

# Migration Outlook

Mexico

November 2011  
Economic Analysis

- **The number of unauthorized Mexican immigrants in the U.S. is reduced; the number of documented ones continues to grow, but at a slower pace**
- **Hardening of the migration policy and unemployment; factors that expel Mexican immigrants from some states in the U.S.**
- **Between 2010 and 2011, more than half of jobs recovered in the U.S. have been for Hispanics. Mexicans have also benefited**
- **Very high-income Mexicans migrate to the United States. A small group that is increasing**
- **Evolution of money transfer markets has led remittances grow more than migration. The cost of sending remittances has tended to decline, Mexico is below the average for Latin America**

The publication ***Mexico Migration Outlook*** is a joint project of BBVA Bancomer Foundation and BBVA Research, Mexico; the Economic Research Department provides new contributions every six months in the field of Migration studies which contribute to a better understanding of this important social movement.

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Closing date: November 17, 2011

## 1. Summary

### **The number of unauthorized Mexican immigrants in the U.S. is lower, while the number of documented immigrants continues to grow, although at a lower pace**

The number of unauthorized Mexican immigrants in the U.S. was reduced by around 400,000 between 2007 and 2010. In that period, the figures of the Current Population Survey (CPS) indicate that the total number of Mexican immigrants remained constant, at levels of 11.8 million, so it is estimated that the number of documented Mexican immigrants that entered the United States should also have grown by a similar figure (400,000 in the same period). Thus, although the number of documented immigrants continues to increase, its growth rate has been reduced to half, on average, compared with the levels observed prior to the global crisis.

### **Recent evidence confirms that the economic crisis is the determining factor in the reduction of migration from Mexico to the U.S.**

Mexican migration to the United States tends to move in the same direction as the U.S. economic cycle. This is the variable with which there is a greater correlation. There is evidence that the number of apprehensions by the U.S. border patrol of Mexican immigrants in the United States is reduced when economic growth is weak, and increases when the U.S. economy strengthens. In recent years, the number of Mexicans that emigrate to the United States has diminished due mainly to the economic situation in the United States, and, consequently, the border patrol has detained fewer Mexican immigrants.

### **The toughening of migratory policy and unemployment, factors that expel immigrants from some states in the U.S.**

In those states of the United States where the application of anti-immigrant laws has been seen, or their implementation is being discussed, such as: Arizona, Florida, Georgia, Alabama and Tennessee, the presence of Mexican immigrants has diminished. In other states, such as California, Maryland, Oregon and Arkansas, the high unemployment rate could be leading to the departure of Mexican immigrants. In general, Mexican immigrants are moving toward states with low unemployment, or toward states near those that have toughened actions toward immigrants, such as: Texas, New Jersey, Virginia, Washington and Michigan.

### **Poverty rises strongly among Mexican immigrants in the United States**

The poverty rate among Mexican immigrants is double that of the general population in the U.S. and between 2007 and 2011 registered one of the highest increases, from 22.1% to 29.8%, with which 3.5 million are in a poverty situation in 2011.

### **The recovery of remittances will continue in 2011 and 2012**

The BBVA Research base scenario considers that the generation of employment in the U.S. will continue, although at a slow pace, particularly for immigrants, given their greater degree of labor flexibility. This dynamic will have a positive impact on the remittances of Mexican immigrants, so that, in dollar terms, there could be an increase between 6.2% and 6.8% in 2011, a figure surpassing what we had projected at the beginning of the year, due mainly to the strong rise registered in September with the depreciation of the peso. For 2012 we believe that the growth of remittances in dollars could be between 8.8% and 10.8%. A risk factor that could stop these recovery trends is the global situation, mainly in Europe and its potential impact on the U.S.

### **More than half of the jobs recovered in the U.S. have been for Hispanics; Mexicans have also benefited**

Between the fourth quarter of 2009 and the third quarter of 2011, data from the U.S. Department of Labor show that the number of jobs in that country grew by 1.33 million; of these, 52% of the total was for Hispanics. Our estimates based on the CPS suggest that around 17% of the total number of jobs that have been generated in that period have been for Mexican immigrants.

### **Mexican migration increases among high-income wage-earners in the United States**

The new Mexican immigrants in the United States are, in the majority, documented workers, with higher educational levels, and are being employed in higher job qualification levels. There is a group of Mexicans earning high incomes that are emigrating to the United States, and whose number has increased in recent years, although it is a small group, comparatively speaking, in terms of the total. In this case, emigration could be related to factors such as insecurity in Mexico. However, a deeper analysis is required to draw more accurate conclusions to this respect.

### **Remittances have grown more than migration worldwide in recent years**

The figures of the United Nations Population Division show that between 1990 and 2010 the number of international immigrants in the world grew 1.4 times. During that same period, remittance flows in the world increased 6.4 times, according to data from the World Bank. Among the factors that explain this situation are: the trend toward the reduction of the cost of sending remittances, the greater participation of new companies in the market for the transfer of funds, the reduction of deliveries through informal channels, and technological changes, among others. Currently, there are different options for sending remittances: bank transfers, the use of cards, transfers through the internet, and transfers by cellular phone, among others.

### **The costs for sending remittances have tended to decline worldwide**

The data of the World Bank Remittance Prices Worldwide (RPW) show that between 2008 and the first quarter of 2011, there has been a declining, although moderate, trend in the total average global cost to send \$200 dollars, from 9.81% to 9%; this despite the fact that between the first quarter of 2010 and the first quarter of 2011 there has been a slight increase in costs, a situation that could be related to the recent worldwide financial instability.

### **Southern Asia and Latin America and the Caribbean, the regions that pay the lowest costs for remittances received**

In the first quarter of 2011, the costs for sending \$200 dollars by region of destination in Southern Asia (SA) and Latin America and the Caribbean (LAC) were 6.56% and 6.82%, respectively; the highest costs are observed in Sub-Saharan Africa (SSA) and in Eastern Asia and the Pacific (EAP), with these being, respectively, 12.73% and 10.08%. These differences are explained in part due to competition in the market for remittance deliveries, existing regulations and the technological and operation infrastructure in each region.

### **Mexico pays a slightly lower cost for remittance transfers, compared to the average cost in Latin America and the Caribbean**

Mexico presents a slightly lower cost than the average for a remittance of \$200 dollars for Latin America and the Caribbean, although, according to studies, this country is one of those that most influence the declining trend observed in costs for the region and which has improved its payment structure downward. This has allowed for greater selection options for consumers and has promoted the efficient and safe reception of remittances from most of the countries from which these are sent.

### **The families receiving remittances with access to financial services have a positive effect on their levels of economic well-being**

Based on econometric techniques, there is evidence that credit and, therefore, financial services increase the probability that households receiving remittances have greater access to goods and services. It is concluded that access to financial services is a factor that favors the economic well-being of the households that receive remittances. The greatest effects include having a computer, Internet access, and cellular telephones. These results are evidence of the importance of more households that receive remittances having access to financial services. This contributes toward the improvement of their economic well-being and probably increasing the potential of the benefits derived from the reception of remittances.

## 2. The outlook for migration in Mexico and remittances to Mexico

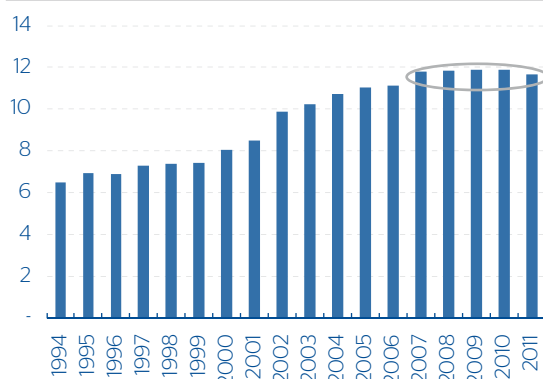
This article describes the evolution of the number of Mexicans in the United States, both authorized and unauthorized, following the last economic crisis, the situation of Mexicans in the U.S. in terms of employment, in which states in the U.S. their presence has diminished and in which it has increased. We also offer our projections on the growth of remittances to Mexico for this and the following year.

### With the recent recession in the U.S., has the number of immigrants diminished, are they undocumented or do they have a visa?

In previous editions of **Mexico Migration Outlook** we showed that the total number of Mexican immigrants in the United States has not increased since 2008; the total has remained stable. There is some evidence that in 2011 a slight decrease was observed. However, it will be necessary to wait for the figures of the annual closing of information. Despite the above, some estimates reveal that the number of unauthorized Mexican immigrants in the United States has diminished. The figures of the Pew Hispanic Center show a reduction of around 500,000 people in the period between 2007 and 2010, while those of the Department of Homeland Security note a reduction of slightly more than 300,000 in the number of undocumented Mexican immigrants in the United States during the same time frame.

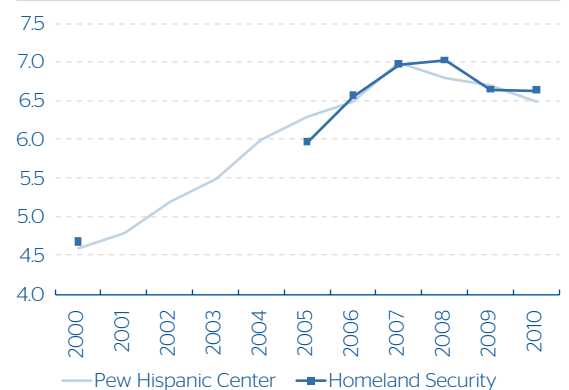
Considering a simple average of both estimates, we note that the number of unauthorized Mexican immigrants in the United States was reduced by around 400,000 between 2007 and 2010. In that period, the figures of the Current Population Survey (CPS) indicate that the total number of Mexican immigrants remained constant at levels of 11.8 million. Thus, the number of unauthorized Mexican immigrants was reduced by around 400,000. The number of documented Mexican immigrants that entered the United States must be a similar figure for the total number registered to have remained constant.

Graph 1  
**Total number of Mexican immigrants in the United States (Millions)**



Source: BBVA Research with figures from the expanded supplement of the March CPS (Current Population Survey) (1994-2011).

Graph 2  
**Unauthorized Mexican immigrants in the United States (Millions)**



Source: Pew Hispanic Center and the U.S. Department of Homeland Security

Between 2000 and 2006 (before the economic crisis) on average the number of Mexican immigrants in the United States grew by approximately 500,000 year to year. Of this total, around 300,000 were unauthorized and close to 200,000 were documented. These figures suggest that although the number of documented immigrants continues to rise, the growth rate has been reduced to half.

### Why has migration declined?

The population census in Mexico for 2010 and 2000 suggests a reduction in Mexican migration abroad (mainly the United States) between those years. The figures show that in the five-year period prior to the 2010 Census, there were 1.1 million persons that emigrated abroad in that period. In comparison with the figures of the 2000 Census, a reduction is observed of 32% in international migration and a reduction of 36% in the number of persons that emigrated to the United States. Thus, the total flow of international immigrants from Mexico in the U.S. fell from 96% to 89%.

Different factors have been noted as the main causes for the reduction of Mexicans emigrating to the United States, among which the following are particularly significant: the toughening of migratory policy in the United States and the economic crisis.

In Mexico, some conditions have improved that have allowed households more purchasing power of goods and better educational opportunities, which has translated into a higher average educational level of the Mexican population. However, these improvements have not been enough to reduce the wage gap between Mexico and the U.S., which is still high. Information from the *Encuesta Nacional de Ocupación y Empleo, ENOE* (the National Survey on Jobs and Employment) and the Current Population Survey (CPS) shows that, on average, those workers born in Mexico living in the United States earned 4.5 times than those who lived in Mexico in 2005. By 2010, this difference had risen to five times, so the wage gap had tended to expand. Thus, although there are some improvements in Mexico, these cannot be considered the main cause that has stopped the migration of undocumented workers and reduced the migration of documented workers.

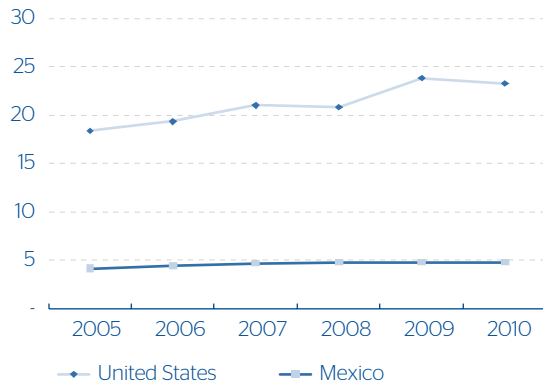
The factor that we have noted as the main cause is the economic crisis, although other factors such as the toughening of migratory policy in the United States and insecurity in Mexico have also had some bearing.<sup>1</sup> Mexican migration to the United States tends to move in the same direction as that country's economic cycle. This is the variable with which there is the greatest correlation. The figures of the Department of Homeland Security in the United States show that the number of Mexicans apprehended showed a rising trend between 1995 and the year 2000; in that period, GDP growth in the United States also showed a rising trend. Between the years 2000 and 2010 there is a reduction in the number of apprehensions, a situation that coincides with lower GDP growth rates in the U.S., and it is as of 2007 when the U.S. entered into a recession, that the number fell to its lowest level from the time the apprehensions were first recorded.

Thus, the number of apprehensions of Mexican immigrants in the United States by the border patrol is lower when when economic growth is weak and increases when the U.S. economy is strengthened. In recent years, the number of Mexicans seeking to emigrate to the United States has declined due mainly to the economic situation in the U.S., and, consequently, the U.S. border patrol seizes a lower number of Mexican immigrants. If the actions against Mexican immigrants were those that were mainly directed toward preventing entry, the number of apprehensions would tend to rise, not to diminish as has occurred in recent years. To this respect, Tuirán and Ávila (2010) note that the proliferation of walls and fences along those areas used to cross the border into the U.S. and detection using high technology has failed, up to now, in reaching its main objective (to discourage and stop the flow of undocumented workers) because it was not accompanied by other effective measures directed toward ordering (or eventually deactivating) the binational labor market that encourages unauthorized migration.<sup>2</sup>

<sup>1</sup> See the June 2011 edition of *Mexico Migration Outlook*.

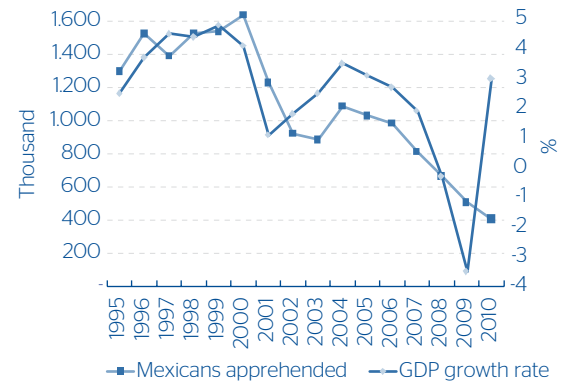
<sup>2</sup> Cornelius (2009) also notes that the greater border surveillance does not stop the flow of undocumented workers, but only makes migration more expensive.

Graph 3  
**Average wage for Mexican workers according to place of residence. (Current monthly pesos)**



Note: In the ENOE the second quarter of each year is considered. The information in dollars was converted to pesos with central bank data on the exchange rate.  
Source: BBVA Research with ENOE and Current Population Survey data, March 2005 to 2010.

Graph 4  
**Mexican immigrants apprehended by the U.S. border patrol and annual GDP growth in the United States (Thousands and annual % change)**



Source: BBVA Research with Bureau of Labor Statistics data

As illustrated, the change that occurred in Mexican migration toward the United States as of the decade beginning in 2000 and particularly since 2008 is mainly attributed to the economic cycle in the U.S., despite the fact that other factors have also had some bearing, although of less importance. Therefore, once the U.S. economy resumes its growth levels prior to the economic crisis, the demand for immigrant workers will tend to increase and therefore, the flows of Mexican immigrants will reactivate gradually. This process will take some time due to high unemployment in the United States, as seen in the following sections.

**Certain improvements in the United States, but with structural weakness**

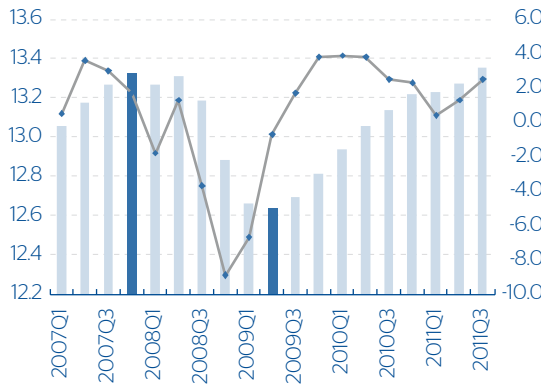
Since the beginning of the economic recession in the fourth quarter of 2007, until the second quarter of 2009, the date on which its conclusion was officially declared,<sup>3</sup> GDP in the United States contracted 5.1%. Later, the U.S. economy entered an expansive phase, with annual growth between the fourth quarter of 2009 and the second quarter of 2010 in each quarter of at least 3.8%. After that, a slowdown phase began that awakened fears of another recession in the U.S., which in the BBVA Research base scenario is unlikely. By the third quarter of 2011, the preliminary figures indicate growth of 2.5%, with which economic growth seems to be accelerating once more, although at moderate rates compared with the period prior to expansion. Thus, to date, U.S. GDP has managed to show 5.6% growth since the end of the recession; that is, the production that had been lost seems to have been recovered.

In the case of employment, the situation has not been the same. Of the nearly 8 million jobs lost in the United State only about 25% has been recovered. Nearly 14 million people still remain unemployed, due to which the unemployment rate continues high at 9%.

<sup>3</sup> By the National Bureau of Economic Research, an institution in charge of noting the points of initiation and conclusion of an economic recession in the United States

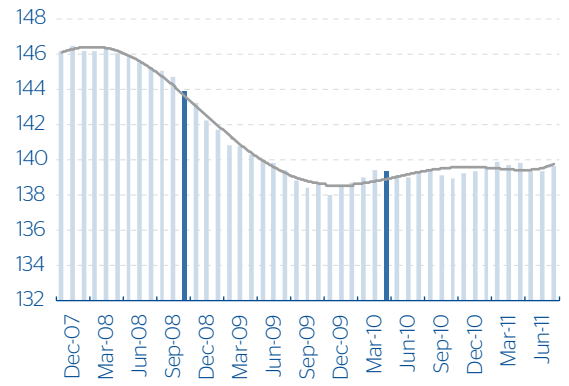


Graph 5  
**Real GDP in the U.S. at 2005 prices**  
(Billions of U.S. dollars and annual % change)



Source: BBVA Research with figures from the U.S. Department of Commerce

Graph 6  
**Employment in the United States**  
(Millions of people and annual % change)



Source: BBVA Research with figures from the Bureau of Labor Statistics

**More than half of the jobs recovered in the U.S. have been by Hispanics; Mexicans have also benefited**

In the current context, of the jobs recovered, Hispanics have been the most favored, as have been Mexican immigrants.<sup>4</sup> Between the fourth quarter of 2009 and the third quarter of 2011, the data of the Labor Department of the United States show that the number of jobs in the country increased by 1.33 million. In that same time frame, jobs for Hispanics grew by 688,000. That is, 52% of the total number of jobs that were generated have been for Hispanics, which represents employment growth of 3.5% for this group.

In the case of persons of Mexican origin, better results have also been observed than for the rest of the population. While for the population in general, the unemployment rate decreased from 10% to 9.1% from the fourth quarter of 2009 to the third quarter of 2011, in the case of Mexicans, the unemployment rate has shown a greater reduction in percentage points, from 12.9% to 11.6% in the same period.

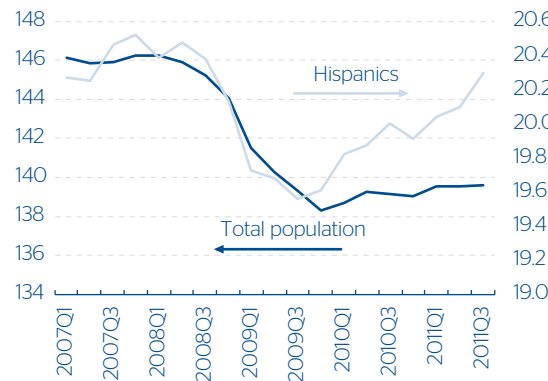
Although the United States Department of Labor does not present figures on quarterly employment for Mexican immigrants, our estimates based on the Current Population Survey suggest that around 17% of the total number of jobs that have been generated since the fourth quarter of 2009 have been for Mexican immigrants.<sup>5</sup>

The recovery of employment that has existed for Mexican immigrants is to a large extent what has allowed remittances to continue growth in recent months above that expected. If job recovery continues, Mexican immigrants will continue to be among the most favored and consequently remittances will continue their upward trend, although moderately.

<sup>4</sup> In the June 2009 edition of *Mexico Migration Outlook*, we noted that in the recovery stages, Mexican immigrants tend to be the most favored due to the labor flexibility that they face.

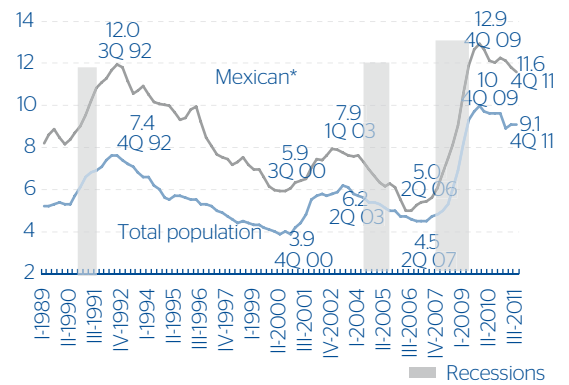
<sup>5</sup> This situation was able to favor that the poverty rates of Mexican immigrants reduced their rate of growth in the years prior to 2011, as shown in the following box.

Graph 7  
**Jobs in the United States (Thousands)**



Source: BBVA Research with Bureau of Labor Statistics data

Graph 8  
**United States. Quarterly general unemployment rate among the population of Mexican origin (Seasonally-adjusted data)**



Seasonally-adjusted based on seats section  
Source: BBVA Research with figures from the Bureau of Labor Statistics

The main sectors where Mexican immigrants are gaining jobs are: retail, educational and health services, agriculture, fishing and reforestation, and professional and entrepreneurial services. The sectors where they continue to lose jobs are: tourism and leisure, other services and manufacturing.

**In which states is the presence of Mexican immigrants increasing?  
In which states is it declining?**

The presence of Mexican immigrant workers has declined in some states, mainly due to the toughening of anti-migratory policies, which has led to the application of anti-migratory laws or to discussion regarding their implementation. This has occurred in the following states: Arizona, Florida, Georgia, Alabama and Tennessee.

In other states, such as California, Maryland, Oregon and Arkansas, the high unemployment rate for Mexican immigrants could be motivating their departure.

Chart 1  
**Anti-immigrant laws in some states of the United States**

State	Law	Date of Approval	Date of Entry into force
Arizona	SB 1070	April 23, 2010	July 29, 2010
Tennessee	HB 670	June 28, 2010	January 1, 2011
Indiana	SB 590	May 10, 2011	July 1, 2011
Georgia	HB 87	May 13, 2011	July 1, 2011
Alabama	HB 56	June 2, 2011	September 1, 2011
Carolina del Sur	SB 20	June 27, 2011	January 1, 2012
Florida	SB 2040	Not approved	
Utah	HB 497	Blocked by Judge	

Source: BBVA Research

In general, Mexican immigrants are moving to states with low unemployment, or to those states near those that have toughened actions toward immigrants, even though they have high unemployment. Between 2007 and 2011, the greater increases in the Mexican immigrant population were seen in the states of Texas, New Jersey, Virginia, Washington and Michigan.

Chart 2

**United States: Mexican immigrants by state of residence (Thousands)**

	2007	2008	2009	2010	2011	% change 2007-2011	% change 2007-2011	Unemployment rate 2011 (%)
<b>Population loss</b>								
California	4,664	4,766	4,713	4,737	4,443	-221	-4.7	14.2%
Florida	387	297	250	245	227	-161	-41.4	12.1%
Arizona	674	693	588	604	585	-89	-13.2	7.7%
Georgia	289	249	273	247	227	-63	-21.6	10.4%
Oregon	147	172	158	148	86	-61	-41.2	14.0%
Maryland	104	52	37	55	51	-53	-51.2	3.4%
Tennessee	112	106	141	93	76	-36	-31.9	6.6%
Alabama	94	48	87	75	59	-35	-37.3	12.6%
Arkansas	67	40	52	46	34	-33	-49.8	10.7%
Colorado	238	256	185	207	207	-31	-12.9	16.1%
<b>Population gains</b>								
Texas	2,263	2,305	2,414	2,376	2,615	352	15.5	8.8%
New Jersey	95	213	152	187	209	115	121.5	9.9%
Virginia	40	47	59	76	99	60	150.2	9.2%
Washington	160	165	174	228	215	55	34.2	17.5%
Michigan	68	69	96	72	101	33	49.3	6.1%
Idaho	37	46	49	48	66	29	77.7	7.2%
Kansas	51	57	64	64	74	23	45.0	19.9%
South Carolina	40	46	40	42	63	22	54.7	3.9%
Illinois	627	613	636	635	647	20	3.2	13.2%
Nebraska	45	41	48	40	62	17	38.6	7.2%

Source: BBVA Research with figures from the Current Population Survey

**Our forecast for remittances**

Given the current results of the performance of the United States economy, which have been moderate but better than expected, we expect that, in 2012, economic recovery will continue at a higher rate than this year, bringing with it slow but gradual job recovery in the U.S. throughout the rest of this year and in 2012.

According to estimates for remittances during the last three months of this year, we foresee that remittances will surpass 22.5 billion dollars for 2011 and will post an annual growth rate in dollars between 6.2% and 6.8% . These figures surpass those noted in our previous edition of **Mexico Migration Outlook**, which we had initially estimated, due mainly to the strong increase registered in the month of September in view of the unexpected depreciation of the peso in that month, which led remittances to grow 21.2% in annual terms that month.

The high peso/dollar exchange rate in the last two months has increased the amount of remittances expressed in pesos and has allowed that there could be a positive real growth of remittances. It is estimated that for 2011, the reception of remittances in pesos will increase between 3.6% and 4.2% with a real growth rate (discounting inflation) in remittances of between 0.2% and 0.8%.

For 2012, we estimate in the BBVA Research base scenario that remittances will grow between 8.8% and 10.8% in dollars, reaching approximately 24.9 billion dollars, a figure close to that reported during the year 2008. If this growth is achieved, the increase in real peso terms received in Mexican households due to these resources would be in a range between 5.6% and 7.6%.

The lack of a medium or long-term range solution in the Euro area could lead to negative economic effects worldwide, and the volatility of the exchange rate could be factors that affect the scenario forecasts for Mexican remittances, which imply lower figures than those commented above. For this reason, we believe that the forecasts could tend to go mainly downward.

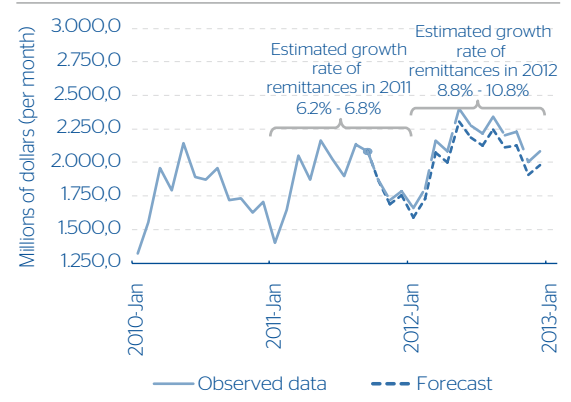
Chart 3  
**Forecast for remittances to Mexico  
(Annual % change in dollars)**

	2011	2012
<b>Growth rate in dollars</b>	6.2 a 6.8	8.8 a 10.8
<b>Growth rate in current pesos</b>	3.6 a 4.2	9.5 a 11.5
<b>Growth rate in real pesos</b>	0.2 a 0.8	5.6 a 7.6

Source: BBVA Research estimates

Graph 9

**Mexico: Family remittances 2010-2012e  
(Monthly remittance flow in US\$ millions, base scenario)**



e. Estimates made by BBVA Research as of October 2011.  
Source: BBVA Research with Banxico (central bank) figures.

### Conclusions

Since 2007, a stagnation has been seen in the total number of Mexican immigrants in the United States, and even some sources note that this year net migration has been negative. Various factors explain this situation, with the most significant being the lack of employment opportunities in the U.S. derived from the economic crisis in that country. In recent years a moderate recovery of the U.S. economy has been observed, although the total number of jobs lost during the last crisis has not been recovered, more than 70% of jobs lost that continue without recovery.

The previsions for economic performance in the U.S. in 2012 are relatively favorable and better than those for this year. If economic growth is maintained a couple of years, Mexican migration to the U.S. is expected to resume the growth trend of the years prior to the crisis, given that the broad wage gap between the two countries will continue.

Given this, the BBVA Research base scenario estimates the growth of remittances for 2012 to be between 8.8% and 10.8% in dollars, higher than what is expected for this year, and could reach levels of around 24.9 billion dollars, a figure close to that reported during 2008. Given this growth, the increase in real terms of pesos received in Mexican households would be between 56% and 76%, and could be higher if the high peso/dollar exchange rate is maintained. A risk factor that could stop these recovery trends is the global situation, mainly in Europe and its potential impact on the U.S.

As noted previously, the recovery of remittances to the levels of 2007 could take two to three more years.

### References

BBVA Research Flash Migración México (2011), "Flash Migración México. In September, remittances could show their highest growth in five years" BBVA, October 28, 2011.

Cornelius, W. (2009), "Los migrantes de la crisis" ("The immigrants of the crisis"), Presentation within the framework of the Permanent Seminar on International Migration, on line.  
<<http://www.iamericas.org/presentations/workshops/Migration09/Wayne%20Cornelius.pdf>>

# Inset 1: The increase in poverty among Mexican immigrants in the United States: a result of the economic crisis

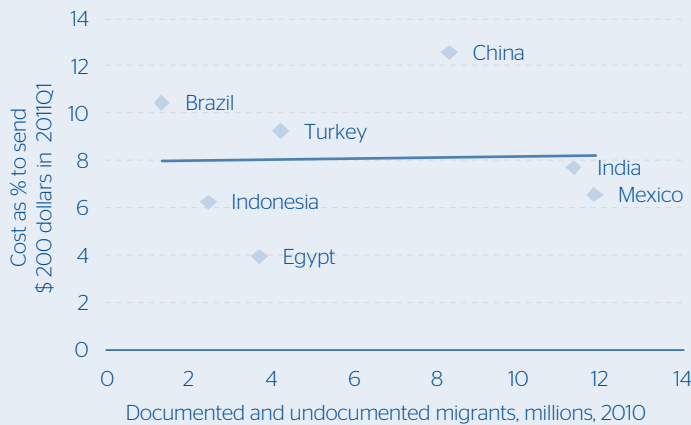
According to the Current Population Survey (CPS), the reduction in poverty<sup>1</sup> that had been observed in the United States until 2006 was reversed with the economic crisis. In fact, the number of people living in poverty increased by 9.8 million between 2007 and 2011, from 36.8 million to 46.6 million people, with 15% of the U.S. population living in poverty in 2011. This increase has been the result of the recent economic crisis, and even though it officially ended in the second quarter of 2009, poverty has continued to grow.

Poverty levels in the Hispanic community are above the average for the general population and have tended to increase more rapidly. In this case, poverty increased by 6 percentage points, from 20.8% to 26.7%, reaching 13.3 million people between 2007 and 2011.

Within the Mexican population, those of the second generation or higher (born in the United States of Mexican origin) have lower levels of poverty than Mexican immigrants (born in Mexico) and have been less affected than the immigrant community. In the former case, poverty levels increased by six percentage points, from 21.6% to 28% in the same time frame, while the number of Mexican immigrants in poverty rose by eight percentage points to reach 29.8%, corresponding to 3.5 million Mexican immigrants living in poverty in the United States.

Thus, Mexican immigrants as a whole are among the groups with high levels of poverty in the United States and were among the hardest hit by the recent economic crisis. This led them to have the highest poverty levels in the past two decades, resulting in 3.4 million Mexican immigrants living in poverty in 2011.

Graph 10  
**Poverty levels in the United States (%)**



Source: BBVA Research with figures from the March supplement to the Current Population Survey, 2005-2011

Chart 4  
**United States: Population living in poverty (Millions of people)**

	2005	2006	2007	2008	2009	2010	2011
<b>Total population</b>	37.6	37.6	36.8	37.7	40.3	44.0	46.6
<b>Hispanics</b>	9.3	9.5	9.3	10.0	11.1	12.4	13.3
<b>Mexicans of second generation or higher</b>	3.8	4.0	3.8	4.1	4.7	5.6	6.0
<b>Mexican immigrants</b>	2.9	2.9	2.6	2.9	3.2	3.4	3.5

Source: BBVA Research with figures from the March supplement to the Current Population Survey, 2005-2011

<sup>1</sup> The United States follows a methodology for measuring poverty based on income. A poverty line is established using an index adopted by a Federal Interagency Committee in 1969 and slightly modified in 1981. Mexico is currently applying a multidimensional approach, which in addition to income considers other variables as well.

### 3. The new Mexican immigrants in the United States, individuals with higher educational levels and income

Migration patterns have been changing throughout the course of the history of emigration from Mexico to the United States. The first emigrants at the beginning of the twentieth century mainly went into agricultural activities and as a group were characterized by relatively low levels of education and income, and they mostly came from rural areas of the country. The principal points of concentration were along the southern U.S. border, mainly in Texas and California. Subsequently, new characteristics of Mexican immigration began to appear, as individuals with certain job skills were moving into industry, construction, and services. Educational levels were rising and the presence of Mexican immigrants was expanding to other regions different from their traditional venues, such as the north and toward other labor sectors.

In the past few years new profiles have emerged for the wave of new emigrants to the United States. Different factors seem to explain the emergence of these new categories. For example, with the recent U.S. economic crisis, there were changes in domestic demand for labor, a tightening of immigration laws in various U.S. states, Mexico's own conditions as a country and the specific characteristics of each region, and internal dynamics among Mexican immigrants in the United States that reconfigure the nature and structure of social networks. This article in **Mexico Migration Outlook** examines specific characteristics and the scope and dimension of these new groups of Mexican immigrants in the United States.<sup>1</sup> The main source of information for this analysis is the Current Population Survey (CPS), prepared by the U.S. Census Bureau

For this article Mexican immigrants surveyed in the CPS were grouped at different intervals according to their year of entry into the United States, so that newly arrived immigrants in a given year are considered as those who entered the country in the past two or three years of each of the years studied. Thus generational categories are established according to the immigrant's date of entry.

#### Where are the new immigrants from? What states did they go to?

Today, the states with the largest emigration flows are the same as 10 years ago; however the dynamics of some of these states have changed. Jalisco, Michoacán, Veracruz, and Mexico City diminished their importance in terms of emigrants leaving for the United States, while Oaxaca, Puebla, and Queretaro have increased their percentage share as immigrants' states of origin.

In terms of places of destination<sup>2</sup> in the United States, major changes can also be observed. Although California and Texas continue to concentrate the largest percentage of newly arrived immigrants, 31.7% and 19.7%, respectively, between 2008 and 2010, significant changes can be noted in the rest of the states in the patterns of Mexican immigration. States such as Arizona, Colorado, Nevada, New York, Oregon, Tennessee, and Wisconsin are no longer attractive for newly arrived immigrants, while Georgia, Indiana, Mississippi, New Jersey, and Virginia are currently on the list of possible destinations for new Mexican immigrants.

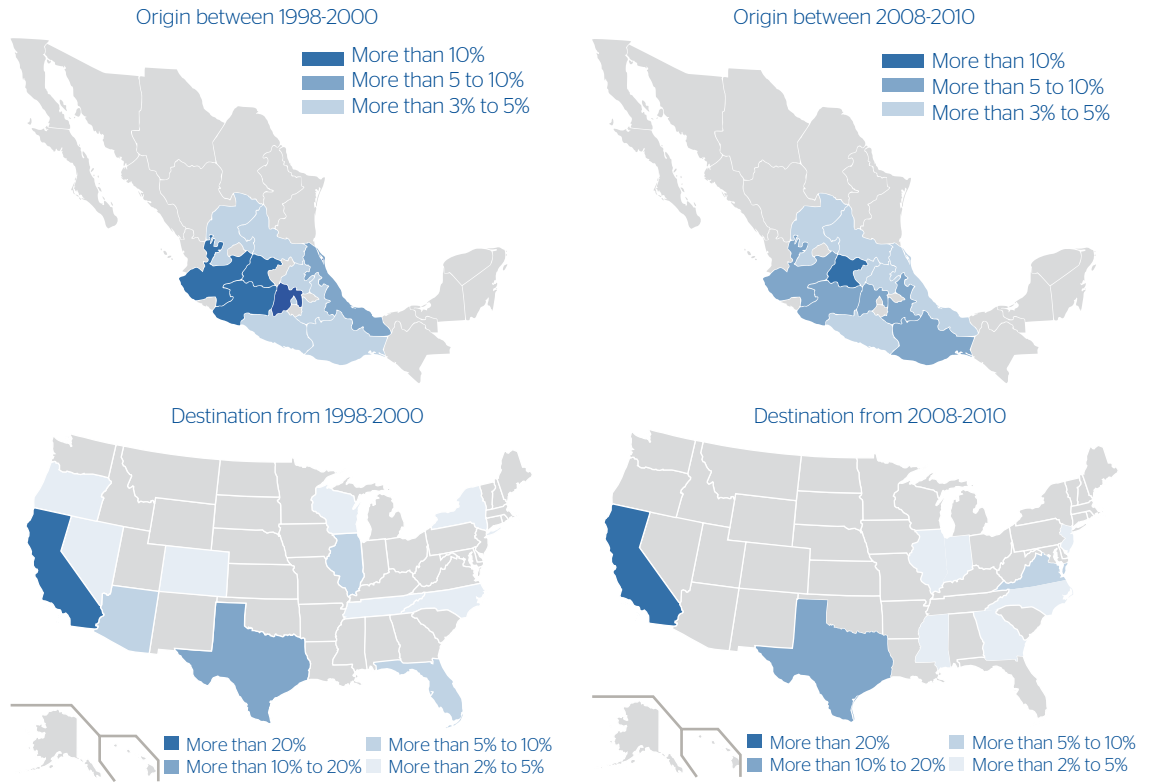
<sup>1</sup> In this article we will provide continuity to the analysis contained in the June 2010 edition of **Mexico Migration Outlook**, where we noted that between 2000 and 2010 there were some characteristics of emigrants that remained relatively stable such as the percentage of men and women, and others in which changes occurred, such as the average age of the immigrants, which has tended to increase, and that is associated with a decrease in the emigration of younger age groups. We also pointed to changes in the importance of the states from which Mexicans emigrated, such as Guanajuato, which occupied third place in 2000, and moved into first place in 2010; Jalisco, Michoacán, and the State of Mexico, which were and continue to remain important states in terms of emigration to the United States, have decreased their percentage share in total emigration to the U.S., while many of the states with the lowest emigration rates posted increases in this period.

<sup>2</sup> To avoid potential problems derived from the CPS sample and to have a more accurate panorama, the first reference map averages recently arrived immigrants with data for 2000 and 2001 and the second map averages the information from 2010 and 2011.

The states that concentrate the largest number of Mexican immigrants do not necessarily reflect the characteristics of recently arrived migrants and immigrants.

Graph 11

**Main states of origin of Mexican emigrants to the United States and their states of destination (% of total number of immigrants for the years indicated)**



Source: BBVA Research with figures from the 2000 and 2010 Population and Housing Census sample for the data on Mexico and the expanded March supplement of the CPS (Current Population Survey) (2000-2001 and 2010-2011) for data on the United States.

To determine if the relative concentration of Mexican states marked by high emigration and the states with high immigration inflows in the United States has increased or decreased over time, the Herfindahl-Hirschman Index (HHI)<sup>3</sup> was used. As can be seen in the following table, in comparing the 2008-2010 period to the 1998-2000 period, both the concentration of Mexican states with high migratory outflows as well as the immigrant-recipient states in the United States has increased. HHI values can also be used to make cross comparisons. For both periods, the U.S. HHI is at least two times higher than Mexico's, indicating a broader diversity in the states of origin of Mexican emigrants in comparison with the greater concentration in a few destination states in the United States.

Chart 5

**Herfindahl-Hirschman Index for measuring the concentration of Mexican immigrants by state of origin and destination**

	1998-2000	2008-2010
<b>Mexico</b>	613	635
<b>United States</b>	1,395	1,513

Source: BBVA Research with data from the CPS (Current Population Survey) (2000-2001 and 2010-2011) and the 2000 and 2010 Census

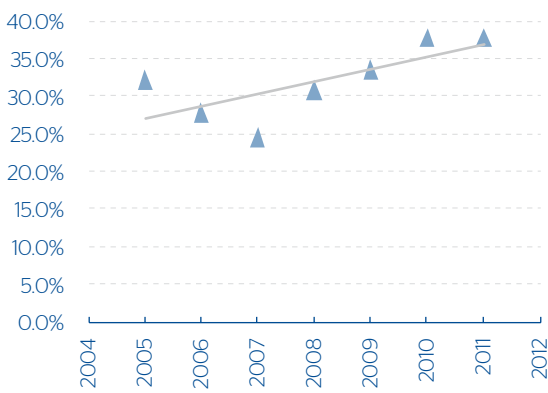
<sup>3</sup> The HHI was devised by economists Orris Herfindahl and Albert Hirschman and is widely used to measure the magnitude of concentrations, particularly those concerning percentage shares in industry and the market. The HHI is calculated by adding the squares of the percentage share of the categories involved. When the percentage is expressed in units between a range of 0 to 100, the HHI takes values between 0 and 10,000, in which smaller values represent a lower concentration and higher values represent a greater concentration.

### A smaller percentage of new immigrants to the construction sector and a higher percentage to the services sector

According to the CPS, Mexicans who recently entered the United States, specifically between 2005 and 2007, showed a downward trend in occupying service sector jobs, from 32.1% of the total to only 24.6%. However, since 2008 there has been a steady increase in the percentage of recently arrived Mexican immigrants in service sector activities, with the corresponding figures being 37.8% in 2010 and 37.7% in 2011. By contrast, the construction sector has declined in relative importance, given that from 2006 to 2008 over 35% of Mexican immigrants entering the United States obtained jobs related to construction and/or mining and oil extraction. The subprime mortgage crisis that intensified in the United States in the second half of 2008 has resulted in fewer than 20% of newly arrived Mexican immigrants obtaining employment in this sector.

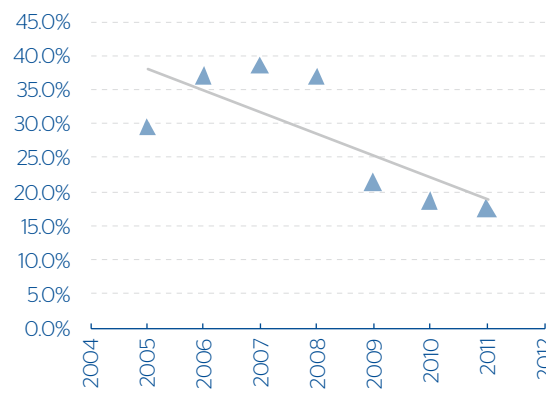
Although there has been a modest recovery in the construction sector, the demand for immigrant workers remains low. As previously noted, many immigrant workers who turn to this sector probably have low educational levels. It is possible that in the services sector, Mexican workers with relatively greater job skills are being hired and therefore some Mexican workers with such characteristics are having opportunities to emigrate. In the next section we will further analyze this point.

Graph 12  
**Percentage of recently arrived Mexican immigrants with jobs in the services sector**



Source: BBVA Research with figures from the expanded March supplement of the CPS (2005-2011)

Graph 13  
**Percentage of recently arrived Mexican immigrants with jobs in the construction and mining and oil sectors**



Source: BBVA Research with figures from the expanded March supplement of the CPS (2005-2011)

### The new immigrants have a higher educational level

CPS figures show that before the economic crisis, the percentage of Mexican immigrants with low educational levels was very high and growing, and that in 2007, of the immigrants who had recently arrived that same year, 35% had, at most, six years of schooling. Meanwhile, the percentage of those with a college education or higher was not very statistically relevant and was decreasing. In 2007, only 4% of recently arrived Mexican immigrants had that level of schooling.

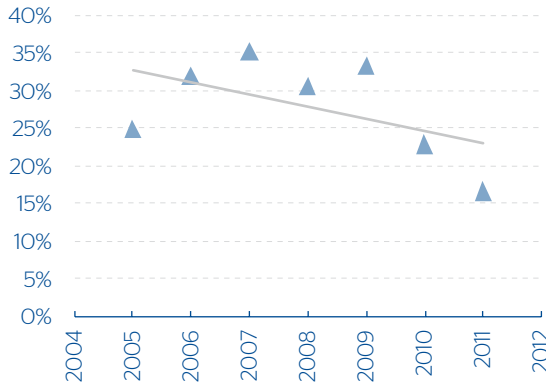
With the economic crisis, the patterns have changed, and the percentage of Mexicans with six or fewer years of schooling entering the United States has declined and the percentage of new immigrants with a college level education or higher has increased. In fact, one out of every nine Mexican emigrants who recently left the country has at least that level of schooling. By 2011 both categories tended to have similar percentages. Thus new immigrants have higher educational levels on average.

The results shown thus far in this study together with those in the section on the current situation, indicate that the new Mexican immigrants in the United States are mostly documented, have higher educational levels, and are obtaining employment with higher job skill levels, and therefore it is likely that they will have higher income levels. In the next section we will present a breakdown of the percentage of Mexican immigrants in the different 20% income brackets in the United States.



Graph 14

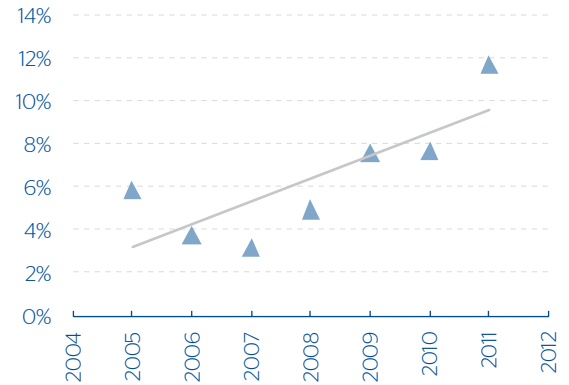
**Percentage of recently arrived Mexican immigrants with less than a sixth grade education**



Source: BBVA Research with figures from the expanded March supplement of the CPS (2005-2011).

Graph 15

**Percentage of recently arrived Mexican immigrants with a college level education or higher**



Source: BBVA Research with figures from the expanded March supplement of the CPS (2005-2011)

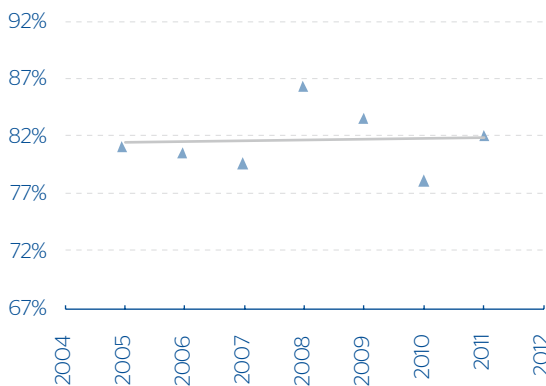
**The percentage of Mexican immigrants with very high incomes and business activities is on the rise**

In this section we will classify recently arrived Mexican immigrants according to 20% brackets of income distribution in the United States. The majority of the Mexicans are in the first two 20 percentile brackets (with an income under US\$25,213 per year), a percentage that has remained relatively stable and does not appear to display a clear pattern with recent changes that have occurred with the economic crisis. In 2005, 81% of recent Mexican immigrants were in the first two 20 percentile brackets and by 2011 the percentage had risen to 82%.

In the third and fourth 20 percentile brackets of income distribution in the United States are Mexicans who earn between US\$25,213 and US\$63,763 per year. Here the percentage of recently arrived Mexican immigrants has been reduced to levels close to 18% in 2005 and to 14% in 2011.

Graph 16

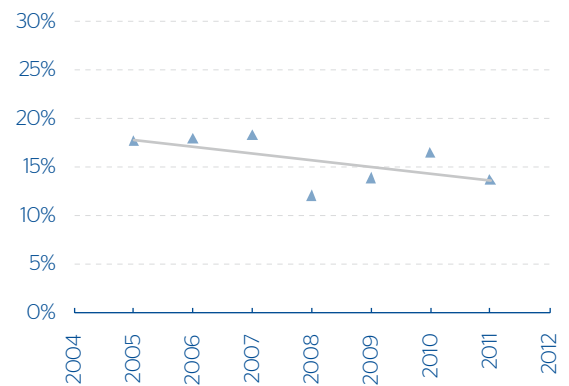
**Percentage of recently arrived Mexican immigrants in the United States who are in the first two 20 percentile income brackets**



Source: BBVA Research with figures from the expanded March supplement of the CPS (2005-2011). In the first 20 percentile bracket, individuals receive less than US\$13,000 a year and in the second 20 percentile bracket they receive between US\$13,001 and US\$25,212 a year.

Graph 17

**Percentage of recently arrived Mexican immigrants in the United States who are in the third and fourth 20 percentile income brackets**



Source: BBVA Research with figures from the expanded March supplement of the CPS (2005-2011). In the third 20 percentile bracket, the range of income is from US\$25,213 to US\$40,000 a year, and in the fourth 20 percentile bracket from US\$40,001 to US\$63,763 a year.

Finally we considered the case of recently arrived Mexican immigrants who are in the top 20 percentile bracket for income distribution in the United States. This category involves individuals who in the CPS reported earning more than US\$63,763 a year. In many cases their emigration is not dependent on the demand that may exist for this type of immigrant, since some of them are individuals who can invest and create jobs, given their income level. In addition, they can assume the costs of emigration, regardless of the socioeconomic conditions in their country of origin or destination.

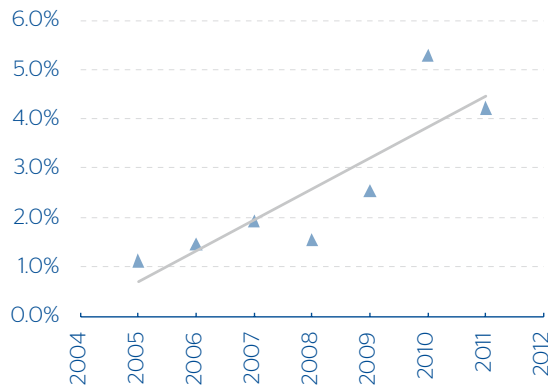
While between 2005 and 2008, recently arrived Mexican immigrants who were in the top 20% income bracket accounted for between 1% and 2% of total emigration from Mexico to the United States, for the last two years CPS data show that between 4.2% and 5.3% of all new Mexican immigrants were in the highest 20 percentile income bracket in the United States<sup>4</sup>. In other words, between four and five of every 100 Mexicans who have emigrated in recent years to the United States have a personal income of at least US\$63,764 a year.<sup>5</sup>

An interesting phenomenon can be noted in this latter category of Mexican emigrants, since in classifying immigrants by income bracket, it is the only segment registering an upward trend. Many of these emigrants are coming to the United States to engage in business and company management activities, as seen by the CPS figures. While in 2005 less than 1% of total newly arrived Mexican immigrants carried out such activities, in 2011 the corresponding figure was close to 3%.

In general, a clear pattern emerges on Mexican emigration to the United States before and after the economic crisis. This occurs with all the Mexicans who emigrate for employment-related reasons, as shown in changes in the number of H2B and H1B visas<sup>6</sup> that the U.S. government grants to workers. Between 2003 and 2006, a total of 218,065 of these types of visas were granted to Mexican immigrants. For the 2007-2010 period, the total number of such visas granted fell by 23% to 167,404.

Graph 18

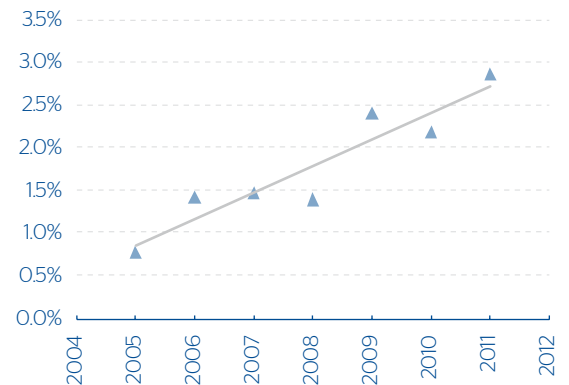
**Percentage of newly arrived Mexican immigrants belonging to the highest 20 percentile income bracket in the United States**



Source: BBVA Research with figures from the expanded March supplement of the CPS (2005-2011)

Graph 19

**Percentage of newly arrived Mexican immigrants engaged in business and company management activities**



Source: BBVA Research with figures from the expanded March supplement of the CPS (2005-2011)

In the emigration of Mexicans with very high income levels, the pattern is different, as can be seen in the number of E1 and E2 visas that the U.S. government grants to foreigners engaged in high end business activities, with a growing trend registered in recent years. In the 2003-2006 period, a total of 5,712 of these types of visas were granted to Mexicans, while in the period of the 2007-2010 crisis, the corresponding figure was 8,237, a 44% increase.

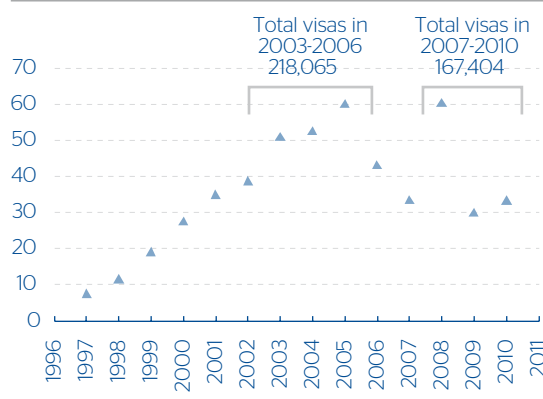
<sup>4</sup> Only the civilian working population is considered; employees of the armed forces are not included.

<sup>5</sup> This is the approximate amount as of which the highest 20 percentile income bracket of the U.S. workforce in 2011 is calculated.

<sup>6</sup> The H1B visa is granted to professionals in "special occupations." This visa allows for a maximum stay of six years in the United States. The H2B visa is granted for non-agricultural temporary employment in occupations with a shortage of American workers.

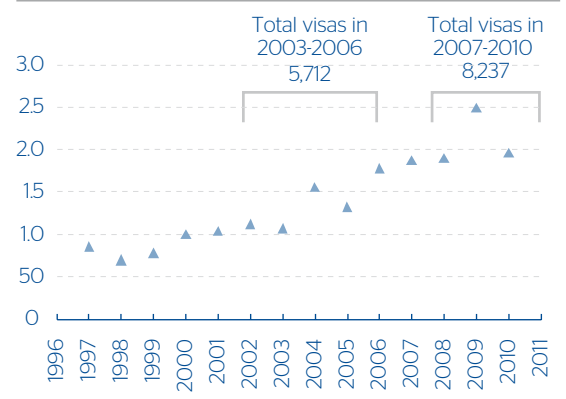
The above results show that there is a group of very high-income Mexicans who are deciding to emigrate to the United States, and whose number is increasing. They are the only group measured by 20 percentile income brackets that has increased in number. This emigration does not seem to be driven, as in most cases, by the existing demand for Mexican immigrant labor. If this were the case, it would display a behavior similar to that of other immigrants, and therefore, other factors may be relevant. Furthermore, since the U.S. economy now shows a greater weakness than before the 2007 crisis, it might have been advisable to have emigrated in that period and not now. In future issues of **Mexico Migration Outlook** we will continue discussing this question, but for the time being a first hypothesis that can be raised is that for this group of Mexicans, emigration could be related more to factors to leave Mexico, probably the increase of insecurity in the country, coupled with the search for new job opportunities and professional development, given that they have high levels of education and income that would allow them to assume certain costs involved in emigrating from Mexico.

Graph 20  
**Total number of H1B and H2B visas granted to Mexican immigrants in the United States**



Source: Bureau of Consular Affairs, U.S. Department of State (1997-2010). The H1B visa is granted to professionals in "special occupations." This visa allows for a maximum stay of six years in the United States. The H2B visa is granted for non-agricultural temporary employment in occupations with a shortage of American workers.

Graph 21  
**Total number of business visas (E-1) and investment visas (E-2) granted to Mexican immigrants in the United States**



Source: Bureau of Consular Affairs, U.S. Department of State (1997-2010). The E1 visa is for owners of a company or for those who have been offered employment in a company that is actively engaged in the international trade of goods and services with a high and continuous volume. The E2 visa is for those who invest substantial amounts in companies whose business activity is "substantial" in the sense that it should involve a major and continuous volume.

Chart 6  
**Recently arrived Mexican immigrants classified by 20 percentile brackets of income distribution in the United States**

20 percentile bracket	First 20 percentile bracket	Second 20 percentile bracket	Third 20 percentile bracket	Fourth 20 percentile bracket	Fifth 20 percentile bracket	Total
2005-2007 average (A)	355,513	265,966	99,244	39,206	11,563	771,492
2009-2011 average (B)	176,066	149,562	42,798	14,451	14,465	397,341
Percentage change between A and B	-50.5%	-43.8%	-56.9%	-63.1%	25.1%	-48.5%

Source: BBVA Research with figures from the expanded March supplement of the CPS (2005-2011).

### Conclusions: changing patterns of Mexican immigrants indicate the opportunities that have opened due to the complementarity of the economies

The characteristics of Mexican emigration to the United States have changed, in general, as of 2008. The main factor has been the economic crisis, but other considerations such as the tightening of immigration laws in various U.S. states and changes in conditions in Mexico have also weighed in. Thus, net undocumented emigration has tended to approach zero, and there is even evidence of a reduction in the total number of undocumented immigrants in the United States.

Some Mexicans have continued to emigrate toward the country's northern neighbor. Most are documented immigrants with higher educational and income levels and they seek better skilled jobs, compared to what the norm was before the economic crisis.

Most of the emigrants who have recently entered the United States while in percentage terms have a higher income than those who arrived before the economic crisis, are in the lowest 20 percentile bracket of income distribution in the United States, and in these cases emigration seems to be associated with demand for these workers' labor.

However, there is a group of Mexicans with very high incomes who are deciding to emigrate to the United States, and whose number has been increasing in recent years, even though it is a comparatively small segment in relation to the total.

It is possible that in this case, emigration is associated with other factors such as insecurity in Mexico. However, a deeper analysis is required in order for more precise conclusions to be drawn concerning the phenomenon. In subsequent issues of **Mexico Migration Outlook** we will continue the discussion and provide further analysis on these issues.

### Bibliographical references

Bureau of Consular Affairs, U.S. Department of State. [http://travel.state.gov/visa/statistics/nivstats/nivstats\\_4582.html](http://travel.state.gov/visa/statistics/nivstats/nivstats_4582.html)

INEGI, 2010 Population and Housing Census

INEGI, 2000 General Population and Housing Census.

Organization for Economic Cooperation and Development (OECD), International Migration Outlook 2011.

U.S. Census Bureau for the Bureau of Labor Statistics, Current Population Survey (2000-2011).

## 4. Has there been an evolution in remittances? A historical review\*

In **Mexico Migration Outlook** we have analyzed different elements that are relevant to immigration, such as the determining factors behind this phenomenon, the behavior of migratory flows, the effects of new developments, such as climate change, social networks, and the impact of some anti-immigrant laws in the United States, among other topics. We have also analyzed and estimated the economic contribution of immigrants, effects on employment, and the amounts paid in taxes in both Mexico and the United States. Thus far we have focused primarily on the movement of people, but with this article we begin an analysis of monetary flows. This study will describe the changes that have occurred in the way in which remittances are sent and will assess whether they have been favorable.

Two additional articles complement the analysis. They describe the main recent trends in the costs of sending remittances worldwide and present a first approximation of the effects on their living standards of access to financial services in households receiving remittances in Mexico. In subsequent issues of this publication we will analyze the use that the households make of remittances and how to strengthen their effects on the recipient families' well-being. With the publication of these studies, we will begin a series of analysis on development related issues.

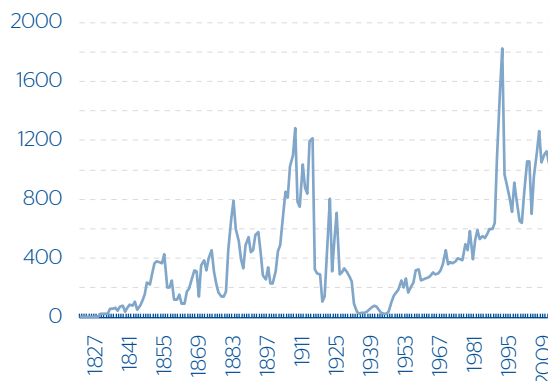
Up until now, there have been relatively few studies that analyze the behavior of remittances, both internationally as well as in Mexico, despite the importance of the number of immigrants worldwide and the amounts of money they send back home. In 2010, some 214 million people were living outside their native country, and they sent an estimated US\$325 billion in remittances back to developing nations.

### Remittances have grown more than immigration

Historically, there have always been movements of people. With this in mind, in the June 2009 edition of **Mexico Migration Outlook** we showed that the first phase of massive migration, which is well documented, occurred in the second half of the nineteenth century, mainly in European nations and from Europe to other countries.<sup>1</sup> In the case of Mexican emigration to the United States, the first phase took place between 1900 and 1929, according to the analysis by Massey and others (2002). So it can be said that immigration is not a new development.

Graph 22

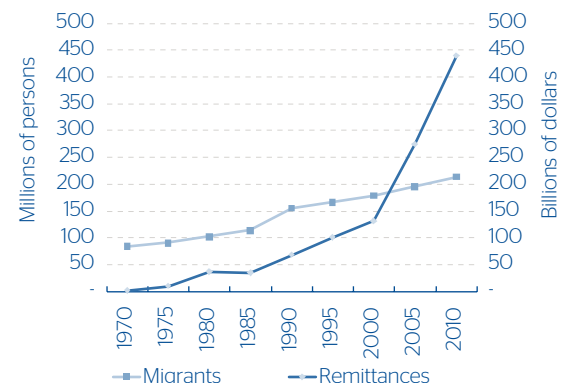
#### Legal immigration to the United States (Annual flows, in thousands of people)



Source: BBVA Research with U.S. Department of Homeland Security figures

Graph 23

#### Remittances and the number of immigrants in the world



Source: BBVA Research with United Nations and World Bank figures

\* We would like to express our appreciation for the comments of Moisés Jaimes, Jaime Caballero, Rubén Torres, Marco Flores, Juan Lavalle, and Sara Castellanos.

<sup>1</sup> Even though there have been other, previous migrations following the discovery of the Americas, it is felt that the largest mass immigration occurred in the second half of the nineteenth century.

While remittances have been associated with the movement of people and presumably have existed ever since the early migrations, it has only been since the 1990s and even more so since the decade that began in 2000 when they experienced a considerable expansion so that there is a new phase in the history of remittances worldwide, from which Latin America and the Caribbean have not been exempt (Lowell and de la Garza, 2002).

Figures from the United Nations Population Division (2009) show that between 1990 and 2010 the number of international immigrants in the world increased 1.4 times, rising from 156 million to 214 million people. In the same period, the flow of remittances in the world grew from US\$68 billion to US\$440 billion, i.e. a 6.4 fold increase, according to World Bank data (2011).

What explains the huge expansion in remittances worldwide that has occurred in recent years? Lozano (2004) noted that among the factors which have played an important role, not only driving the growth in remittances but also transforming the operation of the transfer system for such funds, are: the trend toward a decrease in the cost of sending remittances, a greater participation by banks and companies in the money transfer business, a reduction in remittances sent through informal channels, and improved accounting of family remittances by the central banks. Behind these changes are the advances in communications and immigrants learning the use of new channels for sending remittances.

In the next section we will describe the changes in the ways in which remittances are sent in order to have additional elements to explain the reasons for the recent strong growth in remittances.

## Evolution of the remittance forms

### **The first mechanisms for sending remittances were through acquaintances and in some cases through the mail**

Emigrants in the second half of the nineteenth and early twentieth century who were headed to places of destination to work for fixed periods, in general, had to wait for the conclusion of their period of work and return to their places of origin in order to take part of the income they had earned with them or send it through family or friends on their way back to their communities. The waiting time for receiving remittances for relatives of immigrants could be long and sometimes the funds did not reach their destination. There was great uncertainty involved in sending these savings back home.

At that time, mail delivery companies began to appear in some regions, and in these cases some immigrants made use of such services for sending remittances.

Even though since the late nineteenth century some companies began to offer money transfer services (Ochoa et al, 2003), in many cases the use of the mail, through wire transfers, remained the principal means in different regions for money transfers until the late 1980's and early 1990's. In this period, remittances in Mexico were monopolized by Telégrafos de México (Cevallos, 1998). International money orders were taking on greater importance than wire transfers and in the first half of the 1990s they were the main way in which Mexican households received remittances (see Lozano, 1998). Among its advantages is its low cost, but the time that transpired before the money order was received could be relatively long because the funds were sent to the beneficiaries through the postal service or through acquaintances. In addition, there was the risk of not receiving the funds due to the loss of the money order as such.

In 1995, about 40% of remittances sent to Mexico were made through money orders, which led to the emergence of a large number of foreign exchange bureaus in the 1980s and 1990s in places with important migratory flows (Perez and Alvarez, 2007).

## New ways of sending remittances: the contribution of technological changes

Subsequently, technological advances have allowed for streamlining the sending of remittances and transforming the ways in which this is done. The greatest changes have been relatively recent, and, in general, have occurred since the late 1990s and the beginning of the 2000s. Thus, electronic transfers have gradually grown in importance on a global level as they have increased the speed of sending money and expanded the supply of these services. In the case of Mexico, while in 1995 about 50% of remittances were sent by electronic means, the corresponding figure is now 97%.<sup>2</sup>

One of the first alternatives was the “cash” option, that is, in the place from which the transfer is being made, money is delivered to a bank or a money transfer operator (MTO), who are specialized operators in the transfer of money, which then transfers the funds to the place of destination, with the resources being able to be obtained at different points (given the participation of new intermediaries) such as banks, currency exchange houses, retail chains, pharmacies, telegraph offices, among others. In some cases it is also possible to transfer the cash into a bank account in the destination country. This option began to take on importance in the second half of the 1990s as a manner of sending remittances to Mexico.

The use of bank cards, especially debit cards<sup>3</sup>, has been increasingly important as a mechanism for receiving remittances in recent years. However, this expansion has not been as extensive in small rural communities far from the cities, because of few or no ATMs or retail outlets that accept cards as a means of payment.

There are different mechanisms for the use of cards, one of which is to send remittances through a bank account to the card of another person in another country. In some cases two people in different countries can have access to the same account using two cards. In addition, prepaid cards are now in use; they are purchased by the issuer and the money is received directly by the recipient in another country, with the issuer able to pay funds into the card. Orozco and others (2007) felt that even though the use of the cards for sending remittances from immigrants from Latin America and the Caribbean is relatively low (about 7% of immigrants from these countries use them to send such funds), their use will be growing because many of the recipient families have limited access to financial services<sup>4</sup> and cards can meet some of their essential financial needs such as cash withdrawals and purchases of basic goods, in addition to being a flexible payment instrument, one that may be easier to use than traditional bank accounts.

In recent years, “online money transfers” have also proliferated. From a website a person can send money charged to their credit card, debit card or a bank account. The money can be retrieved in the form of cash or be paid into a bank account.

Recently remittances sent through cell phones have increased in popularity and it is probable that their importance will increase in coming years. Through this system, the user can enter cash in their cell phone, which is recorded in an accounting system integrated with their account and have the funds sent to a cell phone number abroad, where the recipient receives a text message informing him or her that the money has arrived. In this case, banks and MTO have agreements with telephone companies to make the transfer.

Remittance transfers via cell phones have advanced the most mainly in African and Asian countries. Among the Asian countries are the Philippines, Malaysia, India, Pakistan, and Bangladesh. Among the African countries where it is possible to receive remittances in this way are Kenya, Uganda, Rwanda, Benin, Ghana, Cameroon, Tunisia, Guinea Bissau, Ivory Coast, and South Africa.<sup>5</sup>

<sup>2</sup> According to the statistics on remittances from the Banco de México, which are available on the bank's website in the section on Balance of Payments.

<sup>3</sup> According to Orozco (2003), remittances sent via debit cards from the United States to Mexico is the mechanism with the lowest costs.

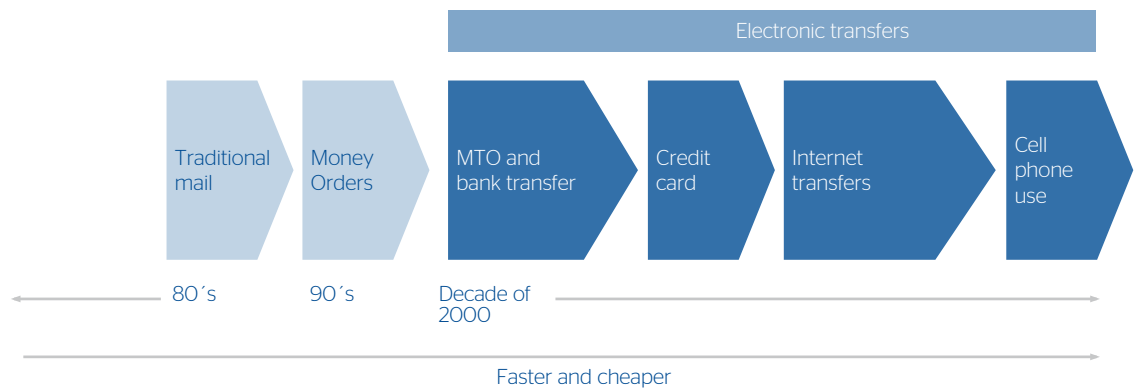
<sup>4</sup> In an article to be published in a subsequent edition of this publication we will provide some estimates of the impact on access to financial services for the immigrant communities.

<sup>5</sup> Transfers via mobile phones are not tied to bank accounts in all of these countries. A case in which such a link does exist is that of M-PESA in Kenya, which is discussed in Mexico Banking Outlook in July 2010. The great advantage of linking the transfers to bank accounts is that the latter have deposit insurance in countries where it exists.

A greater development of systems for sending remittances through cell phones will depend on the further development of the required infrastructure. Ratha and others (2007) have noted that in some countries, anti-money laundering regulations and laws against the financing of terrorism seem to be a restriction on reducing the costs of sending remittances, which has affected banks and mobile phone companies' ability to provide remittance transfer services via mobile phones.<sup>6</sup> In the case of Mexico, both the money transfer companies as well as the payment networks, including banks, have begun the search for solutions to provide these services to their customers and users.<sup>7</sup>

Graph 24

**Historical evolution of the mechanisms for sending remittances**



Note: MTO (specialized money transfer operators)  
Source: BBVA Research

With all these changes, new companies of different sizes have entered the sector by making the sending of remittances more efficient, reducing transfer times, and encouraging a greater number of such transfers. In response, remittances have recently posted much higher growth than the increase in the number of international immigrants, and therefore it can be shown that the advances presented have been beneficial for the recipient households.

**Immigrants have increased their preference for formal mechanisms for sending remittances**

As shown above, the channels for sending remittances have experienced a relatively rapid transformation in the past few years. Previously informal channels were mainly used, but now with the entry of new players and the emergence of new technologies, the formal mechanisms have taken on greater importance, by providing greater security and speed in sending remittances and, recently, lower transaction costs, as well as facilitating access to financial services.

The informal mechanisms involve the sending of remittances through family and friends or through non-regulated businesses that do not have permission to send money. Such channels are present in countries where the flow of remittances is not attractive for companies because of their low volume, in which foreign money transfer firms are highly regulated by the state, or where the technology is not very accessible (Orozco, 2004). In this regard, Freund and Spatafora (2005) found that between 35% and 75% of total remittances through informal channels are transmitted to one or another of the developing countries and that there is tremendous regional variation, with informal remittances to Sub-Saharan Africa, Eastern Europe, and Central Asia being relatively high, while East Asia and the Pacific have relatively low volumes. In the case of Latin America, in countries such as Haiti, Cuba, and Nicaragua, informal means of sending money still represent an important share of the total.

<sup>6</sup> In Mexico, the legislative ruling on the Law for the Prevention and Identification of Operations with Funds of Illicit Origin and the Financing of Terrorism was approved, which stipulates that financial institutions will be required to establish measures for identifying customers and duly submit reports on suspicious activities conducted by their clients and users (BBVA Research, 2011).

<sup>7</sup> Mexican financial authorities have made changes to the regulations to incorporate different levels of monitoring of accounts that raise suspicions regarding money laundering and the financing of terrorism. Prepaid cards are being replaced by accounts with level 1 risk, because their operating system did not contemplate any monitoring (BBVA Research, 2011).



In general, in the informal systems there is no guarantee that the money will reach its destination, and, in addition, the time it takes for it to arrive may be relatively long and uncertain.

The informal mechanisms may be legal or illegal. The former include remittances from immigrant or migrant workers in small amounts (where the transaction is legal), transactions conducted through small businesses (when the transaction is legal), or sending assistance to regions affected by war (when the financial institutions on the scene are weak). Non-legal informal flows include money laundering and the financing of terrorism, and evasion of capital and currency controls (APEC, 2003).

Formal systems include institutions that are part of the regulated financial sector, such as banks, credit unions, money transfer operators (MTO), debit and credit card companies, as well as postal services (APEC, 2003).

Chart 7

**Formal and informal systems for sending money**

	<b>Characteristics</b>	<b>Participants</b>
<b>Formal</b>	Offer better access to financial institutions, greater security, more rapid delivery times	<ul style="list-style-type: none"> <li>• Banks,</li> <li>• Credit unions</li> <li>• Money transfer operators (MTO)</li> <li>• Credit and debit card companies</li> <li>• Postal systems</li> </ul>
<b>Informal</b>	Can be legal or illegal. There is no guarantee that the money will reach its destination and the time it takes to arrive is uncertain	Unregulated agents or companies

Source: BBVA Research

**The dual financial-remittance system**

Even though formal mechanisms have been most used for sending remittances, since they facilitate their delivery with greater security, it is important for the financial systems that they continue to encourage their use, given that in the informal systems, although they may be legal, their anonymity is attractive to individuals and groups involved in illegal activities, and they therefore pose security risks, such as money laundering, and the financing of terrorism, which, in turn, affects the stability, transparency and efficiency of financial systems, and undermines the potential of an economy to post sustainable growth, according to the findings of the APEC report (2003).

Remittances sent through formal channels can facilitate the expansion of the financial sector in developing countries. With deposits from remittances, banks are able to increase lending operations and offer financial products and services to both recipients and non-recipients of the remittances. In addition, in the absence of the development of the financial system, remittances help ease credit restrictions for the poor, improving the allocation of capital and, thereby, promoting economic growth (Giuliano and Ruiz-Arranz, 2006). Demirgüç-Kunt, López Córdova, Martínez Peria, and Woodruff (2001)'s study analyzed the impact of remittances on the banking sector in Mexico and found that remittances are strongly associated with a greater breadth and depth of the banking industry, an increase in the number of branches and accounts per inhabitant, and the amount of deposits in relation to GDP. In the same vein, Aggarwal, Demirgüç-Kunt, and Martínez Peria (2006)'s study, based on figures for 99 developing countries that receive remittances, found that they have a significant and positive impact on bank deposits and credit in relation to GDP, and it therefore concluded that remittances promote financial development in developing countries.

Thus, the financial system is beneficial for remittances and remittances are beneficial for the financial system. As previously noted, there has been an evolution in the way in which remittances are sent, which has allowed for changes in the remittance market and, as a result, variations in costs. In the next article in this issue of **Mexico Migration Outlook** we will analyze the costs of sending remittances.

### Conclusions: technology and the entry of new players have favored the sending of remittance, in less time and at a lower cost and with greater security in receiving the funds

Remittances are a factor that is closely tied to immigration. Since the nineteenth century the first waves of mass emigration began to be documented and it is assumed that since that time, immigrants began to send remittances back home. Over the years, remittances have experienced an evolution that mirrors migration flows. However, since the 1990s and with greater strength as of the decade that began in 2000, remittances have been growing much more rapidly than global migration.

Technological changes in the 1990s and 2000s have been positive, as they have enabled remittances to be sent more quickly, and, in addition, new companies have participated in the money transfer business, which has increased the supply of such services to consumers. Currently, and depending on the particularities of each country and remittance mechanisms, consumers have several options for sending money, such as bank transfers, the use of bank cards, Internet transfers, cell phone transfers, among others. In the case of Mexico, the adoption of electronic mechanisms has been relatively rapid in recent years and it is expected that in the future with the adoption of the mobile phone and correspondent bank modes, their use can first be increased and then expanded.

With these changes, customers' preferences for formal systems have increased. This situation can be beneficial for the development of financial systems, as different studies have shown, since it can increase access to financial systems for a greater number of people, which can favor their standards of living.

In conclusion, the advances achieved in sending remittances have been favorable for both consumers and financial systems in general. It is expected that the range of services will continue to grow, more companies will continue to participate, and that the costs of sending remittance will tend to decline, and that these conditions will favor the continued upward trend in the amount of remittances being sent, beyond the key factors that explain the phenomenon of immigration and that were analyzed in the first issue of **Mexico Migration Outlook** in June 2009.

### Bibliographical References

Aggarwal, R., Demirgüç-Kunt, A., Martínez Pería, M. (2006) "Do workers' remittances promote financial development?" World Bank Policy Research Working Paper 3957.

World Bank (2011), "Estadísticas sobre remesas" ("Statistics on Remittances"), available at <<http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTDECPROSPECTS/0,,contentMDK:21121930-menuPK:3145470-pagePK:64165401-piPK:64165026-theSitePK:476883,00.html>>

Cevallos, Diego "Making Big Bucks on Expatriate Remittances" available online at <<http://ipsnews.net/news.asp?idnews=71837>>

Demirgüç-Kunt, A., López Córdova, E., Martínez Pería, M. and Woodruff, C. (2011), "Remittances and banking sector breadth and depth: Evidence from Mexico", Journal of Development Economics, Vol. 95, No. 2.

United Nations Population Division (2009) "Trends in International Migrant Stock: The 2008 Revision", available at <<http://esa.un.org/migration/>>

Freund, Caroline and Spatafora, Nikola (2005) "Remittances: Transaction Costs, Determinants and Informal Flows," World Bank Policy Research Working Paper 3704.

Giuliano, Paola and Marta Ruiz-Arranz (2006) "Remittances, Financial Development, and Growth," IZA Working Paper No. 2160.

- Lowell, B. Lindsay and Rodolfo O. de la Garza (2002) "A New Phase in the Story of Remittances". In Rodolfo O. de la Garza and Briant Lindsay Lowell Sending Money Home. Hispanic Remittances and Community Development. Rowman & Littlefield Publishers, Inc.
- Lozano, F. (1998), "Las Remesas de los Migrantes Mexicanos en Estados Unidos: Estimaciones para 1995" ("Remittances of Mexican Immigrants in the United States: Estimates for 1995") in Mexico-United States Binational Migration Study, Migration between Mexico and the United States: Vol. 3, Research Report and Background Materials.
- Lozano, Fernando (2004), "Tendencias recientes de las remesas de los migrantes mexicanos en Estados Unidos" ("Recent Trends of Remittances of Mexican Immigrants in the United States" The Center for Comparative Immigration Studies
- Massey, D., J. Durand, and N. Malone (2002), "Beyond Smoke and Mirrors. Mexican Immigration in an era of Economic Integration".
- Ochoa, H. Gómez, J.C., Infante, J. O. (2003), "Giros Y Finanzas: Una Historia De Éxito Continuo en el Mercado De Cambios," Estudios Gerenciales, Universidad ICESI.
- Pérez, A, and Colín, P. (2007), "Las remesas familiares en México y sus inconsistencias", Análisis Económico, Vol. XXII, No. 51.
- Héctor Ochoa Díaz, Juan Carlos Gomez Laguado, and José Orlando Infante Díaz, 2003. Estudios Gerenciales,
- Orozco, Manuel (2003), "Changes in the Atmosphere? Increase of Remittances, Price Decline and New Challenges" Inter - American Dialogue, Research Series.
- Orozco, Manuel (2004) "The Remittance Marketplace: Prices, Policy and Financial Institutions" Pew Hispanic Center.
- Orozoco, Manuel, Jacob, Katy, and Tescher, Jennifer (2007) "Card-Based Remittances: A Closer Look at Supply and Demand" The Center for Financial Services Innovation.
- Ratha, D, Mohapatra, S. and Vijayalakshmi, K. and Xu, Z. (2007), "Remittance Trends 2007" in Migration and Development Brief 3, Development Prospects Group, Migration and Remittances Team
- Servicio de Estudios Económicos and Fundación BBVA Bancomer (2009), "Situación Migración México", June 2009.

## 5. Cost of sending remittances to different regions\*

This article of **Mexico Migration Outlook** expands the analysis of the changes in the various ways that remittance deliveries are made. It approaches the characteristics of the remittance delivery market, and describes their structure, indicating the different actors that intervene and how their participation affects the costs. Also, the main trends in costs at the world level and in the different regions are compared; the costs to Latin America are analyzed; and it is concluded by presenting the trends in remittance delivery costs to Mexico from the main cities in the U.S. with a presence of Mexican immigrants.

### Which factors affect the costs of remittance delivery?

In the remittance market, different actors participate who enable issuers of remittances to transmit them to recipients in other regions. Thus, the more remittances are sent, the incentives for more intermediaries to participate will be greater. There are multiple intermediaries, because not all companies have the structure to participate in remittance delivery alone; there is a specialization in the delivery process. Remittance transmitting companies participate, as do agents contracted by those companies to offer the money delivery services, and the agents who provide distribution in the receptor locations, and the financial institutions that carry out the transactions, among others (Orozco, 2004). Thus, the number of agents participating in the delivery and the commissions that each one charges for his participation will be a factor that will affect remittance costs.

Governments play an important role in the remittance market: they establish the regulatory framework that indicates the requirements that companies must meet to be able to participate in the remittance-delivery-reception market. In some cases, the regulations imposed can increase the costs. To this respect, Orozco (2004) considers that the regulatory system in the United States has increased the monitoring of these flows in recent years, due to which the costs have risen for the companies in the investment of systems, administrative controls, as well as the expenses in the training of the personnel involved in the implementation of monitoring programs.

Chart 8

#### Elements in the remittance market and how they affect the costs

Remittance senders and receivers	In the markets where the most remittances are delivered, a higher number of intermediaries will have the incentive to participate and, consequently, there will tend to be a higher supply of services and, as a result, lower costs.
Intermediaries in the delivery of remittances	In the remittance delivery market, different intermediaries participate who facilitate remittance deliveries. The transmitting companies rely on different agents. The costs will be affected by the commissions that each one of the participants charges for his services, as well as due to the size and the number of agents who intervene in the process. In general, the greater the competition there is among the participants, the costs will tend to drop.
Governments	It is governments that define the regulatory environment. They indicate the requirements that the companies must meet, and they monitor them. They can influence the information that is offered to consumers so they can decide which companies' services they will contract and thus favor competition. They have a very important role in establishing the regulations that companies must meet to make transparent the costs and the commissions that are paid for the delivery of remittances. They also have an influence on the technology that is used in remittance transfers, to facilitate the control of "money laundering" and the financing of terrorism.
Technology	Technological advances expedite remittance deliveries, allow increasing the supply of services, and favor competition and cost reduction.

Source: BBVA Research

\* Out thanks for their comments to Moisés Jaimes, Jaime Caballero, Rubén Torres, Marco Flores and Juan Lavalle

Following the attacks of September 11, 2001 in the United States, regulation has increased noticeably, by which the costs related to the prevention of money laundering have increased significantly, which has had an impact on the cost structure of companies.

On the other hand, governments can carry out actions to achieve greater competition, transparency and protection to the consumer on the remittance market, and, by this, to have a bearing on cost reduction. In this sense, some actions have been directed both in the United States and in Europe. With the law "Wall Street Reform and Consumer Protection" enacted on July 21, 2010, the remittance service suppliers in the United States are obligated to reveal to the senders the equivalent amount that the beneficiary will receive in local currency, as well as the costs of the transaction. In the European Union, the Payment Institution has been created to encourage competition that is subject to minor restrictions and capital requirements and minor information obligations for the conventional banks and the financial institutions (Mohapatra, Dilip Ratha and Silwal, 2010).

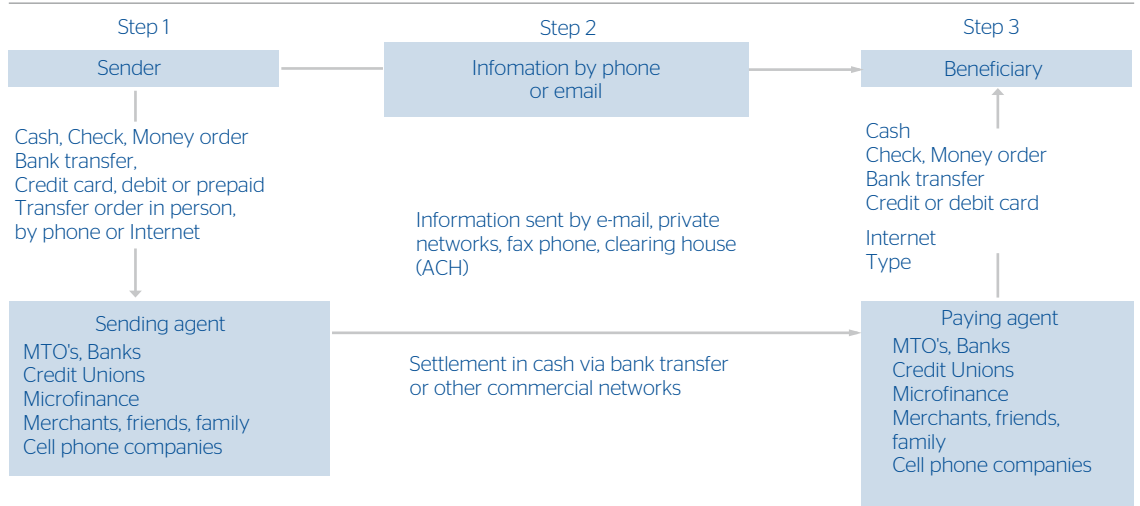
Technology is another element that facilitates operations in the remittance market. In some cases, the subsistence of the companies has depended on their capacity to incorporate technology and make their operating processes efficient, particularly in very competitive industries. As was seen in the previous article, it has been the technological advances that have made remittance deliveries more efficient and have allowed for a greater supply of services; consequently, this has favored competition and lowered costs. Further along, it is shown that, in general, a decreasing trend is observed in the markets in the costs for remittance delivery.

**Steps that are taken for money transfers**

According to Ratha and Riedberg (2005), a typical remittance transaction is carried out in three steps: in the first, the immigrant that sends the remittance pays the amount to the delivery agency, be it in cash, check, money order, credit card, debit card or a transfer instruction sent by e-mail, telephone, or bank by Internet. In step 2, the delivery agency (specialized money transfer operators or MTOs, banks or another financing institution, money exchange office or a retail trade operator, like a gas station or self-service store, etc.) instructs an agent in the receiving country to deliver the remittance to the beneficiary. In the third step, the agent makes the payment to the beneficiary at the place of destination.

Graph25

**Typical steps in a transaction of remittance delivery**



Source: Ratha and Riedberg (2005)

## What is behind the cost charged for sending remittance? The importance of the business models

In order to know the determinant factors behind the cost of the remittances, it is important to know the operating structure of the companies that deliver the remittances. Taking as a reference the works of Kalan and Aykut (2005), companies operating in the market can be identified within two business models. These are briefly described below:

- 1) In the model by agencies, which is broadly used by the large operators of remittance transfers, agents are used that almost always operate another type of business in the countries of remittance delivery and reception.** These can be banks, supermarkets, gas stations, drugstores, convenience stores and other commercial establishments. The agent pays the entire rent of the establishment, the personnel, the overhead costs and the operating expenses in exchange for a commission for the marketing of goods and services such as remittance delivery. The commission charged is generally a percentage of the fee that the international operator charges, excluding the exchange rate spread that is generally charged by the company making the conversion of the currency. In some countries, such as Mexico, agents receive a fixed commission per transaction, which is negotiated previously.
- 2) In the branch model, the operator of the remittance transfer is the owner of the establishments for sending remittances and, frequently, also of those of delivery, which is why he pays all the fixed operating expenses of his branches. These branches are used by many small regional operators and specific market niches.**

Chart 9

### Cost scheme according to the business model

Variable	Agency Model	Branch Model
Common costs	Administrative and operating costs Marketing and publicity Permits and/or operating licenses Maintenance and support of the transaction and transfer system Costs derived from the conversion and handling of currencies Additional services to the client (telephone calls, premiums, promotions, etc.) Costs for meeting established regulations	
Specific costs	Pays commissions to agents in the countries sending and receiving the remittances	Pays all fixed and operating expenses of their branches (rent, payroll, etc.)
Cost breakdown	The fixed costs are reduced and the variable costs relatively higher, since more intermediaries participate	Fixed expenses have an important weight; the variable costs are usually much cheaper than in the other scheme.
Total costs for operating collection and distribution of the money	Almost all of them are variable	They are almost always fixed
Cost per transaction for the company	Generally it is proportional to the volume of the transactions	It is cheaper for high volumes of transactions and expensive when the volume is low.
Who determines the cost for the delivery of the remittance?	The commissions and charges that each intermediary charges in the different steps	The company
Earnings distribution	It is shared among those that intervene in the service lending	All earnings and losses are owned by the company
Market coverage	It depends on the capacity for entering into and maintaining commercial agreements	It depend on the capacity for internal growth of the company
Growth	Leverage with already established companies (which already have knowledge of the profile of consumers) under the commission plan, a lower capital investment is required and, therefore, it has greater expansion speed.	It depends on the company's resources.

Source: BBVA Research based on Kalan and Aykut (2005).

Companies can also choose alternate business models, where the operation of money collection or that of delivery is provided by branches, and the other part by correspondents, or mixed models, where there are branches and agencies, both in the countries of origin and in those of the destination of the remittances.

Thus, the elements composing the remittance market are different; both in the countries of origin and destination, and all of them have a bearing, to a greater or lesser degree, on the costs that are charged to the senders of the remittances. In the following section, we analyze the costs in the different markets.

### Remittance prices worldwide have tended to decline

In 2010, the close to 214 million persons who live outside their native country sent, through remittances, an estimated annual US\$325 million to the developing countries. The amount of these transactions is equivalent to one third of the Gross Domestic Product (GDP) of Mexico of that same year. With that figure, the annual salary of 75% of the persons with the greatest poverty in the world could be paid.<sup>1</sup> Despite this, there is little information and available studies regarding the cost of the service of remittance transfers. A high cost translates into less money for the persons receiving the remittances and their families, and, therefore, fewer resources to meet their economic needs. For this reason, the Global Remittance Work Group, led by the World Bank, identified the need to lower the cost of remittance delivery and issued a recommendation known as the 5x5 objective, which sets as a goal the reduction of the cost of remittance transfers by five percentage points in five years. This recommendation had been adopted by the member countries of the G8 as part of their work agenda for 2009. If the average cost of remittances could drop by five percentage points, in total all the recipient families would receive around US\$16 million additionally per year.

Since 2008, there is a public database that concentrates the costs charged by different companies in different remittance corridors at a world level, that is worked out by the World Bank and it is called Remittance Prices Worldwide (RPW)<sup>2</sup>. Even though there is no information for past years in this system, it is known that the costs at a world level for remittance deliveries have tended to drop and that currently they are lower than those existing in the decade of the 90's (see Orozco, 2002, Orozco, 2004, Ratha and Riedberg, 2005). Mexico is an example of countries where the costs have dropped significantly (more than 70%) since the end of the decade of the 90's to the present day, as will be seen further ahead. The changes that have occurred in the remittance delivery market (a higher number of participants, greater technological development, and higher service supply, among others) have generated a reduction in costs.

The data of the RPW also show a decreasing trend between 2008 and the first quarter of 2011, although moderate, in the total average global cost<sup>3</sup> for sending US\$200, from 9.81% to 9%; the above despite the fact that between the first quarter of 2010 and the first quarter of 2011 there has been a slight increase in the costs, a situation that can be associated with the recent world financial instability.

The specialized money transfer operators (MTO) show the greatest decreasing trend; in the banks, the delivery costs, even though they show a decrease in the period; they have increased in recent months, while postal costs have been fluctuating.

<sup>1</sup> Considering that in the world there are close to 1,200 million poor people who earn less than one dollar a day in the developing countries, an estimate taken from the UN-FAO. <http://www.fao.org>

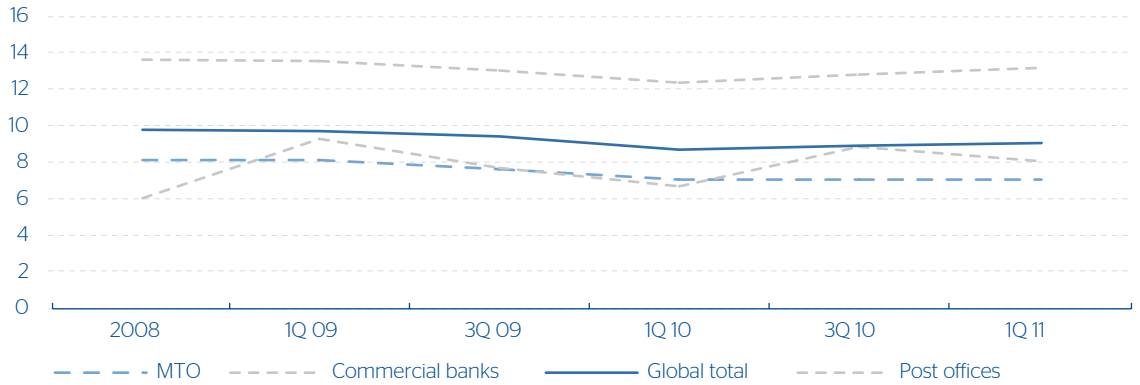
<sup>2</sup> This database has the information of the cost of remittance delivery for amounts equivalent to US\$200 and US\$500.

<sup>3</sup> The total average global cost is calculated as the average cost of delivery of US\$200 through the various suppliers of remittance services around the world, based on the information of the Remittance Prices Worldwide (RPW) database which the World Bank formulates and updates biannually. Excluded are those cases where the exchange rate is not transparent and the remittance brokers of Russia for not having provided information on the rate of exchange, given that the real cost could be higher if they had the complete data. Given that the World Bank does not have information on the market share of the companies that send money, it calculates a simple average based on the information available.

Considering the cost per delivery of US\$200 in remittances by type of service supplier in the first quarter of 2011, it is seen that the highest average cost is present in the banks with 13.2% (US\$26.3), followed by the postal service with 8.1% (US\$16.2), and finally the MTOs for which the average cost is of 7.1% (US\$14.2).

Graph 26

**Total average cost of sending US\$200, includes the cost of the commission and currency exchange (Cost expressed as a % of the amount sent)**



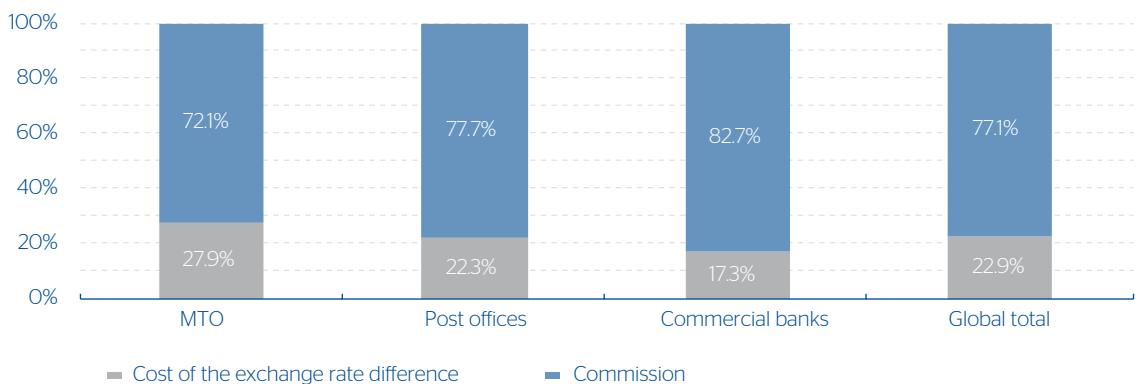
Source: BBVA Research with figures of the Remittance Prices Worldwide (RPW) database of the World Bank 2011.

In the estimate of the total cost for remittance delivery, two components are considered: 1) the commission charged by the service provider for sending a certain amount of money, which is known previously or is informed at the time the transfer is made; and 2) the cost derived from the difference between the exchange rate at which the service lender of the transfer pays the person receiving the money and the price of the currency on the market. This exchange rate can be that of the foreign exchange market, the official rate published in the country for payments in foreign currency, or it can be fixed using a spread that the service lender determines; it can be in terms of the exchange rate at the moment of making the delivery or when the money is delivered, and it can or not be recognized by the person making the transfer.

In general, the costs for the commission item are those representing the higher part of the total cost. Through the first quarter of 2011, they represented on average 77% for a transfer of US\$200. Of the total cost, MTOs represent the highest proportion coming from the currency exchange spread with 27.9%; while in the commercial banks this proportion is lower, 17.3%.

Graph 27

**Average distribution of the total cost (% of the total cost for sending US\$200)**



Source: BBVA Research with figures from the Remittance Prices Worldwide (RPW) database of the World Bank, 2011.



In some cases, like remittances from Spain to Rumania that are sent and charged in euros, or transfers from the United States to some countries in Latin America and the Caribbean that are sent and charged in dollars, the service lenders do not charge this spread. However, the persons receiving the money in foreign currency could incur in additional costs if they decide to convert it to local currency, due to which the real cost could be higher.

There are situations where the cost due to the current exchange spread is negative, due to, among other reasons, such as: preferential exchange rates that the service lender offers, the presence of multiple official exchange rates in a country, or the existence of currency exchange markets that are parallel or black. In these cases, the persons receiving the money benefit from a more favorable exchange rate.

**Southern Asia, Latin America and the Caribbean, the regions that pay the lowest costs for remittances received**

In the first quarter of 2011, when analyzing the cost of remittances by region of destination, notorious dissimilarities can be observed: while in Southern Asia (SA) and Latin America and the Caribbean (LAC), lower costs for remittance transfers are reported, from 6.56% and 6.82%, respectively, the highest costs are observed in Sub-Saharan Africa (SSA) and East Asia and the Pacific (EAP) being, respectively: 12.73% and 10.08%. Thus, in SSA it costs almost double to send US\$200, compared to SA and LAC, which can be explained in part because in some regions there is little competition, the absence of clear and specific regulations that would allow fluidity to this type of activity, and the lack of technological and operating infrastructure.

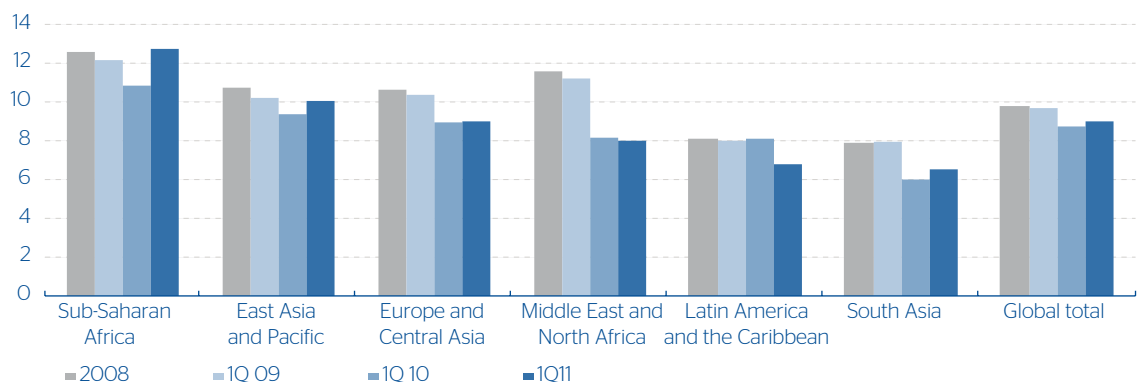
In AOP, of note is the case of China, the second receiver of remittances in the world, where there is little internal competition in the market for receiving remittances (World Bank, 2011). When averaging the cost of remittances in the 8 corridors where the RPW base has information on China (Germany, South Korea, Spain, United States, France, Italy, Japan, United Kingdom and Singapore), the average cost is 12.58%.

Even though it is true that, from 2008 to 2010, reductions have been observed in SSA and EAP in the cost of remittance transfers, in the first quarter of 2011 there was a considerable rise in these two regions, thereby resulting in a higher cost for SSA, more so than the one it had in 2008. An increase in the cost of remittances, although to a lower extent, can also be observed in Europe and Central Asia (ECA) and in SA, when comparing the cost of the last period with the same quarter of the year before.

As per information available from the RPW of the World Bank, the Middle East and Northern Africa region (MENA) is the one that has presented the highest reduction in the cost of remittances by going from 11.59% to 8.00% from 2008 to the first quarter of 2011 period: the second by Europe and Central Asia and by Latin America and the Caribbean.

Graph 28

**Total average cost of sending US\$200 by region of destination. Includes the cost of the commission and the currency exchange. (Cost expressed in % of the amount sent)**



Source: BBVA Research with figures of the Remittance Prices Worldwide (RPW) database of the World Bank, 2011.

Chart 10

**Classification by regions of the developing countries by World Bank**

Latin America and the Caribbean (LAC)	Netherlands Antilles, Bolivia, Brazil, Colombia, Ecuador, El Salvador, Guatemala, Guiana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Dominican Republic , Surinam
Sub-Saharan Africa (SSA)	Angola, Botswana, Ivory Coast, Eritrea, Ethiopia, Gambia, Ghana, Kenya, Lesotho, Malawi, Mali, Mozambique, Nigeria, Congo Republic, Ruanda, Senegal, Sierra Leone, Swaziland, South Africa, Uganda, Zambia and Zimbabwe
East Asia and the Pacific (EAP)	China, South Korea, Fiji, Philippines, Indonesia, Solomon Islands, Kiribati, Malaysia, Papua, New Guinea, Samoa, Thailand, Tonga, Tuvalu, Vanuatu and Vietnam
Europe and Central Asia (ECA)	Albania, Armenia, Azerbaijan, Belorussia, Bosnia and Herzegovina, Bulgaria, Croatia, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldavia, Poland, Rumania, Serbia, Tajikistan, Turkey, Ukraine and Uzbekistan
Middle East and North Africa (MENA)	Algeria, Egypt, Jordan, Lebanon, Morocco, Tunis and Yemen
Southern Asia (SA)	Bangladesh, India, Nepal, Pakistan and Sri Lanka

Source: BBVA Research with World Bank information. <http://www.worldbank.org>

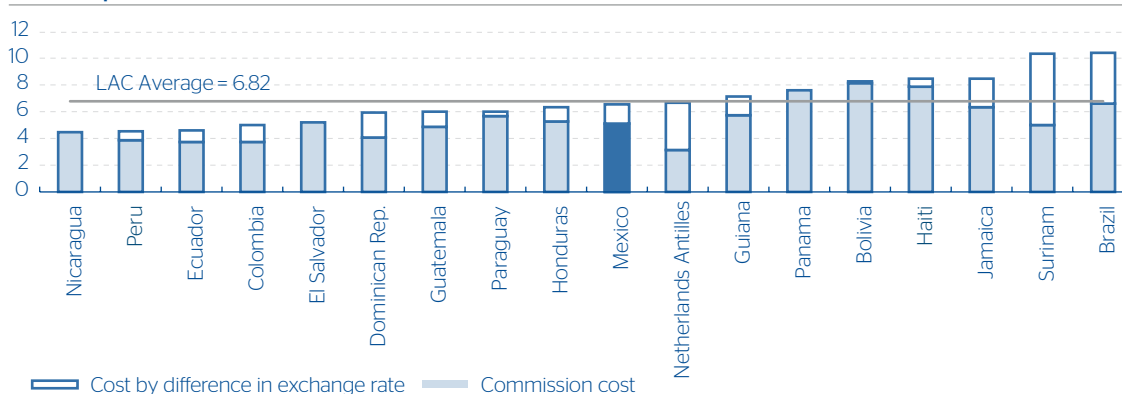
**What are the costs like for remittances received in countries of Latin America and the Caribbean?**

In Latin America and the Caribbean important disparities are also observed in that same period. Countries that have the lowest total average cost for a delivery of US\$200 in remittances are Nicaragua (4.5%), Peru (4.5%) and Ecuador (4.6%), Colombia (5.0%), and El Salvador (5.2%). In all of these countries, with the exception of Colombia, remittances sent from the United States can be received in dollars, which is why, on average, the cost derived from the conversion from one currency to another is usually low or nil, as in the cases of Nicaragua and El Salvador.

In the region, the costliest are Brazil (10.44%) and Surinam (10.38%). Mexico presents a slightly lower delivery cost for US\$ 200, than the average for Latin America and the Caribbean, although according to the World Bank (2011) this country is one of those that have had the most influence on the declining trend that is observed in the costs of the region, since it has improved its retail payment structure, which has allowed more options of election for the consumers and the efficient and secure reception of remittances has been promoted from most of the countries where they are received.

Graph 29

**Total average cost of delivery of US\$200 to LAC First Quarter of 2011  
(Cost expressed in % the amount sent)**



Source: BBVA Research with figures of the Remittance Prices Worldwide (RPW) database of the World Bank, 2011.

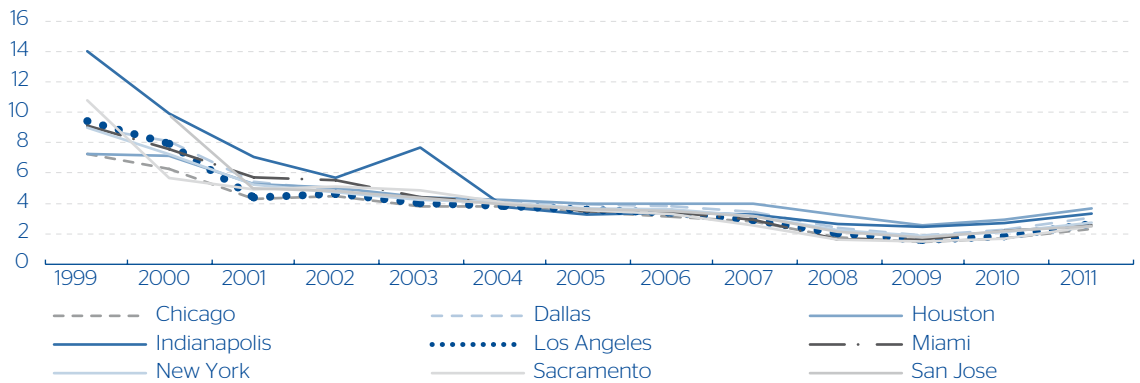
### Costs To Mexico

Mexico has been seen as an example where the costs of remittance delivery have tended to decrease significantly in recent years (Ratha and Riedberg, 2005). The figures of the Procuraduría Federal del Consumidor (PROFECO for its Spanish initials) provide evidence in this regard.

The information compiled by the PROFECO comes from the main cities where there is a higher Mexican population in the United States, and obtains the average cost for sending US\$300. Of the nine cities for which there is information, the most expensive for sending remittances<sup>4</sup> are Houston and Indianapolis with a cost of 3.6% (US\$10.80) and 3.3% (US\$9.90), respectively, while those with the lowest cost are Miami, Sacramento and San Jose with 2.5% (US\$7.50), and Chicago with 2.3% (US\$6.80), respectively. If we compare the current costs for sending the money from the United States to Mexico with those of 1999, it can be seen that in all the cities of the United States, the remittance cost has decreased gradually, although for 2010 and 2011, slight increases are observed in the cost, according to the PROFECO figures.

Graph 30

**Total average cost for sending US\$300 to Mexico by city of delivery, PROFECO**  
(It includes only the expressed cost of the commission as a %)



Source: CNBV with information from the PROFECO. The 2011 data correspond to September 12, 2011.  
Note: The average includes MTOs, Banks and Postal Service.

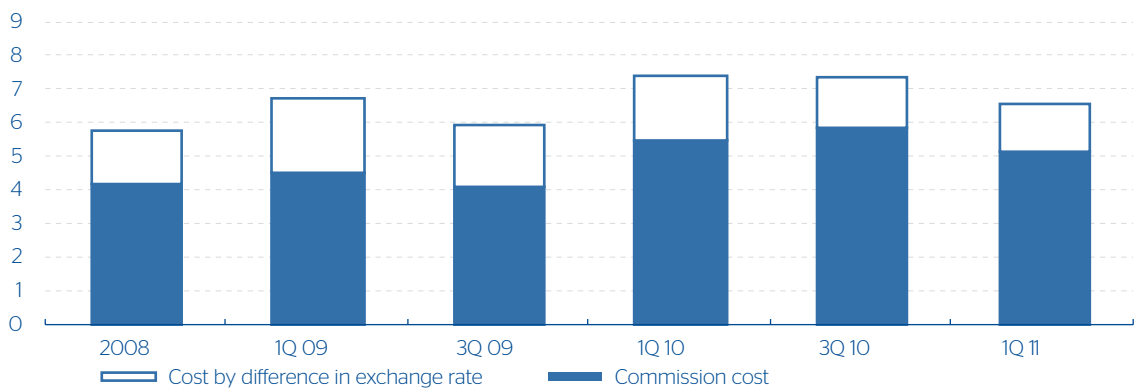
In recent years, perhaps due to the recent financial instability, the cost of remittance delivery to Mexico has tended to fluctuate, according to information from the RPW of the World Bank. From 2008 to the first quarter of 2011, remittance costs for Mexico oscillated between 5.80% and 7.42%, presenting a slight upward trend in this period, due to the rise in the cost during 2010. The datum for the last quarter of 2011, which is presenting a reduction compared to the year before, indicates that, on average, the cost of sending US\$200 to Mexico is 6.58% (US\$13.57).

It should be pointed out that the PROFECO and World Bank data are not directly comparable. PROFECO reports the percentage cost, taking as a reference the delivery of US\$300 and takes just one sample from 9 cities with a high concentration of Mexican immigrants in the U.S., while the World Bank data refer to costs for the delivery of US\$200 and they are average data from the whole country. Also, the data of these two institutions do not originate from the same information sources and do not use the same methodology.

<sup>4</sup> Given that there is no information on the market share of each company in each one of the cities, only the average of the data reported was estimated.

Graph 31

**Total average cost for sending US\$200 to Mexico RPW World Bank (%)**  
(Cost expressed as % of the amount sent)

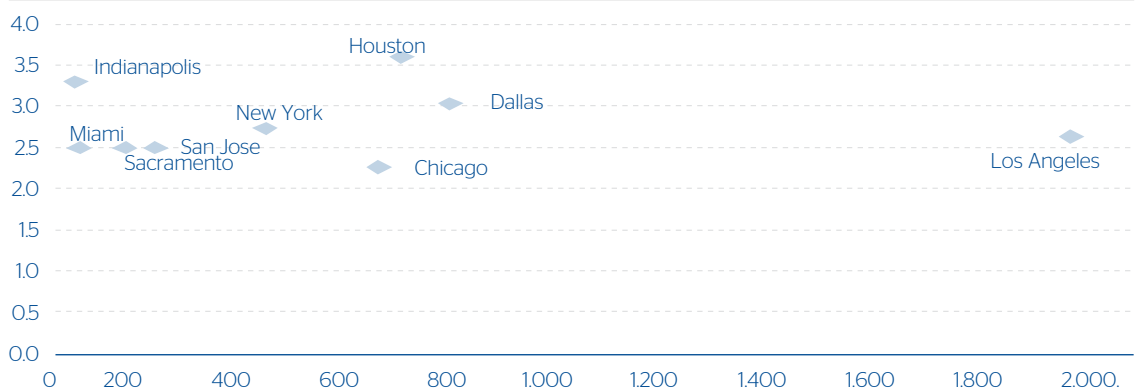


Source: BBVA Research with figures from the Remittance Prices Worldwide (RPW) database of the World Bank, 2011.

In general, at a global level remittance costs tend to be lower in the large markets compared to the small ones (Thorsten Beck and Ma.Soledad Martinez, 2009; Kai and Isaku, 2011), given that they can accommodate more participants and greater competition on the market and due to the effects of economies of scale. When analyzing the cost of remittance delivery of the nine cities included in the PROFECO base with its population of immigrants born in Mexico, it is seen that there is no clear relationship between these two variables. That is, the size of the market does not seem to be a variable affecting the cost of remittance delivery from the United States to Mexico. It is probable that other variables like the specific structure of the market, its competition level, the availability of delivery and money reception points, the additional products and services that are offered (such as free long-distance calls) that allow for differences in the service, among other variables, provide a better explanation of the cost of the remittances that are sent from the United States to Mexico. In a coming edition of **Mexico Migration Outlook**, we will follow-up on these issues.

Graph 32

**Average cost compared to the size of the Mexican immigrant population by city**  
(It includes only the cost of the expressed commission in % to send US\$300 vs. Population by city)



Source: BBVA Research with figures of the General Attorney's Office for Consumer Protection (PROFECO) on September 12, 2011 and of the Census Bureau, Current Population Survey (CPS), March 2011.

**Conclusions: a reduction in the costs in recent years; better information technology and greater competition have helped**

The changes occurring on the remittance market have been boosted by the various actors that participate in it. The first element has been the higher number of immigrants in the world who wish to send remittances to their families in other countries, various companies that have entered

the market covering consumer demands. Currently, different companies can participate in money deliveries, each one charging for the services it provides. Governments have been fundamental factors in the promotion of the regulation and in promoting the use of formal systems; they have a bearing on competition in the market, on the knowledge that consumers have of the companies and, therefore, on delivery costs,

At a world level, the delivery cost varies among the different regions. South Asia, Latin America and the Caribbean are the regions where the receiving families incur in lower costs from remittance deliveries that they receive. In Latin America and the Caribbean, the countries with the lowest costs tend to be those where the dollar can be used as a means of payment, when they are, in some cases, dollarized or semi-dollarized economies and, therefore, the families do not have to incur in the cost of the conversion of the currency to the domestic currency. Mexico has costs lower than the average in the Latin America region. It has shown a great descending trend in the receiving costs, and has been one of the countries that has promoted incentives for relatively low costs in the region.

The studies that have been made on the determinant factors of remittance costs have been relatively few. It is necessary that there be further research in this respect. In this space, we will give these topics continuity and depth.

## References

- Aggarwal, R., Demirgüç-Kunt, A., Martínez Peria, M. (2006) "Do workers' remittances promote financial development?" World Bank Policy Research Working Paper 3957.
- World Bank (2011) "Trends in the Average Cost of Migrant Remittances Services" Access Finance.
- World Bank, Corporación Financiera Internacional, Remittance Prices Worldwide. <http://www.remittanceprices.worldbank.org/>
- Freund, Caroline and Spatafora, Nikola (2005) "Remittances: Transaction Costs, Determinants and Informal Flows," World Bank Policy Research Working Paper 3704.
- Giuliano, Paola and Marta Ruiz-Arranz (2006) "Remittances, Financial Development, and Growth," IZA Working Paper No. 2160.
- Kai Schmitz and Isaku Endo (2011), Finance & Development, Payment System Development Group of the World Bank, June 2011.
- Kalan George R. and Aykut, Dilek (2005). Assessment of Remittance Fee Pricing. Development Prospects.
- Mohapatra, Sanket, Dilip Ratha and Ani Silwal (2010) "Migration and Development Brief 13", Migration and Remittances Unit World Bank.
- United Nations Organization for Food and Agriculture (FAO), <http://www.fao.org>
- Orozco, Manuel (2004) "The Remittance Marketplace: Prices, Policy and Financial Institutions" Pew Hispanic Center.
- Orozco, Manuel (2002) "Attracting remittances: Market, money and reduced costs", Multilateral Investment Fund of the Inter-American Development Bank.
- Ratha, Dilip and Riedberg, Jan. (2005), "On reducing remittance costs", World Bank.
- Thorsten Beck and Ma. Soledad Martínez. What Explains the Cost of Remittances? An Examination across 119 Country Corridors. The World Bank. October 2009.

## Inset 2: Remittances and remittance costs: How is Mexico?

There are many reasons that explain the volume and cost of sending remittances to a country, as has been documented in this edition in various articles. The determining factors are found in terms of the variables both in the country of origin and in the destination country. This section analyzes the volume and cost of remittances sent to Mexico and makes a comparison with countries in Latin America and the Caribbean, as well as with the EAGLEs (“**Emerging and Growth-Leading Economies**”).

The EAGLEs are those countries that are expected to contribute more to GDP growth worldwide than the average of the large developed economies (the G-7, excluding the United States) over the next ten years (2010-2020). Mexico is part of this group of ten “EAGLEs” that includes, by size of their economy: China, India, Brazil, Indonesia, Korea, Russia, Egypt, Turkey and Taiwan.

Based on 2010 figures, the EAGLEs are the countries that send out more than one fourth (57 million people) of international immigrants, with Mexico, India, Russia and China being the main countries in order of importance. The EAGLEs received

remittances for an estimated annual total of US\$157 billion in 2010, which is equivalent to 48% of the total that was sent to the developing countries that year, and 35.7% of the world total, with India, China and Mexico being the three countries with the greatest reception of remittances worldwide. Within the EAGLEs, Mexico contributes almost one fifth of the emigrants in this group and one seventh of the volume of remittances. In addition, it is significant that 98% of the total of its remittances come from only one country (the United States), while in the rest of the EAGLEs, the source of origin of the remittances are from several countries.

In Latin America and the Caribbean, Mexico is the main immigrant-exporting country in the region, surpassing Colombia by more than five times, the second source of immigrants in the region. It surpasses five times the amount of remittances received in Brazil, the second most important country receiving remittances in Latin America. Two out of every five immigrants from Latin America and the Caribbean are of Mexican origin; and two fifths of the total remittances received in the region are in Mexico.

Chart 11

### Migration, remittances and their cost\*: México vs. EAGLEs and main economies in Latin America and the Caribbean

	Emigrants in 2010 (in millions)	% worldwide	Income from remittances in 2010 (billions of US dollars)	% worldwide	Average cost per remittance sent to this destination 2011 1Q
<b>EAGLEs</b>	56.6	26.2%	156.9	35.7%	8.11
Mexico	11.9	5.5%	22.6	5.1%	6.58
India	11.4	5.3%	55.0	12.5%	7.70
Russia	11.0	5.1%	5.6	1.3%	n.a.
China	8.3	3.9%	51.0	11.6%	12.58
Turkey	4.3	2.0%	1.0	0.2%	9.25
Egypt	3.7	1.7%	7.7	1.8%	3.96
Indonesia	2.5	1.2%	7.1	1.6%	6.25
Korea	2.1	1.0%	2.7	0.6%	n.a.
Brazil	1.4	0.6%	4.3	1.0%	10.44
Taiwan	n.a.	n.a.	n.a.	n.a.	n.a.
<b>LAC</b>	30.2	14.0%	58.1	13.2%	6.82
Mexico	11.9	5.5%	22.6	5.1%	6.58
Colombia	2.1	1.0%	3.9	0.9%	5.02
Brazil	1.4	0.6%	4.3	1.0%	10.44
Peru	1.1	0.5%	2.5	0.6%	4.53
Argentina	1.0	0.5%	0.7	0.2%	n.a.
Chile	0.6	0.3%	0.0	0.0%	n.a.
Venezuela	0.5	0.2%	0.1	0.0%	n.a.
<b>Total worldwide</b>	<b>215.8</b>		<b>440</b>		<b>9.03</b>

Source: BBVA Research with figures of the cost of remittances from the World Bank RPW (Remittance Prices Worldwide) through the first quarter of 2011 and migration data by Ratha and Shaw (2007) updated in the World Bank Migration and Remittances Factbook 2011.

\* Cost is expressed as % to send US\$200. The cost of sending remittances includes the commission and the spread due to the exchange rate.

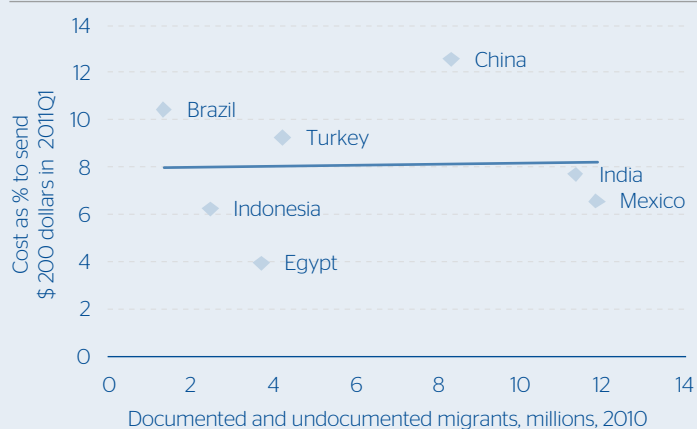
With respect to the cost of sending remittances, for the first quarter of 2011. Mexico paid a cost 19% lower than the rest of the EAGLE countries and 27% lower than the cost worldwide. When compared with the countries of Latin America and the Caribbean, Mexico's cost to send remittances is slightly lower than that of the region (3.5% lower than the average), despite its relative importance in the region. In general, the size of the market is an important factor in determining remittance costs by taking advantage of economies of scale and of incentives due to competition, but this relationship is not seen among the EAGLE countries, since China, which has a great market, both in the size of its emigrant population as well as in the volume of remittances that it receives, has higher costs in this

group, with these being nearly 40% higher than the average cost worldwide. This is due to the lack of competition in the remittance market in that country. Among the EAGLEs, Egypt is the country with the lowest cost (3.96% of the remittance), followed by Indonesia and Mexico.

Thus, neither the total emigrant population nor the volume of remittances received seem to explain, in a determining manner, the cost of remittances among the EAGLEs or in Latin America and the Caribbean. These differences in remittance costs are due mainly to the level of competition and the particular market structures of the countries from which the remittances are sent and where they are received

Graph 33

**Cost of remittances\* vs. emigrant population of the EAGLEs**

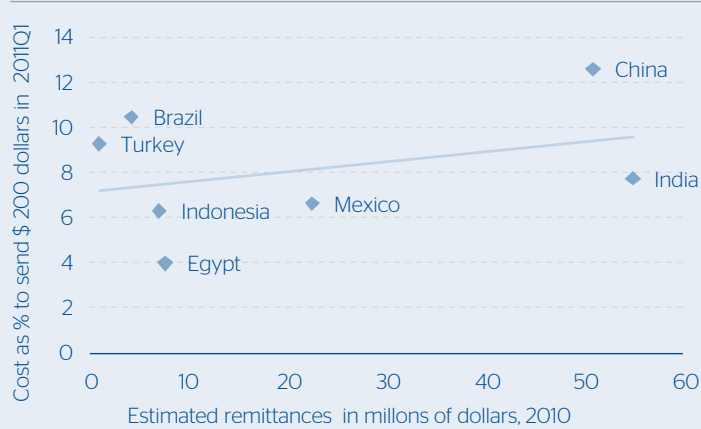


Source: BBVA Research with figures on remittance costs from the World Bank RPW (Remittance Prices Worldwide) and migration data from Ratha and Shaw (2007) updated in the World Bank Migration and Remittances Factbook 2011.

\* The cost of the remittances includes the commission and the spread due to the exchange rate.

Graph 34

**Remittance costs\* vs. total volume of EAGLEs' remittances**



Source: BBVA Research with figures on remittance costs from the World Bank RPW (Remittance Prices Worldwide) and remittance data from Ratha and Shaw (2007) updated in the World Bank Migration and Remittances Factbook 2011.

\* The cost of remittances includes the commission and the spread due to the exchange rate.

Chart 12

**Main countries of origin of remittances toward the EAGLEs in 2010**

EAGLEs	Per capita GDP 2010 adj. PPP* (\$US)	% representing total remittances of the receiving country	Country of origin of the remittances	Per capita GDP 2010 adj. PPP* (\$US)
Brazil	11 289	25%	United States	47 132
		23%	Japan	33 828
		12%	Spain	29 652
		6%	Paraguay	4 915
		5%	Portugal	23 114
		5%	Portugal	23 114
China	7 518	27%	Hong Kong	45 277
		21%	United States	47 132
		7%	Japan	33 828
		7%	Canada	39 034
		6%	Singapore	57 238
		5%	Thailand	8 644

Continues on the next page

Egypt	6 367	27%	Saudi Arabia	23 743
		23%	Jordan	5 659
		11%	Lybia	14 878
		9%	Kuwait	38 293
India	3 291	19%	United Arab Emirates	36 973
		15%	United States	47 132
		13%	Saudi Arabia	23 743
		9%	Bangladesh	1 566
		7%	Nepal	1 250
		6%	United Kingdom	35 053
		5%	Canada	39 034
Indonesia	4 380	56%	Malaysia	14 603
		11%	Saudi Arabia	23 743
		6%	The Netherlands	40 777
Korea	29 791	51%	United States	47 132
		29%	Japan	33 828
		6%	Canada	39 034
Mexico	14 266	98%	United States	47 132
Russia	15 807	33%	Ukraine	6 656
		20%	Kazakhstan	12 402
		6%	Israel	29 405
		6%	Belarus	13 865
Turkey	13 392	64%	Germany	35 930
		7%	France	34 092
		5%	The Netherlands	40 777
Taiwan	34 743	---	Information not available	---

Source: BBVA Research with migration figures of Ratha and Shaw (2007) updated in Migration and Remittances Factbook 2011 of the World Bank and per capita GDP data of the International Monetary Fund.

Note: It includes information on countries of remittances origin which contribute at least 5% of the total of the receiving country.

\* Per capita GDP for 2010 adjusted by purchase power parity

## References

World Bank. Remittances Factbook 2011.

International Monetary Fund (IMF). World Economic Outlook Database. September 2011.

García-Herrero Alicia, Daniel Navia and Mario Nigrinis. BBVA EAGLES Cross-Country Emerging Market Analysis Economic Watch, Nov-15, 2010.

García-Herrero Alicia, Daniel Navia, Mario Nigrinis, José Ramón Perea and Alfonso Ugarte. Who are the EAGLES? Driving Global Growth for the Next Ten Years, Cross-Country Emerging Market Analysis Economic Watch, Feb-14, 2011.

Thorsten Beck and Ma. Soledad Martínez. What Explains the Cost of Remittances? An Examination across 119 Country Corridors. The World Bank. October 2009



## 6. The effect of access to financial services on the well-being of families receiving remittances\*

The absence of access to financial services has been considered as one of the causes limiting opportunities for growth and development both in families and in companies. Low-income households frequently lack bank accounts and it is difficult for them to save and make plans for the future. The absence of savings and access to credit for those persons keeps them in a situation of vulnerability, due to the economic restrictions they present, which reduces their capacity for acquiring goods and services, which, on many occasions, are essential for reaching a better socio-economic condition: as for example, to have better educational and health levels. Those countries with more developed financial systems have better possibilities for growth opportunities (Burgess and Pande, 2005) in partly due to the fact that they have more egalitarian societies, with a better distribution of income and access to basic services.

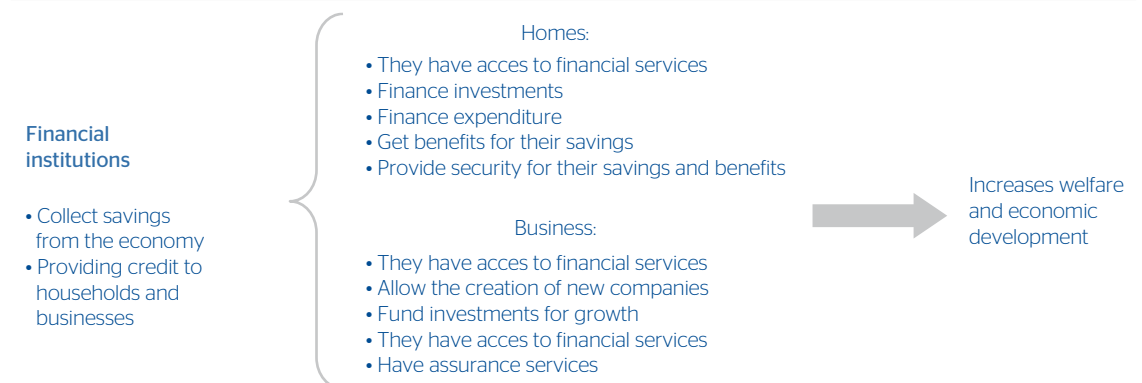
In this sense, this article in *Mexico Migration Outlook*, seeks to explore whether access to financial services in households receiving remittances in Mexico generates differences as to the economic well-being, for which we compared the households receiving remittances with or without access to credit<sup>1</sup>, controlling by variables what could determine access to goods and services. The main source of information comes from the new structuring of variables of the National Survey of Income and Expenses in Households (EHIGH for Its Spanish Initials) of 2008 and 2010 in Mexico, which is compiled by the National Statistics and Geography Institute (INEGI for its Spanish Initials). With this article, we provide continuity to the analysis of the topics on the migration-development link that we began in previous issues of this publication.

### Link between access to financial services and economic well-being

Economic literature documents that access to financial services allows increasing well-being and economic development, since it gives households the possibility of investing (among them in human capital) for which they obtain yields; although, they can also finance a larger number of expenditures, which allows them to increase their possession of goods and services, and even facilitates the acquisition of insurance services. When they save in financial institutions, households receive benefits for their savings.

Graph 35

#### Link between financial services and economic well-being



Source: BBVA Research

\* We wish to express our thanks for the comments of Sara Castellanos.

<sup>1</sup> In general, it is considered that those households with greater access to credit have greater access to financial services.

With the savings received by the banking institutions, companies can obtain credit, which will allow them to develop new investment projects or to promote the creation of new companies, which as a result generates employment and, with that, greater income for households. In synthesis, a “virtuous circle” is generated that creates feedback, favoring a more efficient allocation of resources in the economy, among those who need it for launching profitable investment projects, with those who designate part of their income to savings. This dynamic opens greater opportunities, both to consumers and investors, promoting greater growth and generation of employment

In the case of lower income sectors, The Group of Experts for Financial Inclusion of the G20 (2010) considers that the following benefits exist: i) it increases stability in their income; ii) it promotes the possession of goods to reduce the effects of economic shocks; iii) it offers products for credit and savings; iv) it allows having payment systems and money transfers; and v) it provides access to the insurance system.

In the process of mobilization of savings, the banks and other financial intermediaries provide aggregate value through several mechanisms (Levine, 2005, quoted in Corporación Andina de Fomento, 2011): i) the use of technologies that allow cost reduction in the reception of deposits; ii) generation of information regarding new investment opportunities and entrepreneurial capacities and/or good residential clients; iii) the monitoring of the execution of companies’ and families’ investment plans; and iv) the provision of incentives so that they will carry out their projects and pay their credit commitments.

### How many households receiving remittances have access to bank credit in Mexico?

For this article, we have used information from the new structure of variables of the National Survey of Income and Expenses in Households (ENIGH) of 2008-2010 in Mexico. In both years, the households are asked about the possession of bank or commercial credit cards by any of its members through which articles and services can be acquired, since they have access to an amount of money (credit) as a means of financing. This variable is the one that appears in the survey to give us an approximation of access to bank credit in households.<sup>2</sup>

The 2010 survey also included, in addition, the period of monthly reference information regarding the use of a credit card held by a member of the household for acquiring tobacco or food and beverages consumed in or out of the household, which could be an indicator of the use of credit. Given that this information is not included in the 2008 survey, considered in this article will be the information regarding the disposition of credit cards as a means of access to bank credit.

The ENIGH data show that in 2008, 18% of Mexican households (5 million) had access to credit through cards. Considering the households receiving remittances, the figures show that 10% had access to credit. For 2010, an increase is observed in the financial inclusion since 6.3 million households had credit cards.

In the case of households receiving remittances, an increase is also observed in the number and the proportion of households that have access to credit through cards, since of the 1.36 million households receiving remittances, 12% have credit.

Chart 13

#### Households in Mexico according to access through cards and the reception of remittances in 2008 (Thousands)

	2008		National total
	With credit card	Without credit card	
Receive remittances	159	1,453	1,613
Do not receive remittances	4,873	20,582	25,455
<b>Total</b>	<b>5,032</b>	<b>22,035</b>	<b>27,067</b>

Source: BBVA Research with figures of the new structuring of the ENIGH variables 2008.

<sup>2</sup> In the ENIGH 2006, bank or commercial credit cards were surveyed (TDC) separately, and it was found that more households reported having bank credit cards (TDCs) (see Castellanos and Garrido, 2010).

Chart 14

**Households in Mexico according to access to credit through credit cards and remittance reception in 2010 (Thousands)**

	2010		National total
	With credit card	Without credit card	
Receive remittances	165	1,193	1,357
Do not receive remittances	6,187	21,531	27,717
<b>Total</b>	<b>6,351</b>	<b>22,723</b>	<b>29,074</b>

Source: BBVA Research with figures of the new structuring of variables of the ENIGH 2010

**The characteristics of households receiving remittances having access to credit cards**

Access to credit through cards also offers a measure of availability to financial services. Those households with access to credit cards will also have greater availability to financial services.

In general, the ENIGH figures show that households receiving remittances with access to credit cards compared to those who do not have access to them, tend to be headed in a lower proportion by women, to have younger heads of family and with a higher educational level, to have more members (both men and women), to have a higher number of employed persons, to receive higher amounts of remittances, and to have higher per capita income levels. Remittances seem to have a greater importance in the household income without access to financial services, because they represented 30% of their total income in 2010, while in households that use credit, this proportion is 20%.

Chart 15

**Characteristics of the households receiving remittances according to their condition of access to credit through cards**

	2008		2010	
	With credit cards	Without credit cards	With credit cards	Without credit cards
Female head of the family (%)	48.7	53.9	38.7	46.9
Age of the head of the family	51.4	52.4	47.3	52.3
Head of the family with no education	6.8	20.0	5.1	20.9
Head of the family with primary education	49.8	56.4	29.3	52.3
Head of the family with secondary education	21.5	15.5	33.5	16.8
Head of the family with high school education	8.1	5.2	11.8	5.7
Head of the family with professional education	13.8	2.9	20.2	4.3
Size of the household	4.4	4.1	4.2	3.7
Female members of the family	2.4	2.3	2.3	2.0
Male members of the family	2.0	1.8	1.8	1.7
Members of the family younger than 12 years of age	0.9	1.1	1.0	0.9
Members of the family between 12 and 64 years of age	3.3	2.6	2.9	2.4
Members of the family older than 65	0.2	0.4	0.3	0.4
Number of employed persons	2.0	1.4	1.5	1.1
Quarterly income from remittances	6,876	6,121	8,999	6,792
Income from employment	30,874	11,358	22,507	8,897
Total quarterly current income (pesos)	55,957	24,676	44,530	22,917
Total quarterly per capita income (pesos)	13,901	7,120	12,419	7,575

Source: BBVA Research based on the ENIGH figures 2008 and 2010

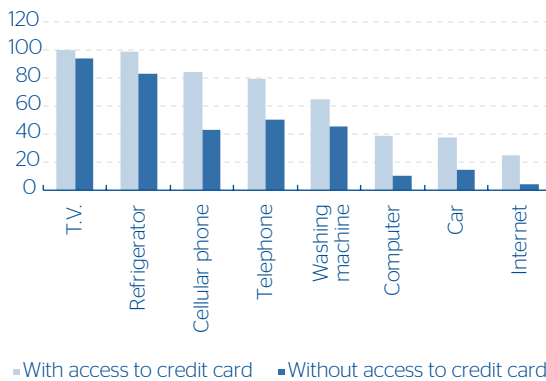
## Households receiving remittances with financial services have greater access to goods and services

Another difference existing between households receiving remittances with access to financial services and those receiving them without access to financial services is that the former, in general, show a greater access to goods and services. Based on the ENIGH figures, The proportion of households was calculated in each group that has access to the following goods and services: TV set, refrigerator, fixed telephone, washing machine, cellular phone, car, computer and Internet.

As seen in the previous section, there are certain differences among both groups of households (such as income), which could have a bearing on the access to goods. What we are seeking in this article is to analyze whether access to financial services has been a factor that has influenced greater access to goods and services and, consequently, has favored greater well-being. In the following section, the methodology employed to this end is explained.

Graph 36

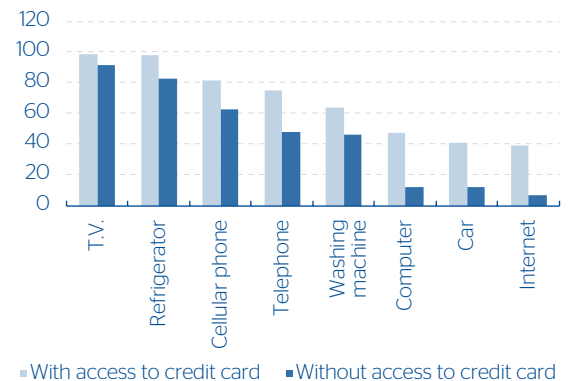
**Households receiving remittances with access to goods and services according to access to a credit card in 2008 (%)**



Source: BBVA Research with Department of Homeland Security of the U.S. figures

Graph 37

**Households receiving remittances with access to goods and services according to access to a credit card in 2010 (%)**



Source: BBVA Research with United Nations and World Bank figures

## Methodology

The methodology that is used in this article in determining whether access to credit cards has been an important factor that has provided access to goods and services and, consequently, has favored well-being in households receiving remittances, seeks to isolate the effect of access to credit cards from the effect that other variables might have in the acquisition of goods and services such as family income, educational levels, age, gender of the head of the family, and other characteristics of households.

To achieve the above, we will use statistical models, probit and logit<sup>3</sup> type, where the dependent variable is worth 1 if the household has a specific good or service. Based on these models, the objective is to determine what variables affect the probability of access to goods and services.

Considering the manner in which these variables affect the probability of access, and based on the information of the households in the sample, what is known as the estimated probability is calculated, which, after having considered different variables that affect it, allows eliminating, to a certain extent, the effect of such variables, leaving only the possible effect of access to credit

<sup>3</sup> These models allow estimating the probability of occurrence of an event, given certain variables. The logit models assume a logistic distribution in errors of estimation of the model, while the probit models assume a normal distribution.

cards (financial services). In general, the following process is conducted: an indicating variable is generated that is worth 1 if a household has financial services and 0 in a contrary case. This indicating variable is included in a regression of the variable that indicates access to a determined good or service for all the households in the sample compared to all the other variables. The co-efficient of the indicating variable is what points to the possible effect of access to credit cards (financial services) in the probability of acquiring goods and services.

The variables that are included in the regressions are: a variable that indicates whether the household has access to credit through cards, the per capita income of the persons in the household, a variable that is worth 1 if the head of the family is a man, the age of the head of the family and its square, a variable that indicates whether the household belongs to a community with a high or very high underprivileged level, a variable that indicates whether the household is in a rural sector<sup>3</sup> and a variable that indicates whether the head of the family has at most a secondary educational level or less. Thus, the differences in the access of goods and services between both groups are obtained, which, when they are conditioned in a series of variables, allow making an estimate of the possible effect of credit in those differences.

**The impact of the use of financial services in the acquisition of goods and services in households receiving remittances**

Based on the methodology set forth in the section above, the marginal effect was calculated in terms of access to credit in the probability of access to goods or services of the households receiving remittances. The results, in all cases, were positive and with a high statistical significance, which suggests that credit and, as a result, access to financial services, is an element that has contributed to the fact that households receiving remittances may access a higher quality of goods and services and, consequently, improve their economic well-being.

Both models offer similar results in each year. It is observed that the greater effects are present in computers, the Internet, cell phones, and cars. Between 2008 and 2010, the effect of access to financial services seems to have increased in the case of the following goods: cars, computers and the Internet, while in the other goods, its effect seems to have reduced, like in cell phones and fixed telephones. In goods such as refrigerators or TV sets (in which there are the highest access levels on the part of the households) the effect of financial services seems to have remained relatively stable in the years under consideration, and they are the ones where credit seems to have little effect in increasing the possession of these items.

Chart 16

**Marginal effect of access to credit in access to goods and services (percentage points)**

	2008				2010			
	Probit		Logit		Probit		Logit	
	Coefficient	T	Coefficient	T	Coefficient	T	Coefficient	T
Refrigerator	9.8	93.8	9.0	173.6	8.1	83.0	7.8	105.4
Washing machine	5.2	35.3	4.8	32.1	12.1	87.6	12.1	94.2
TV set	3.8	51.5	3.7	151.9	3.7	55.1	3.5	116.0
Car	9.8	99.5	9.1	86.5	14.7	155.6	13.2	121.9
Computer	11.9	143.4	10.0	107.0	15.7	177.0	13.8	128.5
Internet	4.3	121.0	2.6	68.8	17.5	239.6	14.7	144.5
Cellular Phone	33.3	216.5	34.6	269.1	14.5	97.9	15.2	103.3
Fixed telephone	18.8	123.1	18.7	127.1	12.2	83.5	12.0	81.4

Coefficients in bold: significant at a level of 5% or less  
Standard errors are significant at heterocedasticity  
Source: Proper production based on the 2010 ENIGH

<sup>4</sup> In communities of fewer than 2,500 in habitants, according to INEGI criteria

## Conclusions

In economic literature, it is well documented that access to financial services brings greater well-being and facilitates economic development, and is a key element in reducing inequality and poverty.

This article analyzes the case of those households receiving remittances in Mexico. It was found that the proportion of households receiving remittances with access to credit is relatively low. Around 22% had credit in 2010 through cards.

Among the households receiving remittances, those with access to credit cards, which can be inferred have greater access to financial services, tend to be headed in a lower proportion by women, to have younger heads of family and with higher educational levels, to have a higher number of persons employed, to receive higher amounts from remittances, and to have higher per capita income levels. Also, they are able to access, in higher proportions, different goods and services.

Based on econometric techniques, the idea was to determine whether access to credit explains, in a way, this difference in access to goods and services. The results obtained give evidence that credit and, therefore, access to financial services increases the probability that the recipient households have goods and services. Thus, it is concluded that access to financial services is a factor that favors the economic well-being of the households receiving remittances. The greatest effects are present in the possession of computers, Internet, cellular phones and a car.

In this way, these results give evidence of the importance that households receiving remittances have access to financial services. To do this would contribute to improving their economic well-being and would probably make possible the benefits derived from the reception of remittances.

## References

- Burgess, Robin y Pande, Rohini (2005), "Do Rural Banks Matter? Evidence from the Indian Social Banking Experiment" *The American Economic Review*, Vol. 95, No. 3.
- Castellanos, Sara and Garrido, Daniel (2010) "Tenencia y uso de tarjetas de crédito en México. Un análisis de los datos de la Encuesta Nacional de Ingreso y Gastos de los Hogares 2006" ("The holding and use of credit cards in Mexico. An analysis of the data of the National Survey on Household Income and Expenses 2006"). *The Economic Quarter*, Vol. LXXVII (1)
- Andean Foment Corporation (2011), "Servicios financieros para el desarrollo: promoviendo el acceso en América Latina" ("Financial services for development: promoting access in Latin America")
- Grupo de Expertos para la Inclusión Financiera de la G20 (2010). *Innovative Financial Inclusion, G20 Financial Inclusion Experts Group—ATISG Report*
- INEGI (2011), "Encuesta Nacional de Ingreso y Gastos de los hogares en México 2010" ("National Survey on Household Income and Expenses in Mexico, 2010")
- INEGI (2009), "Encuesta Nacional de Ingreso y Gastos de los hogares en México 2008" ("National Survey on Household Income and Expenses in Mexico, 2008")
- Levine, R. (2005). Finance and growth: theory and evidence. *Handbook of Economic Growth*, 1(1), 865-934.

## 7. Statistical Appendix

Chart 17

### International migrants (millions)

	Total				Male				Female			
	1990	1995	2005	2010	1990	1995	2005	2010	1990	1995	2005	2010
<b>World</b>	155.5	166.0	195.2	213.9	84.2	99.2	109.1	76.4	96.1	104.8	96.1	104.8
<b>Developed countries</b>	82.4	94.1	117.2	127.7	45.5	56.7	62.0	42.8	60.5	65.7	60.5	65.7
<b>Developing countries</b>	73.2	71.8	78.1	86.2	38.7	42.5	47.2	33.6	35.6	39.1	35.6	39.1
North America	27.8	33.6	45.6	50.0	16.5	22.6	25.0	14.2	23.0	25.1	23.0	25.1
Asia	50.9	48.8	55.1	61.3	26.7	30.3	34.0	23.1	24.8	27.3	24.8	27.3
Latin America and the Caribbean	7.1	6.2	6.9	7.5	3.1	3.4	3.7	3.5	3.4	3.7	3.4	3.7
Europe	49.4	54.7	64.4	69.8	26.0	30.6	33.3	26.0	33.8	36.5	33.8	36.5
Africa	16.0	17.9	17.7	19.3	9.5	9.4	10.3	7.4	8.3	9.0	8.3	9.0
Oceania	4.4	4.7	5.5	6.0	2.4	2.7	2.9	2.1	2.8	3.1	2.8	3.1

### Annual flow of remittances, (billions of dollars)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010e
<b>World</b>	126.7	131.5	149.5	169.2	204.2	237.0	274.9	317.9	385.0	443.2	416.0	440.1
<b>Developed countries</b>	50.5	48.4	52.5	55.1	63.2	72.9	77.2	85.2	100.1	110.8	102.1	107.2
<b>Developing countries</b>	74.4	81.3	94.9	111.0	137.4	159.3	192.1	226.7	278.5	324.8	307.1	325.5
East Asia and Pacific	14.0	15.8	21.0	27.0	32.3	40.0	50.3	57.4	71.1	85.5	85.7	91.2
South Asia	15.1	17.2	19.2	24.1	30.4	28.7	33.9	42.5	54.0	71.6	74.9	82.6
Latin America and the Caribbean	15.9	17.7	20.2	24.4	28.2	36.8	43.4	50.1	59.2	63.3	64.6	56.9
Europe and Central Asia	10.2	10.4	10.3	10.7	11.6	16.0	23.3	28.4	39.3	45.8	35.4	36.7
Middle East and Northern Africa	12.9	13.1	15.3	15.9	20.5	23.2	25.1	26.5	32.1	35.9	33.7	35.5
Sub-Saharan Africa	4.4	4.6	4.7	5.1	6.0	8.0	9.4	12.7	18.6	21.4	20.6	21.5

### Immigrants in the U.S. (Millions of persons)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<b>Total population</b>	269.1	271.7	276.8	279.5	282.1	285.9	288.3	288.4	299.4	301.6	304.1	307.0	312.5
<b>Immigrants</b>	26.3	26.4	30.0	31.8	32.5	33.5	34.2	35.8	37.5	38.0	38.0	38.5	40.0
<b>Gender</b>													
<b>Male</b>	13.1	13.1	15.1	16.1	16.4	16.8	17.2	17.9	18.9	19.2	19.1	19.2	19.6
<b>Female</b>	13.2	13.3	14.8	15.7	16.1	16.7	17.0	17.8	18.6	18.9	18.9	19.3	20.3
<b>Age</b>													
<b>Under 15</b>	1.8	1.6	2.1	2.2	2.1	2.1	2.2	2.2	2.2	2.1	2.0	2.0	n.a
<b>Between 15 and 64</b>	21.6	21.8	24.7	26.4	27.0	27.7	28.4	29.6	31.0	31.5	31.3	31.7	n.a
<b>Over 64</b>	2.9	3.0	3.2	3.3	3.3	3.7	3.7	3.9	4.3	4.5	4.7	4.8	5.0
<b>Region of origin</b>													
<b>Europe</b>	4.3	4.2	4.4	4.5	4.5	4.6	4.7	5.1	5.2	5.3	5.3	5.2	4.8
<b>Asia</b>	7.0	7.2	7.9	8.5	8.5	8.4	8.7	9.3	9.8	9.9	10.1	10.3	11.3
<b>Latin America</b>	13.4	13.4	15.3	16.0	16.0	17.8	18.3	19.1	20.1	20.1	20.2	20.4	21.2
<b>Other areas</b>	1.6	1.6	2.4	2.8	2.8	2.7	2.6	2.2	2.4	2.8	2.4	2.5	2.6

e. Estimated

n.a: Not available

Source: BBVA Research with information from United Nations, World Bank, United States Census Bureau and Pew Hispanic Center

Chart 18

**Mexican Immigrants in the U.S.**

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<b>Total Mexicans in the U.S. (Millions)</b>	n.a.	n.a.	n.a.	23.2	24.0	25.5	26.7	26.9	28.1	29.3	30.3	30.7	31.7	32.3	32.5
Mexican Immigrants	7.3	7.4	7.4	8.1	8.5	9.9	10.2	10.7	11.0	11.1	11.8	11.8	11.9	11.9	11.6
Second and third generation	n.a.	n.a.	n.a.	14.4	14.9	16.0	16.8	16.6	17.5	18.2	18.5	18.9	19.8	20.4	20.9
<b>Demographic characteristics of Mexican immigrants</b>															
<b>Gender (%)</b>	100.0	100.0	100.0	100.0	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	55.5	55.0	55.1	53.9
Female	44.1	45.4	45.6	46.1	45.9	44.6	44.9	44.8	44.6	44.8	44.0	44.5	45.0	44.9	46.1
<b>Age groups (%)</b>	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
From 0 to 14 years old	10.3	9.7	8.0	9.4	9.3	9.1	8.6	8.6	8.6	7.7	7.3	6.6	6.1	5.5	5.3
From 15 to 29 years old	35.1	33.2	33.2	32.6	31.4	33.1	31.9	32.3	31.3	30.2	28.6	27.9	25.8	25.0	24.3
From 30 to 44 years old	33.9	35.8	36.2	36.1	35.6	36.9	37.5	37.4	37.0	37.3	38.1	37.9	38.0	38.7	37.6
From 45 to 64 years old	16.4	16.6	17.4	17.3	18.8	16.8	17.4	17.3	18.6	20.1	20.8	22.1	24.2	25.0	26.6
From 65 years or over	4.3	4.7	5.3	4.6	4.9	4.1	4.6	4.4	4.5	4.7	5.1	5.5	5.9	5.9	6.3
<b>Average age (years)</b>	33.1	33.8	34.5	33.9	34.4	33.6	34.3	34.2	34.5	35.2	35.2	35.8	36.7	37.2	38.6
<b>State of residence (%)</b>	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100	100.0	100.0
California	46.8	46.3	46.2	47.8	44.5	42.5	39.3	38.3	42.1	39.5	39.5	40.2	39.7	39.9	38.2
Texas	21.1	21.5	21.4	19.0	21.0	20.3	23.0	21.4	20.3	19.4	19.2	19.5	20.3	20.0	22.5
Illinois	5.8	6.5	6.3	5.8	5.5	4.9	6.5	5.5	5.5	4.7	5.3	5.2	5.4	5.3	5.6
Arizona	6.8	6.7	6.4	5.3	4.7	5.6	6.0	6.2	5.5	6.4	5.7	5.8	5.0	5.1	5.0
North Carolina	0.9	0.8	1.1	1.4	1.5	1.6	1.6	2.6	2.0	2.5	2.2	1.9	1.7	2.2	2.0
Florida	1.5	1.4	2.1	2.4	3.0	3.5	2.2	2.0	2.4	2.8	3.3	2.5	2.1	2.1	1.9
Georgia	0.2	0.4	1.0	0.7	1.0	1.3	1.5	2.0	2.2	2.8	2.4	2.1	2.3	2.1	1.9
Nevada	1.3	1.1	1.5	2.0	1.7	1.8	1.8	1.6	1.9	1.8	1.9	2.0	1.6	1.7	1.9
Washington	1.6	0.7	1.0	1.4	1.1	1.3	1.5	1.9	1.0	1.0	1.4	1.4	1.5	1.9	1.8
New York	2.2	2.9	2.4	1.8	2.1	2.3	1.8	1.7	1.1	1.9	2.0	1.7	1.8	1.8	1.8
New Jersey	0.9	0.3	0.2	0.4	0.5	0.8	0.6	1.0	0.8	1.2	0.8	1.8	1.3	1.6	1.8
Colorado	2.1	1.2	1.2	2.3	1.9	2.5	2.5	2.3	2.2	2.4	2.0	2.2	1.6	1.7	1.8
New Mexico	1.4	1.2	1.3	1.0	1.1	1.1	1.1	0.8	1.1	1.1	0.9	1.0	1.1	1.0	1.0
Other states	7.5	9.1	7.8	8.6	10.3	10.4	10.5	12.6	12.0	12.6	13.3	12.7	14.8	13.6	12.7
<b>Period of entry (%)</b>	100.0	100.0	100.0	100.0	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	10.6	10.7	10.3	9.7
From 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	15.9	15.7	15.3	15.3
From 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	27.4	26.6	27.4	27.1
From 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	44.0	44.2	42.8	43.0
2008 onwards	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	2.1	2.9	4.2	4.9

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	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<b>Mobility condition in the last year (%)</b>	100.0	100.0	100.0	100.0	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	95.5	95.6	96.3	97.2
Internal immigrants <sup>1</sup>	4.6	3.3	4.2	4.9	4.7	4.9	5.0	4.4	5.3	4.5	3.4	3.0	3.2	2.8	1.9
International immigrants <sup>2</sup>	3.6	2.2	3.8	3.5	3.5	3.9	2.7	2.4	5.0	2.5	1.8	1.5	1.2	1.0	1.0
<b>Social characteristic of the Mexican immigrants (%)</b>															
<b>Education<sup>3</sup></b>	100.0	100.0	100.0	100.0	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 grades	58.7	58.6	56.3	56.2	56.7	54.7	54.1	52.7	52.6	51.0	47.0	50.0	49.2	46.0	47.0
From ten to twelve grades	26.9	28.0	30.3	29.9	28.7	30.6	31.4	32.9	32.9	34.3	38.0	35.0	35.2	37.2	36.8
Higher technical	9.6	8.8	8.8	9.6	9.1	9.3	9.0	9.1	9.2	9.3	9.9	9.4	9.7	9.9	10.3
Professional & postgraduate	4.8	4.6	4.6	4.3	5.5	5.4	5.5	5.3	5.3	5.4	5.0	5.6	5.9	6.9	5.9
<b>Citizenship in the United States (%)</b>	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
U.S. citizen	18.2	21.1	22.7	22.6	22.6	21.4	21.8	21.3	20.4	21.3	21.5	22.7	24.1	25.8	27.0
Non - U.S. citizen	81.8	78.9	77.3	77.4	77.4	78.6	78.2	78.7	79.6	78.7	78.5	77.3	75.9	74.2	73.0
<b>Poverty condition<sup>4</sup></b>	100.0	100.0	100.0	100.0	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	24.8	27.1	28.8	29.9
Not poor	66.3	69.8	71.7	74.3	75.3	75.4	74.6	74.3	73.8	74.3	77.9	75.2	73.0	71.3	70.2
<b>Type of health coverage</b>	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	n.a	n.a	n.a	n.a
Public	13.5	12.5	12.9	12.7	12.3	11.7	12.9	12.9	14.1	14.1	12.7	n.a	n.a	n.a	n.a
Private	31.7	31.2	31.4	33.2	33.1	33.6	32.3	30.3	29.8	29.6	28.3	n.a	n.a	n.a	n.a
Both	2.0	2.4	2.1	2.0	1.9	1.7	2.2	1.8	2.7	2.3	2.6	n.a	n.a	n.a	n.a
None	52.8	53.8	53.6	52.1	52.7	53.0	52.6	55.0	53.4	54.1	56.4	n.a	n.a	n.a	n.a
<b>Labor characteristics of Mexican immigrants (%)</b>															
<b>Population of 15 of age or over (Millions)</b>	6.5	6.7	6.8	7.3	7.7	9.0	9.3	9.8	10.1	10.3	10.9	11.1	11.1	11.2	11.0
Economically-active pop.	4.4	4.6	4.6	5.0	5.3	6.3	6.5	6.7	6.9	7.2	7.7	7.6	7.7	7.7	7.6
Employed	4.0	4.2	4.3	4.6	4.9	5.8	5.8	6.2	6.5	6.8	7.2	7.0	6.7	6.8	6.8
Unemployed	0.4	0.3	0.3	0.4	0.4	0.6	0.6	0.5	0.4	0.4	0.4	0.6	1.0	1.0	0.8
Economically-inactive pop.	2.1	2.1	2.2	2.3	2.4	2.6	2.9	3.1	3.1	3.1	3.3	3.4	3.5	3.5	3.4
<b>Hours worked weekly (%)</b>	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
34 or less	12.5	13.0	10.6	9.3	9.7	11.6	11.1	10.3	11.0	9.5	10.5	12.4	16.4	20.2	19.7
From 35 to 44 hours	69.8	70.3	73.7	76.8	75.3	75.2	75.1	76.1	75.2	76.1	75.1	74.8	71.0	68.6	70.0
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	12.8	12.6	11.2	10.4

Continues on the next page

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<b>Annual wage (U.S. dollars) (%)</b>	100.0	100.0	100.0	100.0	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	11.7	13.0	13.4	12.6
From 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	32.5	31.0	34.0	32.8
From 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	27.0	25.3	24.3	25.9
From 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	13.2	14.5	13.4	13.4
From 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	15.6	16.1	14.9	15.4
<b>Sector of activity (%)</b>	100.0	100.0	100.0	100.0	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	5.2	5.2	5.5	4.9
Secondary	36.4	35.3	34.9	36.6	36.5	35.8	35.8	36.1	36.9	39.6	40.6	37.2	33.2	30.9	32.3
Tertiary	51.2	54.5	54.5	51.2	54.0	55.9	59.8	58.9	57.4	56.2	55.4	57.7	61.7	63.6	62.8
<b>Type of Employment (%)</b>	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Prof. & related employment	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	3.3	3.7	3.2	3.6	3.9	4.4	3.7	4.3	3.9
Employment in services, sales, management	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	4.0	3.9	3.4	3.6	3.3	3.7	5.1	4.8	4.9
Services	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	29.2	28.6	29.2	29.0	27.3	27.9	31.8	32.3	31.1
Sales and related	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	6.0	6.3	5.7	6.0	5.9	5.9	5.7	6.0	6.0
Administrative & office equip.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	5.7	5.7	5.5	5.4	5.1	5.6	5.4	6.2	7.2
Agriculture, fishing and forestry activities	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	4.3	4.4	5.3	3.8	4.0	4.7	5.0	4.5	4.2
Employ. in construction maintenance, and repair	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	15.5	18.8	20.4	22.3	24.8	21.8	16.8	16.1	16.8
Production occ.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	17.3	15.2	14.4	15.1	14.0	13.4	12.9	12.7	13.2
Trans. and production	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	10.5	9.3	9.6	8.1	8.5	9.0	9.5	9.2	9.0

Notes: 1/ It refers to the population that resided, the year prior to the interview, in a county other than the current one.

2/ It refers to the population that resided, the year prior to the interview, in Mexico.

3/ Population 25 years or over.

4/ Methodology for poverty in the U.S. Individuals are classified as below the poverty level using a poverty index adopted by a Federal Inter Agency Committee in 1969, slightly modified in 1981.

n.a: not available

Source: BBVA Research with CONAPO estimates based on the Census Bureau, Current Population Survey (CPS), March 1994-2007, and estimates with BBVA Research and the Current Population Survey (CPS), March 2008-2011.

Chart 19

**Indicators on remittance receipts at state level**

State	Households in the year 2000				Households in 2010				Indicator of dependence on remittances 2008*	Degree of dependence on remittances**
	Receiving remittances (%)	With immigrants in U. S. previous five years (%)	With circular migrants in the U.S. previous five years (%)	With U. S. return migrants from previous five years (%)	Receiving remittances (%)	With immigrants in U. S. previous five years (%)	With circular migrants in the U.S. previous five years (%)	With U. S. return migrants from previous five years (%)		
<b>National</b>	<b>4.4</b>	<b>4.1</b>	<b>0.9</b>	<b>0.8</b>	<b>3.6</b>	<b>1.9</b>	<b>0.9</b>	<b>2.3</b>	<b>2.4</b>	
Michoacan	11.4	10.4	2.8	2.3	9.3	4.4	2.0	4.9	9.5	Very high
Guerrero	7.9	6.8	0.8	1.1	6.6	3.2	1.0	3.5	9.3	Very high
Oaxaca	4.1	4.8	0.6	0.7	4.9	4.1	0.9	3.1	8.7	Very high
Zacatecas	13.0	12.2	3.3	2.5	11.0	4.5	2.3	5.7	8.3	Very high
Nayarit	9.6	6.8	2.0	2.0	9.1	2.1	2.3	4.4	6.1	High
Guanajuato	9.2	9.6	2.2	1.6	7.7	5.3	2.3	4.3	5.9	High
Morelos	6.4	7.5	1.3	1.1	5.4	2.5	1.1	3.6	5.7	High
Hidalgo	5.1	7.1	1.6	0.9	4.3	3.5	1.6	4.1	5.4	High
Tlaxcala	2.2	2.7	0.5	0.4	2.6	2.4	1.2	1.8	5.4	High
Puebla	3.3	4.0	0.5	0.7	3.8	3.0	1.0	2.1	4.4	High
Chiapas	0.8	0.8	0.1	0.1	1.1	1.1	0.5	0.9	4.2	High
San Luis Potosi	8.2	7.4	1.3	1.2	6.6	3.1	1.3	3.3	3.9	Medium
Colima	7.3	5.6	1.4	2.1	5.2	1.8	1.1	4.2	3.6	Medium
Durango	9.7	7.3	1.8	1.6	6.5	2.4	1.3	3.4	3.5	Medium
Veracruz	2.7	3.2	0.5	0.2	2.5	1.8	0.8	2.0	3.3	Medium
Aguascalientes	6.7	6.7	2.7	1.5	4.8	2.6	1.6	3.3	3.0	Medium
Jalisco	7.7	6.5	1.8	1.7	5.4	2.2	1.3	3.0	3.0	Medium
Queretaro	3.7	4.8	1.4	0.7	3.3	3.0	1.6	2.6	2.3	Low
Sinaloa	4.6	3.6	0.9	0.6	3.3	1.0	0.7	1.9	2.3	Low
Mexico	2.1	2.6	0.6	0.3	1.5	1.0	0.6	1.1	2.2	Low
Chihuahua	4.3	3.7	1.0	1.3	4.4	1.7	0.7	2.8	1.4	Low
Tamaulipas	3.6	3.0	0.6	0.7	3.0	1.2	0.7	2.5	1.4	Low
Sonora	3.2	1.6	0.3	0.9	2.7	1.1	0.7	2.9	1.2	Low
Baja California	4.0	2.4	0.4	2.3	3.7	1.1	0.5	4.2	1.2	Low
Yucatan	1.4	1.0	0.2	0.2	1.4	0.7	0.4	0.7	0.9	Low
Coahuila	3.4	2.2	0.8	0.7	2.4	0.9	0.5	1.5	0.9	Low
Quintana Roo	1.0	0.7	0.2	0.2	1.2	0.5	0.3	1.0	0.7	Very low
Distrito Federal	1.7	1.6	0.4	0.3	1.2	0.6	0.4	0.6	0.6	Very low
B. California Sur	1.1	1.0	0.6	0.6	1.6	0.5	0.4	2.5	0.6	Very low
Nuevo Leon	2.5	1.9	0.7	0.6	1.3	0.6	0.4	1.0	0.4	Very low
Tabasco	0.6	0.6	0.2	0.0	0.8	0.5	0.3	0.5	0.4	Very low
Campeche	1.0	0.9	0.2	0.1	0.9	0.5	0.3	1.0	0.1	Very low

\*Remittances / GDP\*100.

\*\*Classification by BBVA Research. The cutoff points were established based on standard deviations in the sample.

Source: For 2000, CONAPO estimates based on the sample of ten percent of the XII Censo General de Población y Vivienda 2000.

Para 2010, BBVA Research con base en la muestra del diez por ciento del Censo de Población y Vivienda 2010.

Para el índice, BBVA Research based on CONAPO estimates.

Chart 20

**Annual figures on family remittances at the national level**

	2003	2004	2005	2006	2007	2008	2009	2010	2011 p/
<b>Millions of dollars</b>									
<b>Total</b>	<b>15,138.7</b>	<b>18,331.7</b>	<b>21,688.3</b>	<b>25,566.8</b>	<b>26,049.6</b>	<b>25,138.6</b>	<b>21,244.7</b>	<b>21,271.2</b>	<b>17,279.6</b>
Electronic transfers	13,212.4	16,228.5	19,667.2	23,854.0	24,802.7	24,113.7	20,547.5	20,583.3	16,919.9
Money Orders	1,665.3	1,869.7	1,747.9	1,359.7	859.7	598.7	386.2	389.8	154.6
Cash and payment in kind	254.6	233.6	273.2	353.2	387.3	426.3	311.0	298.2	205.1
Personal checks	6.4	-	-	-	-	-	-	-	-
<b>Thousands of Transactions</b>									
<b>Total</b>	<b>47,985.9</b>	<b>57,013.4</b>	<b>64,921.7</b>	<b>74,184.6</b>	<b>75,635.8</b>	<b>72,618.6</b>	<b>66,936.9</b>	<b>67,434.7</b>	<b>52,280.2</b>
Electronic transfers	43,132.7	52,087.9	60,509.4	70,697.7	73,278.7	70,478.0	65,381.4	65,930.0	51,490.6
Money Orders	4,498.1	4,602.8	4,066.9	2,844.6	1,585.9	1,353.3	866.4	816.1	317.6
Cash and payment in kind	348.3	322.7	345.4	642.3	771.2	787.2	689.1	688.6	472.1
Personal checks	6.9	-	-	-	-	-	-	-	-
<b>Average remittance (dollars)</b>	<b>315.5</b>	<b>321.5</b>	<b>334.1</b>	<b>344.6</b>	<b>344.4</b>	<b>346.2</b>	<b>317.4</b>	<b>315.4</b>	<b>330.5</b>

p/ Data to September 2011

Source: BBVA Research based on Banxico (central bank) data

Chart 21

**Annual figures on household remittances at national level (% breakdown)**

	2003	2004	2005	2006	2007	2008	2009	2010	2011 p/
<b>Millions of dollars</b>									
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Electronic transfers	87.3	88.5	90.7	93.3	95.2	95.9	96.7	96.8	97.9
Money Orders	11.0	10.2	8.1	5.3	3.3	2.4	1.8	1.8	0.9
Cash and payment in kind	1.7	1.3	1.3	1.4	1.5	1.7	1.5	1.4	1.2
Personal checks	0.0	-	-	-	-	-	-	-	-
<b>Thousands of Transactions</b>									
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Electronic transfers	89.9	91.4	93.2	95.3	96.9	97.1	97.7	97.8	98.5
Money Orders	9.4	8.1	6.3	3.8	2.1	1.9	1.3	1.2	0.6
Cash and payment in kind	0.7	0.6	0.5	0.9	1.0	1.1	1.0	1.0	0.9
Personal checks	0.0	-	-	-	-	-	-	-	-

p/ Data to September 2011

Source: BBVA Research based on Banxico (central bank) data

Chart 22

**Remittance Commissions from the United States to Mexico (dollars per remittance\*)**

	Chicago	Dallas	Houston	Indianapolis	Los Angeles	Miami	New York	Sacramento	San Jose	Average
1999	21.8	27.1	21.8	42.1	28.3	27.4	27.0	32.4		28.5
2000	18.8	24.3	21.4	29.7	23.7	22.6	21.6	17.1	29.2	23.2
2001	12.7	16.2	15.7	21.1	13.1	17.0	15.7	14.7	15.0	15.7
2002	13.3	14.6	14.9	17.1	13.9	16.4	14.2	15.3	14.4	14.9
2003	11.2	13.1	13.1	22.9	12.0	13.1	12.8	14.5	13.1	12.8
2004	11.2	12.3	12.6	11.3	11.4	12.0	12.2	12.2	11.7	11.9
2005	10.1	11.7	11.9	9.7	10.6	10.3	11.0	10.7	10.9	10.7
2006	9.3	11.3	11.9	10.1	10.1	10.1	10.8	9.9	10.5	10.4
2007	8.2	10.3	11.9	9.8	8.7	8.7	9.5	7.7	9.3	9.3
2008	5.1	7.1	9.6	7.9	6.1	4.9	6.7	4.8	6.4	6.5
2009	4.4	5.7	7.7	7.4	4.8	5.0	5.6	4.5	5.3	5.6
2010	5.0	6.7	8.6	8.1	5.5	6.5	6.3	5.0	6.5	6.5
2011 p/	6.4	8.8	10.7	9.5	7.4	7.1	7.9	6.9	7.2	8.0

\* Average cost to sending 300 dollars.

p/ Preliminary data 2011 to October 24 of this year.

Source: 1999-2009, with CNBV information from PROFECO

2010-2011 data, BBVA Research figures from the weekly database.

Chart 23

**Annual remittances by state (Millions of dollars)**

	2003	2004	2005	2006	2007	2008	2009	2010	2011 p/
<b>National</b>	<b>15,138.7</b>	<b>18,331.7</b>	<b>21,688.3</b>	<b>25,566.8</b>	<b>26,049.6</b>	<b>25,138.6</b>	<b>21,244.7</b>	<b>21,271.2</b>	<b>17,279.6</b>
Michoacan	1,787.5	2,281.4	2,442.4	2,503.7	2,435.0	2,448.2	2,126.1	2,141.2	1,689.8
Guanajuato	1,407.4	1,727.9	1,904.8	2,311.2	2,388.2	2,317.2	1,939.2	1,978.3	1,637.3
Jalisco	1,335.2	1,462.2	1,695.8	1,975.5	1,995.9	1,914.3	1,690.2	1,752.8	1,426.0
Mexico	1,106.4	1,445.8	1,764.8	2,079.2	2,166.2	2,066.3	1,695.9	1,635.0	1,266.2
Puebla	854.0	1,009.0	1,182.1	1,482.6	1,617.0	1,615.2	1,370.8	1,369.1	1,119.7
Oaxaca	787.1	948.9	1,080.2	1,360.1	1,516.9	1,521.8	1,294.8	1,294.6	1,081.0
Veracruz	999.1	1,168.1	1,373.4	1,680.8	1,775.1	1,618.0	1,292.5	1,235.6	982.6
Guerrero	877.4	1,018.4	1,174.7	1,455.7	1,489.0	1,435.1	1,196.8	1,199.7	963.6
Distrito Federal	814.7	921.6	1,312.6	1,490.4	1,058.2	1,083.5	963.1	997.7	858.4
Hidalgo	608.5	725.6	815.0	982.8	1,091.8	960.7	749.9	714.5	581.2
San Luis Potosi	403.6	469.1	562.3	714.4	778.0	760.6	624.9	628.5	525.5
Zacatecas	402.4	484.7	540.5	667.7	687.1	681.3	571.6	580.8	475.0
Chiapas	435.2	587.5	765.3	940.9	920.7	810.9	607.9	573.5	460.5
Morelos	373.2	433.1	505.1	587.9	635.2	622.4	546.5	553.9	446.6
Sinaloa	320.5	374.1	451.1	503.3	522.8	487.6	455.4	469.5	385.2
Tamaulipas	234.4	284.1	425.3	496.8	516.5	500.3	413.8	401.7	334.6
Chihuahua	236.7	279.4	389.2	473.9	460.0	474.7	406.6	397.3	315.7
Durango	262.4	329.7	384.3	428.5	452.9	441.9	373.7	378.6	314.3
Baja California	142.0	165.1	256.6	302.1	334.4	334.3	321.1	347.3	297.4
Queretaro	283.3	353.4	405.9	484.1	475.0	436.3	359.1	354.0	291.2
Nayarit	227.5	262.4	302.7	348.2	374.9	376.4	340.7	336.9	268.4
Sonora	128.3	170.5	294.7	326.0	332.1	310.9	277.8	291.5	250.1
Nuevo Leon	189.2	295.8	283.9	342.6	327.0	323.7	292.2	283.5	231.3
Aguascalientes	260.2	314.8	322.6	379.4	372.9	332.2	281.3	293.4	229.6
Tlaxcala	149.2	185.0	221.1	270.7	303.3	305.1	258.2	258.2	210.1
Coahuila	139.9	180.0	240.7	275.3	293.1	278.3	233.6	233.7	184.6
Colima	103.7	134.3	165.0	183.2	199.6	184.5	164.3	171.3	137.8
Yucatan	60.3	75.8	94.1	122.1	136.7	136.1	109.6	112.5	89.4
Tabasco	86.0	105.3	156.4	187.9	182.7	156.1	114.0	111.1	85.8
Quintana Roo	52.9	67.5	85.0	99.5	98.5	97.2	85.4	86.7	69.7
Campeche	51.7	53.2	65.7	82.0	80.4	72.7	55.7	55.0	44.2
Baja California Sur	19.0	17.7	24.4	28.5	32.1	34.7	31.9	33.7	27.3

p/ Data to September 2011

Source: BBVA Research based on Banxico (central bank) data

Chart 24

**Annual remittances by state (Breakdown %)**

	2003	2004	2005	2006	2007	2008	2009	2010	2011 p/
<b>National</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Michoacan	11.8	12.4	11.3	9.8	9.3	9.7	10.0	10.1	9.8
Guanajuato	9.3	9.4	8.8	9.0	9.2	9.2	9.1	9.3	9.5
Jalisco	8.8	8.0	7.8	7.7	7.7	7.6	8.0	8.2	8.3
Mexico	7.3	7.9	8.1	8.1	8.3	8.2	8.0	7.7	7.3
Puebla	5.6	5.5	5.5	5.8	6.2	6.4	6.5	6.4	6.5
Oaxaca	5.2	5.2	5.0	5.3	5.8	6.1	6.1	6.1	6.3
Veracruz	6.6	6.4	6.3	6.6	6.8	6.4	6.1	5.8	5.7
Guerrero	5.8	5.6	5.4	5.7	5.7	5.7	5.6	5.6	5.6
Distrito Federal	5.4	5.0	6.1	5.8	4.1	4.3	4.5	4.7	5.0
Hidalgo	4.0	4.0	3.8	3.8	4.2	3.8	3.5	3.4	3.4
San Luis Potosi	2.7	2.6	2.6	2.8	3.0	3.0	2.9	3.0	3.0
Zacatecas	2.7	2.6	2.5	2.6	2.6	2.7	2.7	2.7	2.7
Chiapas	2.9	3.2	3.5	3.7	3.5	3.2	2.9	2.7	2.7
Morelos	2.5	2.4	2.3	2.3	2.4	2.5	2.6	2.6	2.6
Sinaloa	2.1	2.0	2.1	2.0	2.0	1.9	2.1	2.2	2.2
Tamaulipas	1.5	1.5	2.0	1.9	2.0	2.0	1.9	1.9	1.9
Chihuahua	1.6	1.5	1.8	1.9	1.8	1.9	1.9	1.9	1.8
Durango	1.7	1.8	1.8	1.7	1.7	1.8	1.8	1.8	1.8
Baja California	0.9	0.9	1.2	1.2	1.3	1.3	1.5	1.6	1.7
Queretaro	1.9	1.9	1.9	1.9	1.8	1.7	1.7	1.7	1.7
Nayarit	1.5	1.4	1.4	1.4	1.4	1.5	1.6	1.6	1.6
Sonora	0.8	0.9	1.4	1.3	1.3	1.2	1.3	1.4	1.4
Nuevo Leon	1.2	1.6	1.3	1.3	1.3	1.3	1.4	1.3	1.3
Aguascalientes	1.7	1.7	1.5	1.5	1.4	1.3	1.3	1.4	1.3
Tlaxcala	1.0	1.0	1.0	1.1	1.2	1.2	1.2	1.2	1.2
Coahuila	0.9	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Colima	0.7	0.7	0.8	0.7	0.8	0.7	0.8	0.8	0.8
Yucatan	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5
Tabasco	0.6	0.6	0.7	0.7	0.7	0.6	0.5	0.5	0.5
Quintana Roo	0.3	0.4	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	0.3	0.3
Baja California Sur	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2

p/ Data to September 2011

Source: BBVA Research based on Banxico (central bank) data

Chart 25

**Labor situation of Hispanics and Mexicans in the U.S. (Figures in thousands)**

	2008		2009				2010				2011		
	IV	I	II	III	IV	I	II	III	IV	I	II	III	
<b>Total population*</b>													
Pop. 16 years old & over	234,825	234,913	235,459	236,093	236,739	236,996	237,442	238,104	238,712	238,852	239,316	239,871	
Work force	154,653	154,235	154,811	154,235	153,544	153,531	154,283	153,956	153,867	153,279	153,512	153,613	
Employed	136,652	137,444	137,656	137,544	138,273	138,626	139,331	139,212	139,066	139,587	139,596	139,649	
Unemployed	10,730	12,648	14,352	14,895	15,406	14,904	14,952	14,744	14,801	13,693	13,916	13,963	
Labor Force participation rate	65.9	65.7	65.7	65.3	64.9	64.8	65.0	64.7	64.5	64.2	64.1	64.0	
Unemployment rate	6.9	8.2	9.3	9.7	10.0	9.7	9.7	9.6	9.6	8.9	9.1	9.1	
<b>Hispanics*</b>													
Pop. 16 years old & over	32,557	32,501	32,754	33,018	33,291	33,333	33,579	33,837	34,101	34,078	34,311	34,555	
Work force	22,111	22,120	22,403	22,435	22,487	22,644	22,716	22,789	22,865	22,673	22,785	22,884	
Employed	20,114	19,723	19,688	19,585	19,586	19,809	19,886	20,004	19,913	20,039	20,099	20,297	
Unemployed	1,996	2,397	2,716	2,850	2,901	2,836	2,830	2,785	2,952	2,634	2,685	2,586	
Labor Force participation rate	67.9	68.1	68.4	67.9	67.5	67.9	67.6	67.3	67.1	66.5	66.4	66.2	
Unemployment rate	9.0	10.8	12.1	12.7	12.9	12.5	12.5	12.2	12.9	11.6	11.8	11.3	
<b>Hispanics</b>													
Pop. 16 years old & over	32,557	32,501	32,754	33,018	33,291	33,333	33,579	33,837	34,101	34,078	34,311	34,555	
Work force	22,183	22,033	22,340	22,508	22,528	22,581	22,637	22,886	22,890	22,557	22,733	23,008	
Employed	20,240	19,442	19,751	19,680	19,713	19,526	19,942	20,139	20,016	19,729	20,163	20,459	
Unemployed	1,943	2,592	2,589	2,828	2,815	3,055	2,695	2,747	2,874	2,829	2,570	2,549	
Labor Force participation rate	68.1	67.8	68.2	68.2	67.7	67.7	67.4	67.6	67.1	66.2	66.3	66.6	
Unemployment rate	8.8	11.8	11.6	12.6	12.5	13.5	11.9	12.0	12.6	12.5	11.3	11.1	
<b>Mexicans</b>													
Pop. 16 years old & over	20,707	21,056	21,006	20,716	20,913	21,284	21,182	21,170	21,433	21,260	21,320	21,743	
Work force	14,144	14,183	14,349	14,140	14,168	14,468	14,322	14,361	14,462	14,123	14,153	14,531	
Employed	12,960	12,493	12,671	12,350	12,398	12,471	12,642	12,745	12,632	12,291	12,562	12,940	
Unemployed	1,184	1,690	1,678	1,790	1,771	1,997	1,680	1,616	1,831	1,832	1,591	1,591	
Labor Force participation rate	68.3	67.4	68.3	68.3	67.7	68.0	67.6	67.8	67.5	66.4	66.4	66.8	
Unemployment rate	8.4	11.9	11.7	12.7	12.5	13.8	11.7	11.3	12.7	13.0	11.2	10.9	
<b>U.S. - born Mexicans</b>													
Pop. 16 years old & over	9,730	10,227	9,976	9,623	10,031	10,493	10,211	9,911	10,363	10,624	10,662	10,760	
Work force	6,419	6,662	6,596	6,287	6,417	6,818	6,582	6,432	6,629	6,723	6,821	6,967	
Employed	5,831	5,925	5,760	5,387	5,543	5,907	5,677	5,546	5,698	5,818	5,953	6,059	
Unemployed	588	737	836	899	873	912	904	886	930	905	868	907	
Labor Force participation rate	66.0	65.1	66.1	65.3	64.0	65.0	64.5	64.9	64.0	63.3	64.0	64.7	
Unemployment rate	9.2	11.1	12.7	14.3	13.6	13.4	13.7	13.8	14.0	13.5	12.7	13.0	
<b>Mexican immigrants</b>													
Pop. 16 years old & over	10,977	10,829	11,031	11,093	10,882	10,791	10,971	11,258	11,059	10,636	10,657	10,983	
Work force	7,725	7,520	7,753	7,853	7,752	7,650	7,740	7,929	7,834	7,400	7,332	7,564	
Employed	7,129	6,568	6,911	6,963	6,854	6,564	6,965	7,198	6,934	6,473	6,609	6,880	
Unemployed	596	953	841	891	897	1,085	776	731	900	927	723	684	
Labor Force participation rate	70.4	69.5	70.3	70.8	71.2	70.9	70.5	70.4	70.8	69.6	68.8	68.9	
Unemployment rate	7.7	12.7	10.9	11.3	11.6	14.2	10.0	9.2	11.5	12.5	9.9	9.0	

\* Seasonally-adjusted figures

Source: BBVA Research with figures from Bureau of Census, Current Population Survey (CPS), 2006-2009

Chart 26

**Monthly receipts from remittances in Mexico (Millions of dollars)**

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Jan	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	1,572.6	1,324.3	1,401.5
Feb	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	1,810.4	1,553.7	1,647.6
Mar	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	2,111.2	1,955.3	2,052.4
Apr	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	2,184.2	1,784.2	1,789.4	1,872.8
May	520.4	571.6	590.8	798.2	912.2	1,343.8	1,770.4	2,057.3	2,534.6	2,411.8	2,371.2	1,905.2	2,144.7	2,166.5
Jun	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	1,928.9	1,890.9	2,021.9
Jul	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	2,182.3	1,838.2	1,871.5	1,897.6
Aug	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	1,786.7	1,954.6	2,134.7
Sept	476.3	490.5	568.6	772.1	860.6	1,365.5	1,586.8	1,886.0	2,141.0	2,186.0	2,113.4	1,747.1	1,719.3	2,084.7
Oct	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	1,695.6	1,731.7	
Nov	460.7	502.0	583.1	693.8	741.4	1,203.7	1,506.2	1,887.0	1,962.8	1,958.4	1,751.7	1,500.4	1,629.2	
Dec	614.3	587.7	666.9	759.0	919.4	1,341.1	1,565.1	1,932.1	1,938.7	1,962.8	1,781.2	1,564.2	1,706.6	
<b>Total</b>	<b>5,626.8</b>	<b>5,909.6</b>	<b>6,572.8</b>	<b>8,895.3</b>	<b>9,814.5</b>	<b>15,040.7</b>	<b>18,331.3</b>	<b>21,688.3</b>	<b>25,566.8</b>	<b>26,049.6</b>	<b>25,138.6</b>	<b>21,244.7</b>	<b>21,271.2</b>	

**Monthly receipts from remittances in Mexico (Annual % change)**

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Jan	13.0	4.5	14.2	43.6	8.6	43.1	6.3	26.4	28.6	6.5	-4.9	-11.7	-15.8	5.8
Feb	10.5	6.1	15.0	42.6	12.7	34.0	21.7	21.9	27.6	1.8	0.1	-2.6	-14.2	6.0
Mar	11.9	8.8	6.4	45.2	3.7	47.6	34.7	14.3	27.3	1.6	-3.2	-0.2	-7.4	5.0
Apr	3.4	6.6	6.3	47.3	9.7	49.2	25.9	15.8	18.2	4.5	0.8	-18.3	0.3	4.7
May	6.9	9.8	3.4	35.1	14.3	47.3	31.7	16.2	23.2	-4.8	-1.7	-19.7	12.6	1.0
Jun	11.0	3.7	3.8	38.1	15.0	57.1	24.7	14.2	21.7	-1.7	-1.6	-14.8	-2.0	6.9
Jul	11.9	2.5	10.1	42.9	5.8	61.5	21.5	11.2	19.1	8.1	-7.9	-15.8	1.8	1.4
Aug	13.5	9.3	14.3	29.8	7.6	65.0	27.5	15.2	13.4	3.3	-13.0	-14.8	9.4	9.2
Sept	10.4	3.0	15.9	35.8	11.5	58.7	16.2	18.9	13.5	2.1	-3.3	-17.3	-1.6	21.2
Oct	7.8	4.4	17.9	41.7	7.0	64.0	10.0	21.7	24.4	2.2	11.4	-35.7	2.1	
Nov	34.1	9.0	16.2	19.0	6.9	62.3	25.1	25.3	4.0	-0.2	-10.6	-14.3	8.6	
Dec	61.8	-4.3	13.5	13.8	21.1	45.9	16.7	23.5	0.3	1.2	-9.3	-12.2	9.1	
<b>Total</b>	<b>15.7</b>	<b>5.0</b>	<b>11.2</b>	<b>35.3</b>	<b>10.3</b>	<b>53.3</b>	<b>21.9</b>	<b>18.3</b>	<b>17.9</b>	<b>1.9</b>	<b>-3.6</b>	<b>-15.5</b>	<b>0.1</b>	

**12-month flow of remittances in Mexico (Millions of dollars)**

Jan	4,908.7	5,644.0	5,966.2	6,771.5	8,951.3	10,120.7	15,105.3	18,617.0	22,079.0	25,681.4	25,957.8	24,930.1	20,996.4	21,348.4
Feb	4,943.5	5,666.4	6,024.5	6,962.0	9,032.5	10,364.8	15,314.1	18,873.6	22,473.8	25,714.9	25,960.6	24,881.0	20,739.7	21,442.3
Mar	4,988.8	5,704.1	6,054.1	7,185.6	9,059.0	10,719.3	15,695.3	19,085.0	22,935.1	25,748.4	25,890.1	24,876.4	20,583.9	21,539.3
Apr	5,003.3	5,733.3	6,083.7	7,421.6	9,130.1	11,115.9	16,006.3	19,324.8	23,254.5	25,841.8	25,908.2	24,476.4	20,589.0	21,622.7
May	5,037.0	5,784.5	6,102.9	7,629.0	9,244.0	11,547.6	16,432.9	19,611.7	23,731.8	25,719.0	25,867.7	24,010.3	20,828.6	21,644.5
Jun	5,086.9	5,802.9	6,122.6	7,835.3	9,356.2	12,038.7	16,766.0	19,850.6	24,148.8	25,679.1	25,831.5	23,675.0	20,790.6	21,775.5
Jul	5,139.5	5,815.2	6,173.5	8,074.3	9,402.7	12,557.0	17,059.0	20,036.6	24,500.1	25,856.6	25,644.6	23,331.0	20,823.9	21,801.6
Aug	5,197.2	5,860.7	6,249.5	8,255.6	9,462.5	13,109.1	17,444.6	20,309.0	24,775.2	25,934.1	25,330.2	23,020.2	20,991.7	21,981.7
Sept	5,242.1	5,874.9	6,327.5	8,459.1	9,551.0	13,614.1	17,665.9	20,608.1	25,030.2	25,979.1	25,257.6	22,653.9	20,964.0	22,347.0
Oct	5,275.1	5,894.8	6,412.5	8,692.4	9,606.5	14,156.8	17,804.8	20,940.5	25,484.4	26,030.0	25,526.8	21,713.0	21,000.0	
Nov	5,392.3	5,936.1	6,493.6	8,803.1	9,654.1	14,619.1	18,107.3	21,321.2	25,560.3	26,025.6	25,320.1	21,461.7	21,128.8	
Dec	5,626.8	5,909.6	6,572.8	8,895.3	9,814.5	15,040.7	18,331.3	21,688.3	25,566.8	26,049.6	25,138.6	21,244.7	21,271.2	

**12-month flow of remittances in Mexico (annual % change)**

Jan	15.5	15.0	5.7	13.5	32.2	13.1	49.3	23.2	18.6	16.3	1.1	-4.0	-15.8	1.7
Feb	15.0	14.6	6.3	15.6	29.7	14.7	47.8	23.2	19.1	14.4	1.0	-4.2	-16.6	3.4
Mar	14.9	14.3	6.1	18.7	26.1	18.3	46.4	21.6	20.2	12.3	0.6	-3.9	-17.3	4.6
Apr	14.4	14.6	6.1	22.0	23.0	21.8	44.0	20.7	20.3	11.1	0.3	-5.5	-15.9	5.0
May	13.2	14.8	5.5	25.0	21.2	24.9	42.3	19.3	21.0	8.4	0.6	-7.2	-13.3	3.9
Jun	12.1	14.1	5.5	28.0	19.4	28.7	39.3	18.4	21.7	6.3	0.6	-8.3	-12.2	4.7
Jul	11.6	13.1	6.2	30.8	16.5	33.5	35.9	17.5	22.3	5.5	-0.8	-9.0	-10.7	4.7
Aug	11.8	12.8	6.6	32.1	14.6	38.5	33.1	16.4	22.0	4.7	-2.3	-9.1	-8.8	4.7
Sept	10.6	12.1	7.7	33.7	12.9	42.5	29.8	16.7	21.5	3.8	-2.8	-10.3	-7.5	6.6
Oct	9.6	11.7	8.8	35.6	10.5	47.4	25.8	17.6	21.7	2.1	-1.9	-14.9	-3.3	
Nov	11.4	10.1	9.4	35.6	9.7	51.4	23.9	17.7	19.9	1.8	-2.7	-15.2	-1.6	
Dec	15.7	5.0	11.2	35.3	10.3	53.3	21.9	18.3	17.9	1.9	-3.5	-15.5	0.1	

Source: BBVA Research based on Banxico (central bank) data



Chart 27

**Average total cost of remittances for sending \$ 200 dollars to top 20 countries receiving remittance  
 (Cost as % of amount sent)**

Global ranking *	Country	Estimated remittances in 2010 *						
		(Millions of US\$)	2008	2009 Q1	2009 Q3	2010 Q1	2010 Q3	2011 Q1
1	India	55,000.0	7.86	7.75	7.64	7.48	8.21	7.82
2	China	51,000.0	12.87	13.60	13.01	12.09	11.00	12.31
3	Mexico	22,571.8	5.80	6.76	5.84	7.42	7.10	6.87
4	Philippines	21,310.7	8.73	7.43	6.78	5.71	6.20	6.11
5	France	15,938.7	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	Germany	11,558.9	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7	Bangladesh	11,050.2	7.11	4.84	5.08	4.62	4.45	4.07
8	Belgium	10,445.8	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
9	Spain	10,245.4	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
10	Nigeria	9,974.7	8.68	8.23	9.83	8.12	8.02	9.03
11	Pakistan	9,407.3	7.62	8.03	6.33	4.87	7.00	7.81
12	Poland	9,079.9	n.a.	6.84	6.45	6.25	7.17	8.36
13	Lebanon	8,176.7	12.41	12.08	14.04	13.16	14.53	13.05
14	Egypt	7,680.9	5.47	5.40	6.24	4.98	3.97	3.96
15	United Kingdom	7,433.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
16	Vietnam	7,215.3	11.37	9.26	8.59	9.11	9.69	9.92
17	Indonesia	7,138.6	10.49	8.31	9.19	6.58	6.43	6.46
18	Moroco	6,446.6	12.64	10.22	10.31	8.67	8.67	7.83
19	Russia	5,590.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
20	Serbia	5,579.7	11.10	9.87	10.75	11.56	8.60	9.08

Chart 28

**Average total cost of remittances for sending \$200 dollars to 10 countries receiving remittances in Latin America  
 (Cost as % of amount sent)**

Global ranking *	Country	Estimated remittances in 2010 *						
		(Millions of US\$)	2008	2009 Q1	2009 Q3	2010 Q1	2010 Q3	2011 Q1
3	Mexico	22,571.8	5.80	6.76	5.84	7.42	7.10	6.87
24	Brazil	4,277.1	8.76	9.31	8.54	14.00	10.93	10.44
25	Guatemala	4,255.2	6.57	5.82	6.40	6.31	5.86	6.00
27	Colombia	3,942.4	6.70	6.04	5.95	5.67	5.04	5.02
30	El Salvador	3,648.4	4.59	4.14	4.11	4.57	5.00	5.22
34	Dominican Republic	3,373.4	9.76	7.56	7.80	7.01	6.40	5.97
39	Honduras	2,661.5	4.70	5.98	5.32	4.41	6.70	6.35
40	Ecuador	2,548.3	5.29	5.38	4.27	4.65	5.05	4.62
42	Peru	2,494.0	10.06	8.21	5.11	4.56	4.54	4.53
48	Jamaica	2,020.0	10.61	11.17	9.65	8.95	9.16	8.48

Note: To calculate the average total cost we exclude data where the exchange rate is not transparent and Russia remittance-corridors due to not providing information on exchange rate, since the actual cost may be higher if data were complete. World Bank does not have information on remittance-senders market shares, so the total average cost is calculated as a simple average of the available information, as indicated by the World Bank.

Source: BBVA Research base on World Bank Remittance Prices Worldwide (RPW) 2011 and Ratha and Shaw (2007) updated on Migration and Remittances Factbook 2011, World Bank.

\* According to World Bank estimations

## 8. Special topics included in previous issues

### Junio 2011

- Outlook for Mexico on migration and remittances- 2011-2012
- Recent changes in the international migratory patterns in Mexico
- Effect of remittances on employment and school enrollment in Mexico
- Are remittances a driving force for development in Mexican communities?

### November 2010

- The impact of the recession in the United States on immigrants and remittances from Mexicans and their respective outlooks
- Migration from Mexico to the United States, an essentially economic link
- Immigration in Arizona and the effects of the new law "SB-1070"  
Inset 1: The Arizona SB 1070 Law: Origin and characteristics
- Highly Qualified Mexican Immigrants in the U.S.; A revealing photograph  
Inset 2: An estimate of the transfer of resources due to education expenses from Mexico to the U.S. through Mexican immigrants

### May 2010

- The Global Crisis and Its Effects on Migration and Remittances  
Inset 1: Anti-immigration Policies: Motivations and Some Examples
- Migration and Climate Change: The Mexican Case
- The Importance of Social Networks in Migration
- The Impact of Social Networks on the Income of Mexicans in the U.S

### November 2009

- Effects of the Recession in the United States on Mexican Migrants and Outlook for 2010
- Sectorial and Regional Mobility of Mexicans in the U.S.
- Economic Effects of Migration in the Destination Country
- Recent Changes in the Conditions of Mexican Households that Receive Remittances
- Importance of the Global Forum on Migration & Development\*

### Junio 2009

- Determining Factors of Migration
- International Migratory Flows
- Mexican Migration to the U.S.: A Brief X-Ray
- Municipal Factors Spurring Mexican Migration Abroad
- Has Poverty Affected Mexican Migration to the U.S.?
- Immigration Policy of the U.S.: a Historic Retrospective

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