285	289	300
World	385	444	420	425	441
Growth rate (%)					
Developing countries	22.9	16.7	-6.1	1.4	3.9
Eastern and Pacific Asia	23.8	20.8	-1.5	0.8	3.7
Europe and Central Asia	36.0	13.8	-14.7	2.7	5.0
LatAm and the Caribbean	6.8	2.3	-9.6	0.5	3.5
Middle East & North Africa	20.1	10.6	-7.2	1.5	3.3
Southern Asia	27.1	35.6	-1.8	1.7	4.1
Sub-Saharan Africa	47.6	13.4	-2.9	1.8	3.9
Low income countries	23.4	28.3	0.7	2.6	4.6
Middle income countries	22.9	15.6	-6.8	1.2	3.8
World	21.3	15.3	-5.3	1.2	3.7

e   estimated
f   forecast
Source: World Bank

Mexico: International Emigrants and Immigrants and Migratory Net Balance

	Emigrants	Immigrants	Balance
2007	901,984	448,421	-453,563
2008	657,824	415,343	-242,481
2009	556,805	420,150	-136,655

Source: INEGI estimates based on the National Occupation and Employment Survey; Data bases

El Salvador (9%). However, the more dependent economies on remittances, like Central America and the Caribbean, are the ones that have suffered a greater effect. For example, between 2007 and 2008, in Jamaica, the share of remittances in GDP was reduced by 5 percentage points, in Honduras 4.4 points and in the Dominican Republic 2 percentage points.

Eastern and Pacific Asia and Southern Asia are the regions where remittances decreased less in percentage terms, 1.5% and 1.8% in dollars, respectively, in 2009. China, which belongs to the first group presented a decline of around 3% in dollars, while in the Philippines, the remittances increased 4%. In India, the main receiver of remittances in the world, a 9% reduction was posted in dollars, while in other nations of the Asian Southeast, remittances continued to grow. This is the case of Bangladesh, Pakistan and Nepal, where growth was over 3% in dollars.

The performance of remittances illustrates the degree of exposure and affectation of the region to the global crisis. The most important drops in general correspond to the zones linked, through migration, to regions where the greatest drops in GDP were registered and, as a result, the labor markets suffered in greatest magnitude, as, for example, in the North American corridor and in some European countries; in contrast, the least affected zones correspond to the Asian countries.

By 2010, the World Bank estimates that remittances will grow in all the regions of the world, although moderately. Europe and Central Asia will be regions where the remittance flows will present greater dynamism. For Latin America, according to World Bank estimates, the expected growth will be of only 0.5%, by which they will practically remain stagnant. For 2011, higher increases are expected in the remittance flows to all the regions. For Latin America, the forecast is an increase of 3.5% in dollars. The Asian countries will be among the most benefited.

Effects in the case in Mexico

It is not surprising that Mexico was one of the countries most affected by the exposure of Mexican immigrants in the United States and in addition in those sectors that amply employ Mexican nationals such as construction, the manufacturing industry, and retail. Nevertheless, despite the marked drop in activity of those sectors in the U.S. and the tightening of migratory controls, emigration has simply decelerated, without there being a massive return as many had expected.

Emigration has continued; there has not been a massive return

The INEGI figures indicate that between 2006 and 2009, the number of international emigrants from Mexico tended to decrease. Through the fourth quarter of 2009, there were five international emigrants for every one thousand habitual ones on Mexican territory, a figure that has practically remained constant since the fourth quarter of 2008. This contrasts with what happened in 2006 when the emigration rates for every thousand inhabitants were higher than 8. There is evidence that a lower number of Mexicans is emigrating abroad.

At the same time that no massive return of Mexican migrants is observed[1], the immigration rates are maintaining their customary pattern performance, below the emigration rates, which implies that the number of persons leaving the country is higher than those arriving. In annual terms in 2009, the number of immigrants was of 420,000; in that same period, the number of emigrants was higher, 557,000. One year before, in 2008, 415,000 persons immigrated to Mexico and 658,000 left the country, while two years before in 2007, the number of immigrants was 448,000 and that of emigrants 902,000. Thus, the stock of migrants abroad apparently continues to grow, although at a lower rate than it did in previous years.

The crisis has struck hard in sectors where Mexican migrants are concentrated, although unemployment has seemingly reached its maximum

An important factor that explains the lower flow of Mexican migrants abroad has been the economic crisis. The sectors where the migrants are mostly concentrated have been the most affected in the U.S. such is the case of construction, retail trade and manufacturing, even more than in the two previous crises, in 1990 and 2001. In each one of these three sectors, the current number of employees is lower by close to 2 million persons, compared to that which existed at the start of the crisis, but in percentage terms, the loss has been higher in the construction sector, where close to 26% of jobs have been lost, compared to manufacturing with 16% and retail trade with 8%.

Fortunately, these three sectors seem to be giving the first signs of stabilization and seem to be halting their drops in terms of employment. Even manufacturing and retail are starting to show symptoms of improvement.

This has given rise to the perception that, in general, the loss of employment has halted. The same seems to be happening with workers of Mexican origin, who, in the first quarter of 2010 registered a lower unemployment rate than the one they had at the end of 2009, 12.8 versus 12.9%. In the first quarter of the year, the number of jobs seems to have increased for workers of Mexican origin. Even though the calculation can become complicated, since it is derived from a survey and due to seasonal problems, it is probable that close to 100,000 Mexicans more have been employed in the first quarter of this year. Of those employed, around 55,000 could have been migrant workers. Thus, although in some sectors the loss of employment is evident compared to what happened a year ago, in other sectors gains in employment are beginning to be seen. Such seems to be the case of tourism and leisure, retail and educational and health services in the case of Mexican migrants in the U.S.. Similarly, Mexicans born in the U.S. have had employment gains in educational and health services and in public administration, for example.

There are also differences by regions. The southern part of the United States is also showing employment gains for Mexican migrants, which indicates that, in addition to mobility among sectors, there has been geographic mobility.

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1   Almost a year ago, in the June 2009 edition of Migration Watch Mexico, we presented several arguments as to why a massive return did not occur as many feared.

Mexico: International Migration Quarterly Rates
Rate per every thousand inhabitants
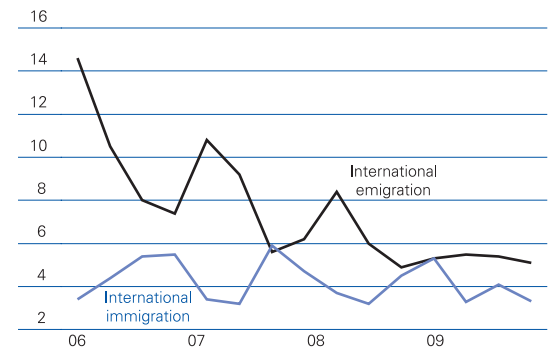
Source: INEGI, Estimates based on the National Occupation and Employment Survey, 2006-2009; Data bases

U.S.: Performance of Employment in the Construction Sector as of the Start of Recessions
Index Starting Month = 100
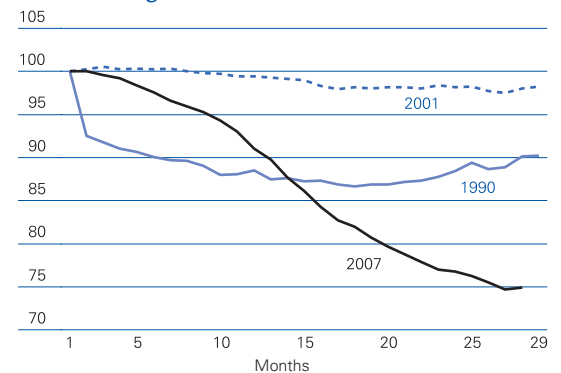
Source: BBVA ERD Mexico with U.S. Bureau of Labor Statistics data

U.S.: Performance of Employment in the Retail Sector as of Start of Recessions
Index Starting Month = 100
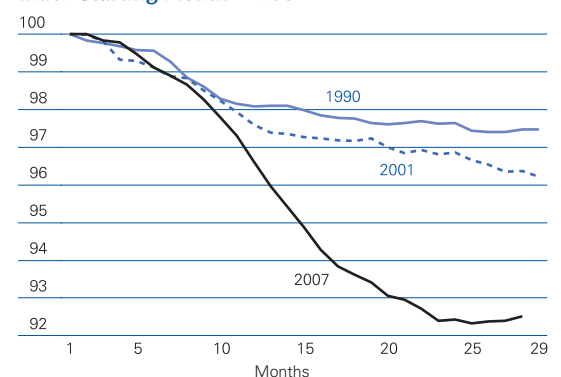
Source: BBVA ERD Mexico with U.S. Bureau of Labor Statistics data

U.S.: Performance of Employment in the Manufacturing Sector as of Start of Recessions
Index Starting Month = 100
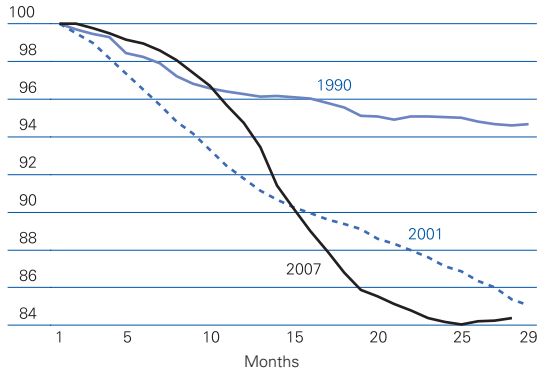
Source: BBVA ERD Mexico with U.S. Bureau of Labor Statistics data

U.S.: Jobs Lost and Gained by Mexicans
Oct-Dec, thousands, seasonally non-adjusted figures

	2008	2009	Chg. 09-08
Immigrants			
Lost			
Construction	1,432	1,206	-225
Manufacturing	1,181	992	-189
Agriculture & fishing	372	312	-60
Gained			
Tourism & leisure	1,074	1,085	11
Retail	741	812	71
Education & health	521	636	115
Natives			
Lost			
Retail	1,065	928	-137
Manufacturing	492	475	-18
Construction	460	355	-105
Gained			
Education & health	1,203	1,270	67
Public administration	276	357	82
Other Services	253	288	35

Source: BBVA ERD Mexico with Current Population Survey data

U.S.: Quarterly General Unemployment Rate and of Mexicans
Seasonally-adjusted data
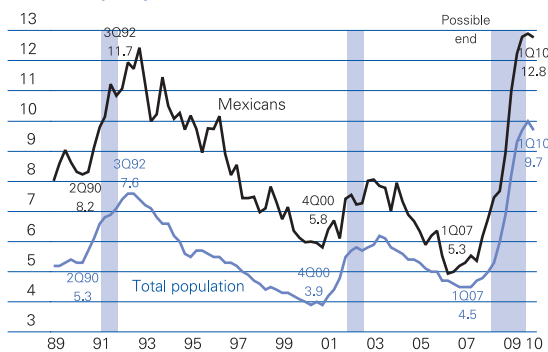
Source: BBVA ERD Mexico with Current Population Survey data

We would have to wait the next months to confirm the validity of the hypothesis of the recovery of employment for Mexicans. The labor flexibility that characterizes the labor sector that Mexican immigrants are facing has allowed that many of them transfer to other sectors and could be generating some gains in employment that should consolidate in the coming months, although at rates that are going to take time in offsetting the destruction of employment during the crisis.

Restrictions for Mexican migrants to enter the United States have increased

In addition to the economic crisis, another factor that could help to explain that a lower number of Mexicans is emigrating abroad (mainly to the United States) has been the reinforcement of the U.S. migratory policy. Surveillance has increased along the border with the United States, among other reasons to prevent undocumented persons to enter the country. Some of the consequences of this policy have been that the probability of apprehension has increased, although it had been doing it since 1986, by the Immigration Reform and Control Act (the IRCA) since the start of the economic crisis it has accelerated. Similarly, the costs of emigration have increased. The figures of the Mexican Migration Project[2] reveal that, on average, the cost of crossing the border for undocumented Mexicans rose in real terms between 2006 and 2008. If the year 2000 is taken as a reference, this figure has risen 56% in real terms. In absolute terms, it is estimated that the cost of crossing the border has grown from US$600 at the beginning of the 90's to a little more than US$2,500 in 2008. Also, from a rise in the probability of detention to practically double, from 20% to 40%, compared to the average from 1965 to 2001, compared with what was observed between 2006 and 2009.

Now, what effect do increases in the cost of migration produce? Everything seems to indicate that they discourage return migration, although they do not necessarily stop the entry of migrants. When crossing to the United States becomes more costly, the Mexican migrants, who manage to cross, evaluate more closely the decision to return to Mexico, since the cost of crossing the border has risen and could be higher in the future. As a result, they tend to remain for a longer time outside Mexico. This is the trend that has emerged. The probability of return has tended to decrease notably, particularly since the end of the last decade and the beginning of the current one. In this way, it can be affirmed that during the recent crisis, the migratory controls imposed in the U.S. have served as a barrier to the exit of Mexican migrants. As to the entry, it is difficult to evaluate this fully, since these measures have intensified, at the same time that the economic situation was worsening in the country of destination.

Outlook for migratory flows from Mexico

In some academic forums, it has been possible to comment the hypothesis that the lower intensity observed recently in the migratory flows abroad is a sign that Mexicans will stop emigrating abroad with

2   To know the methodology of the calculation, please consult Karen Pren, Project Manager of the Mexican Migration Project.

the intensity that they were doing. It has even been mentioned that this could represent a change in the trend or a point of inflexion in the migratory dynamics that we have observed since the nineteen eighties.

For this to happen, at least one of the following two situations must occur, if not both. That the job supply for migrants be reduced and/or that the demand for work positions by migrants decrease. The first case occurs if economic conditions impede offering sufficient job positions for migrants or if a hardening of migratory policies takes place beyond the expected benefits. Now, neither the effects of the crisis will be permanent nor is it very probable that the migratory controls recently imposed in Arizona will extend to the rest of the U.S. and that they may become a restriction of a permanent nature. This will depend to a great extent on the federal government of the United States, from acts taken by both President Obama and the Congress as well as from the rules established by the local governments. However, the main short-term risk is that a recovery with low employment can be observed, since many companies have tended to adapt to a lower number of workers, which would reduce the demand for labor.

On the other hand, what seems to us to be a greater determining factor in the long term is that the fundamental elements of an economic nature that motivate some Mexican workers to shift still remain, and it is quite probable that they can be maintained for a prolonged period going forward. The broad spread between wages in Mexico and the United States, the differentials between employment and development, the relative poverty and the population pyramids with greater accelerated aging in the developed countries, compared to the emerging ones, are elements that will continue in the coming years.

In view of the above, the expulsion and attraction factors will continue to exist and will continue to motivate some Mexicans to emigrate. Thus, it does not seem that this crisis or the recent restrictions imply a permanent stagnation or a drastic change in the migratory dynamics of Mexicans to the U.S.. In a more general way, and in accordance with the evolution of the above-mentioned crisis, it can be stated that the benefits that encourage migration are superior to the costs, and this could maintain the migratory flow.

Remittances in Mexico, recent evolution and outlook; the worst is over

Mexico is the main receiving country of remittances in Latin America, since it receives close to 40% of the flows that reach this region due to this concept, and it is the third main receiving country of remittances in the world, only behind India and China. In 2007, remittances to Mexico reached their maximum, a little more that US$26 billion, and, since then, they began to decrease, to US$25 billion in 2008 and to US$21 billion in 2009. That is, between 2007 and 2009, remittances to Mexico decreased close to 19% in dollars.

The depreciation of the peso partially offset the drop in dollar remittances. For example, in 2009, the annual drop in dollars was 15.7%.

U.S.: Employed Workers Total and Mexican
Seasonally-adjusted data, millions
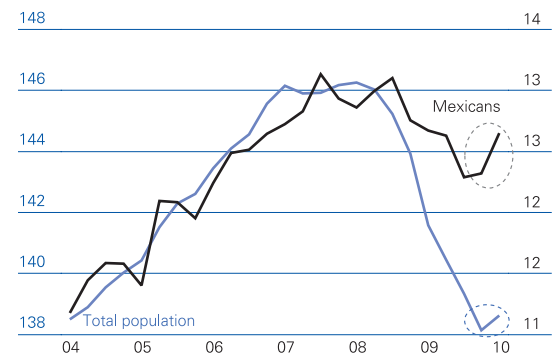
Source: BBVA Bancomer with Current Population Survey data

U.S.: Jobs of Mexicans by Region
Oct-Dec, Thousands, seasonally non-adjusted figures

	2008	2009	Chg. 09-08
Immigrants			
Northeast	343	312	-31
North-Central	847	750	-97
South	2,197	2,285	88
West	3,742	3,507	-235
U.S. Natives			
Northeast	76	74	-2
North-Central	526	493	-33
South	2,401	2,184	-217
West	2,829	2,793	-36

Note: **Northeast**: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont, Pennsylvania, New Jersey and New York
North Central: Illinois, Indiana, Michigan, Ohio, Wisconsin, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota and South Dakota.
South: Delaware, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, Washington D.C., West Virginia, Alabama, Kentucky, Mississippi, Tennessee, Arkansas, Louisiana, Oklahoma and Texas.
West: Arizona, Colorado, Idaho, Montana, NevaDA, New Mexico, Utah, Wyoming, California, Oregon and Washington
Source: BBVA ERD Mexico with Current Population Survey data

U.S.: Probability of Detention in an Undocumented Crossing
%

Source: Mexican Migration Project using MMP128

BBVA Bancomer
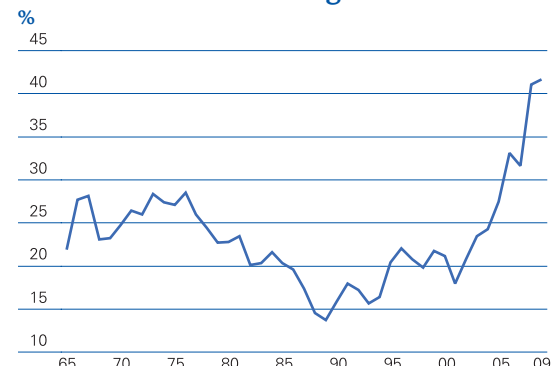
Costs of Crossings to the U.S. by Undocumented Mexicans
2009 dollars
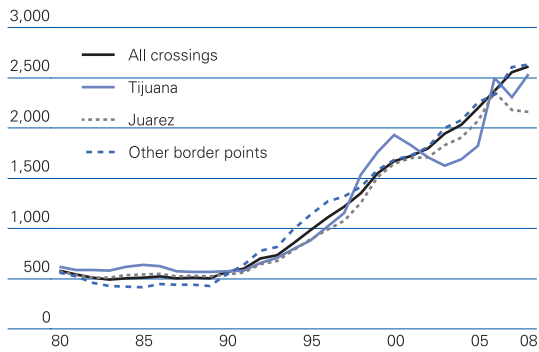
Source: Mexican Migration Project using MMP128

Remittances to Mexico
Annual % change

	Dollars	2002 pesos
2007	1.96	-1.83
2008	-3.57	-7.00
2009	-15.74	-2.15
2010e	3.00	-9.60

Source: BBVA ERD Mexico with Banco de Mexico data

12-Month Remittance Flow in Mexico
12-month accumulated flows
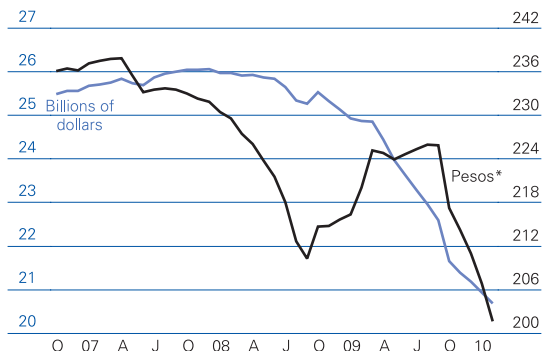
* Billions of 2002 pesos
Source: BBVA Bancomer with Banco de Mexico data

Thus, this situation has allowed reducing the impact of the drop in remittances. However, October 2009 was the last month in which remittances maintained a positive trend in pesos. Thus, for 2010, the depreciation will no longer be a favorable factor.

As we have mentioned, some indicators are pointing to the fact that the drop in remittances in dollars will soon be halted. In March, the last recorded datum available, remittances posted their lowest drop in a year. We expect that, toward the second half of 2010, a certain recovery in the flows from remittances can be seen in a clear manner. This would not imply that the levels obtained cumulatively prior to the beginning of the crisis will be reached. In fact, we estimate that it will be in 2011 or in 2012 when it is be possible to recover the maximum levels of 2007, because even though there are symptoms that indicate a certain recovery in the employment of migrants, it will be slow, just as the general employment trend in the U.S., particularly in construction, manufacturing and retail.

Finally, our forecast regarding the performance of remittances for this year remains the same according to what was described in the previous edition of Migration Watch Mexico of November 2009; we expect that they will grow overall this year around 3% in dollars, within a range between 0% to 5% in dollars. However, there will be a drop in pesos of slightly more than 9%. Among the risks that could exist for this course not to be met is the performance of the U.S. economy going forward, that employment growth would lag even more, and that anti-migratory policy in the U.S. would be reinforced more.

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Banco de México (2009), "*Estadísticas de Ingresos por Remesas*" ("*Statistics of Remittances Revenue*" [on line] <www.banxico.org.mx>

Bureau of Census (2009), Current Population Survey (CPS), [on line] < http://www.census.gov/cps/>

Anti-immigration Policies: Motivations and Some Examples

The world economic crisis generated in migration destination countries an increase in unemployment, in some a step backward in poverty levels and, as a result, a rise in the price of social security and health care system costs. The immediate actions undertaken by the authorities aimed at ensuring a stricter control of national borders and a reinforcement of security conditions. In this environment, some countries designed policies to encourage migrants to return home. These restrictions on the entry of migrants have led to a decline in the intensity with which the migratory flows had been occurring, but without generating massive returns.

We emphasize this point because questions have been raised in public opinion as to the probability of a drastic change in migratory flows, which would lead to a smaller percentage of people leaving their places of origin. The argument is that in reinforcing borders and increasing the restrictions on the entry of new migrants in the destination countries, many people will be forced to remain in their places of origin, perceiving emigration as a less attractive option.

It is important to note that in the dynamics of migration there are factors at work that motivate migration and others that undercut it. As long as the former exceed the latter, migratory flows will continue. In this section we will compare factors on each side in order to be able to provide some perspective as to how migratory flows could be directed in the future. In addition, some examples of immigration policy applied recently will be presented and the effects of the recently approved law in Arizona will be described and assessed.

Motivations and restrictions on migration

In general, the main cause behind migration can be attributed to economic factors. Among these are unemployment, poverty, wage differentials, insecurity and, recently in some countries, climate change. Social networks are emerging and facilitating the growth and expansion of migration. All these driving forces, in general, continue and it is not projected that in the short term they will cease to be factors that attract migrants to the destination countries and lead them to abandon their countries of origin.

Meanwhile, among the factors that inhibit migratory flows are a recession in the place of destination, such as recently occurred, and in some cases the application of various anti-immigration policies. This factor is short term in nature. By increasing border security, it is likely that fewer migrants will decide to enter a country; nevertheless, there is evidence that even though migration can be discouraged, it does not stop. For example, since 1986 the United States began to strengthen its migration policies in order to reduce the flow of immigrants, but this has had few effects in situations of high economic growth. Another factor inhibiting migration are policies that encourage migrants to return home.

Motivations and Restrictions on Migration
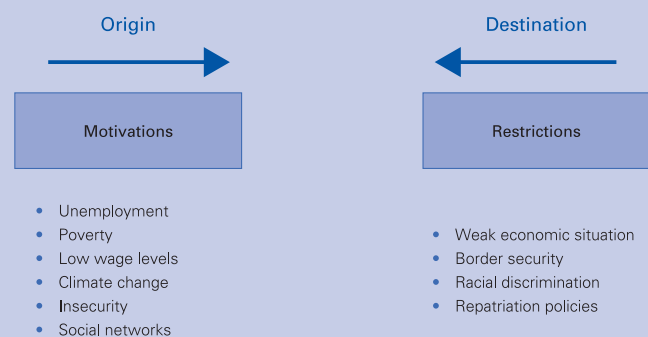
Source: BBVA ERD Mexico

Policies that encourage migrants to return to their home countries have not been very effective

Spain is an example of policies aimed at encouraging the return of migration in place since 2008. Only one out of every 45 immigrants had entered the program. Through February 2010, some 10,600 requests had been received (Labor Ministry, 2010), while it is estimated that the migrant population tops six million. In November 2009, Japan introduced a program that pays US$3,000 dollars to immigrants from Latin America who decide to return to their home countries; nevertheless, there is little evidence suggesting large numbers of people have done so (Ratha, Mohapatra, and Silwal, 2009). In February 2009 the Czech Republic also began a program to enable unemployed migrants of non-European Union nations to return to their home countries, but it has also received a low number of requests; through July 2009, when the first phase of the program concluded, it had received 2,000 applications from a total immigrant population of 450,000 in the country[1]. This appears to suggest that the majority of migrants choose to remain in the places of destination, even when faced with a complicated situation. This behavior can be attributed to migrants having the expectation that in the future the situation in the

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1   "*Voluntary returns programme ends amidst new flood of immigrants*", Radio Praha, Dec. 15. 2009.

destination country will improve, or that in the place of origin the outlook might not be very different, and that, in addition, the cost of again crossing the border could be higher in the future. The evidence up to now shows that the motivation for migration continues to exceed the restrictions. Everything seems to indicate that migratory patterns will continue with an intensity not very different from what was the case before the economic crisis.

The Arizona law

At the end of April, a law was enacted in the U.S. state of Arizona. It is a state law, supported by the governor of Arizona and the state legislature. Among its objectives is to identify, pursue, and deport undocumented immigrants. Arizona Law SB1070 will penalize those immigrants who are illegally in the state. They will be arrested and subject to trial in order to proceed with their deportation. It will also impose sanctions on those who employ or transport undocumented migrants. In accordance with the legislation, this law will go into effect in July.

The foreign-born population in Arizona has been increasing in the past few years. Between 2000 and 2008, the number of foreigners increased by 276,000 to reach 933,000, representing 14% of the total state population. The lion's share of the foreign-born population comes from Latin America (71%) and within this category Mexico is in first place.

Arizona Population

	2000		2008	
	Number	%	Number	%
Total population	5,130,632	100.0	6,500,180	100.0
Native	4,474,449	87.2	5,567,662	85.7
Foreigners	656,183	12.8	932,518	14.3
Non-citizens	462,239	9.0	648,603	10.0
Naturalized	193,944	3.8	283,915	4.4
Foreign population in Arizona				
by place of origin	656,183	100.0	932,518	100.0
Europe	71,674	10.9	83,609	9.0
Asia	77,450	11.8	124,937	13.4
Africa	8,475	1.3	23,887	2.6
Oceania	3,156	0.5	3,483	0.4
Latin America	469,033	71.5	662,414	71.0
Mexico	436,022	66.4	611,410	66.0
North America	26,395	4.0	34,188	3.7

Source: Migration Policy Institute Data Hub

After California, Texas, and Illinois, Arizona is the state with the greatest concentration of Mexican migrants in the United States. More than 600,000 Mexican immigrants reside in the state, which represents slightly less than 6% of the total population, but 66% of the total migrant population of Arizona.

The announced application of SB1070 Law has divided public opinion in the United States. For some it is a discriminatory and not very effective law, while others feel that it can reduce migration. Since the law was signed, thousands of activists have carried out protests, which could increase the discussion about the need for migratory reform.

Conclusions. Migration is a phenomenon that is fundamentally economic in nature. Its causes are economic, and for the same reason, if the objective is to minimize migration, the main tools for doing so must also involve economic considerations. Establishing policies to persecute undocumented workers or to reinforce border security is not the best way to prevent people from crossing the border. The evidence has demonstrated that despite the economic crisis and an increase in restrictions on migrants entering countries, migratory flows have not stopped, although their intensity has been reduced.

Countries of origin and destination can benefit from migration. Given the mutual benefits that can be generated, joint policies should be sought that would better structure the migratory flows, having the economic factors as their central elements. Therefore, collaboration and agreements on immigration issues between the countries involved should be better understood among the governments, civil society, the media, and, society in general. To the extent that in the places of origin it is possible to address the main motivating factors for migration and begin to generate better living conditions that would allow for the creation of a greater number of jobs, higher wages, improved labor conditions, and attending to the problem of climate change, people will be less inclined to cross borders. The task at hand on both sides of the border in favor of better conditions for migrants, of achieving greater harmony for the different communities both in the destination countries (the United States) as well as the countries of origin (Mexico) has become a vital topic of discussion.

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Migration and Climate Change: The Mexican Case

In the past meeting of the Global Forum on Migration and Development 2009, held in Athens, Greece, one of the topics considered to be most important with regard to its effects on migration was climate change. In our June 2009 edition of **Migration Watch Mexico**, we mentioned the importance of environmental phenomena as factors of population expulsion or attraction. The first case occurs when in the communities of origin, the environment begins to be detrimental to the life of human beings; for example, when there is environmental degradation and new risk zones appear, or when land is limited. In turn, the environment is a population attraction factor when the ecological quality of the environment is better compared to the zones of origin, thereby motivating migration.

In this article we seek to analyze the link between migration and climate, for which we reviewed some of the possible consequences of climate change on migration and focused on the particular case of Mexico. We reviewed some outstanding works that describe world climate trends and how these could affect the displacement of persons. We also present some statistics that try to provide some light to the possible link between migration and climate change in the Mexican case and point out, based on various studies, in which regions of the country there might be migratory movements in response to climate change.

Evidence at the international level

Different studies at a world level have shown that the temperature of the planet has begun to rise in recent years. Of the twelve years of the 1995-2006 period, eleven of these are among the warmest in the temperature records of the world's surface since 1850. Also, due in part to thermal dilation, the meltdown of glaciers, icecaps and polar ice mantles, the level of the world's oceans has been rising. For example, since 1961 at an average of 1.8mm/year, and since 1993 at a greater rate, of 3.1mm/year, such as is indicated in the Fourth Evaluation Report of the Intergovernmental Panel on Climate Change (IPCC; 2007). This indicates that throughout the twentieth century, the average temperature in the world had risen between 0.4° and 0.8° C, equivalent to an increase in sea levels of approximately between 1mm and 2mm on average each year (IPCC, 2002).

Among the factors that explain climate change are the variations in the concentrations of greenhouse gas emissions and aerosols in the atmosphere, and variations in the land cover and solar radiation. Ever since more than 500,000 years ago, human beings have been liberating CO_2 into the atmosphere through the burning of various materials and changes in the use of the ground, and in the last 200 years, this activity has accelerated notably. Global emissions of greenhouse gases have increased as a result of human activities, from the pre-industrial era, by 70% between 1970 and 2004 (Ramirez and others), while annual emissions of carbon dioxide (CO_2), rose around 80% between 1970 and 2004 (IPCC, 2007).

The increases in the world concentration of CO_2 are due mainly to the use of fossil-based fuels, such as coal and, in an important though lower part, to changes in the use of the land. The atmospheric

Global Temperature Index Earth - Ocean 1880-2009
Anomaly of temperature (°C), annual average
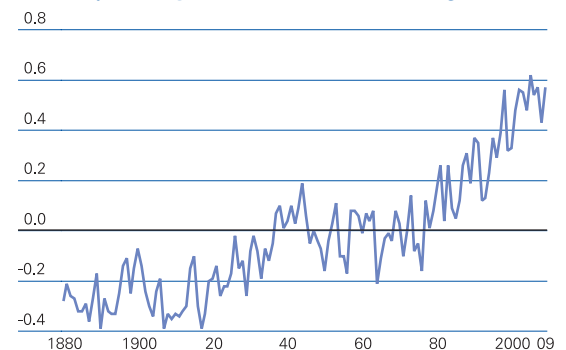
Note: The index is prepared by the Goddard Institute for Space Studies and combines the surface temperature of the ocean with the surface temperature of the air surrounding the earth

Source: NASA

Origin of Greenhouse Gas Effects (GGE)
Total emissions in terms of CO2, equivalent, 2004
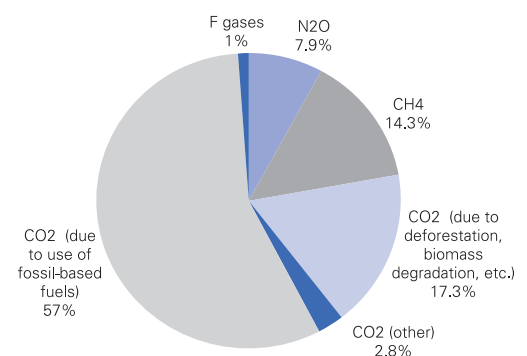
Source: Intergovernmental Panel on Climate Change (IPCC, 2007)

Projections at the End of the XXI Century of Surface Warming and the Rise in Ocean Levels Worldwide
Average values at a world level

Different scenarios	Temperature[1]		Ocean[2]
	Optimal estimate	Possible interval	
Constant concentrations in levels of the year 2000	0.6	0.3 - 0.9	Not available
Scenario B1	1.8	1.1 - 2.9	0.18 - 0.38
Scenario A1T	2.4	1.4 - 3.8	0.20 - 0.45
Scenario B2	2.4	1.4 - 3.8	0.20 - 0.43
Scenario A1B	2.8	1.7 - 4.4	0.21 - 0.48
Scenario A2	3.4	2.0 - 5.4	0.23 - 0.51
Scenario A1F	4.0	2.4 - 6.4	0.26 - 0.59

1   Temperature change (°C in 2090-2099 compared to 1980-1999)
2   Rise in ocean level in 2090-2099 compared to 1980-1999) Interval obtained based on models, excluding future rapid dynamic changes of ice flows.
Notes: All preceding scenarios indicated are six testimonial IEEE scenarios. The approximate equivalent concentrations of carbon dioxide of radioactive forcing computed due to greenhouse gas emissions and anthropogenous aerosols in 2100 (see page 823 of the TIE) for illustrative testimonial scenarios B1, AIT, B2, A1B, A2 and A1F1 of the IEEE are 600, 700, 800, 850, 1250 and 1550 ppm, respectively
Source: IPCC (2007) Intergovernmental Panel on Climate Change

concentrations of CO2 and CH4 of 2005, exceeded by far the natural interval of pre-industrial values. During the last 250 years, the human economy has dumped more than 1.1 billion tons of CO2 due to the use of fossil-based fuels for the generation and use of energy, of which 770 million, equivalent to 70%, were scattered during the last 50 years. Due to deforestation, only during the last 50 years, more than 330 million tons have been strewn (Semarnat, 2010).

Some projections of the Intergovernmental Panel on Climate Change, comprised of renowned experts on the subject from various countries, indicate that global greenhouse gas emissions will continue to increase in the next decades, which will probably be reflected in additional temperature increases. The Group's 2000 Report indicates that global greenhouse gas emissions could increase between 25% and 90% between 2000 and 2030. Thus, if the trends observed in recent years continue, the temperature at the end of the century could rise, with great probability, between 1° and 4° C, and in more extreme situations could increase up to 6° C, compared to the levels observed during the period from 1980 to 1999. Even in a conservative scenario, where the concentrations of greenhouse gas emissions are maintained, the temperature would increase on average 0.6° C. Sea levels could rise additionally between 0.18 m and 0.6 m compared to the levels of the same period. In the most intense case, more extreme atmospheric episodes would occur; most of the ecosystems would be submitted to stress and in a process of change, many species would be condemned to extinction and entire insular nations would be threatened by floods (World Bank 2009).

The Stern Report (2006) indicates that global warming will affect the basic elements for the functioning of life of human beings, such as access to water, the production of foods, health and the environment. If no actions are taken to reduce the current emissions and change the tendencies we have observed, the accumulated costs up to 2025 could be equivalent to losing between 5% and 20% of global GDP toward the middle of this century. This represents an estimate of the risks that could be incurred due to the existence of this phenomenon.

In view of the environmental changes described above, there are great pressures that will contribute to migration and displacement of persons. In the next section, we highlight the possible links between migration and climate change.

The Link between Migration and Climate Change
Migratory movements due to environmental consequences have been present for many years. However, it has only been in the last two decades that greater interest has been given to identifying and evaluating the link between the two variables. Warner and others (2009) note that climate is already a factor that contributes to migration. Although economic and political factors are the main ones[1] climate is already having evident effects. Estimates show a broad range of impact, suggesting that between 25 million and one billion persons could move as a result of climate change during the next 40 years (IOM, 2007).

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1   In the first edition of **Migration Watch Mexico** a review was done of economic literature on "The Determining Factors of Migration..."

As a result of climate change, natural disasters have intensified, as well as a greater environmental degradation in certain regions, which has caused many persons to lose their homes and a deterioration of their means of production, due to which poverty is increased and other zones less affected by climate change could be more attractive for some persons, thereby leading to migratory movements.

In view of the importance that the link between Migration and Climate Change is assuming, the International Organization for Migrations (IOM, 2007) has proposed a definition for those persons that are forced to move due to environmental consequences. "Environmental migrants" are those persons or groups of persons that for some reason due to a sudden or progressive change in the environment that adversely affects their lives are forced to leave their habitual homes, either temporarily or permanently, and to move, either within their country or abroad.

According to Warner and others (2009), most persons seek refuge in their own countries, but others cross borders in search of better opportunities. That is, climate change would have greater effects on internal migration, among various regions in the countries. Some migrations and displacements could be prevented through adaptation measures and an integrated management of water. However, many poor countries do not have sufficient infrastructure to adopt general measures of adaptation, and migration would be an important choice, particularly in less developed countries.

Evidence of climate change in Mexico

The region comprised of Mexico and Central America is highly vulnerable to climate phenomena. In this area there have been various natural disasters with considerable costs; in 1998, hurricane Mitch blasted Central America; in 2005, hurricane Stan affected Mexico and Guatemala; tropical storm Noel caused serious floods in Tabasco, Mexico. This has placed these countries in the region among the first places in the Global Climate Risk Index. Harmelin (2009) ranks Honduras as the country in third place in this Index for the 1990-2008 period, with Nicaragua in sixth place and Mexico ranking 30th.

Various climate scenarios have been considered for Mexico, many of these prepared by the Center for Atmospheric Sciences of the National Autonomous University of Mexico (UNAM). (see Centro de Ciencias de la Atmósfera de la UNAM, 2010), which mostly project that the average temperature by the end of this century could rise between 1° and 4° C, with the highest warming in Northern and Northwestern Mexico. In the case of precipitation, although there are models that indicate that the climate could rise slightly, most predict reductions between 6% and 11% in the same period (Galindo, 2009).

Conde and Gay (1999) identify the Central and Northern parts of the country and the coastal region in Tabasco as the most vulnerable zones in Mexico. The areas in the north and those with large populations, especially in central Mexico, are more vulnerable to drought and decertification, due to erosion and the gravity of drought which will increase due to high temperatures and variations in precipita-

Channel through which Climate Change could Favor Migration
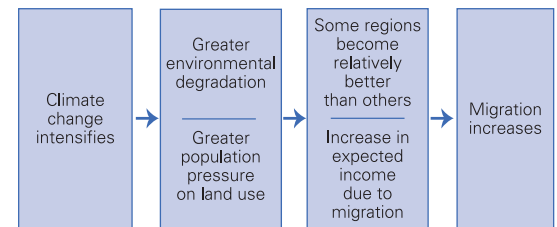
Source: Economic Research Department, Mexico

Manner in which Climate Change Could Affect Migration

Manner
• Intensification of natural disasters, such as hurricanes and cyclones that destroy housing and cause persons to relocate during short or long periods.
• Increase in temperature and droughts that affect agricultural production, reducing the population's means of subsistence and access to clean water.
• Rising ocean levels, making coastal areas uninhabitable.
• Competition for natural resources could lead to conflicts and in turn to displacements.

Source: Martin (2009)

Climate Risk Global Index; Mexico and Central America Positions

Country	Position
Honduras	3
Nicaragua	6
Guatemala	24
Mexico	30
El Salvador	37
Costa Rica	61
Panama	101

Source: Harmalin (2009)

tions in these arid and semi-arid regions. In turn, the coast of the state of Tabasco will be more vulnerable to changes in sea levels. Estimates project that the sea could penetrate between 40 and 50 kilometers.

Galindo (2009) finds that the economic consequences of climate change for Mexico are uneven by regions and there could even be temporary gains in some of these. However, in the long term, the negative economic effects surpass temporary gains. By 2100, the total economic costs of climate change, according to their calculations, would be equivalent to an accumulated effect between 6% and 30% of Mexico's GDP, although the great uncertainty associated with these calculations must be considered. One of the sectors in which important losses would occur is that of agriculture and livestock, due to which the rural population would be the most affected.

Climate, a factor that encourages migration in Mexico

Mexico has been one of the countries analyzed in terms of the different aspects of migration. Nevertheless, an element that has only been referred to slightly is the environment. A study by CONAZA (1994) more than a decade ago notes that 97% of Mexican soil has been affected in different degrees by some process of degradation; and that around 60% presents a severe or extreme degree, due to which migratory movements are reasonably expected, mainly in the rural areas. Alain de Janvry and others (1997) argue that in the case of rural households in Mexico, environmental deforestation and the limited possession of fertile land create an incentive to emigrate.

Based on the figures of the *Mexican Migration Project* (MMP), it was found that most households in migrant communities do not possess land, and that those who do own land, in the majority of cases, the land is dry and not appropriate for agriculture. Thus, it is possible to infer that the environment is playing an important role in encouraging the migration of Mexicans to the United States. The MMP sample corresponds to 124 binational communities, 19,906 Mexican household, 922 households in the U.S. interviewed in different years as of 1982 and up to 2009. For the exercise conducted, the expansion factors of the survey were used.

In order to find greater evidence in the relationship between the environment and migration, we compared the index of land degradation prepared by Cambell and Berry (2003) with the Conapo index of migratory intensity. Also, two groups were defined among the poor states (with high or very high poverty levels) and the rest of the states. It was found that in the two groups of states, the correlation between land degradation and migration is positive, being more accentuated when the states are poorer. This seems to suggest that when the land is limited or not very fertile for production, and economic conditions tend to be scarce, such as in the poorer states, the incentive to emigrate tends to be greater (See graphs).

The case studies made for Mexico in the states of Tlaxcala and Chiapas as part of the project "Environmental Change and Forced Migrations Scenarios" (EACH-FOR) by Alscer and Faist (2009) concludes that there is a link between environmental degradation and migration in regions of Mexico. The erosion of the soil and the

Mexico: Households in Migrant Communities, According to Type of Land

Country	Non-migrants	Migrants	Total
Irrigated	1,447	4,086	5,533
Moist	157	383	541
Dry soil	4,237	10,086	14,322
Pasture	305	640	944
Orchard	236	588	824
Other	22	120	142
Without land	42,667	96,803	139,470
Unknown	8	47	55
Total	**49,080**	**112,752**	**161,832**

Source: BBVA Bancomer with figures from database of the Mexican Migration Project (2010)

change in rain patterns has been an additional expulsion factor for emigration. In many cases emigration has served as a strategy of income diversification; remittances have been used, according to the study, mainly to cover basic needs and as substitute income in view of the decline in agricultural production, given its high dependence on climate.

Aguilar (1995) analyzes the future trends of human settlements and studies the perspectives of vulnerability to climate change. The results point in the same sense than those reported by Conde and Gay (1999). Five states in the country present high vulnerability: Chihuahua, Tamaulipas, Jalisco, state of Mexico and Tabasco. Chihuahua could present high values in total and urban population increase and high levels of consumption of water per inhabitant. The state of Mexico also records high population increases and strong increases in consumption and total water supply. Jalisco also shows high population increase but also a rise in the incidence of infectious diseases. In Tabasco, the consumption of water per inhabitant rises, as well as the incidence of infectious diseases.

Conclusions

Climate change is a confirmed fact. Projections indicate that if there is no radical change in current trends of the accumulation of greenhouse gas emissions toward the end of this century, the temperature could rise additionally between 1° and 4° C, while ocean levels would rise between 0.18 and 0.6 m. This would lead to an increase of migratory movements in the world. Various studies reveal that climate is an element that is already affecting displacements of persons.

In Mexico, climate change has already shown signs of adverse effects. With regard to migration, although the subject has been studied only slightly, there is certain evidence that indicates that climate change indeed influences the displacement of persons. The results found suggest that there is indeed a link between migration and environmental degradation. Most households in migrant communities do not own land, or it is not appropriate for agriculture, so it is feasible to note that climate has been a factor that encourages some people to leave their communities and move to other regions, either in the country itself, toward larger urban zones, or to emigrate abroad.

Some case studies reinforce the arguments expressed herein. They show that soil erosion and the change in rain patterns have been an additional expulsion factor for emigration in some regions in Mexico, mainly in the rural areas.

The highest vulnerability levels in view of climate change could be located in states with rapid population growth, high water consumption levels and those that register high incidence levels of infectious diseases. This situation could be present in the northern region (Tamaulipas and Chihuahua), in the central zone (Jalisco and state of Mexico) and in the Gulf of Mexico (Tabasco), especially in rural communities.

States with medium vulnerability to climate change are: Baja California, Sinaloa, Coahuila, Nuevo León, Michoacán, Guanajuato, Guerrero, Puebla, Veracruz, Chiapas and Quintana Roo.

Land Degradation and Migration in States with High or Very High Poverty Levels

Migration (indices)

$y = 0.5615x - 0.9178$
$R^2 = 0.1435$

Land degradation (indices)
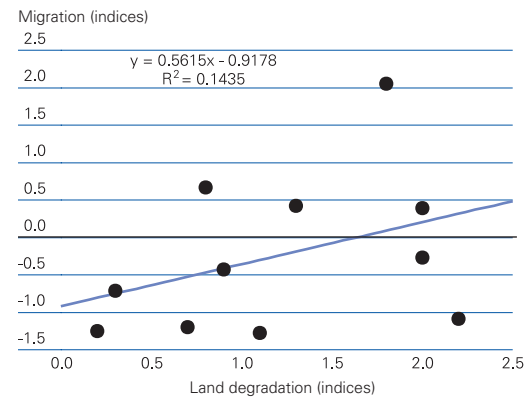
Note : The following states were considered : Campeche, Chiapas, Guerrero, Hidalgo, Michoacán, Oaxaca, Puebla, San Luis Potosí, Tabasco, Veracruz and Yucatán
Source: BBVA Bancomer based on CONAPO estimates on a sample of ten per cent of the XII General Population and Housing Census 2000

Land Degradation and Migration in States with Medium, Low or Very Low Poverty Levels

Migration (indices)

$y = 0.2833x - 0.2674$
$R^2 = 0.0265$

Land degradation (indices)
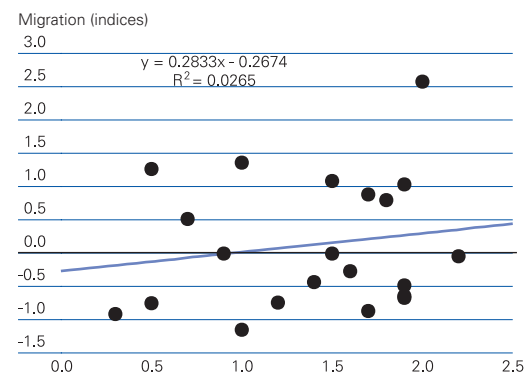
Note: The following states were considered: Aguascalients, Baja California, Baja California Sur, Coahuila, Colima, Chihuahua, Federal District, Durango, Guanajuato, Jalisco, Mexico state, Morelos, Nayarit, Nuevo Leon, Queretaro, Quintana Roo, Sinaloa, Sonora, Tamaulipas, Tlaxcala and Zacatecas.
Source: BBVA Bancomer based on estimates by CONAPO from a ten percent sample of the XII General Population and Housing Census 2000

Degree of Vulnerability to Climate Change in Mexico
Absolute differences, 1990-2025
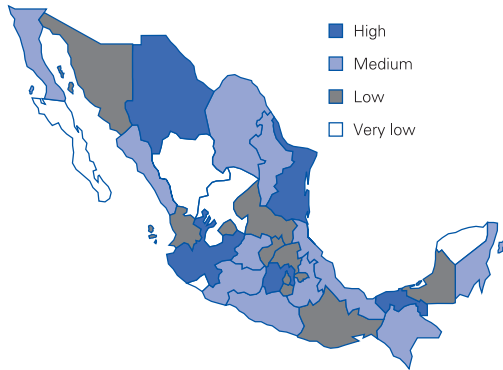
Source: Aguilar (1995)

States in the Mexican Republic According to Degree of Vulnerability to Climate Change

Degree of vulnerability	States
High	Chihuahua, Tamaulipas, Jalisco, Estado de México y Tabasco
Medium	Baja California, Sinaloa, Coahuila, Nuevo León, Michoacán, Guanajuato, Guerrero, Puebla, Veracruz, Chiapas, y Quintana Roo
Low	Sonora, Nayarit, Aguascalientes, San Luis Potosí, Querétaro, Hidalgo, Distrito Federal, Morelos, Tlaxcala, Oaxaca, Campeche
Very low	Baja California Sur, Durango, Zacatecas, Colima, Yucatán

Source: Aguilar (1995)

The states with lower vulnerability are: Baja California Sur, Durango, Zacatecas, Colima, and Yucatán, since the prevalence of infectious diseases, the increase in water consumption per inhabitant or population growth tend to be lower compared with the rest of the states.

The results noted in this article evidence the need of considering climate change and its possible effects on the states in migratory policies for the purpose of achieving an appropriate population distribution and reducing the vulnerability that climate change could cause on the inhabitants of the Mexican territory. There is time, but good planning will help in facing this problem.

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The greater accessibility, use, and dissemination of new technologies have made clear the importance and benefits of social networks. People are broadening their communication capacity with other groups more rapidly and efficiently and obstacles to communication due to distances are diminishing. It is increasingly easier and less expensive to establish communication with other people in another city or even in another country. Different tools have served to facilitate communication among people and as a result, facilitate the expansion of social networks. The proliferation of telephone services (fixed telephony but mainly mobile telephones) and the Internet has enabled more people to be able to communicate around the world.

In the case of migrants, the use of cellular telephones is very extended and growing. This is because it allows important information to be accessed, for example; regarding the migration experience, how to undertake it, mitigate risks, and achieve a more rapid integration in the destination country. The use of short messages (SMS) is frequent and there is a certain amount of evidence regarding its effectiveness. Recently, the appearance of social networking sites on the Internet such as Facebook, MySpace, Twitter, among others, has served to put people in contact with each other and share information, interact, and create communities with similar interests, establishing personal and professional relationships. These new sites illustrate the potential for communication through these new technologies.

In many cases migration has made use of social networks, and it is very likely that with the creation and expansion of the new technologies, they will be more frequently used as an instrument to facilitate the movement of people toward other regions within and outside a specific country, since such technologies favor relations among people, diminishing physical and cultural barriers, which facilitates obtaining information, with its resulting effect in reducing diverse costs.

In this article we seek to analyze the role of social networks in migration from a theoretical perspective. In the first section, we will describe the concept of social networks and their application to the migration phenomenon. The second section will discuss the reasons why the existence of social networks increases the likelihood of emigration and will describe some effects of this phenomenon on the labor market. It should be noted that this edition of *Migration Watch Mexico* includes a complementary article that analyzes the potential effects of social networks on the income levels of Mexican migrants in the United States. In the third section, we will address the possible economic effects, both positive as well as negative, on the communities of origin based on the evolution of migratory trends, and finally the fourth section will offer some conclusions and reflections on this interesting topic.

The benefit of social networks on migration
A social network is a social structure through which a group of people relate to each other through different means of communication. People often form, generate, and build social networks as time passes.

In the case of migration, when ties exist among people in the places of origin and destination, social networks are created. Through affinities, friendship, and common cultural features, this allows current and previous migrants as well as non-migrants to connect with each other in their places of origin and destination. It is common that the migrant communities in places of destination will be formed by people that come from the same region or regions of the country of origin. According to Massey and others (1993), social networks are a type of "social capital" that people use to access employment outside their places of origin. People obtain access to this social capital through their membership in social institutions and networks, which can translate into material resources to improve or maintain a position in society (Coleman, 1988, cited in Zenteno, 2000).

As we have noted on other occasions, the causes of migration are primarily economic[1]. Most people who leave their places of origin do so for economic reasons. The social networks are a mechanism that facilitates this process. Theoretically, they are of key importance for two reasons: 1) they help to reduce the economic and non-economic costs of migration, by becoming institutions that regulate access to information and employment opportunities; and 2) in the long term they represent the main motor for perpetuating migration that is increasingly less dependent on the economic causes that led to the phenomenon (Zenteno, 2000).

Among the economic costs, we can mention as examples, transportation, the search for employment, housing, etc.; and in the non-economic category, there is the difficulty of leaving family behind and to adapt to new customs and people.

Economists have characterized this as *dependence* on the trend of migratory flows to remain and strengthen over time. Sociologists have termed this same process as cumulative causation (Massey and others, 1997).

The probability of emigrating increases with social networks

The likelihood of emigrating tends to be greater when emigration is more frequent. The first migrants transmit their experience to potential migrants, who because they have greater information, reduce the costs and risks and the emigration process is made easier for them. Social networks thus encourage emigration.

As the social networks grow and accumulate greater migratory experience, migration becomes progressively less selective and spreads from the medium to the lowest income socioeconomic sectors (Massey, et. al., 1993). In this regard, Massey and Espinosa (1997) based on statistics from 25 Mexican communities show that the social networks are an important factor in Mexican migration to the United States.

Some studies have shown that the growth and extension of social networks begins a process of "cumulative causation", through which

Theoretical Importance of Social Networks in Migration

Importance
1) They help reduce the economic and non-economic costs of migration
2) In the long term they represent the main driving force for perpetuating migration that is increasingly less dependent on the economic causes.

Source: Zenteno (2000)

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1   For a more detailed analysis of the reasons for migration, see the first issue of *Migration Watch Mexico*, dated June 2009, in which a full review is presented of the economic studies published on the causes behind migration.

Social Networks Lead to Migration being Self-Sustained
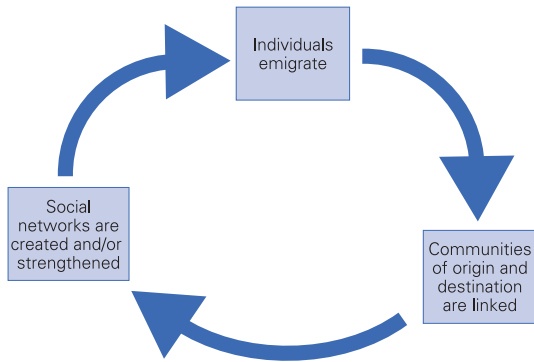
Source: BBVA ERD Mexico

the migratory flows become self-sustained (Garip, 2008). This argument has been evaluated in certain studies. Curran, Garip, and Chung (2005) based on data from 1984 and 1994 for Thailand find that the migratory phenomenon increases the probability of emigrating and that its effect is greater when the migratory experience corresponds to the female population. Massey and Zenteno (1999), based on figures from the Mexican Migration Project and simulation exercises, show that in the case of Mexican migration the process of cumulative causation occurs. These same authors argue that the persistence of migration in space and time is due to two fundamental processes, namely, the accumulation of human capital, and the accumulation of social capital. The former functions between individuals and the latter through the social networks in which they are inserted.

Thus, social networks are by nature, flexible, and even more so in the case of Mexican migrants due to the conditions of the U.S. labor market and in particular for these groups, which allows for partially counteracting the restrictions on entry into that country's job market that we have recently observed. In fact, this mechanism was able to function in the recent economic crisis, since even though some countries tightened their immigration policies and employment conditions in the destination countries were affected, a migratory flow was maintained, although with a lower intensity than in previous years. This could also have had a certain impact on the "no return".

Migrants' income and jobs can be favored by social networks

There is evidence that migrants tend to be located in places where their acquaintances live and have obtained employment. That is, people who decide to emigrate have prior access to certain information regarding labor conditions in the places of destination. In addition, they can also possibly benefit from moral and economic support. This benefit comes to a large extent from the social networks that they have access to.

In general, workers who have greater information and support from friends and acquaintances are more likely to obtain better results both in the search for employment as well as the income obtained. Social networks represent a mechanism that can positively affect migrants' labor conditions.

Some studies have documented certain effects of social networks on success in the job market. Hellerstein, McInerney, and Neumark (2008), in their study, empirically verify that social networks positively affect obtaining employment for a job. They have a greater impact among less skilled rather than highly trained workers. Among Hispanic population groups whose level of English is relatively low, the social networks have a greater effect.

Based on figures from the United States, Arceo-Gómez (2010), evaluates the possible effect of social networks on the places where migrants will reside. He concludes that migrants with low-skill levels take into consideration information on the unemployment rate and income levels from their social networks to determine where to reside, while migrants with high work-skill skill levels do not take such data into account.

The social networks can have positive or negative economic effects on the communities of origin

To the extent that migrants and non-migrants are connected through the social networks in the places of origin and destination, an economic tie can emerge through remittances. Migrants in the places of destination send resources to their families in the places of origin; such resources can have positive economic effects in the short term on the communities since they stimulate investment and consumption and, in turn, employment.

At the same time, an adverse effect can take place. Families in the places of origin, by knowing that their relatives who have emigrated are obtaining greater income than in their home communities, can feel an incentive to emigrate. In the long term this can generate a certain depopulation in the communities, especially when entire families emigrate. With this, in the long run, the flow of remittances to the communities of origin could tend to decrease and an expansion would not be generated in demand and as a result, in the development of the place of origin. This occurs when there is a permanent move of families to the destination country. However, it is also necessary to recognize that there is a certain percentage of migrants[2] who will work abroad temporarily (they may even take their families to live with them), who manage to accumulate a certain amount of money, and who later return to their country of origin to start productive business activities.

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2   A recent study conducted by the OECD (2010): "*Latin American Economic Outlook*" indicates that between 20% to 50% of migrants in the OECD countries, including the United States, leave their destination country in the first five years, return to their country of origin or move to a third country.

Empirical Evidence of the Effects of the Social Networks on Migration

Authors	Effect on	Study groups	Description
Arceo-Gómez (2010)	Where migrants are located	Immigrants in the United States	Migrants with low-skill levels take into consideration information on the unemployment rate and income levels from their social networks to determine where to reside, while migrants with high-skill levels do not take such data into account.
Garip (2008)	Probability of emigrating	Immigrants in Thailand	The probability that a person will emigrate increases 17% for each migratory trip in the household and more than two-fold for each trip in the community
Goel and Lang (2008)	Income	Immigrants in Canada	Figures from 2001 were used. Findings indicate that immigrants with social networks earn more income than those without such networks. In considering 25% of income distribution, among recent immigrants with formal income, those who have at least one relative or friend in the place of destination earn 12.8% more than those who do not know people there.
Massey and Aysa (2007)	Where migrants are located	Migrants from Latin America	The more connections a person has with others who have been in the United States and the greater the prevalence of migrants in the community, the probability will be higher of emigrating to the U.S.
Curran and Rivero (2003)	Where migrants are located	Mexican migrants	The social networks are more important for international movements than for internal movements. Furthermore, women's networks are more important than men's networks for movements within Mexico
Munshi (2003)	Income and employment	Mexican migrants in the United States	When the networks tend to be relatively large, the results in labor terms for migrants tend to be better, with better jobs, higher salaries, etc.
Davis, Stecklov, & Winters, 2002	Probability of emigrating	Mexican migrants in the United States	The likelihood that a person from a rural area of Mexico will emigrate to the U.S. when he or she does not have relatives there is 4.1%, whereas with an immediate family member 6.6%, and with two or more relatives 9.6%.
Massey and Zenteno (1999)	Probability of emigrating	Mexican migrants in the United States	Based on simulation exercises, it was shown that in the case of Mexican migration, there is an ongoing process of cumulative causation. This implies that the number of immigrants in the United States will continue to increase

Source: BBVA ERD Mexico

Effects of the Social Networks on the Communities of Origin

Length of stay	Direction of effect	Description
Short term	Positive	Migrants in the places of destination send remittances to their families in the places of origin; such resources can have positive economic effects since they stimulate investment and consumption and, in turn, employment.
Long term	Negative	Families in the places of origin can feel an incentive to emigrate, which can generate a certain depopulation in the communities. With this, in the long term, the flow of remittances to the communities of origin could tend to decrease and an expansion would not be generated in demand and as a result, in the development of the place of origin.

Source: BBVA ERD Mexico

According to Portes (2007) the prevalence of one or another effect seems to depend on government intervention and the very nature of the migration. Effective government programs, reflected in public works projects, subsidies, and support for productive activities, and the direct launching of companies that generate jobs can encourage the adult family members to remain and work, creating the sociodemographic infrastructure necessary so that the remittances and investments from migrants are used productively. If migration is cyclical in nature, that is, if it corresponds to individuals who travel outside the country and return after accumulating a certain amount of savings, it is likely that the previous effects would materialize.

But, on the contrary, if entire families migrate, the incentives to return and to send remittances decrease, with which the possible effects of remittances on the communities diminish.

The effects of social networks are unequal and they depend on their composition

The degree to which social networks affect decisions to emigrate depends to a large extent on how the expected return of migrants is affected. In this sense, the composition of the migration to which an individual is tied is important. The composition of migration varies depending on the experiences of the migrants with the social networks and with the strength of the ties (Davis, Stecklov, and Winters, 2002). For example, a social network made up of members of a nearby family could have greater effects on the occurrence of migration than networks comprised of individuals they know who belong to a community.

In this regard, Munshi (2003) points out that the size of the networks is important. His research indicates that when the network tends to be relatively large, the results in terms of employment for the migrants tends to be better, with them finding better jobs, in less time, with higher wages, etc.

Conclusions and final reflections

Social networks represent an important mechanism in the migratory process. They increase the probability of people emigrating by reducing the costs of migration; they facilitate obtaining employment and positively affect the migrants' expected return. In the long term, social networks generate a mechanism with which migration encourages migration, becoming a self-sustained process.

The communities of origin can benefit from social networks through the sending of remittances, thereby stimulating consumption and investment. Nevertheless, when it is entire families that emigrate and that pattern occurs to a large extent in a specific community, a process of depopulation can occur, with which the possible benefits of the remittances could be discouraged and an expansion in demand and therefore, in the development of the place of origin, would not be generated. However, it is also necessary to recognize that the emigration of many individuals and families is temporary and they tend to return to their countries of origin. The prevalence of one or another effect seems to depend, in general, on government intervention, in terms of the design and application of public policies and the very nature of migration.

In the past economic crisis, it is likely that the social networks worked as a mechanism that mitigated the return of some migrants to their places of origin. Furthermore, other migrants continued moving to the places of destination. The migratory flows simply saw a drop in their intensity, with the exception of programs promoted by the governments facilitating the migrants return home.

With a view toward the future, it is projected that migrant social networks will be strengthened through the use of new technologies such as the Internet, which would lead to a higher number of people having greater knowledge on how to reduce the costs and risks of migration and as a result, they will be motivated to leave their places of origin. That is, the process through which migration encourages migration would accelerate.

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The Impact of Social Networks on the Income of Mexicans in the U.S.*

Various studies have given evidence of the probability of emigrating when there is previous experience in emigration in the community. The social network improves information and reduces transaction costs, facilitating the emigration process for others. In addition, there are other effects, for example, expanding and strengthening the social network to which people belong, generating a process that provides feedback to itself. In an initial stage, the social network helps by sharing the migration experience, provides information on how to do it, the risks that could be faced and how to try to mitigate them. In a second stage, once the migration has taken place, multiple information flows are generated not only of an economic nature, such as for example finding a job and its characteristics, but they go further than that and include other social aspects such as peaceful coexistence, cultural aspects, help in case of illness and health problems.

To the extent that more people belong to a migratory group, the information flows expand with greater intensity; consequently, connections expand between people, and the process of adaptation and functioning in another country is made easier, inducing more persons to move to other regions or to facilitate changes in employment in the same locality, generating greater labor flexibility. Thus, it would be expected that those immigrants who have a greater knowledge of jobs, of the places where they are found and of possible wages tended to obtain a comparatively higher income compared to persons that do not have that information.

This article analyzes from an empirical point of view whether social networks play an important role on the income that Mexican migrant workers receive, which would constitute a differentiating aspect. To this end, Mexican workers in the United States who have relatively strong networks are compared to those lacking social networks or whose access to them is limited. The main source of information is the National Survey of Rural Homes of Mexico (ENHRUM for its Spanish initials), the most recent corresponding to 2003.

We believe that the contributions of this study are twofold: first, to introduce an analysis of the social networks for the case of Mexican immigrants, which is relatively novel, and secondly, the methodology employed to identify the possible magnitude of a social network and its effect on income. The results obtained, when this is conducted by different methods, are considered to be statistically strong.

Methodology

The proposed methodology strives to clearly identify the differential characteristics between groups of migrants and evaluate whether these differences are statistically significant. The attribute that is being analyzed is the income of Mexican workers in the U.S. The analytical structure that will be used is the one commonly used in evaluating the effectiveness of a specific medical treatment to cure an illness, that is, through an experimental design, a homogenous population group is chosen to which treatment is given and this is compared to another one which has not be treated (generally known as the control group). After a time, the results of both groups are

Evaluation of Impact Through Control and Treatment Groups

Intervention

Y_1 ———————————— ● (R with treatment)

Impact = Y_1 - Y_1^*

Y_1^* ———————————— ● (R without treatment)

Y_0 ●

t = 0   t = 1   **Time**
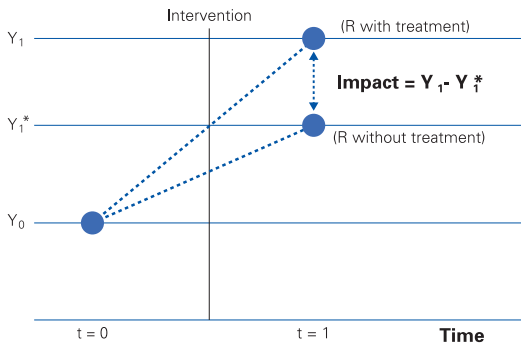
R   Result
Source: BBVA Bancomer based on Ravallion (2008)

analyzed and if they present an improvement of the health conditions for the group treated, it is proof that the treatment has been effective.

In our case, we will accept having access to a relatively strong social network as if it were a medical treatment. Going forward, for the purpose of this exercise, the concept of a strong social "network" will be defined quantitatively, although, in essence, it constitutes the one where there is a significant presence of migrants, which facilitates the daily activity they realize. Thus, Mexican workers who belong to a "strong" network are compared to those Mexican workers who have access to a weak network or to which there is no access. After a time of having access to a network, the income of both groups are compared and if any differences are observed, they can be attributed to the fact that they had a social network. This last would be true, provided that both groups have similar characteristics. Unfortunately, nothing guarantees that those belonging to one or another group or who have joined one or another group at random are homogenous. In view of this problem, it is important to apply some statistical techniques that would allow that the groups being compared to be as similar as possible.

Definition of groups of comparison

Knowing the dimension of the social networks to which a person belongs can be difficult, in particular because, in the surveys, it is uncommon to ask questions to this respect, but mostly because the opinion that each person has of the network to which he belongs, could be subjective. To approach this problem, we will take the advantages that the ENHRUM offers, which includes a section of the work stories of Mexicans in the United States, by which it is possible to know both some of the characteristics of the households interviewed that were in Mexico, as well as of its members who were in the United States in the years between 1980 and 2002.

Based on this information, it is possible to identify, for each one of the locations included in the ENHRUM, which persons were in the United States in different years. It is possible to get to see that, year after year, the number of Mexicans in the United States increases to a greater extent in locations with prior migrants.

The initial year taken for the analysis was 1998 for two reasons: in that year, there were sufficient observations to make the estimates and also there would be at least four years of operation of the social networks, because the last year in which the information was included is 2002.

The social network of a community was measured by the proportion of individuals in the sample that are in the United States in a particular year. Thus, classified in the group under treatment were those individuals surveyed in the ENHRUM who were somewhere in the United States in 2002, but that four years before, that is in 1988, the number of persons from their locality that was living in the United States was equivalent at least to 5% to the individuals from that locality. That is, it is assumed that the social networks facilitate growth of the migratory flow from the locality and that it is of a sufficiently representative size so that it can be assumed that the person could have had access to the benefits of a strong social

network. On the other hand, the control group would include the rest of the Mexican workers in the United States, that is, in communities where the presence of migrants in the U.S. is lower than 5% of the population, which could reflect a weaker or no social network.

Techniques for estimates

What we sought to analyze was the possible effect of having access to a relatively strong social network. Up to now, we have classified those surveyed in the ENHRUM who were migrants in 2002 into two groups, one with access to a relatively strong network and the other in which the networks are weak or nil. If the classification of both groups had been random, simply the difference in average income could be attributed to the different access to social networks. Nevertheless, both groups can have additional characteristics to those mentioned that make them different and, therefore, the factors contributing to income could be different. For example, those who have greater access to a network could have greater abilities in certain activities that allow them to obtain a higher income, which is why such abilities could make the difference in terms of income. If the existence of factors that affect income is not considered, such as the one described, a greater or lesser effect than they really have could be attributed to the networks, that is, their effect could be slanted.

So as to avoid the problems mentioned, two techniques will be considered to estimate the effect of the social networks on income, which are much used for purposes of impact evaluation:

1) **Regression techniques**[1]: Based on these econometric techniques, it is sought to determine which variables affect the income of Mexican workers in the United States. Considering the manner in which these variables affect income and based on the information of the individuals in the sample, what is known as an estimated income is calculated, which after having considered the different variables that affect them, allows eliminating to a certain extent the effect of such variables, leaving only the possible effect of the social networks. In general, the following process is carried out:

   An indicating variable is generated that is worth 1 if a person belongs to the control group and 0 if it is from the treatment group. This indicator variable is included in a regression of the income of all the individuals in the sample, compared to all the other variables. The coefficient of the indicator variable is the one that shows the possible effect of networks on income.

2) **Matching by propensity**[2]: With this technique, what is being sought is to compare the most similar individuals possible. To this end, an index is calculated in which the different characteristics of the persons in one or another group (control and treatment)[3] are summarized. In this way, those individuals treated with those

United States: Comparison Groups

Treatment group	Control group
Persons in the U.S. in 2002 whose locality had in 1998 a proportion of migrants higher than 5%	Persons in the USA in 2002 whose locality had in 1998 a proportion of migrants a maximum of 5%

Source: BBVA ERD Mexico

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1   For further explanation of this technique see Ravallion (2008) and Wooldridge (2001) chapter 18.
2   This technique has been used previously, among others, by Esquivel and Huerta-Pineda in a study where the effects of remittances on poverty is Mexico is analyzed and by Ordaz (2009) in a document analyzing the possible effect of education on rural poverty In Mexico.
3   This index is denominated propensity score. Its estimate requires meeting the so-called balancing hypothesis for which it is necessary that for those observations with the same "propensity score", the distribution of the characteristics prior to the treatment be the same in the control and treatment groups. This implies that, conditioned to the "propensity score", each individual has the same probability of being assigned to the treatment than in an random experiment.

of the control group, whose indexes are very similar, are compared. Those individuals with very similar indexes are considered to have very similar characteristics. This implies that the analysis is done as if the experiment has been random. The comparisons are conducted in the so-denominated common support zone, that is, where there are sufficient observations to be able to make comparisons. There are different procedures for making the comparisons. In this article, we will use that of the "closest neighbor" which consists in comparing the persons of the treatment group with those of the control group, whose index is the closest in magnitude.

The variables used

The variable of comparison is the income logarithm, with the aim of facilitating the interpretation of the units in which they are expressed by leaving them in growth percentages. The following were used as control variables: a variable with a value of 1 if the individual is a man and 0 if it is a woman (sex); the age of the persons and its value squared; a variable that indicates if someone is married, years of schooling, the academic yield in the last year (scholastic average), the number of children in the home; a variable that indicates the command of the English language. Choosing these variables to a large extent depended on the information provided in the survey

In the first instance, all the variables indicated were included in the models. However, the use of certain statistical tests allowed discriminating which variables were the most appropriate to be included. In the estimate of the comparison index in the matching by propensity method, the first specification that complied with the balancing condition, (necessary for a good application of this method) excluded scholastic grade and the indicator variable of civil or marital status; the second specification, instead of the indicator variable of civil or marital status, included the number of children in the home. These same variables are those that were used in the regression method with the aim of maintaining certain comparability between the two methods.

The first estimates suggest that the probability of belonging to a relatively strong social network tends to increase when persons are of the masculine sex and of an age up to a certain point (of around 50 years of age) or who are married.

Once the probabilities of belonging to a relatively strong network have been estimated, it is pertinent to proceed to the estimate of the effect of networks on the income of workers, in the case of the method of matching by propensity. In the case of the regression method, this process is not required. In the following section, the results of the estimates are presented.

Results

To calculate the possible effect on the income of Mexican workers in the U.S., the average income of those who have access to relatively strong networks was compared to the income of those who do not have networks or where access is weak. To this end, the two methods mentioned above were used and, in each case, two specifications were made with the aim of proving that the results are statistically sound.

Estimated Model of the Index of Comparison in the Method of Matching Propensity
Dependent variable equal to 1 if there is access to a strong social network

Variable	Specification 1		Specification 2	
	Coeff	t	Coeff	t
Gender (1 if male)	0.4526	2.02**	0.4637	2.87**
Age	0.0624	1.95*	0.0327	0.89
Age2	-0.0006	-1.44	-0.0003	-0.60
English	0.6763	3.49**	0.6645	3.46**
Children	-0.0004	-0.01		
Yield (average in the last year of school)	0.0061	0.33	0.0065	0.35
Married			0.2669	1.66*
Constant	-1.2162	-2.08**	-0.8456	-1.37

Coeff	Coefficient
t	t statistic
*	Significant to 10% level
**	Significant to 5% level
Note:	The estimate was made through a probit model
Source:	BBVA ERD Mexico based on ENHRUM

Considering the statistically significant results of the two methods, it was found that, on average, migrants who have access to relatively strong social networks earn around 23% more than migrants with similar characteristics who have weak social networks. Thus, these results suggest that the social networks have a positive influence on the income of Mexican workers, since, in general, they tend to obtain higher income than they would if they did not have the networks. This result could result from persons that have access to a stronger network; in general, they have more information to choose where to move and on job positions and the respective wages. On this point, Wahba and Zenou (2004) show evidence, based on data from Egypt, that the probability of finding a job through a social network is greater in comparison than with other search methods. When analyzing the case of Mexican migrants, Munshi (2003) finds that the probability of a person being employed increases when his social network is exogenously large.

Which individuals are those who benefit the most form the social networks?

Evidence was found that social networks positively affect the income of Mexican workers in the United States who have access to them. An interesting point based on this result is identifying those who benefit the most from social networks, since it is possible to assume that not all persons who have access to a social network have similar benefits. To this end, the sample was divided into different groups by age, gender and schooling, and the methods used were applied to the population in general.

In terms of age, the population was grouped in persons 40 years of age or less and in persons older than 40. When making this separation, the difference in income between those younger tends to be higher than the 23% figure for the total of the population, which is why it is probable that it is the younger ones who have a greater advantage from the social networks, since their income tends to increase to a greater extent than in the case of the older persons.

When separating the population according to gender, it was found that it is in the case of men where the social networks have a greater effect, since their income tends to increase more than in the case of women.

To explore the effects, considering schooling, the population was divided into two groups: those who have no more than six years of school and those with more than six years. It was found that the social networks tend to benefit, to a greater extent, those persons with lower education, since their income tends to rise in a greater proportion than in the case of those persons with greater education. In this respect, Arceo Gomez (2010) finds a similar result to that shown here in relation to labor qualification. The less qualified migrants make important use of the information they obtain through the social networks in order to decide where to locate, while highly qualified individuals do not take into consideration this type of information or it is much less important for them.

Thus, the results obtained show that social networks have a positive effect on the income of Mexican workers in the U.S. and that their

Average Effect of Social Networks on the Income of Mexican Migrants in the U.S.

Method	Specification	Effect
Regression	1	22.50%
	2	23.20%
Matching propensity	1	14.90%
	2	22.00%
Average*		22.60%

*	Statistically significant results
Note:	Coefficients in bold statistically significant at the 5% level
Source:	BBVA ERD Mexico based on ENHRUM

Summary of the Effects of Social Networks on Different Groups

Clasification	Group	Regression		Matching propensity	
		1	2	1	2
Age	Younger or equal to 40 years	AP	AP	AP	AP
	Older than 40 years	EP	EP	EP	EP
Gender	Male	AP	AP	AP	AP
	Female	EP	EP	EP	EP
Schooling	Lower or equal to 6 years of schooling	AP	AP	NC	NC
	More than 6 years	EP	EP	NC	NC

AP	Effect higher than the average
EP	Effect lower than the average
NC	Cases in which the sample was much reduced and no consistent results were obtained
Source:	BBVA ERD Mexico based on ENHRUM

effect varies for different groups of the population. Younger workers, those of the male gender and those with lower education seem to be the groups that benefit the most from social networks.

Conclusions

In this article, of **Migration Watch Mexico**, we analyzed empirically whether social networks have an effect on the income of Mexican workers living in the United States. Two methods and two specifications were used in each case with the aim of obtaining statistically sound estimates.

The results of this analysis reveal that the probability of belonging to a relatively strong social network tends to increase among persons of the masculine gender, of age up to a certain point, or are married. Also, it is found that all the social networks are important for Mexicans working in the United States, since those who have access to strong networks receive, on average, higher income than those who have weak networks or in when they have no access to a social network.

The estimates show that the persons who most benefit from social networks are the younger workers, of the male gender and with less schooling, since, on average their income tends to be higher than the one they would have if they did not belong to a social network.

Expansions of this study could be directed to proving whether the use of communication technologies, such as mobile phones, the Internet, etc., can manage to make possible the benefits of belonging to a social network, a situation which, in recent years, has intensified.

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Statistical Appendix

Number of International Immigrants, millions

	1960	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010
World	77.1	80.8	84.5	90.4	102.0	113.2	155.5	166.0	178.5	195.2	213.9
Developed Countries	33.9	37.6	41.1	46.2	50.7	55.4	90.3	101.4	110.8	123.2	133.4
Developing Countries	43.2	43.2	43.4	44.1	51.3	57.8	65.2	64.6	67.7	72.1	80.5
Northern America	13.6	14.4	15.2	17.5	20.2	23.4	27.8	33.6	40.4	45.6	50.0
Asia	28.5	28.3	28.1	28.2	32.0	38.0	42.9	41.5	45.6	49.1	55.6
Latin America and the Caribbean	6.2	6.0	5.8	5.8	6.1	6.3	7.1	6.2	6.5	6.9	7.5
Europe	14.6	17.1	19.2	21.6	23.1	24.2	27.8	34.1	37.7	44.6	50.1
Africa	9.2	9.5	10.0	10.7	13.8	14.1	16.0	17.9	17.1	17.7	19.3
Oceania	2.1	2.6	3.0	3.3	3.6	3.9	4.4	4.7	5.0	5.5	6.0
Ex-USSR	2.9	3.0	3.1	3.2	3.3	3.3	29.6	27.9	26.2	25.8	25.4

Annual Remittances, inflows, US$ billion

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009e
World	120.5	125.9	130.5	145.4	167.5	204.5	237.5	275.2	317.3	384.8	443.5	420.1
Developed Countries	48.5	50.0	48.0	52.3	54.9	64.1	73.2	76.2	81.9	95.4	105.8	102.9
Developing Countries	72.0	75.9	82.5	93.1	112.6	140.4	164.4	198.9	235.4	289.4	337.8	317.2
East Asia and Pacific	12.2	14.9	15.7	18.8	27.5	32.7	40.3	50.5	57.6	71.3	86.1	84.8
South Asia	13.4	15.1	17.2	19.2	24.1	30.4	28.7	33.9	42.5	54.0	73.3	72.0
LatAm and Caribbean	15.8	17.6	20.0	24.2	27.9	36.6	43.3	50.1	59.2	63.2	64.7	58.5
Europe and Central Asia	13.2	11.1	12.1	11.6	12.8	14.4	21.0	30.1	37.3	50.8	57.8	49.3
Middle-East & North Africa	13.1	12.8	12.9	14.7	15.2	20.4	23.0	25.0	26.1	31.4	34.7	32.2
Sub-Saharan Africa	4.3	4.4	4.6	4.7	5.0	6.0	8.0	9.4	12.6	18.6	21.1	20.5

U.S. Immigration, millions of persons

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Total population	266.8	269.1	271.7	276.8	279.5	282.1	285.9	288.3	288.4	299.4	301.6	304.1
Immigrants	25.8	26.3	26.4	30.0	31.8	32.5	33.5	34.2	35.8	37.5	38.0	38.0
Gender												
Male	12.9	13.1	13.1	15.1	16.1	16.4	16.8	17.2	17.9	18.9	19.2	19.1
Female	12.8	13.2	13.3	14.8	15.7	16.1	16.7	17.0	17.8	18.6	18.9	18.9
Age												
Less than 15	1.9	1.8	1.6	2.1	2.2	2.1	2.1	2.2	2.2	2.2	2.1	2.0
15 to 64	21.1	21.6	21.8	24.7	26.4	27.0	27.7	28.4	29.6	31.0	31.5	31.3
More than 64	2.8	2.9	3.0	3.2	3.3	3.3	3.7	3.7	3.9	4.3	4.5	4.7
Region of birth												
Europe	4.3	4.3	4.2	4.4	4.5	4.5	4.6	4.7	5.1	5.2	5.3	5.3
Asia	6.8	7.0	7.2	7.9	8.5	8.5	8.4	8.7	9.3	9.8	9.9	9.1
Latin America	13.1	13.4	13.4	15.3	16.0	16.0	17.8	18.3	19.1	20.1	20.1	20.2
All other	1.6	1.6	1.6	2.4	2.8	2.8	2.7	2.6	2.2	2.4	2.8	3.5

Source: BBVA Bancomer with United Nations, World Bank, U.S. Census Bureau and Pew Hispanic Center data

Mexican Immigrants in the U.S.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Mexicans in the U.S. (Millions)	na	na	na	23.2	24.0	25.5	26.7	26.9	28.1	29.3	30.3
Foreign born	7.3	7.4	7.4	8.1	8.5	9.9	10.2	10.7	11.0	11.1	11.8
U.S. born	na	na	na	14.4	14.9	16.0	16.8	16.6	17.5	18.2	18.5
Demographic characteristics of Mexican emigrants											
Gender	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Male	55.9	54.6	54.4	53.9	54.1	55.4	55.1	55.2	55.4	55.2	56.0
Female	44.1	45.4	45.6	46.1	45.9	44.6	44.9	44.8	44.6	44.8	44.0
Age groups	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0 to 14	10.3	9.7	8.0	9.4	9.3	9.1	8.6	8.6	8.6	7.7	7.3
15 to 29	35.1	33.2	33.2	32.6	31.4	33.1	31.9	32.3	31.3	30.2	28.6
30 to 44	33.9	35.8	36.2	36.1	35.6	36.9	37.5	37.4	37.0	37.3	38.1
45 to 64	16.4	16.6	17.4	17.3	18.8	16.8	17.4	17.3	18.6	20.1	20.8
65 and older	4.3	4.7	5.3	4.6	4.9	4.1	4.6	4.4	4.5	4.7	5.1
Average age (in years)	33.1	33.8	34.5	33.9	34.4	33.6	34.3	34.2	34.5	35.2	35.2
By state	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
California	46.8	46.3	46.2	47.8	44.5	42.5	39.3	38.3	42.2	39.5	39.5
Texas	21.1	21.5	21.4	19.0	21.0	20.3	23.0	21.4	20.3	19.4	19.2
All other	11.5	11.6	11.3	12.1	14.0	14.9	15.1	18.3	17.0	18.7	18.8
Arizona	6.8	6.7	6.4	5.3	4.7	5.6	6.0	6.2	5.6	6.4	5.7
Illinois	5.8	6.5	6.3	5.8	5.5	4.9	6.5	5.5	5.4	4.7	5.3
Florida	1.5	1.4	2.1	2.4	3.0	3.5	2.2	2.0	2.3	2.8	3.3
North Carolina	0.9	0.8	1.1	1.4	1.5	1.6	1.6	2.6	2.0	2.5	2.2
New York	2.2	2.9	2.4	1.8	2.1	2.3	1.8	1.7	1.2	1.9	2.0
Colorado	2.1	1.2	1.2	2.3	1.9	2.5	2.5	2.3	2.2	2.4	2.0
Nevada	1.3	1.1	1.5	2.0	1.7	1.8	1.8	1.6	1.9	1.8	1.9
Period of arrival	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Before 1975	20.4	19.6	19.9	17.3	15.5	13.5	13.5	12.3	11.8	10.6	10.3
1975 to 1985	29.6	28.4	28.1	24.4	22.6	20.9	20.9	19.0	16.6	17.0	15.9
1986 to 1995	49.9	44.3	39.8	39.2	36.9	35.8	35.8	30.2	29.7	28.9	28.3
1996 to 2007	0.0	7.7	12.2	19.1	25.0	29.9	29.9	38.5	41.9	43.6	45.5
Mobility status in the last year	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Non- immigrants	91.8	94.5	92.0	91.6	91.9	91.2	92.3	93.2	89.7	93.1	94.9
Internal migrants[1]	4.6	3.3	4.2	4.9	4.7	4.9	5.0	4.4	5.3	4.5	3.4
International migrants[2]	3.6	2.2	3.8	3.5	3.5	3.9	2.7	2.4	5.0	2.5	1.8

1   It refers to the population that resided, the previous year to the interview, in a different county to the current one.
2   It refers to the population that resided, the previous year to the interview, in Mexico.
na   not available
Source: BBVA Bancomer tabulations of Conapo data, based on U.S. Census Bureau, Current Population Survey (CPS) data, March 1994-2007

Mexican Migrants in the U.S.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Social characteristics on Mexican emigrants											
Educational attainment[1]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 10th grade	58.7	58.6	56.3	56.2	56.7	54.7	54.1	52.7	52.6	51.0	47.0
From 10th to 12th grade	26.9	28.0	30.3	29.9	28.7	30.6	31.4	32.9	32.9	34.3	38.0
Some college	9.6	8.8	8.8	9.6	9.1	9.3	9.0	9.1	9.2	9.3	9.9
College graduate or advanced degree	4.8	4.6	4.6	4.3	5.5	5.4	5.5	5.3	5.3	5.4	5.0
Citizenship	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
American citizen	18.2	21.1	22.7	22.6	22.6	21.4	21.8	21.3	20.4	21.3	21.5
Not American citizen	81.8	78.9	77.3	77.4	77.4	78.6	78.2	78.7	79.6	78.7	78.5
Poverty status[2]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Poor	33.7	30.2	28.3	25.7	24.7	24.6	25.4	25.7	26.2	25.7	22.1
Non-poor	66.3	69.8	71.7	74.3	75.3	75.4	74.6	74.3	73.8	74.3	77.9
Health insurance coverage type	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Public	13.5	12.5	12.9	12.7	12.3	11.7	12.9	12.9	14.1	14.1	12.7
Private	31.7	31.2	31.4	33.2	33.1	33.6	32.3	30.3	29.8	29.6	28.3
Both	2.0	2.4	2.1	2.0	1.9	1.7	2.2	1.8	2.7	2.3	2.6
None	52.8	53.8	53.6	52.1	52.7	53.0	52.6	55.0	53.4	54.1	56.4
Employment situation of Mexican emigrants											
15 years and over (millions)	6.5	6.7	6.8	7.3	7.7	9.0	9.3	9.8	10.1	10.3	10.9
Labor force	4.4	4.6	4.6	5.0	5.3	6.3	6.5	6.7	6.9	7.2	7.7
Employed	4.0	4.2	4.3	4.6	4.9	5.8	5.8	6.2	6.5	6.8	7.2
Unemployed	0.4	0.3	0.3	0.4	0.4	0.6	0.6	0.5	0.4	0.4	0.4
Not in labor force	2.1	2.1	2.2	2.3	2.4	2.6	2.9	3.1	3.1	3.1	3.3
Average weekly hours of work	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Up to 34	12.5	13.0	10.6	9.3	9.7	11.6	11.1	10.3	11.0	9.5	10.5
35 to 44	69.8	70.3	73.7	76.8	75.3	75.2	75.1	76.1	75.2	76.1	75.1
45 or more	17.7	16.7	15.7	13.9	14.9	13.2	13.8	13.6	13.8	14.4	14.4
Annual earnings (dollars)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 10,000	29.8	26.2	23.8	21.0	17.5	17.5	15.0	14.4	13.4	12.8	11.1
10,000 to 19,999	42.1	43.2	44.3	44.1	42.4	40.0	39.9	40.9	39.9	37.1	34.4
20,000 to 29,999	16.6	17.9	18.8	20.1	22.0	24.6	24.3	23.9	24.0	26.2	27.5
30,000 to 39,999	6.8	7.6	6.9	7.8	9.9	9.3	10.7	11.2	11.4	12.4	13.7
40,000 or more	4.7	5.1	6.2	7.0	8.2	8.7	10.1	9.6	11.3	11.5	13.3
Economic sector	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Primary	12.4	10.2	10.6	12.1	9.5	8.3	4.4	5.0	5.7	4.2	4.0
Secondary	36.4	35.3	34.9	36.6	36.5	35.8	35.8	36.1	36.9	39.6	40.6
Tertiary	51.2	54.5	54.5	51.2	54.0	55.9	59.8	58.9	57.4	56.2	55.4
Occupation	na	na	na	na	na	na	100.0	100.0	100.0	100.0	100.0
Professional and related	na	na	na	na	na	na	7.4	7.8	6.7	7.5	7.3
Sales and management[3]	na	na	na	na	na	na	15.4	15.9	15.0	15.0	14.9
Building clean., mainten. & food prep.[4]	na	na	na	na	na	na	25.6	24.6	25.6	25.3	23.3
Farming, fishing, and forestry	na	na	na	na	na	na	4.3	4.4	5.4	3.9	3.9
Construction, maintenance, and repair[5]	na	na	na	na	na	na	19.5	22.6	23.2	25.3	27.8
Transportation and Production[6]	na	na	na	na	na	na	27.9	24.6	24.0	22.8	22.6
Extraction	na	na	na	na	na	na	0.1	0.1	0.2	0.2	0.2

1   People 25 and older.
2   U.S. poverty methodology. Families and unrelated individuals are classified as being above or below the poverty level using a poverty index adopted by a Federal Interagency Committee in 1969 and slightly modified in 1981.
3   Includes: health care, protection as detectives, inspectors, police officers, supervisors, managers of correctional institutions, etc., personal care as child care, barbers, funeral and recreation services.
4   Includes: doorman, building cleaners, and domestic servants.
5   Includes: operators and supervisors of production, assemblers of electrical and electromechanical, metallic structure-makers, computer programmers and operators.
6   Transportations and mobile occupations, electricians, electromechanical, machinery assemblers, metallic structures manufacturers, cleaners of vehicles and equip., workers in recycling and shipper.
na   not available
Source: BBVA Bancomer tabulations of Conapo estimates from U.S. Census Bureau, Current Population Survey (CPS) data, March 1994-2007

Information by State of the Mexico-United States Migration

	Migrants in U.S.			Migrants in U.S. / population*				Migrants in U.S., % distribution			
	1990	2000	2003	1990	2000	2003	Rank'03	1990	2000	2003	Rank'03
Total	**5,413,082**	**8,780,482**	**9,866,755**	**5.98**	**8.06**	**8.68**		**100.00**	**100.00**	**100.00**	
Baja California	486,173	501,014	498,132	32.75	26.46	23.65	1	8.98	5.71	5.05	6
Zacatecas	360,276	513,810	550,856	16.75	21.93	23.21	2	6.66	5.85	5.58	5
Michoacán	571,002	950,661	1,059,366	11.65	16.72	18.10	3	10.55	10.83	10.74	2
Jalisco	912,093	1,252,615	1,349,238	14.23	16.31	17.06	4	16.85	14.27	13.67	1
Colima	57,170	85,258	92,732	12.76	15.32	15.64	5	1.06	0.97	0.94	25
Durango	204,871	301,832	327,306	10.84	14.33	15.05	6	3.78	3.44	3.32	11
Guanajuato	400,033	800,680	921,477	8.03	13.46	14.92	7	7.39	9.12	9.34	3
Nayarit	99,315	162,600	177,917	9.90	13.81	14.64	8	1.83	1.85	1.80	21
Chihuahua	338,780	457,037	478,760	12.58	14.32	14.24	9	6.26	5.21	4.85	7
Morelos	72,656	168,609	204,851	6.60	11.74	13.20	10	1.34	1.92	2.08	17
Aguascalientes	71,038	119,777	134,738	8.92	11.67	12.70	11	1.31	1.36	1.37	23
San Luis Potosí	200,941	339,314	386,100	7.50	10.82	12.15	12	3.71	3.86	3.91	9
Tamaulipas	137,839	221,284	241,961	6.10	8.09	8.40	13	2.55	2.52	2.45	15
Guerrero	107,405	284,851	347,528	3.30	7.13	8.37	14	1.98	3.24	3.52	10
Nuevo León	197,012	279,349	294,178	6.75	7.71	7.85	15	3.64	3.18	2.98	13
Sonora	139,996	165,299	170,604	7.34	7.14	7.08	16	2.59	1.88	1.73	22
Querétaro	47,384	90,036	106,145	4.18	6.28	7.04	17	0.88	1.03	1.08	24
Hidalgo	32,977	141,440	194,075	1.39	5.05	6.76	18	0.61	1.61	1.97	18
Coahuila	133,986	170,195	180,291	5.85	6.37	6.54	19	2.48	1.94	1.83	20
Sinaloa	83,135	161,370	186,534	3.38	5.40	6.01	20	1.54	1.84	1.89	19
México	206,566	485,442	586,196	2.94	5.42	5.95	21	3.82	5.53	5.94	4
Oaxaca	69,574	181,683	231,968	1.82	4.08	5.03	22	1.29	2.07	2.35	16
Puebla	85,369	246,361	305,442	1.76	4.18	4.92	23	1.58	2.81	3.10	12
Baja California Sur	13,637	16,546	17,213	5.09	4.83	4.73	24	0.25	0.19	0.17	29
Distrito Federal	270,978	367,202	413,395	2.68	3.05	3.36	25	5.01	4.18	4.19	8
Quintana Roo	12,790	15,431	16,413	5.21	3.51	3.30	26	0.24	0.18	0.17	30
Veracruz	46,614	197,495	266,256	0.67	2.41	3.16	27	0.86	2.25	2.70	14
Yucatán	33,824	43,313	47,081	2.10	2.23	2.38	28	0.62	0.49	0.48	26
Tlaxcala	4,238	18,836	25,856	0.48	1.76	2.34	29	0.08	0.21	0.26	28
Campeche	4,777	7,505	9,341	0.95	1.15	1.36	30	0.09	0.09	0.09	32
Chiapas	6,318	24,100	32,622	0.18	0.57	0.71	31	0.12	0.27	0.33	27
Tabasco	4,315	9,537	12,183	0.27	0.47	0.58	32	0.08	0.11	0.12	31

* Migrants in the US as % of the population in the state
Source: BBVA Bancomer with Conapo data

Indicators of Remittances Inflows at State Level

	Households in 2000					Indicator[5]	Level[6]
	Number	Remittances[1]	Emigrants[2]	Circular[3]	Return[4]		
Total	**22,639,808**	**4.35**	**4.14**	**0.94**	**0.85**	**2.70**	
Michoacán	893,671	11.37	10.37	2.82	2.31	15.72	Very high
Zacatecas	306,882	13.03	12.18	3.31	2.55	11.94	Very high
Oaxaca	762,517	4.13	4.76	0.56	0.72	11.57	Very high
Guerrero	677,731	7.86	6.79	0.84	1.09	11.48	Very high
Hidalgo	507,225	5.06	7.14	1.61	0.88	9.76	Very high
Guanajuato	990,602	9.20	9.55	2.18	1.60	8.93	High
Nayarit	222,714	9.64	6.82	2.03	2.03	8.44	High
Chiapas	832,111	0.76	0.79	0.11	0.07	7.74	High
Tlaxcala	203,259	2.24	2.70	0.49	0.37	6.75	High
Morelos	376,140	6.44	7.46	1.27	1.13	5.85	Medium
Veracruz	1,649,332	2.74	3.20	0.49	0.22	5.23	Medium
Puebla	1,098,409	3.28	4.02	0.54	0.66	5.16	Medium
San Luis Potosí	509,582	8.20	7.43	1.29	1.15	4.98	Medium
Colima	136,926	7.34	5.62	1.37	2.10	4.63	Medium
Durango	331,242	9.70	7.31	1.82	1.57	4.49	Medium
Jalisco	1,457,326	7.70	6.53	1.78	1.68	4.31	Medium
Aguascalientes	207,327	6.69	6.66	2.74	1.46	4.00	Medium
Querétaro	311,896	3.71	4.81	1.42	0.68	3.59	Medium
Sinaloa	586,245	4.60	3.58	0.89	0.61	3.57	Medium
México	2,978,023	2.11	2.63	0.56	0.33	2.90	Low
Tamaulipas	690,067	3.64	3.02	0.61	0.75	2.10	Low
Tabasco	426,653	0.64	0.58	0.15	0.04	2.02	Low
Sonora	539,528	3.16	1.59	0.32	0.87	1.56	Low
Chihuahua	767,679	4.32	3.70	1.04	1.27	1.42	Low
Baja California	613,602	4.02	2.38	0.35	2.28	1.14	Low
Coahuila	555,793	3.38	2.23	0.81	0.68	1.14	Low
Yucatán	387,434	1.41	1.02	0.22	0.23	1.12	Low
Distrito Federal	2,203,741	1.72	1.60	0.44	0.32	0.94	Very low
Campeche	163,451	1.02	0.88	0.15	0.10	0.91	Very low
Quintana Roo	219,671	0.99	0.71	0.19	0.25	0.86	Very low
Baja California Sur	107,536	1.08	1.03	0.57	0.63	0.63	Very low
Nuevo León	925,493	2.46	1.91	0.65	0.58	0.62	Very low

1   Households receiving remittances (%)
3   Households with circular emigrants in the U.S in the 5 years preceding (%)
5   Remittances dependency indicator 2006, remittances / GDP * 100
Source: BBVA Bancomer tabulations of Conapo estimates

2   Households with emigrants in the U.S in the 5 years preceding (%)
4   Households with return emigrants in the U.S in the 5 years preceding (%)
6   Level of dependence on remittances. Classification made by BBVA Bancomer. Rankings are based on standard deviations of the sample

Annual Figures on Remittances Nationwide

	2003	2004	2005	2006	2007	2008	2009
Millions of U.S. dollars							
Total	15,040.7	18,331.3	21,688.7	25,566.8	26,068.7	25,137.4	21,181.1
Money orders	1,665.3	1,869.7	1,747.9	1,359.7	859.7	598.2	386.2
Personal checks	6.4	0.0	0.0	0.0	0.0	0.0	0.0
Wire transfers	13,114.4	16,228.0	19,667.7	23,854.0	24,821.7	24,113.0	20,483.9
Cash and kind	254.6	233.6	273.2	353.2	387.3	426.3	311.0
Thousands of transactions							
Total	44,308.5	57,011.3	64,923.3	74,183.6	75,700.8	72,627.3	66,797.0
Money orders	4,163.6	4,602.8	4,066.9	2,844.6	1,585.9	1,352.7	866.4
Personal checks	5.6	0.0	0.0	0.0	0.0	0.0	0.0
Wire transfers	39,819.1	52,085.8	60,511.0	70,696.7	73,343.7	70,487.4	65,241.5
Cash and kind	320.3	322.7	345.4	642.3	771.2	787.2	689.1
Average remittance (dollars)	316.4	321.0	333.7	344.6	344.4	346.1	317.1

Source: BBVA Bancomer with Banco de Mexico data

Annual Remittances at State Level, millions of dollars

	2003	2004	2005	2006	2007	2008	2009
Total	**15,040.7**	**18,331.3**	**21,688.7**	**25,566.8**	**26,068.7**	**25,137.4**	**21,181.1**
Michoacán	1,778.9	2,298.9	2,461.8	2,520.4	2,392.0	2,457.2	2,133.1
Guanajuato	1,403.2	1,734.1	1,904.8	2,319.4	2,353.6	2,324.5	1,944.8
Estado de México	1,345.4	1,485.7	1,723.1	2,009.0	2,008.7	1,942.4	1,714.9
Jalisco	1,112.1	1,466.1	1,791.6	2,110.8	2,171.4	2,095.6	1,716.4
Veracruz	989.6	1,162.6	1,364.4	1,672.4	1,736.2	1,620.4	1,294.1
Puebla	804.9	963.0	1,133.3	1,425.9	1,555.4	1,567.5	1,304.7
Oaxaca	770.8	929.6	1,053.6	1,321.0	1,420.3	1,456.5	1,203.6
Guerrero	845.5	982.7	1,117.3	1,378.0	1,418.2	1,401.6	1,149.1
Distrito Federal	826.8	928.8	1,333.9	1,524.6	1,374.8	1,105.3	980.6
Hidalgo	589.1	698.1	782.1	945.5	1,085.6	939.5	736.7
Chiapas	397.7	465.3	557.5	710.0	760.6	758.3	605.9
San Luis Potosí	439.3	595.6	772.1	943.6	906.3	799.9	630.9
Zacatecas	400.5	485.3	541.0	670.0	757.5	677.7	569.6
Morelos	368.5	429.8	504.9	588.7	614.9	621.2	541.9
Tamaulipas	319.4	377.4	455.4	507.3	516.4	489.1	423.7
Sinaloa	238.1	290.9	435.6	508.0	521.2	511.4	457.7
Chihuahua	240.5	286.0	398.7	485.3	471.9	475.3	410.4
Durango	265.3	336.2	392.5	437.2	450.6	450.4	381.2
Querétaro	283.2	357.7	412.4	492.4	474.7	442.3	363.6
Nayarit	229.6	267.2	308.3	355.0	376.9	383.6	347.5
Baja California	144.4	168.8	263.2	309.6	336.1	342.1	329.1
Aguascalientes	193.3	303.0	291.4	351.5	358.6	331.1	280.9
Nuevo León	260.9	318.6	324.8	382.0	355.5	331.8	299.3
Sonora	130.5	174.6	302.5	334.4	335.7	318.3	284.6
Coahuila	142.2	184.3	247.0	282.3	294.2	299.6	246.0
Tlaxcala	143.1	181.3	218.0	268.0	293.5	299.3	257.2
Colima	105.2	137.6	169.1	187.5	196.3	197.9	173.3
Tabasco	87.3	107.8	160.3	192.5	185.2	159.4	116.8
Yucatán	59.5	73.0	88.8	119.0	133.4	129.0	106.2
Quintana Roo	53.7	68.9	86.9	102.0	99.4	99.5	87.5
Campeche	52.5	54.6	67.4	84.0	81.0	74.4	57.0
Baja California Sur	19.4	18.3	25.1	29.2	32.4	35.5	32.6

Source: BBVA Bancomer with Banco de Mexico data

Annual Figures on Remittances Nationwide, % distribution

	2003	2004	2005	2006	2007	2008	2009
Millions of dollars							
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Money orders	11.1	10.2	8.1	5.3	3.3	2.4	1.8
Personal checks	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Wire transfers	87.2	88.5	90.7	93.3	95.2	95.9	96.7
Cash and kind	1.7	1.3	1.3	1.4	1.5	1.7	1.5
Thousands of transactions							
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Money orders	9.4	8.1	6.3	3.8	2.1	1.9	1.3
Personal checks	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Wire transfers	89.9	91.4	93.2	95.3	96.9	97.1	97.7
Cash and kind	0.7	0.6	0.5	0.9	1.0	1.1	1.0

Source: BBVA Bancomer with Banco de Mexico data

Annual Remittances at State Level, % distribution

	2003	2004	2005	2006	2007	2008	2009
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Michoacán	11.8	12.5	11.4	9.9	9.2	9.8	10.1
Guanajuato	9.3	9.5	8.8	9.1	9.0	9.2	9.2
Estado de México	7.4	8.0	8.3	8.3	8.3	8.3	8.1
Jalisco	8.9	8.1	7.9	7.9	7.7	7.7	8.1
Veracruz	6.6	6.3	6.3	6.5	6.7	6.4	6.1
Puebla	5.4	5.3	5.2	5.6	6.0	6.2	6.2
Oaxaca	5.1	5.1	4.9	5.2	5.4	5.8	5.7
Guerrero	5.6	5.4	5.2	5.4	5.4	5.6	5.4
Distrito Federal	5.5	5.1	6.2	6.0	5.3	4.4	4.6
Hidalgo	3.9	3.8	3.6	3.7	4.2	3.7	3.5
Chiapas	2.9	3.2	3.6	3.7	3.5	3.2	2.9
San Luis Potosí	2.6	2.5	2.6	2.8	2.9	3.0	3.0
Zacatecas	2.7	2.6	2.5	2.6	2.9	2.7	2.7
Morelos	2.5	2.3	2.3	2.3	2.4	2.5	2.6
Tamaulipas	1.6	1.6	2.0	2.0	2.0	2.0	2.0
Sinaloa	2.1	2.1	2.1	2.0	2.0	1.9	2.2
Chihuahua	1.6	1.6	1.8	1.9	1.8	1.9	1.9
Durango	1.8	1.8	1.8	1.7	1.7	1.8	1.8
Querétaro	1.9	2.0	1.9	1.9	1.8	1.8	1.7
Nayarit	1.5	1.5	1.4	1.4	1.4	1.5	1.6
Baja California	1.0	0.9	1.2	1.2	1.3	1.4	1.6
Aguascalientes	1.7	1.7	1.5	1.5	1.4	1.3	1.3
Nuevo León	1.3	1.7	1.3	1.4	1.4	1.3	1.4
Sonora	0.9	1.0	1.4	1.3	1.3	1.3	1.3
Coahuila	0.9	1.0	1.1	1.1	1.1	1.2	1.2
Tlaxcala	1.0	1.0	1.0	1.0	1.1	1.2	1.2
Colima	0.7	0.8	0.8	0.7	0.8	0.8	0.8
Tabasco	0.6	0.6	0.7	0.8	0.7	0.6	0.6
Yucatán	0.4	0.4	0.4	0.5	0.5	0.5	0.5
Quintana Roo	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Campeche	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Baja California Sur	0.1	0.1	0.1	0.1	0.1	0.1	0.2

Source: BBVA Bancomer with Banco de Mexico data

Employment Status of the Hispanic and Mexican Population in the U.S., thousands

	I 07	II 07	III 07	IV 07	I 08	II 08	III 08	IV 08	I 09	II 09	III 09	IV 09
Total population*												
Population (16 years & over)	230,839	231,482	232,210	232,937	232,807	233,410	234,110	234,825	234,913	235,459	236,093	236,739
Labor force	153,050	152,764	153,071	153,598	153,871	154,228	154,565	154,653	154,235	154,811	154,235	153,544
Employed	137,724	137,088	136,719	136,226	136,105	136,360	136,807	136,652	137,444	137,656	137,544	138,273
Unemployed	6,903	6,859	7,136	7,418	7,619	8,196	9,324	10,730	12,648	14,352	14,895	15,406
Labor force participation rate	66.3	66.0	65.9	65.9	66.1	66.1	66.0	65.9	65.7	65.7	65.3	64.9
Unemployment rate	4.5	4.5	4.7	4.8	5.0	5.3	6.0	6.9	8.2	9.3	9.7	10.0
Total population												
Population (16 years & over)	230,839	231,482	232,210	232,937	232,807	233,410	234,110	234,825	234,913	235,459	236,093	236,739
Labor force	152,013	152,810	153,921	153,752	152,822	154,264	155,399	154,662	153,659	154,697	154,923	153,289
Employed	144,692	146,040	146,723	146,732	144,755	146,166	146,029	144,501	140,125	140,592	140,069	138,724
Unemployed	7,321	6,771	7,199	7,020	8,067	8,099	9,370	10,161	13,534	14,105	14,854	14,565
Labor force participation rate	65.9	66.0	66.3	66.0	65.6	66.1	66.4	65.9	65.4	65.7	65.6	64.8
Unemployment rate	4.8	4.4	4.7	4.6	5.3	5.2	6.0	6.6	8.8	9.1	9.6	9.5
Hispanic*												
Population (16 years & over)	30,966	31,238	31,520	31,809	31,732	31,999	32,274	32,557	32,501	32,754	33,018	33,291
Labor force	21,418	21,461	21,716	21,803	21,807	22,065	22,131	22,111	22,120	22,403	22,435	22,487
Employed	20,270	20,260	20,472	20,511	20,384	20,479	20,397	20,114	19,723	19,688	19,585	19,586
Unemployed	1,148	1,201	1,244	1,292	1,423	1,585	1,734	1,996	2,397	2,716	2,850	2,901
Labor force participation rate	69.2	68.7	68.9	68.5	68.7	69.0	68.6	67.9	68.1	68.4	67.9	67.5
Unemployment rate	5.4	5.6	5.7	5.9	6.5	7.2	7.8	9.0	10.8	12.1	12.7	12.9
Hispanic												
Population (16 years & over)	30,966	31,238	31,520	31,809	31,732	31,999	32,274	32,557	32,501	32,754	33,018	33,291
Labor force	21,254	21,482	21,781	21,891	21,646	22,063	22,205	22,183	22,033	22,340	22,508	22,528
Employed	20,008	20,341	20,549	20,630	20,106	20,551	20,487	20,240	19,442	19,751	19,680	19,713
Unemployed	1,245	1,141	1,232	1,260	1,540	1,511	1,719	1,943	2,592	2,589	2,828	2,815
Labor force participation rate	68.6	68.8	69.1	68.8	68.2	68.9	68.8	68.1	67.8	68.2	68.2	67.7
Unemployment rate	5.9	5.3	5.7	5.8	7.1	6.9	7.7	8.8	11.8	11.6	12.6	12.5
Mexican												
Population (16 years & over)	19,403	19,674	19,985	20,018	20,161	20,427	20,744	20,707	21,056	21,006	20,716	20,913
Labor force	13,334	13,592	13,921	13,841	13,700	14,045	14,238	14,144	14,183	14,349	14,140	14,168
Employed	12,559	12,878	13,183	13,011	12,687	13,044	13,158	12,960	12,493	12,671	12,350	12,398
Unemployed	774	714	738	830	1,012	1,001	1,080	1,184	1,690	1,678	1,790	1,771
Labor force participation rate	68.7	69.1	69.7	69.1	68.0	68.8	68.6	68.3	67.4	68.3	68.3	67.7
Unemployment rate	5.8	5.3	5.3	6.0	7.4	7.1	7.6	8.4	11.9	11.7	12.7	12.5
Native-born Mexican												
Population (16 years & over)	8,750	8,707	8,948	9,106	9,230	9,364	9,429	9,730	10,227	9,976	9,623	10,031
Labor force	5,927	5,822	5,954	6,105	6,111	6,274	6,247	6,419	6,662	6,596	6,287	6,417
Employed	5,548	5,451	5,548	5,708	5,702	5,762	5,676	5,831	5,925	5,760	5,387	5,543
Unemployed	379	371	406	397	409	512	570	588	737	836	899	873
Labor force participation rate	67.7	66.9	66.5	67.0	66.2	67.0	66.2	66.0	65.1	66.1	65.3	64.0
Unemployment rate	6.4	6.4	6.8	6.5	6.7	8.2	9.1	9.2	11.1	12.7	14.3	13.6
Foreign-born Mexican												
Population (16 years & over)	10,654	10,967	11,037	10,912	10,930	11,063	11,315	10,977	10,829	11,031	11,093	10,882
Labor force	7,406	7,770	7,968	7,736	7,589	7,771	7,991	7,725	7,520	7,753	7,853	7,752
Employed	7,011	7,427	7,635	7,304	6,985	7,282	7,482	7,129	6,568	6,911	6,963	6,854
Unemployed	395	343	332	432	603	489	510	596	953	841	891	897
Labor force participation rate	69.5	70.8	72.2	70.9	69.4	70.2	70.6	70.4	69.5	70.3	70.8	71.2
Unemployment rate	5.3	4.4	4.2	5.6	8.0	6.3	6.4	7.7	12.7	10.9	11.3	11.6

*   Seasonally adjusted
Source: BBVA Bancomer with Bureau of Census, Current Population Survey (CPS) data, 2006-2009

Monthly Income for Remittances in Mexico, millions of dollars

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Jan	338.7	382.5	399.6	456.3	655.0	711.0	1,017.3	1,081.9	1,367.6	1,758.3	1,872.9	1,781.1	1,568.2	1,320.7
Feb	331.6	366.4	388.9	447.2	637.7	718.9	962.9	1,171.8	1,428.4	1,823.2	1,856.7	1,859.4	1,803.4	1,548.9
Mar	381.9	427.2	464.9	494.5	718.1	744.5	1,099.1	1,480.2	1,691.6	2,152.8	2,186.3	2,115.9	2,104.3	1,949.7
Apr	425.5	440.0	469.2	498.8	734.8	805.9	1,202.5	1,513.5	1,753.3	2,072.7	2,166.1	2,188.4	1,779.8	
May	486.7	520.4	571.6	590.8	798.2	912.2	1,343.8	1,770.4	2,057.3	2,534.6	2,431.9	2,371.2	1,900.1	
Jun	453.6	503.5	521.9	541.6	747.8	860.0	1,351.2	1,684.3	1,923.3	2,340.3	2,300.4	2,264.1	1,922.8	
Jul	441.7	494.3	506.7	557.6	796.6	843.1	1,361.4	1,654.4	1,840.3	2,191.7	2,369.2	2,186.7	1,833.4	
Aug	428.9	486.6	532.1	608.1	789.3	849.1	1,401.3	1,786.8	2,059.2	2,334.3	2,411.9	2,097.5	1,780.7	
Sep	431.5	476.3	490.5	568.6	772.1	860.6	1,365.5	1,586.8	1,886.4	2,141.0	2,186.0	2,113.4	1,742.1	
Oct	421.7	454.7	474.5	559.5	792.8	848.3	1,391.0	1,530.0	1,862.3	2,316.5	2,367.4	2,636.6	1,691.2	
Nov	343.4	460.7	502.0	583.1	693.8	741.4	1,203.7	1,506.2	1,887.0	1,962.8	1,957.8	1,747.3	1,495.1	
Dec	379.8	614.3	587.7	666.9	759.0	919.4	1,341.1	1,565.1	1,932.1	1,938.7	1,962.2	1,775.8	1,560.1	
Total	**4,864.9**	**5,626.8**	**5,909.6**	**6,572.8**	**8,895.3**	**9,814.5**	**15,040.7**	**18,331.3**	**21,688.7**	**25,566.8**	**26,068.7**	**25,137.4**	**21,181.1**	

Monthly Income for Remittances in Mexico, annual % change

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Jan	8.0	13.0	4.5	14.2	43.6	8.6	43.1	6.3	26.4	28.6	6.5	-4.9	-12.0	-15.8
Feb	17.6	10.5	6.1	15.0	42.6	12.7	34.0	21.7	21.9	27.6	1.8	0.1	-3.0	-14.1
Mar	13.2	11.9	8.8	6.4	45.2	3.7	47.6	34.7	14.3	27.3	1.6	-3.2	-0.5	-7.3
Apr	8.2	3.4	6.6	6.3	47.3	9.7	49.2	25.9	15.8	18.2	4.5	1.0	-18.7	
May	17.7	6.9	9.8	3.4	35.1	14.3	47.3	31.7	16.2	23.2	-4.1	-2.5	-19.9	
Jun	24.2	11.0	3.7	3.8	38.1	15.0	57.1	24.7	14.2	21.7	-1.7	-1.6	-15.1	
Jul	18.2	11.9	2.5	10.1	42.9	5.8	61.5	21.5	11.2	19.1	8.1	-7.7	-16.2	
Aug	11.1	13.5	9.3	14.3	29.8	7.6	65.0	27.5	15.2	13.4	3.3	-13.0	-15.1	
Sep	27.2	10.4	3.0	15.9	35.8	11.5	58.7	16.2	18.9	13.5	2.1	-3.3	-17.6	
Oct	20.9	7.8	4.4	17.9	41.7	7.0	64.0	10.0	21.7	24.4	2.2	11.4	-35.9	
Nov	8.8	34.1	9.0	16.2	19.0	6.9	62.3	25.1	25.3	4.0	-0.3	-10.8	-14.4	
Dec	6.9	61.8	-4.3	13.5	13.8	21.1	45.9	16.7	23.5	0.3	1.2	-9.5	-12.2	
Total	**15.2**	**15.7**	**5.0**	**11.2**	**35.3**	**10.3**	**53.3**	**21.9**	**18.3**	**17.9**	**2.0**	**-3.6**	**-15.7**	

12-month Flow of Remittances in Mexico, millions of dollars

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Jan	4,249	4,909	5,644	5,966	6,771	8,951	10,121	15,105	18,617	22,079	25,681	25,977	24,925	20,934
Feb	4,298	4,944	5,666	6,025	6,962	9,033	10,365	15,314	18,874	22,474	25,715	25,980	24,868	20,679
Mar	4,343	4,989	5,704	6,054	7,186	9,059	10,719	15,695	19,085	22,936	25,748	25,909	24,857	20,525
Apr	4,375	5,003	5,733	6,084	7,422	9,130	11,116	16,006	19,325	23,255	25,842	25,931	24,448	
May	4,448	5,037	5,784	6,103	7,629	9,244	11,548	16,433	19,612	23,732	25,739	25,871	23,977	
Jun	4,537	5,087	5,803	6,123	7,835	9,356	12,039	16,766	19,851	24,149	25,699	25,835	23,636	
Jul	4,605	5,140	5,815	6,173	8,074	9,403	12,557	17,059	20,037	24,501	25,877	25,652	23,283	
Aug	4,648	5,197	5,861	6,249	8,256	9,462	13,109	17,445	20,309	24,776	25,954	25,338	22,966	
Sep	4,740	5,242	5,875	6,328	8,459	9,551	13,614	17,666	20,609	25,030	25,999	25,265	22,595	
Oct	4,813	5,275	5,895	6,413	8,692	9,606	14,157	17,805	20,941	25,484	26,050	25,534	21,649	
Nov	4,840	5,392	5,936	6,494	8,803	9,654	14,619	18,107	21,322	25,560	26,045	25,324	21,397	
Dec	4,865	5,627	5,910	6,573	8,895	9,814	15,041	18,331	21,689	25,567	26,069	25,137	21,181	

12-month Flow of Remittances in Mexico, annual % change

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Jan	13.9	15.5	15.0	5.7	13.5	32.2	13.1	49.3	23.2	18.6	16.3	1.2	-4.1	-16.0
Feb	14.2	15.0	14.6	6.3	15.6	29.7	14.7	47.8	23.2	19.1	14.4	1.0	-4.3	-16.8
Mar	13.8	14.9	14.3	6.1	18.7	26.1	18.3	46.4	21.6	20.2	12.3	0.6	-4.1	-17.4
Apr	11.9	14.4	14.6	6.1	22.0	23.0	21.8	44.0	20.7	20.3	11.1	0.3	-5.7	
May	12.2	13.2	14.8	5.5	25.0	21.2	24.9	42.3	19.3	21.0	8.5	0.5	-7.3	
Jun	14.0	12.1	14.1	5.5	28.0	19.4	28.7	39.3	18.4	21.7	6.4	0.5	-8.5	
Jul	14.8	11.6	13.1	6.2	30.8	16.5	33.5	35.9	17.5	22.3	5.6	-0.9	-9.2	
Aug	15.2	11.8	12.8	6.6	32.1	14.6	38.5	33.1	16.4	22.0	4.8	-2.4	-9.4	
Sep	16.8	10.6	12.1	7.7	33.7	12.9	42.5	29.8	16.7	21.5	3.9	-2.8	-10.6	
Oct	17.9	9.6	11.7	8.8	35.6	10.5	47.4	25.8	17.6	21.7	2.2	-2.0	-15.2	
Nov	16.8	11.4	10.1	9.4	35.6	9.7	51.4	23.9	17.8	19.9	1.9	-2.8	-15.5	
Dec	15.2	15.7	5.0	11.2	35.3	10.3	53.3	21.9	18.3	17.9	2.0	-3.6	-15.7	

Source: BBVA Bancomer with Banco de Mexico data

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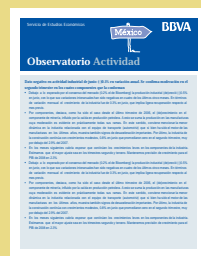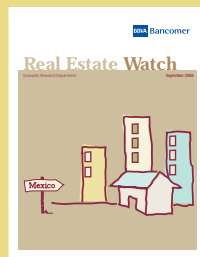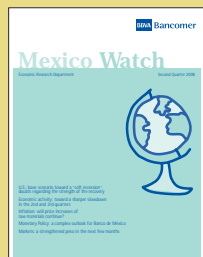Ignacio San Martín — ignacio.sanmartin@bbvacompass.com

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