

Migration Outlook

Mexico

December 2013
Economic Analysis

- Mexico is one of 5 countries where remittances will decline in 2013
- Employment for Mexican immigrants in the U.S. has begun to show signs of recovery
- In Mexico, migration seems to have negative effects in underdeveloped municipalities and positive effects on more developed municipalities
- Municipalities with higher migration intensity have the lowest levels of education in the country

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Closing date: December 4, 2013

1. Summary

Global remittances are set to grow again in 2013

World Bank forecasts for 2013 show that global remittance flows will stand at 549 billion dollars, meaning growth of 5.8%. In the subsequent 3 years growth is expected to accelerate from 8.2% in 2014 to 9.4% in 2016. Developing countries, which are the recipients of the largest proportion of remittances, are expected to receive 414 billion dollars in 2013. The lowest growth rate for remittances received in 2013 is expected to be registered in Latin America and the Caribbean, at 2.5%. However, in the 2014-2016 period the region is expected to record some of the strongest growth in remittances.

Only 5 countries worldwide are expected to see remittances decline in 2013, one of which is Mexico

Remittances worldwide are expected to grow in most countries in 2013. Mexico is set to be one of the few countries where remittances will not grow. Just 5 countries are expected to show negative rates in 2013, including Israel, Kosovo and France. Of these, Mexico and France are among the top 5 recipients of remittances in the world.

According to the World Bank, in 2013 Mexico will be the world's fourth largest recipient of remittances, behind China, India and the Philippines

At the close of 2013 India and China are set to be the world's biggest recipients of remittances. The Philippines will hold the third place, with 26 billion dollars, and Mexico for the second consecutive year will be in fourth place, with around 22 billion dollars. The same trend has been seen since 2012, while France also registered significant growth in recent years, but is recording a performance similar to that of Mexico.

Remittances to Mexico will decline in 2013, but are set to grow in 2014

BBVA Research estimates that over the course of 2013 Mexico will receive between 4.5% and 5.5% less income from remittances than in 2012, which would bring remittances in the year to 21,429 million dollars at most. However, the favorable results for certain U.S. sectors with a high concentration of Mexican immigrants are likely to continue over the forthcoming months, meaning remittances could perform better, potentially registering growth of between 5% and 6%.

Employment for Mexican immigrants in the U.S. has begun to recover

In recent months employment among Mexican migrants has shown signs of steady and stable growth, more in line with total labor growth in the United States. Even the unemployment rate among Mexican immigrants has started to decrease significantly in recent months, standing at very close to the national average between July and October at 7.3%. This is because of incipient job growth in the sectors that employ around 60% of Mexican immigrants: leisure and hospitality, construction, manufacturing and wholesale and retail trade.

Migration seems to have negative effects on underdeveloped municipalities and positive effects on more developed municipalities

The impact of migration on various development indicators has been examined. The results show that migration seems to have adverse effects on more marginalized migrant communities and positive effects on the economic development of more developed municipalities. Given that of all the municipalities with the highest migration rates, the most developed ones represent a third of the less developed municipalities, we can infer that for every municipality that benefits from migration, there are on average 3 that are impaired as a result of migration.

Municipalities with higher migration intensity have the lowest levels of education in Mexico

Municipalities with high migration intensity have a higher percentage of people with no schooling and a higher proportion of people with primary education as their highest level of schooling. Meanwhile, the proportion of people with university degrees is lower. These municipalities with high migration intensity also have the lowest average years of schooling: where migration intensity is “high”, average schooling stands at 6.45 years, while in “very high” areas average schooling stands at 6.01, both being below the national average of 8.38 years.

In contrast with the national trend, in municipalities with higher migration intensity, average schooling levels are higher for women than among men

The low levels of schooling in communities with higher migration intensity in Mexico seems to be a result of higher school drop-out rates seen in these areas, mainly among men and starting at the age of 12, as they make the transition to secondary education. The lack of opportunities seems to be one of the main factors that drive people in those municipalities to drop out of school and start working, a situation that is most common among young men. In municipalities with higher migration intensity, the opportunity cost of attending school is high, and seems to be higher for men than for women.

Educational policies are required in Mexican municipalities with higher migration intensity

Municipalities with high migration intensity have the lowest levels of education in the country and higher school drop-out rates than municipalities with less migration. Furthermore, more individuals join the labor market at an early age and those with the best training are more likely to emigrate; thus the quality of the human capital left behind in these Mexican municipalities could be deteriorating. It also seems that low levels of schooling are passed down from parents to children in these municipalities. Education policies are therefore needed to tackle these issues.

2. Migration and remittance prospects for Mexico and worldwide, at the close of 2013

Global remittance growth in 2013 will outstrip that of 2012 and is expected to accelerate in subsequent years

According to figures from the World Bank, from 2004 to 2008 global remittances remained buoyant, recording annual growth rates in excess of 15%. The last economic crisis had slowed remittance flows to many countries, with a global decline of 6.3% in 2009. However, since 2010 we have seen positive growth rates. In 2013 global remittance flows are expected to stand at 549 billion dollars, representing a growth rate of 5.8%, which is higher than the increase recorded in 2012, while over the following 3 years this growth is expected to rise from 8.2% in 2014 to 9.4% in 2016.

Table 1

Remittance estimates and forecasts for developing countries

	Billion US dollars							
	2009	2010	2011	2012	2013e	2014f	2015f	2016f
All developing countries	303	334	373	389	414	449	491	540
East Asia and the Pacific	79	95	106	107	115	126	139	154
Europe and Central Asia	32	32	38	38	43	47	52	58
Latin America and the Caribbean	55	56	59	60	61	68	75	84
Middle East and North Africa	34	40	43	47	49	51	54	57
South Asia	75	82	97	107	114	123	133	145
Sub-Saharan Africa	28	29	30	30	32	35	38	41
World	418	454	506	519	549	594	646	707
Low income	21	24	28	32	38	41	46	52
Middle income	281	310	345	357	376	408	445	488
High income	115	120	133	129	135	144	155	167
	Growth rates							
All developing countries	-6.3	10.2	11.9	4.3	6.3	8.6	9.3	9.9
East Asia and the Pacific	-6	20.1	12.4	1	7.4	9.5	10.2	10.5
Europe and Central Asia	-20.1	-0.9	17.6	1.6	10.8	10.3	11.2	11.6
Latin America and the Caribbean	-12	1.1	6.1	0.9	2.5	10.5	11.1	11.6
Middle East and North Africa	-6.5	19.4	6.3	10.8	3.6	4.9	5.4	5.6
South Asia	4.6	9.4	18.4	9.7	6.8	7.7	8.5	9.4
Sub-Saharan Africa	-1.8	4.1	4.5	-0.4	6.2	8.6	9.2	9.5
World	-6.3	8.7	11.5	2.5	5.8	8.2	8.8	9.4
Low income	3.7	11.1	17.7	14.6	17.3	10.5	11.2	12.5
Middle income	-7	10.1	11.5	3.5	5.3	8.4	9.1	9.6
High income	-6.4	4.6	10.5	-2.7	4.5	6.8	7.3	7.7

e: estimated; f: forecast.
Source: World Bank (2013)

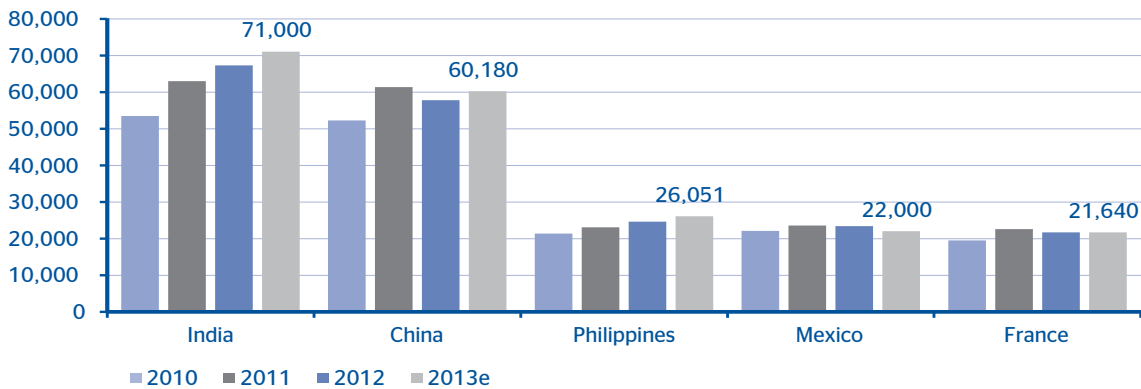
It is estimated that developing countries, which are the recipients of most remittances, will receive 414 billion dollars in 2013. Within this group, the regions receiving the most remittances are East Asia and the Pacific and South Asia. The latter is also the only developing region where remittance flows did not decline in 2009. In the forthcoming years the two regions are expected to record growth rates close to the global average.

The regions where remittances declined the most in 2009 are Europe and Central Asia and Latin America and the Caribbean. The latter is expected to show the slowest growth rate in 2013, at 2.5%, but from 2014 to 2016 both regions are projected to record the fastest remittance growth among developing regions.

Mexico is set to end 2013 as the world’s fourth largest recipient of remittances and will also be one of the few countries where remittances will decline

According to World Bank estimates, at the close of 2013 India and China will be the world’s leading recipients of remittances. The Philippines is set to hold the third position, with 26 billion dollars, while Mexico will come in fourth place for the second year in a row, with around 22 billion dollars.¹ This is the same trend seen in 2012, while France has recorded significant growth in recent years, with 21 billion dollars in 2013.

Chart 1
Remittance flows to the main recipient countries, 2010-2013e
(Million US dollars)



e: World Bank estimates
Source: BBVA Research with figures from the World Bank (Annual Remittances Data, last updated in October 2013)

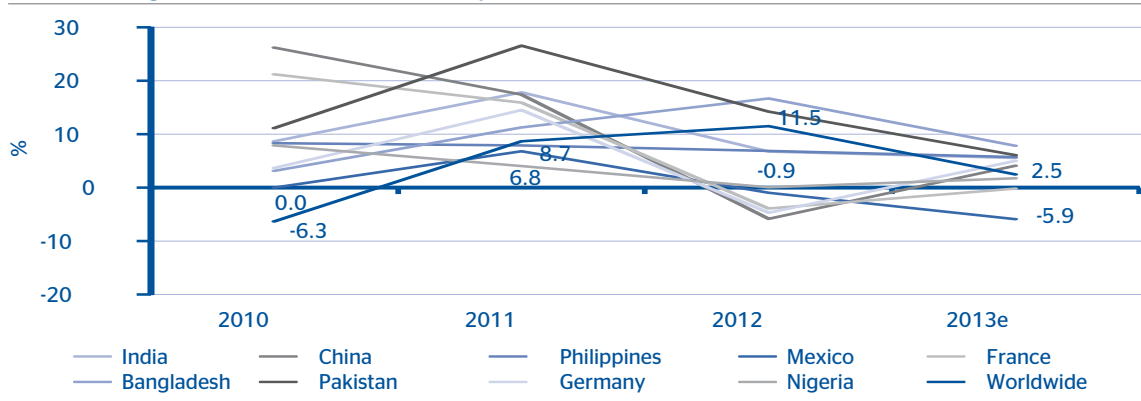
Mexico in particular saw remittances grow by close to 16% in 2006. However, since the economic crisis it has failed to record levels above the 26 billion dollars registered in 2007. Even in 2009 there was a decline of slightly more than 15%. In 2011, it showed a significant growth, close to 7%, but this was followed by another decline in 2012, which is expected to be repeated in 2013.

As we have seen, the global trend for remittances in 2013 will be one of growth. Mexico is likely to be one of just 5 countries in which remittances will decline in 2013, together with Israel, Kosovo, Albania and France. Looking at the growth rates from the last four years, the world’s largest remittance recipients showed a downward trend. However, most of these are set to see positive figures in 2013. Of these, Mexico and France are the only countries where negative growth is expected.

¹ The World Bank remittance figures include transfers from workers, salary remuneration and other transfers and credits, which are not only family remittances, and therefore these may not match those reported by the central banks of some countries.

Chart 2

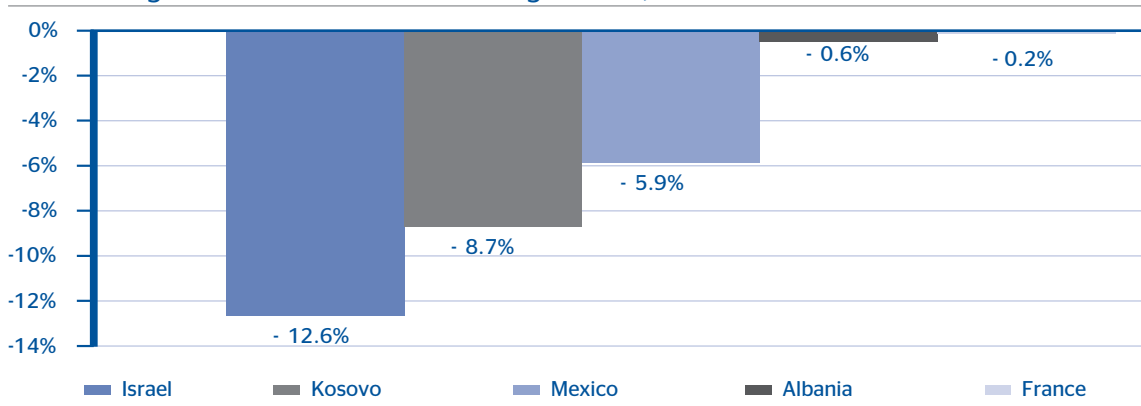
Remittance growth rates in the main recipient countries



Source: BBVA Research with figures from the World Bank (Annual Remittances Data, last updated in October 2013)

Chart 3

Remittance growth rates in countries showing declines, 2013



Source: BBVA Research with figures from the World Bank (Annual Remittances Data, last updated in October 2013)

The following sections focus on prospects for remittances and migration in Mexico.

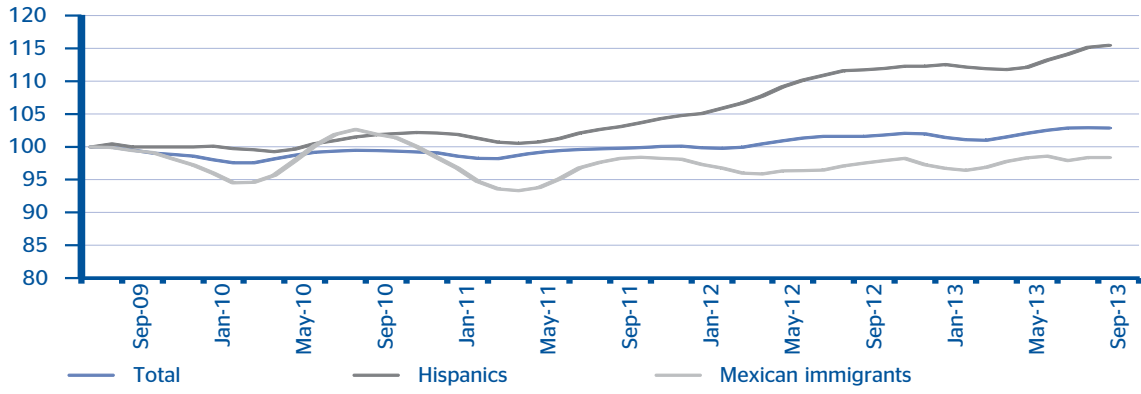
What about employment for Mexican immigrants in the U.S.?

In the United States, the economic recession that began in 2007 officially came to an end in June 2009. Since then, employment in the U.S. has recovered steadily. To date, close to 50% of the more than 8 million jobs that were lost during the recession have now been recovered. Hispanics as a whole have been one of the groups to benefit most from this. The jobs lost among Hispanics were among the quickest to recover, with employment among this group standing 15% higher than when the economic recovery began.

Although they are Hispanic, the situation for Mexicans has been different. Mexicans are yet to recover all the jobs that were lost in the recession, with total employment for the group standing below the June 2009 level. In previous *Mexico Migration Outlook* issues, we discussed the three main factors behind this: 1) Mexican migrants are generally concentrated in sectors where the economic recovery has been very slow or non-existent, 2) Most new jobs have gone to people with higher levels of schooling, and Mexicans have some of the lowest levels of education, 3) Anti-immigration laws affect Mexican alien workers more than any other group, because they had largely been introduced in areas where immigrants from Mexico predominated. Recently, employment among Mexican immigrants showed signs of steady and stable growth, more in line with the total labor growth in the United States. In recent

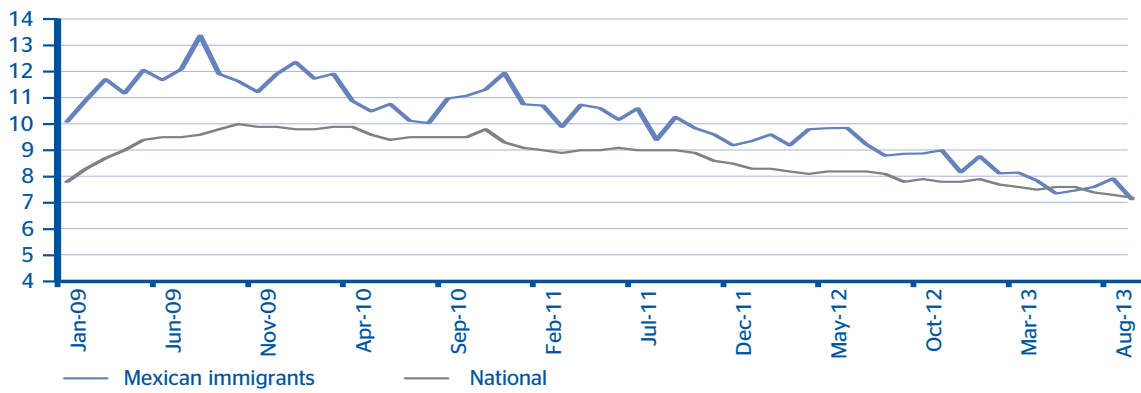
months the unemployment rate among Mexican immigrants began to decline significantly, standing very close to the national average between July and October at 7.3%.

Chart 4
Working Population Index in the United States (June 2009=100)



Note: Figures smoothed by the 3-month moving average
Source: BBVA Research based on Current Population Survey data

Chart 5
U.S.: National unemployment rate and for Mexican immigrants (%)



Note: The unemployment data for Mexican immigrants were Seasonally-Adjusted by TRAMO/SEATS
Source: BBVA Research based on Current Population Survey data

In which sectors have Mexican immigrants gained jobs? In which have they lost employment?

Mexican immigrants lost most of their jobs in the manufacturing sector, just over 130,000 in the last 4 years. Next comes the wholesale and retail trade sector, where Mexican immigrants lost nearly 20,000 jobs over the last year.

Professional and business services has been the most buoyant sector for Mexican immigrants seeking work, where they have found more than 170,000 jobs over the last 4 years, nearly 50,000 last year. They have also seen a significant increase in jobs in leisure and hospitality sector, with just over 100,000 in the last 4 years. In construction, which is a key labor sector for Mexican immigrants, job growth has resumed slowly, with around 2,000 new jobs last year.

Table 2

Mexican immigrants employment by industry, 3rd quarter (thousands)

Industry	2009	2010	2011	2012	2013	Change 09-13	Change 12-13
Professional and business services	760	825	851	884	931	172	48
Leisure and hospitality	1,120	1,123	1,006	1,181	1,224	104	43
Financial activities	142	129	122	172	193	51	21
Information	46	59	44	30	37	-10	7
Education and health services	601	624	646	601	607	6	6
Mining	23	34	36	45	48	25	4
Construction	1,147	1,125	1,158	1,181	1,183	36	2
Agriculture, fishing and reforestation	343	370	316	340	333	-10	-8
Other services, excl. government	411	423	402	448	436	24	-12
Transportation and utilities	240	273	268	302	290	50	-12
Public administration	60	72	66	82	64	5	-17
Wholesale and retail trade	723	780	783	740	719	-4	-20
Manufacturing	1,039	932	966	1,008	900	-138	-107

Note: Figures not seasonally adjusted

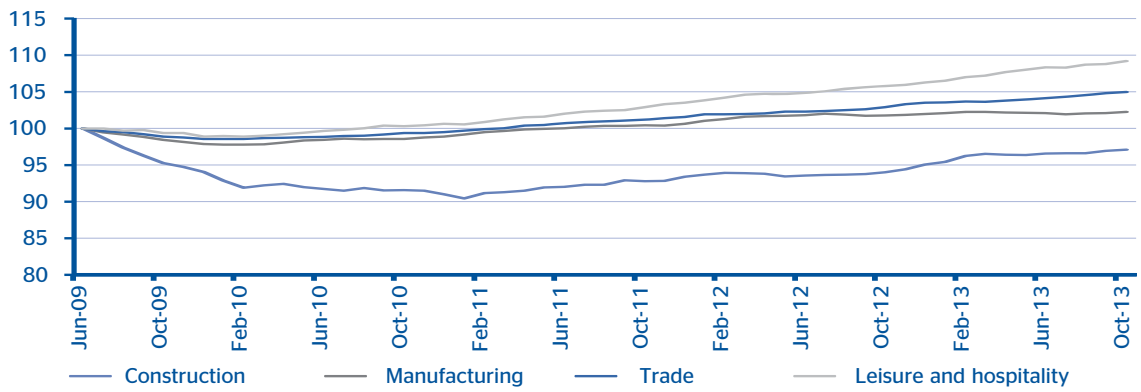
Source: BBVA Research based on Current Population Survey data

The recent recovery of jobs among Mexican immigrants has been driven by improvements in sectors where they are highly concentrated

As seen above, labor conditions for Mexican immigrants have started to improve in recent months. This is largely due to the recovery of jobs in sectors where Mexican immigrants are highly concentrated, such as leisure and hospitality, construction, manufacturing and trade which combined employ nearly 60% of Mexican immigrants in United States. Of these industries, leisure and hospitality has generated the most jobs, creating more than 1.2 million since June 2009 when the economic recession officially ended. The construction and manufacturing sectors have shown steady and stable growth in recent months. If these trends continue, employment is likely to grow further among Mexican immigrants, and consequently remittances to Mexico should also increase.

Chart 6

U.S.: Employment evolution in sectors with a high concentration of Mexican immigrants (June 2009=100)



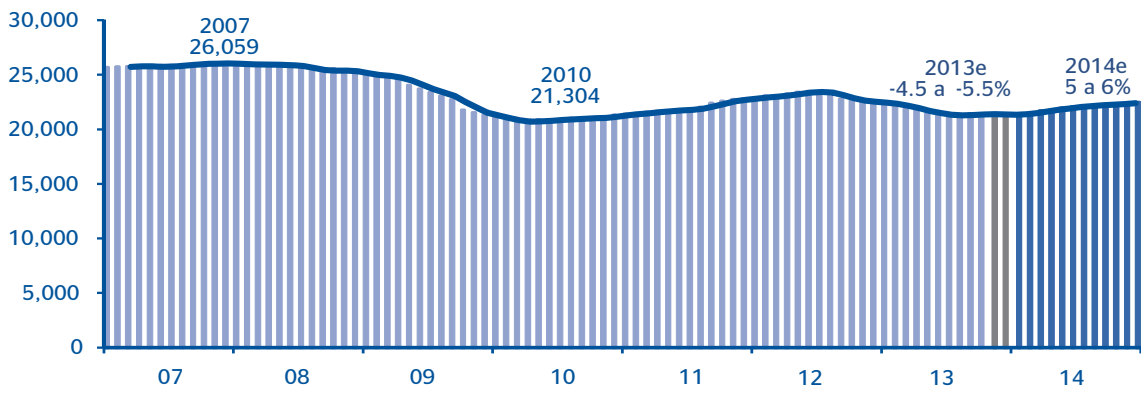
Source: BBVA Research based on Current Population Survey data.

Our remittance forecasts for Mexico in 2013 and 2014

In the first 7 months of the year remittances to Mexico declined month after month against the previous year. The trend began to shift in August 2013, and in September 2013 there was 8% growth over 2012. There was a further increase in October. However, despite this growth the poor figures from the first few months meant that total remittance income received by Mexico in 2013 will be short of the 2012 figure, down by between 4.5% and 5.5%. Bearing in mind the recovery of jobs for Mexican immigrant workers in the U.S., remittance inflow in 2014 should improve, potentially showing growth rates in dollars of between 5% and 6%. This means that remittances of up to 22.6 billion dollars could be received, which is still well short of the more than 26 billion dollars received in 2007.

Chart 7

Accumulated 12-month inflows of remittances to Mexico (Million US dollars)



e: BBVA Research estimate
Source: BBVA Research with Banxico figures

Table 3

Change in remittance inflows to Mexico in US dollars

Year	2013e	2014e
Estimated remittance inflow (millions \$US)	21,204 to 21,429	22,382 to 22,595
Variation range, %	-5.5 to -4.5%	5 to 6%

e: estimated

Source: BBVA Research estimates

Final thoughts

Global remittances in 2013 are expected to grow faster than in 2012. Annual income from remittances is set to grow in most countries, while declines are expected in just 5 countries. Mexico is one of these, meaning its second consecutive year of falls. This is due to the difficulty that Mexican immigrants face in finding employment, since the main sectors that employ Mexican immigrants were stagnant until early 2013. Construction and trade industries have begun to create more jobs in recent months, which have helped Mexican immigrants find work and reduce their unemployment rate to around the U.S. average. However, this will not be enough to prevent remittances to Mexico from declining over the full-year 2013.

BBVA Research estimates that over the course of 2013 Mexico will receive between 4.5% and 5.5% less income from remittances than in 2012, which would bring remittances in the year to 21.429 billion dollars at most. However, the favorable results from some U.S. sectors with high concentrations of Mexican immigrants are likely to continue to improve over the next coming months. Therefore remittance figures should grow over the course of 2014. BBVA Research expects growth of between 5% and 6%, meaning potential remittances of up to 22.6 billion dollars, which is still a long way short of the 26 billion recorded in 2007.

References

Banco de Mexico (2013). Balance of Payments. Income from remittances.

U.S. Bureau of Labor Statistics (2013). Current Population Survey (CPS) 2013.

World Bank (2013), "Migration and Development Briefs 21". Migration and Remittances Team, Development Prospects Group, Development Economics (DEC).

World Bank (2013). Annual Remittances Data.

3. Has there been improvement in economic development in Mexican municipalities with highest migration levels?

In recent studies, there are mainly three approaches to understand the effect of migration on development. The economic aspect studies the behavior of the migrant labor force and their influence, for example, on variables such as consumption, unemployment and wages in the recipient country. The diplomatic approach considers the social relationships originated by interaction between migrants and their environment, for example, threats to national security and political power of minorities in the recipient country. Lastly, the cultural aspect looks at the diversity generated by population mobility in the recipient country and the sustaining of migrants' relationships with their place of origin (Ronald Skeldon, 2008).

In general terms, these approaches and the debate over economic development have focused largely on the migrants' countries of origin, with two main schools of thought. The first argues that migration improves economic development in such countries by reducing unemployment, as greater opportunities emerge for those remaining behind as others emigrate; via remittances that drive up income, consumption and investment; via the skills that migrants often learn in the countries of destination and may be used upon return to their countries of origin. The second view suggests that migration may have adverse effects on the countries of origin, by the loss of labor force and the so-called "brain drain", thus undermining the ability of such countries to develop.

In previous *Mexico Migration Outlook* reports, we pointed out that migration brings both benefits and costs for both the migrants' countries of origin and destination, meaning that the connection between migration and development needs to be examined in both countries. We have widely documented the various ways in which the United States has benefited from Mexican migration, providing an example of how migration can also increase development in countries that receive immigrants.

In the past we have also examined the effects of migration on aspects associated with development in Mexico, such as employment among the working age population and school attendance among children and young people. This article continues our study into the relationship between migration and development in Mexico. To this end, we have examined how migration affected various aspects of development in Mexican municipalities between 2000 and 2010. It uses as its basis the migration intensity index¹, compiled by the Consejo Nacional de Población (National Population Council - Conapo), as well as data from Censuses of 2000 and 2010. Specifically, it aims to look at whether a higher migration level has improved municipalities' economic conditions between 2000 and 2010, and to find out if migration has differentiated effect between more developed and less developed municipalities.

Migration and development, some previous studies on Mexico

Some studies in Mexico have looked at the influence of migration on variables related to development. We detail some of these below.

Alcaraz, Chiquiar and Salcedo (2010) examined the effects of remittances on child labor and school attendance rates among households that receive remittances, within the context of the last economic crisis. They have found that the decline in remittances triggered by the 2008 and 2009 global crisis drove up child labor rates and significantly reduced school attendance.

¹ The migration intensity index is a summarized measurement that helps differentiate states and municipalities based on the intensity of the various types of migratory flows to or from the U.S. and the receipt of remittances.

The effects of remittances on the employment decisions of those with migrant relatives have been studied by Airola (2008) and Hanson (2007), both of whom identified an inverse correlation.

McKenzie and Hildebrandt (2005) found that households in Mexico's rural communities with international migrants showed lower rates of infant mortality and were less likely to face malnutrition, thanks to the improved health education that comes with higher wealth. López-Córdova (2006) also found evidence that remittances reduce infant mortality. Meanwhile, Antman (2013) found that having a child who emigrates to the U.S. increases the probability of elderly parents in Mexico to have poorer health.

Esquivel and Huerta (2007) studied the effects of remittances on poverty and found an inverse correlation. This correlation was also identified by Mora (2007) and Mora (2010), even indicating that migratory tradition in the community reduces inequality in the long term.

Various studies have examined the effects of migration on school attendance and educational attainment. However, there is no conclusive evidence to establish any prevailing correlation, as some found positive effects and others negative. Hanson and Woodruff (2003) identified a positive impact on educational attainment among girls in rural communities who live in households where mothers have low levels of educational attainment. López-Cordova (2006) also identified a positive effect of remittances on literacy rates among children aged 6 to 14, although the impact of remittances on the education of teenagers (over 14 years of age) was negative. Malone (2007) finds that remittances allow for greater investment in education and therefore benefit development.

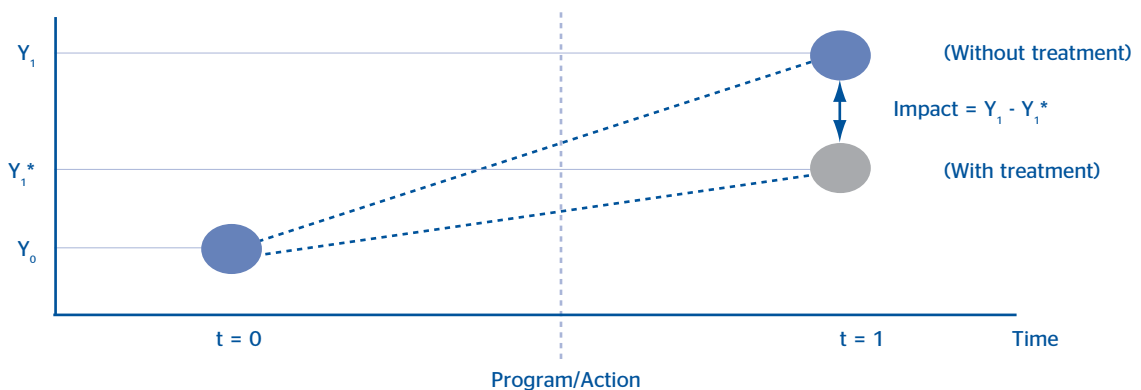
Studies that point to migration having an adverse effect on education include that by Meza and Pederzini (2009), which finds that the migratory tradition of a community negatively affects school attendance and years of schooling for children aged 11 to 15. McKenzie and Rapoport (2006) also identified a negative correlation between years of schooling and school attendance among males aged 12 to 18 and females aged 16 to 18.

Methodology

This article seeks to identify whether migration had positive effects on certain development variables in Mexican municipalities between 2000 and 2010. To this end, it uses the "differences-in-differences" technique, which is commonly employed to evaluate the impact of a *treatment* or action.

Chart 8

Impact evaluation scheme through control and treatment groups



Source: BBVA Research, based on Ravallion (2008)

This method compares the differences observed in certain result variables between two groups with similar characteristics: one that is affected by the action, which is called the treatment group, and a second that is not, called the control group. Three differences are identified, one before the action (t_0), one after (t_1) and the difference between both. The latter indicates the impact that the action or treatment has on the result variable. Chart 8 shows how the effect is estimated.

Using a regression structure, the differences-in-differences model can be expressed as follows:

$$Y_i = \beta_0 + \beta_1 * trat_i + \beta_2 * after_i + \beta_3 * trat_i * after_i + [\bar{\beta}_C^t * \overline{ctrl}_i] + e_i \quad (1)$$

where:

Y_i	Outcome variable for observation i
$trat_i$	Binary variable to indicate treatment for observation i. 1 = treatment, 0 = control
$after_i$	Binary variable to indicate temporality for observation i. 1 = after the treatment, 0 = before the treatment
$\beta_0, \beta_1, \beta_2, \beta_3$	Estimated regression coefficients (see table)
$[\bar{\beta}_C^t * \overline{ctrl}_i]$	Control variables component
$\bar{\beta}_C^t$	Transposed vector of control variable coefficients
\overline{ctrl}_i	Control variable vector for observation i
e_i	Residual for observation i

The interpretation of the coefficients follows from the interaction of the values taken by the binary variables. The following table shows the interpretation of the regression coefficient values.

Table 4
Estimated coefficients using the differences-in-differences method

	Treatment group (T)	Control group (C)	Difference (T - C)
Before (B)	$\beta_0 + \beta_1$	β_0	β_1
After (A)	$\beta_0 + \beta_1 + \beta_2 + \beta_3$	$\beta_0 + \beta_2$	$\beta_1 + \beta_3$
Difference (A - B)	$\beta_2 + \beta_3$	β_2	β_3

Source: BBVA Research

Thus, the coefficient value in the interaction term (β_3) provides the differences-in-differences estimate for the treatment impact.

Changes in development variables of Mexican municipalities from 2000 to 2010, by level of migration intensity

In this section we present various indicators for Mexican municipalities in 2000 and 2010, and we classify them based on their level of migration intensity, using the migration intensity index (IIM) compiled by the Consejo Nacional de Población (National Population Council). The migration intensity index is used to classify the municipalities into 6 levels of migration intensity: very high, high, medium, low, very low and null. As shown in Table 5, for some indicators the municipalities with the highest migration intensity show the greatest improvement, while in others the opposite is true.

Some Mexican municipalities were created between 2000 and 2010. However, not all levels of migration intensity registered an increase in the number of municipalities. As we can see, in the “very low” and “null” levels there were declines, suggesting a general increase in migration intensity in Mexico.

The average population grew significantly over these 10 years, in excess of 50% in the municipalities with “very low” and “null” levels of migration intensity, while it declined in those with “medium” and “high” levels.

The average proportion of the female population tends to be higher in municipalities with “very high” migration intensity, over 52%, but these were also where the fastest declines were recorded between 2000 and 2010, while the “low” migration intensity category showed an increase.

Table 5

Mexican municipality indicators according to levels of migration intensity

		Degree of migration intensity					
		Very high	High	Medium	Low	Very low	Null
Total municipalities	2000	162	330	392	593	873	93
	2010	178	431	514	719	603	11
	% chge. (00-10)	9.9	30.6	31.1	21.2	-30.9	-88.2
Total average municipal population	2000	13,591	19,185	29,757	63,685	44,544	6,813
	2010	13,666	18,833	27,158	63,698	69,509	10,497
	% chge. (00-10)	0.6%	-1.8%	-8.7%	0.0%	56.0%	54.1%
Average municipal female population (% of total)	2000	52.8	51.9	51.4	50.9	51.1	50.2
	2010	52.3	51.7	51.2	51.0	51.2	50.0
	pp chge. (00-10)	-0.5	-0.2	-0.2	0.1	0.0	-0.2
Average municipal illiterate population aged 15 and over (% of total)	2000	15.0	15.0	12.1	6.6	10.0	36.1
	2010	13.4	12.1	10.0	5.8	5.6	25.1
	pp chge. (00-10)	-1.6	-2.9	-2.1	-0.8	-4.3	-10.9
Average municipal employed population (% of active population)	2000	98.9	99.0	98.9	98.6	98.6	99.3
	2010	93.0	94.9	95.7	95.2	95.9	98.8
	pp chge. (00-10)	-5.9	-4.0	-3.2	-3.4	-2.6	-0.5
Occupied housing units with drainage (%)	2000	65.0	64.7	71.9	82.9	78.7	25.2
	2010	80.5	82.3	84.6	92.2	92.1	55.8
	pp chge. (00-10)	15.4	17.6	12.7	9.2	13.4	30.6
Occupied housing units with electricity (%)	2000	94.3	92.7	94.5	96.6	94.3	76.2
	2010	96.4	96.9	96.9	98.3	97.2	90.1
	pp chge. (00-10)	2.2	4.1	2.4	1.7	2.9	13.8
Occupied housing units with piped water (%)	2000	81.5	77.2	81.5	87.9	83.2	60.3
	2010	84.6	81.1	83.8	88.7	89.7	62.9
	pp chge. (00-10)	3.1	4.0	2.3	0.8	6.5	2.6
Occupied housing units with a non-earth floor (%)	2000	83.8	81.4	82.8	90.3	84.8	37.9
	2010	91.7	90.4	90.1	93.9	93.5	78.2
	pp chge. (00-10)	7.9	9.0	7.4	3.7	8.7	40.3
Occupied housing units without goods (%)	2000	4.5	5.6	5.1	2.8	6.5	33.8
	2010	3.9	4.0	4.0	2.2	2.7	32.1
	pp chge. (00-10)	-0.6	-1.6	-1.1	-0.7	-3.8	-1.7

pp chge: Change in percentage points

% chge: Percentage change

Source: BBVA Research with data from the 2000 and 2010 Census

The illiterate population aged 15 or over showed a negative change in all municipalities, but this variation was more significant in municipalities with lower migration; in the “very low” intensity level municipalities there was a 4.3 percentage point reduction, while in the “null” category there was a decline of nearly 11 percentage points between 2000 and 2010.

In the 10-year period analyzed, the proportion of employed people declined in all categories, with the sharpest drop coming in municipalities with the highest migration intensity. In the “high” migration intensity degree there was a decrease of 4 percentage points, while in the “very high” intensity level the decline was close to 6 percentage points.

Additionally, the changes between 2000 and 2010 in housing indicators were reviewed, some of which are included in the marginalization index compiled by Conapo. These are: i) drainage, ii) electricity, iii) piped water, iv) non-earth floors, and v) occupied housing without goods.

- i) Homes with drainage show a positive change in all municipalities, the largest increase coming in municipalities with “null” intensity and the lowest increase coming in “low” intensity municipalities.
- ii) Homes with electricity showed a positive change, similar to that for drainage, in all municipalities, with the largest increase coming in municipalities with “null” degree and the lowest increase coming from “low” intensity municipalities.
- iii) Homes with piped water showed a positive change in all municipalities, with the largest increase coming in municipalities with “very low” migration intensity and the lowest increase coming from “low” intensity municipalities.
- iv) Occupied homes with non-earth floors showed a positive change in all municipalities, similar to drainage and electricity, with the largest increase from municipalities with “null” intensity and the lowest increase coming in “low” intensity municipalities.
- v) Occupied homes with no goods showed a positive change, similar to that for drainage, electricity and homes with non-earth floors, with the greatest increase coming in municipalities with “null” intensity and the lowest increase coming in “low” and “very low” intensity municipalities.

Therefore, no clear trend has been observed to indicate whether the municipalities exposed to migration show higher or better development conditions than those less exposed to migration, nor can the effect of migration on the changes seen in the results be inferred. The analysis in the following section explains how much influence could migration have on these changes.

Effects of migration on economic development variables in Mexico

This section presents the results of the estimates of migration’s impact on various development indicators in Mexican municipalities. In this case the treatment group is made up of municipalities with “high” or “very high” migration intensity, while those with “low” or “very low” migration intensity are the control group. In order to make the samples even more comparable, the municipalities were separated into two groups: 1) with high or very high levels of marginalization, and 2) with low or very low levels of marginalization. Also, both effects are estimated separately in an attempt to see whether municipalities with greater marginalization tend to improve to a greater or lesser extent than those with less marginalization as a result of migration.

The indicators used in the analysis are included in the Conapo marginalization index, namely the lack of goods, services or conditions; the results with a negative sign indicate an improvement in socioeconomic conditions. Two regressions are used, one in which equation (1) is estimated and another in which other control variables are added

As can be seen in Table 6, when municipalities are highly marginalized the only indicator that migration seems to improve is the level of overcrowded homes. However, there seemed to be adverse effects in the percentage of homes without electricity, the percentage of those living in homes with earth floors and the employed population with income of two minimum wages or below. Thus, migration generally seems to be negative in such communities and for these marginalization indicators.

In municipalities with lower levels of marginalization, an adverse effect is only found in the level of overcrowding. However, there are positive impacts including a reduction in the percentage of the population aged 15 or over without completed primary education, the percentage of people living in homes without drainage or toilets, the percentage of homes without electricity and the percentage of people living in homes with earth floors. Therefore, migration generally seems to have a positive impact on the most developed municipalities.

According to these results, migration generally seems to have adverse effects on more marginalized migrant communities and positive effects on the economic development of more developed municipalities. Unfortunately, out of the municipalities with “high” or “very high” migration intensities, those with low or very low levels of marginalization in 2010 represented just 3.4% of the total, while those with high or very high levels of marginalization represented nearly 9% in the same year. Thus, on average those benefiting represent about a third of those that are not being benefited by migration. One factor that could undermine the anticipated effect of migration is education, as seen in the following article of this edition of *Mexico Migration Outlook*.

Table 6

Average impact of migration on municipal development indicators

	High or very high degree of marginalization				Low or very low degree of marginalization			
	R1		R2		R1		R2	
	coef	t	coef	t	coef	t	coef	t
% of illiterate population aged 15 and over	1.0672	0.86	0.6358	0.99	-0.6361	-1.61	-0.2058	-0.84
% of population without completed primary education aged 15 and over	1.6232	1.41	0.2462	0.51	-3.7281	-3.55 ***	-3.3486	-6.16 ***
% of occupants of homes without drainage or toilet	-2.0261	-1.04	-2.8289	-1.5	-2.5521	-4.49 ***	-2.3740	-4.88 ***
% of occupants of homes without electricity	3.7915	2.33 **	1.7148	1.42	-0.6900	-2.32 **	-0.9526	-3.5 ***
% of occupants of homes without piped water	2.1278	0.75	2.2461	0.98	-1.0706	-0.92	-1.2564	-1.18
% of homes with some level of overcrowding	-0.6952	-0.54	-0.7904	-2.4 **	1.8059	1.29	2.0660	2.1 **
% of occupants of homes with earth floor	10.0566	4.1 ***	8.3876	4.57 ***	-1.0541	-1.47	-1.0596	-1.9 *
% of working population with income up to 2 minimum wages	2.8417	2.64 ***	1.1598	1.28	-0.0132	-0.01	0.2744	0.25

Control variables in R2: Average level of schooling, marginalization index, population log, percentage of employed population, percentage of economically active population, percentage of female population, percentage of rural population

Treatment group: municipalities with high or very high migration intensity

Control group: municipalities with low or very low migration intensity

*** Statistically significant at a level of 1% or less; ** Statistically significant at a level of 5% or less; * Statistically significant at a level of 10% or less

Source: BBVA Research with data from the 2000 and 2010 Censuses

Conclusions

Current literature accepts that there is a link between migration and development. For migrants' countries of origin there are two main schools of thought, one arguing that migration has positive effects on development via the remittances that migrants send-back home, the skills that migrants acquire in their countries of destination and the reduction of unemployment in their countries of origin, as a result of emigrants leaving the labor force. The second view is that migration can have adverse effects on the countries of origin, by the loss of labor force and the so-called "brain drain", hindering the ability of the countries of origin to develop.

A number of studies have been conducted in Mexico looking at specific indicators such as education, poverty, health and others. Some identify positive effects of migration on these indicators, while others distinguish adverse impacts. There is therefore no consensus over which of the two prevails. The goal of this study is to offer further information, and it therefore seeks to assess what impact migration has on municipalities with the highest levels of marginalization and those that are more developed.

The results show that migration seems to have had adverse effects on the most marginalized migrant communities and positive effects on the economic development of more developed municipalities between 2000 and 2010. Given that among all municipalities with high levels of migration, the more developed ones represent one third of all less developed municipalities, we may infer that for each municipality that benefits from migration there are on average three that are impaired as a result of migration. One factor that may have an impact on these results is the educational attainment level in municipalities with high migration intensity. As the following article shows, on average these communities have the lowest educational attainment levels in Mexico.

References:

- Airola, Jim (2008), "Labor Supply in Response to Remittance Income: The Case of Mexico", *The Journal of Developing Areas* Vol. 41, No. 2.
- Alcaraz, Carlo, Daniel Chiquiar and Alejandrina Salcedo (2010), "Remittances, Schooling, and Child Labor in Mexico", Working Paper 2010-14. Bank of Mexico.
- Antman, F. (2013) "How Does International Migration Affect the Health of Elderly Parents Left Behind? Evidence from Mexico", Working Paper.
- Esquivel, G., and A. Huerta-Pineda (2007) "Remittances and Poverty in Mexico: A Propensity Score Matching Approach", *Integration and Trade Journal* 27 (July-December): 45-71.
- Hanson, Gordon (2007), "Emigration, Remittances, and Labor Force Participation in Mexico", INTAL-ITD, Working Paper, No. 28.
- Hanson, Gordon H. and Woodruff, Christopher (2003). "Emigration and Educational Attainment in Mexico." Working Paper.
- López Córdova, E., (2006). "Globalization, Migration, and Development: The Role of Mexican Migrant Remittances". Washington, D.C., Inter-American Development Bank.
- Malone, L. (2007). "Migrants' Remittances and Investments in Children's Human Capital: The Role of Asymmetric Preferences in Mexico", *Mapping Global Inequalities*, Center for Global, International and Regional Studies, UC Santa Cruz
- McKenzie, David and Hildebrandt, Nicole (2005). "The Effects of Migration on Child Health in Mexico." *Economy* 6 (1): 257-289.
- McKenzie, David and Rapoport, Hillel (2006). "Can Migration Reduce Educational Attainment? Evidence from Mexico." *The World Bank Policy Research Working Paper*, 3952.

Meza, Liliana González and Carla Pederzini Villareal (2009). "Migration, remittances and schooling decisions in rural households in Mexico". Institute of Research on Sustainable Development and Social Equity. Universidad Iberoamericana.

Mora, Rivera J., (2007). "Essays on Migration and Development in Rural Mexico", Doctorate thesis, Mexico, El Colegio de México.

Mora, Rivera J., (2010). "Rural development and migration" in: "Series: Mexico's big problems", Volume XI Rural economy / Antonio Yúnez Naude, coordinator, El Colegio de México.

Skeldon, Ronald (2008), "International Migration as a Tool in Development Policy: A Passing Phase?" Population and Development Review.

4. What is the relationship between migration and education in Mexican municipalities?

Education is considered a key factor for economic development, as human capital makes people more productive and is needed to support technological change in terms of innovation and through adoption of existing knowledge (Canton and Blom, 2004). Education helps to improve quality of life for individuals by generating future benefits, such as better health, higher salaries and increased mobility opportunities. There are also positive effects at the local level, such as bringing down crime rates and unemployment.

As with education, migration has been considered a key factor for economic development. The relationship between both variables is of great relevance, as in communities with high emigration rates education can boost the potential positive effects of migration. Nonetheless, little study has been done on this relationship. This *Mexico Migration Outlook* article seeks to help illustrate how migration and education in Mexico are related. To this purpose, we compare a number of education indicators in Mexican municipalities according to their level of migration intensity.

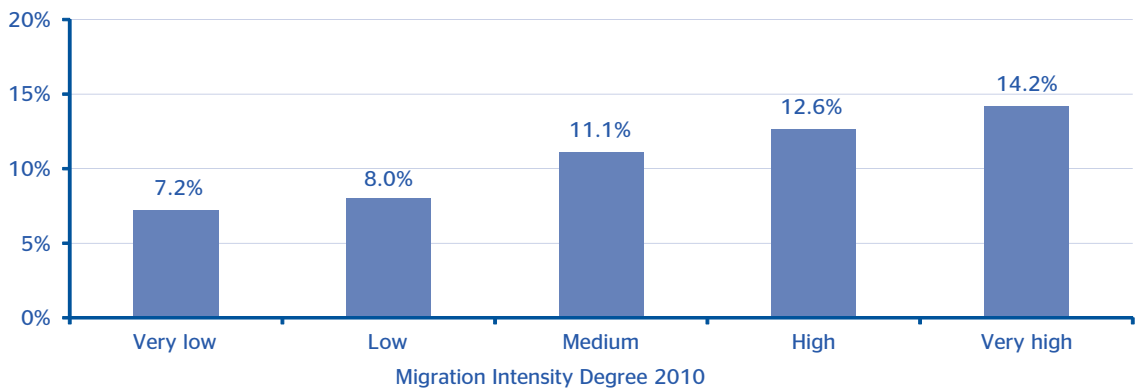
The main source of information used is the 2010 Population and Housing Census, together with the Mexico-United States migration intensity index, compiled by the National Population Council (Consejo Nacional de Población, Conapo), and data on sociodemographic characteristics of the population in 2,416 Mexican municipalities. This study includes municipalities for which complete data is available for each indicator used.

1) Level of education and migration intensity

In Mexico there is a direct relationship between the proportion of people without schooling and the migration intensity level of municipalities, as shown in chart 9, although this does not imply any causality. In municipalities with “very high” migration intensity, the percentage of people without schooling is nearly twice the figure than in municipalities with “very low” migration intensity.

Chart 9

Percentage of the population without schooling in Mexican municipalities, according to migration intensity level, 2010

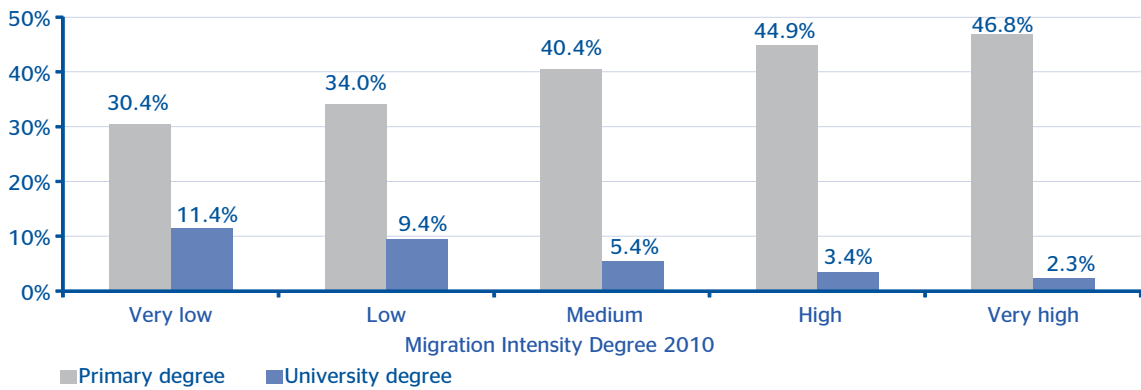


Source: Self elaboration using CONAPO estimates, based on INEGI

In general, the proportion of people holding university degrees as their highest level of education decreases as the level of migration intensity increases, while the proportion of people with primary schooling as their highest level of education tends to increase in line with migration intensity. This can be seen in chart 10.

Chart 10

Percentage of the population with primary schooling and university degrees as maximum levels of education, in Mexican municipalities, according to migration intensity degree, 2010

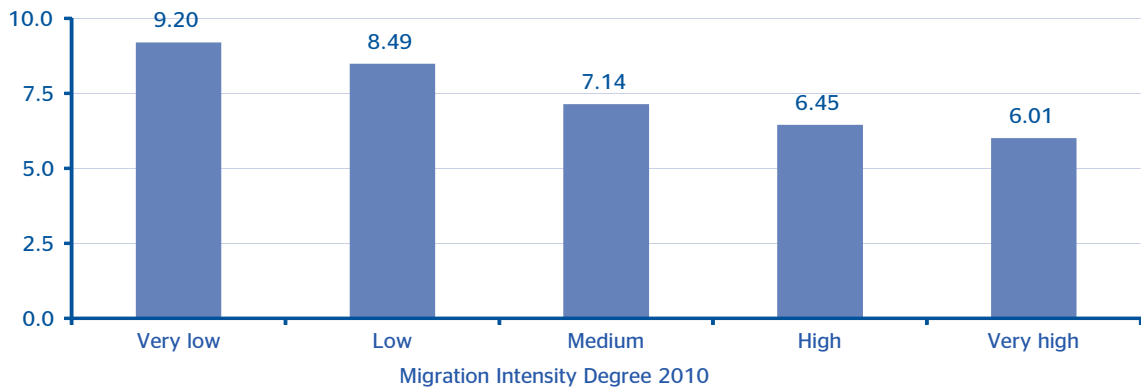


Source: Self elaboration using CONAPO estimates, based on INEGI

As chart 11 shows, the average years of schooling are lower in those municipalities with the highest migration intensity. Where migration intensity is “high”, average schooling stands at 6.45 years, while in “very high” migration areas average schooling stands at 6.01, both of which are below the national average of 8.38, according to 2010 census data.

Chart 11

Average schooling in Mexican municipalities, according to levels of migration intensity, 2010



Source: Self elaboration using CONAPO estimates, based on INEGI

In total, these results show that municipalities with high levels of migration tend to lag behind in terms of education. It is important to see if there are any differences between the population groups. The following section therefore looks at age groups and gender groups.

2) Education by age and gender

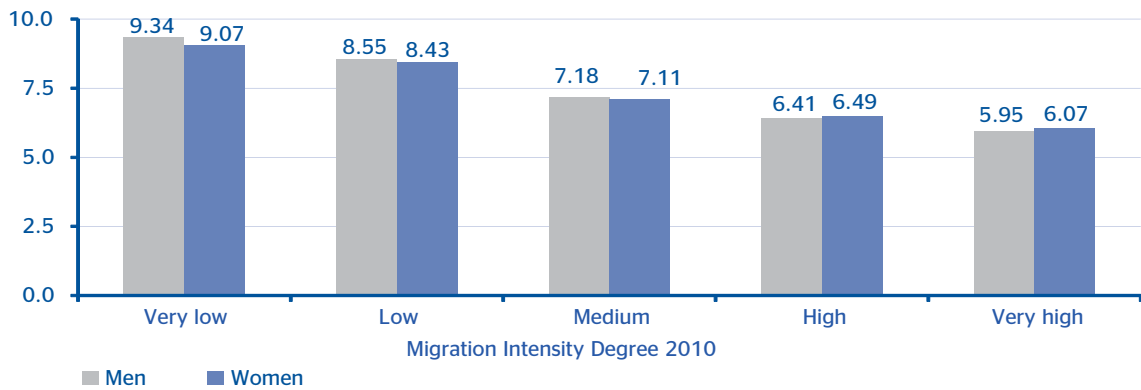
According to current literature, households face two important decisions when allocating funds to education. First, they choose whether to send their children to school or to work. Among poorer households the choice tends to be based on which is less costly and brings more income in the short term. It also depends of the age and gender of the individual; the older the children the more likely they are to join the labor market. In the same approach, while men, on average, earn higher wages than women, which may undermine the appeal of continuing their education.

Second, the individual chooses between a private school or a public school, and in most households this decision depends largely on budget limitations that might prevent access to private education.

One interesting result is shown in chart 12. In communities with less migration, men tend to have higher levels of education than women and vice-versa, while in communities with more migration women tend to have the highest level of education. However, women in municipalities with high migration intensity have on average lower levels of education than those in municipalities with low migration intensity.

Chart 12

Average years of schooling by gender in Mexican municipalities, according to levels of migratory intensity, 2010

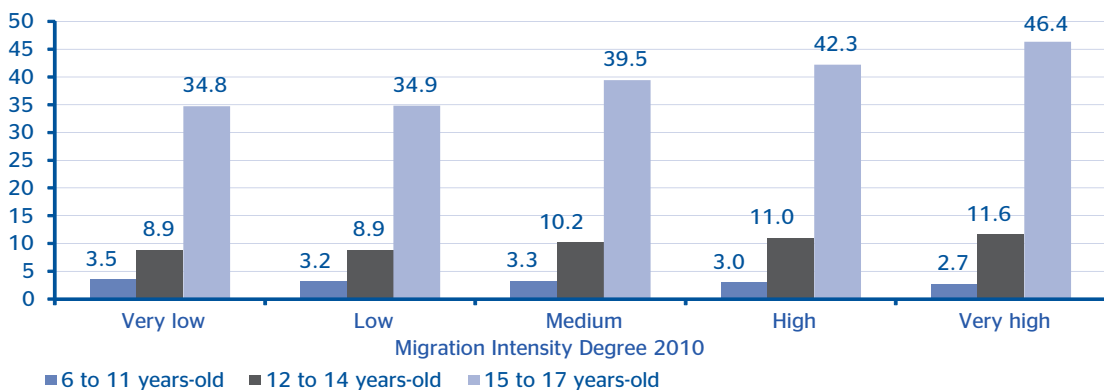


Source: Self elaboration using CONAPO estimates, based on INEGI

As can be seen in chart 13, Mexico’s school drop-out problem begins between the ages of 12 and 14 (the age at which junior-high education usually begins) and mainly in municipalities most exposed to emigration. These drop-out problems are more severe between the ages of 15 and 17, when 46% of children in “very high” migration intensity municipalities do not attend school, i.e. nearly one out of every two.

Chart 13

Percentage of the population that does NOT attend school, by age groups, in Mexican municipalities according to the level of migration intensity, 2010



Source: Self elaboration using CONAPO estimates, based on INEGI

What factors might explain the lower levels of education in Mexican communities with higher migration intensity? Why, in contrast with the general trend in the country, is the average schooling among men lower than among women in communities with the highest rates of emigration? The following section seeks an answer to these questions.

3) Factors explaining the levels of education in migrant communities

This section attempts to explain the factors that may directly affect the levels of education in municipalities with high levels of emigration to the United States. The following factors are worth noting:

- The opportunity cost of attending school: employment.
- The intergenerational pattern.
- Emigration of the most highly qualified individuals.

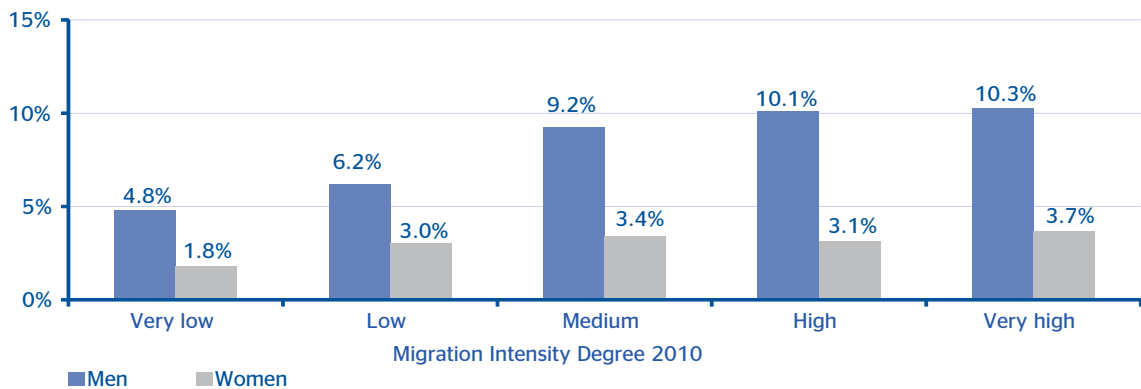
A. The opportunity cost of attending school: employment

According to chart 14, the proportion of individuals aged 12 to 14 who work increases in line with the level of migration intensity, while this increase is greater among men than among women. In this case, 1 out of every 10 men works in municipalities with “high” or “very high” migration intensity.

Chart 15 shows how the proportion of the working population aged 15 to 17 years also increases as the level of migration intensity increases. Approximately 1 out of every 3 men in municipalities with “medium”, “high” and “very high” migration intensities works, while 1 out of every 10 women in municipalities with “low” and “very low” migration intensities works.

Chart 14

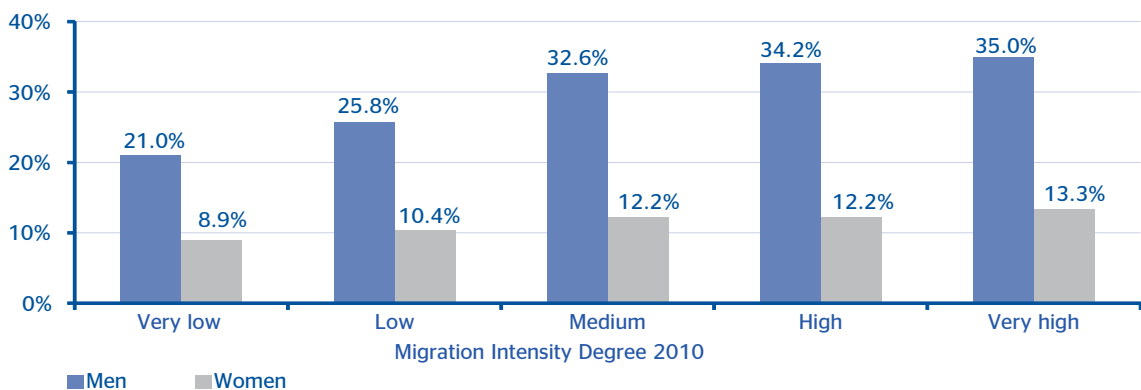
Percentage of the population aged 12 to 14 in Mexican municipalities who work, according to migration intensity degree, 2010



Source: Self elaboration using CONAPO estimates, based on INEGI

Chart 15

Percentage of the population aged 15 to 17 who work in Mexican municipalities, according to migration intensity degree, 2010

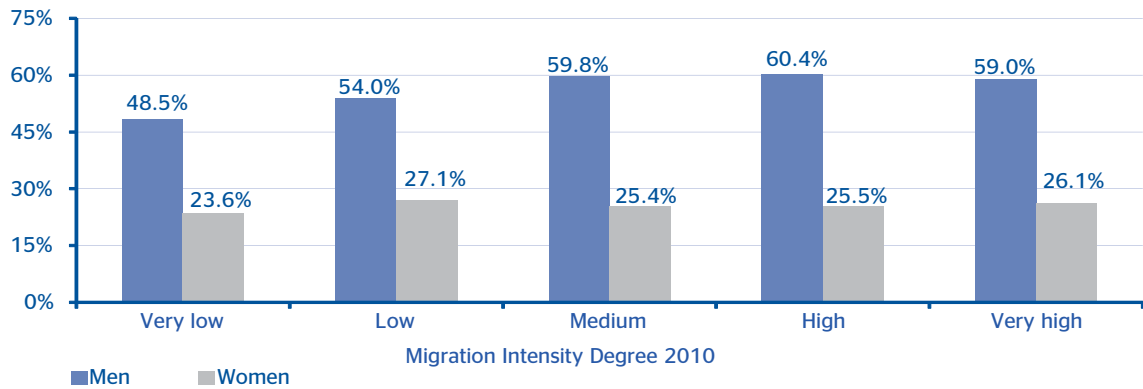


Source: Self elaboration using CONAPO estimates, based on INEGI

Chart 16 shows how the proportion of the working population aged 18 to 20 increases as the level of migration increases. Approximately 1 out of every 2 men and 1 out of every 4 women work. The hypothesis regarding the opportunity cost of studying can be seen most clearly in this age range, as at 18 years old people reach legal age and moving into the labor market is a latent possibility for Mexicans.

Chart 16

Percentage of the population aged 18 to 20 who work in Mexican municipalities, according to migration intensity degree, 2010



Source: Self elaboration using CONAPO estimates, based on INEGI

Therefore, one factor that seems to drive down the levels of education in communities with higher migration levels is that a higher proportion of people in those communities leave school to get work, which may be associated with a lack of income. The fact that school absenteeism is higher among men than women in municipalities with higher migration levels seems to largely be down to the fact that they join the labor market at an earlier age, possibly because when the father of a family emigrates, it is the male children who are expected to take over his work duties.

B. The intergenerational pattern

The home is the first source of knowledge, both social and academic. The better educated and most qualified individuals have the greatest opportunity to choose what path they would like to take in life. For example, at least four subjective benefits of higher levels of education can be identified: a sense of self-improvement, enjoyment of learning, entertainment and the pleasure of addressing challenges (Chacón and Peña, 2012). The level of education achieved by children in a given household will largely depend on the level of education of the household heads.

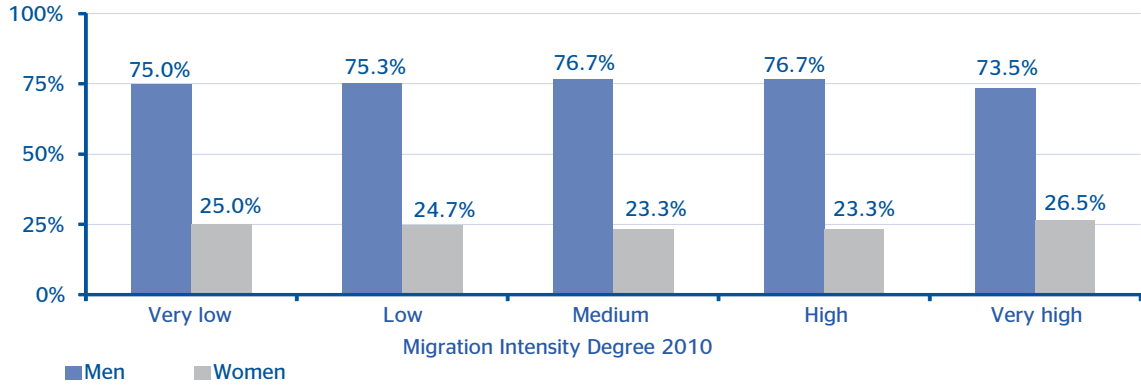
First, chart 17 shows that the percentage of women who are heads of household increases in the “very high” migration intensity areas. This may be because in those municipalities it is mainly men who emigrate, while women tend to stay at home and take care of the family.

Chart 18 shows that the proportion of heads of household with up to junior-high school education reduces in line with the level of migration intensity, while the proportion for children in the family increases. Charts 19 and 20 show a high correlation between the proportions of those who are the heads of household and children in the family who have reached up to high school or university education, respectively.

Although the education levels among children seems to increase in relation to that of the heads of household, there is in fact a high correlation between the levels of education in both groups, which seems to suggest that the level of education attained by the heads of households may have an influence on the level of education that their children will reach, meaning an intergenerational influence on education levels. Thus, those born in communities with high migration intensity seem to be more likely to have lower levels of education than those who are born in communities where migration rates are lower.

Chart 17

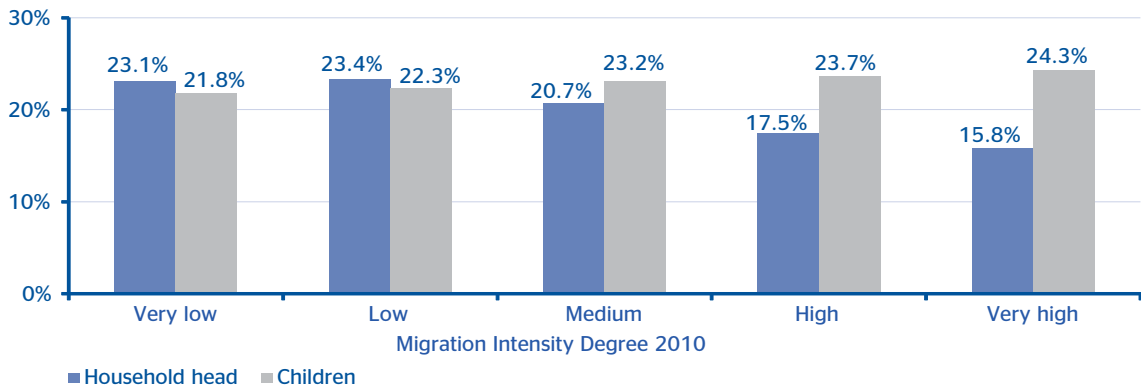
Percentage of the population that is head of household in Mexican municipalities, according to migration intensity, 2010



Source: Self elaboration using CONAPO estimates, based on INEGI

Chart 18

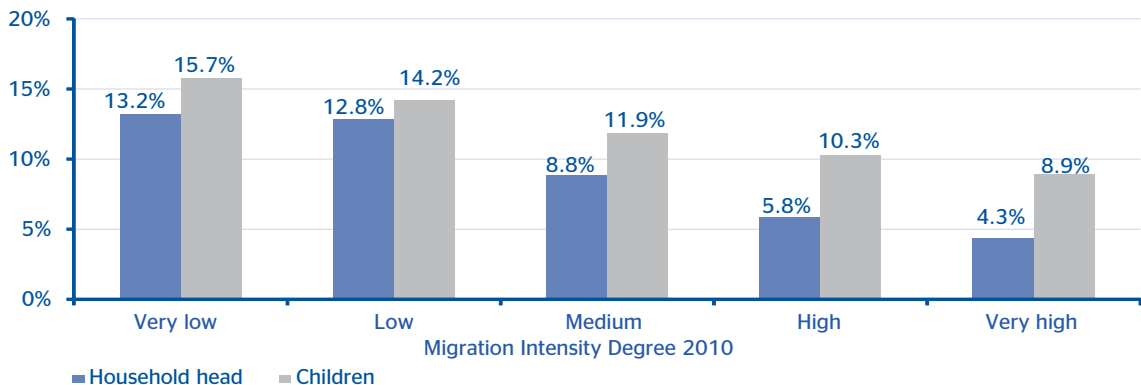
Percentage of the population with junior-high school as maximum level of education in Mexican municipalities, according to migration intensity, 2010



Note: The figures for heads of household and children are not comparable, given the ages of the children
Source: Self elaboration using CONAPO estimates, based on INEGI

Chart 19

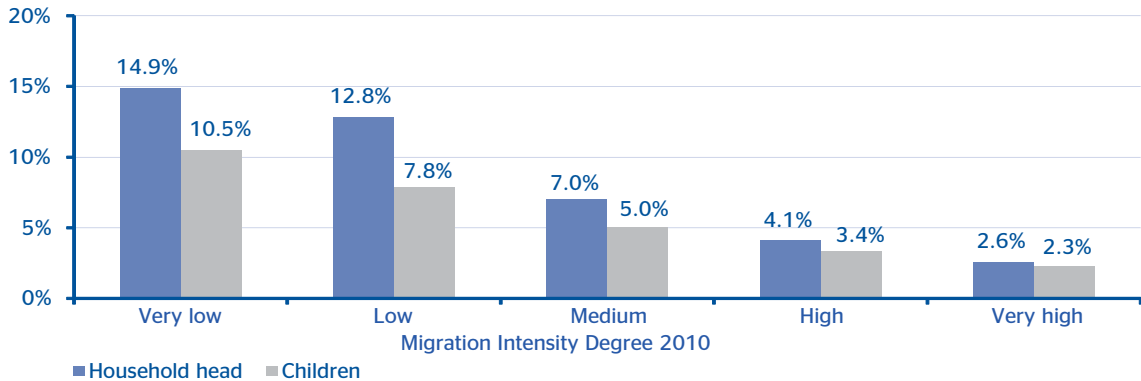
Percentage of the population with high-school studies in Mexican municipalities, according to migration intensity, 2010



Note: the figures for heads of household and children are not comparable, given the ages of the children
Source: Self elaboration using CONAPO estimates, based on INEGI

Chart 20

Percentage of the population with university education in Mexican municipalities, according to migration intensity, 2010



Note: the figures for heads of household and children are not comparable, given the ages of the children
Source: Self elaboration using CONAPO estimates, based on INEGI

C. Emigration of the most highly qualified individuals

According to 2010 census figures, the average level of schooling in Mexico was 8.38 years, while Mexican immigrants in the U.S. had an average level of schooling in the same year of 9.59 years.¹ As shown above, average schooling levels in municipalities with higher migration intensity and, generally, where emigration is lower, stands below the national average.

Table 7

Average years of schooling, 2010

Mexico	Mexican immigrants in the U.S.	In municipalities with "very low" migration intensity	In municipalities with "very high" migration intensities
8.38	9.59	9.20	6.01

Source: Self elaboration using CONAPO estimates, based on INEGI and CPS data

If Mexicans immigrants living in the U.S. have higher schooling levels than the national average and they mainly come from communities with levels of schooling below the national average, we can infer that those with the highest levels of education generally have a greater propensity to emigrate to the United States.

The above situation could affect average schooling levels in these communities and the quality of the human capital there. As a result, communities with high levels of emigration are unable to capitalize on the positive effects of migration because the population that remains behind are poorly educated, while those with higher levels of education generally have a greater propensity to emigrate in search of better opportunities.

Conclusions and recommendations

Traditionally, migration has been considered a positive aspect for economic development in the communities that migrants originate from. The effect of migration may be improved or undermined by education, which helps individuals develop skills that allow for greater generation of income. This article seeks to show empirical evidence of this effect in municipalities with high migration intensity in Mexico.

The results show that municipalities with higher migration intensity tend to lag behind in terms of education, with the population having the lowest number of years of schooling in the country. In contrast with the national figures, where average schooling levels are higher for men, in Mexican communities

¹ BBVA Research estimates based on the weighted average of the *Educational attainment* variable from the Current Population Survey 2010.

most exposed to emigration women on average have higher levels of education, although these are lower on average compared with women in other Mexican regions with low migration intensity.

The low levels of schooling in communities with higher migration intensity in Mexico seems to be a result of the higher rates of school drop-out seen in these areas, mainly among men and starting at the age of 12, as they make the transition to junior-high school. The lack of opportunities seems to be one of the main factors that drive people in those municipalities to drop out of school and start working, a situation that is most common among young men. This may be because quite often when the father emigrates, male children are expected to take over his employment duties in Mexico.

A further aspect that may have an influence on the low levels of education in municipalities with higher migration intensity is the “intergenerational education transfer” from parents to children; in general terms children whose parents have higher levels of education have higher educational aspirations than children with parents who have low levels of education (Chacón and Peña, 2012). This analysis shows that the heads of household in communities with higher migration intensity also have the lowest levels of schooling in Mexico, and there is a strong correlation between the education levels of parents and their children. Thus, those born in communities with high migration intensity seem to be more likely to have lower levels of education than those who are born in communities where migration rates are lower.

The level of schooling of those in Mexico is below the average of Mexicans immigrants in the United States. Given that most of those living in the U.S. come from Mexican communities with higher migration intensity, and these tend to have the lowest levels of schooling, we can infer that there is a greater propensity to emigrate among higher qualified individuals. This could have an impact on the human capital that remains behind, and therefore the potential benefits of migration may be undermined. Therefore, it is important to create educational policies aimed at those Mexican municipalities with higher migration intensity and at the school-age population. Such policies should include transfer mechanisms conditional on school attendance to ensure that young people do not discontinue their education because they need to work. It is also important that children and young people in such communities be provided with both social and academic information beyond that which they can get at home, and schools and education centers are excellent sources of such information.

In this way, conditional cash transfers on staying in school can achieve two goals at once: on the one hand they improve the individual’s human capital, and on the other they reduce the incentives to emigrate with low levels of schooling. Compensation mechanisms for education can be beneficial at an early age. For example, a scholarship based on performance can offer young people the resources they need to continue their studies, increase their purchasing power and reduce the opportunity cost of attending school. On the other hand, it is difficult to establish mechanisms to improve the education levels achieved by heads of households. However, both conditional transfers and demand compensation should have an impact on the education level of the current generation, thus leading to a generational interdependence with higher schooling levels in the future.

This is important for both migrants and those who remain behind in municipalities with high migration intensity, because economic development in communities that generate migrants can be driven or hindered by schooling levels in those communities. Therefore, it is important that assistance and benefit programs focus on the school-age population and on municipalities with high migration intensity, to allow optimization of the positive impacts of migration and improve the economic conditions of those who live there.

References:

Canton, Erik and Andreas Blom (2004), "Can Student Loans Improve Accessibility to Higher Education and Student Performance?" World Bank Policy Research Working Paper 3425.

Chacón, Armando and Pablo Peña (2012), "Changing stories. What individuals, companies and not-profit organizations can do for education in Mexico" FCE.

Chiquiar, Daniel and Gordon H. Hanson (2005), "International Migration, Self-Selection, and the Distribution of Wages: Evidence from Mexico and the United States". Journal of Political Economy.

Hanson, Gordon H. and Christopher Woodruff (2003), "Emigration and Educational Attainment in Mexico" NBER.

INEGI, 2010 Population and Housing Census.

López Córdova, Ernesto (2004), "Globalization, Migration and Development: The Role of Mexican Migrant Remittances" Inter-American Development Bank.

5. Statistical Appendix

Table 8

International immigrants (Millions)

	Total					Women					Men				
	1990	1995	2000	2005	2010	1990	1995	2000	2005	2010	1990	1995	2000	2005	2010
World	155.5	166.0	178.5	195.2	213.9	76.4	81.8	88.3	96.1	104.8	79.1	84.2	90.2	99.2	109.1
By type of country of destiny															
Developed countries	82.4	94.1	104.4	117.2	127.7	42.8	48.7	54.1	60.5	65.7	39.6	45.5	50.3	56.7	62.0
Developing countries	73.2	71.8	74.1	78.1	86.2	33.6	33.1	34.2	35.6	39.1	39.6	38.7	39.9	42.5	47.2
By region of destiny															
North America	27.8	33.6	40.4	45.6	50.0	14.2	17.1	20.4	23.0	25.1	13.6	16.5	20.0	22.6	25.0
Lat. Am & the Caribbean	7.1	6.2	6.5	6.9	7.5	3.5	3.1	3.2	3.4	3.7	3.6	3.1	3.2	3.4	3.7
Europe	49.4	54.7	57.6	64.4	69.8	26.0	28.7	30.4	33.8	36.5	23.4	26.0	27.2	30.6	33.3
Africa	16.0	17.9	17.1	17.7	19.3	7.4	8.4	8.0	8.3	9.0	8.6	9.5	9.1	9.4	10.3
Asia	50.9	48.8	51.9	55.1	61.3	23.1	22.1	23.7	24.8	27.3	27.8	26.7	28.2	30.3	34.0
Oceania	4.4	4.7	5.0	5.5	6.0	2.1	2.4	2.5	2.8	3.1	2.2	2.4	2.5	2.7	2.9

Source: BBVA Research with figures from United Nations Population Division

Annual inflow of remittances (Billions of dollars)

	1995	2000	2005	2006	2007	2008	2009	2010e	2011p	2012p	2013p	2014p
World	98.6	131.4	276.9	320.9	393.9	457.2	428.5	453.1	500.6	533.0	571.0	615.0
Developed countries	44.7	51.8	90.0	99.5	115.8	133.2	120.2	120.9	128.4	134.0	141.0	148.0
Developing countries	53.9	79.6	186.9	221.4	278.1	324.0	308.3	332.1	372.2	399.0	430.0	467.0
East Asia and Pacific	8.9	16.7	48.7	55.8	71.4	84.8	86.3	95.4	107.5	115.0	125.0	135.0
South Asia	10.0	17.2	33.9	42.5	54.0	71.6	75.1	82.2	97.2	104.0	113.0	122.0
Lat. America and the Caribbean	13.3	20.2	49.8	58.9	63.0	64.4	56.8	57.2	61.7	66.0	72.0	77.0
Europe and Central Asia	6.5	9.2	19.7	24.9	38.7	45.3	36.4	36.6	41.2	45.0	49.0	55.0
Middle East and North Africa	12.1	11.5	25.1	26.5	32.1	36.0	33.6	40.2	42.4	45.0	47.0	50.0
Sub-Saharan Africa	3.1	4.8	9.7	12.8	18.8	21.7	20.1	20.5	22.2	24.0	25.0	27.0

e: WorldBank estimates

p: WorldBank forecast

Source: BBVA Research with figures from WorldBank.

Immigration to the United States (Millions)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Total population	276.5	282.1	285.9	288.3	291.2	293.8	296.8	299.1	301.5	304.3	306.1	308.8	311.1
Immigrants	31.8	34.4	35.7	36.7	37.4	37.9	39.5	39.6	38.9	39.9	40.5	42.2	42.6
By sex													
Men	15.9	17.3	17.9	18.4	18.9	19.1	19.9	19.9	19.4	20.0	20.1	20.7	20.8
Women	15.9	17.1	17.8	18.3	18.5	18.8	19.6	19.7	19.5	19.9	20.4	21.5	21.8
By age group													
Under 15	2.4	2.5	2.4	2.5	2.6	2.4	2.5	2.4	2.1	2.2	2.0	2.0	1.9
Between 15 and 64	26.0	28.5	29.5	30.4	30.9	31.4	32.8	32.7	32.2	32.9	33.4	35.0	35.3
Over 64	3.4	3.4	3.8	3.8	3.9	4.1	4.2	4.5	4.6	4.8	5.1	5.2	5.4
By region of origin													
Latin America & the Caribbean	15.5	17.5	18.4	18.9	19.4	19.7	20.7	20.5	20.3	20.9	21.0	21.5	21.5
Asia and Oceania	8.1	8.8	9.2	9.5	9.8	10.1	10.6	10.9	10.9	11.0	11.4	12.5	12.6
Europe	5.3	5.4	5.4	5.6	5.4	5.2	5.5	5.6	5.4	5.5	5.6	5.5	5.4
África	0.9	0.8	0.8	0.8	0.9	1.2	1.2	1.5	1.5	1.7	1.6	1.8	1.8
Canada	1.0	0.9	0.9	0.8	0.8	0.8	0.9	0.8	0.7	0.8	0.8	0.9	0.8
Not specified	1.0	1.0	1.0	1.1	1.1	0.9	0.6	0.3	0.1	0.0	0.1	0.0	0.2

Source: BBVA Research estimates from Current Population Survey (CPS).

Table 9

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

	2010		2011			2012				2013		
	IV	I	II	III	IV	I	II	III	IV	I	II	III
Total population*												
Pop. 16 years old & over	238,712	238,852	239,316	239,871	240,431	242,436	242,968	243,564	244,169	244,828	245,363	245,961
Civilian labor force	153,823	153,291	153,466	153,702	154,017	154,629	154,866	154,899	155,469	155,402	155,577	155,614
Employed	139,146	139,456	139,564	139,848	140,660	141,883	142,228	142,463	143,303	143,367	143,845	144,253
Unemployed	14,677	13,835	13,902	13,854	13,356	12,747	12,638	12,437	12,166	12,035	11,732	11,362
Labor force participation rate	64.4	64.2	64.1	64.1	64.1	63.8	63.7	63.6	63.7	63.5	63.4	63.3
Unemployment rate	9.5	9.0	9.1	9.0	8.7	8.2	8.2	8.0	7.8	7.7	7.5	7.3
Hispanics*												
Pop. 16 years old & over	34,101	34,078	34,311	34,555	34,806	36,383	36,627	36,881	37,145	37,168	37,395	37,630
Civilian labor force	22,907	22,591	22,746	22,944	23,319	24,122	24,467	24,428	24,551	24,496	24,743	24,936
Employed	19,984	19,952	20,073	20,353	20,707	21,594	21,828	21,955	22,139	22,179	22,498	22,628
Unemployed	2,923	2,639	2,673	2,590	2,612	2,528	2,640	2,472	2,413	2,318	2,245	2,308
Labor force participation rate	67.2	66.3	66.3	66.4	67.0	66.3	66.8	66.2	66.1	65.9	66.2	66.3
Unemployment rate	12.8	11.7	11.8	11.3	11.2	10.5	10.8	10.1	9.8	9.5	9.1	9.3
Hispanics												
Pop. 16 years old & over	34,101	34,078	34,311	34,555	34,806	36,383	36,627	36,881	37,145	37,168	37,395	37,630
Civilian labor force	22,890	22,557	22,733	23,008	23,292	24,075	24,472	24,496	24,523	24,418	24,774	24,995
Employed	20,016	19,729	20,163	20,459	20,724	21,368	21,928	22,066	22,148	21,954	22,618	22,723
Unemployed	2,874	2,829	2,570	2,549	2,568	2,707	2,543	2,430	2,375	2,464	2,156	2,273
Labor force participation rate	67.1	66.2	66.3	66.6	66.9	66.2	66.8	66.4	66.0	65.7	66.2	66.4
Unemployment rate	12.6	12.5	11.3	11.1	11.0	11.2	10.4	9.9	9.7	10.1	8.7	9.1
Mexicans												
Pop. 16 years old & over	21,433	21,249	21,315	21,731	21,780	22,585	22,667	22,622	22,992	23,121	23,246	23,257
Civilian labor force	14,462	14,117	14,149	14,524	14,651	15,026	15,178	15,107	15,204	15,190	15,428	15,449
Employed	12,632	12,285	12,558	12,935	13,011	13,258	13,576	13,626	13,746	13,633	14,099	14,055
Unemployed	1,831	1,832	1,591	1,589	1,639	1,768	1,602	1,481	1,457	1,557	1,330	1,394
Labor force participation rate	67.5	66.4	66.4	66.8	67.3	66.5	67.0	66.8	66.1	65.7	66.4	66.4
Unemployment rate	12.7	13.0	11.2	10.9	11.2	11.8	10.6	9.8	9.6	10.3	8.6	9.0
U.S.-born Mexicans												
Pop. 16 years old & over	10,374	10,339	10,498	10,574	10,741	11,514	11,745	11,653	11,765	11,990	12,211	12,162
Civilian labor force	6,628	6,518	6,727	6,843	6,897	7,359	7,637	7,592	7,565	7,622	7,873	7,948
Employed	5,698	5,615	5,864	5,946	6,000	6,430	6,729	6,714	6,773	6,804	7,077	7,061
Unemployed	930	903	863	897	897	929	908	878	792	818	796	887
Labor force participation rate	63.9	63.0	64.1	64.7	64.2	63.9	65.0	65.2	64.3	63.6	64.5	65.4
Unemployment rate	14.0	13.9	12.8	13.1	13.0	12.6	11.9	11.6	10.5	10.7	10.1	11.2
Mexican immigrants												
Pop. 16 years old & over	11,059	10,910	10,817	11,157	11,039	11,071	10,922	10,969	11,227	11,131	11,035	11,095
Civilian labor force	7,834	7,599	7,422	7,681	7,754	7,667	7,541	7,515	7,639	7,568	7,555	7,501
Employed	6,934	6,670	6,694	6,989	7,011	6,828	6,847	6,912	6,973	6,829	7,022	6,994
Unemployed	900	929	728	692	743	839	694	603	666	739	533	507
Labor force participation rate	70.8	69.7	68.6	68.8	70.2	69.3	69.0	68.5	68.0	68.0	68.5	67.6
Unemployment rate	11.5	12.2	9.8	9.0	9.6	10.9	9.2	8.0	8.7	9.8	7.1	6.8

* Seasonally Adjusted.

Source: BBVA Research with figures from Bureau of Labor Statistics and estimations from Current Population Survey (CPS), 2006-2013

Table 10

Mexican Immigrants in the United States

	1995	2000	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Total Mexicans in the U.S. (Millions)	n.d.	n.d.	26.5	26.9	27.8	28.6	29.5	30.6	31.9	32.5	33.0	34.0	34.7
Mexican immigrants	7.0	8.1	10.2	10.7	11.1	11.1	11.8	11.8	11.9	11.9	11.6	11.9	11.8
2nd & 3rd generation	n.d.	n.d.	16.3	16.1	16.8	17.5	17.7	18.7	20.0	20.6	21.3	22.2	22.9
Demographic characteristics of Mexican immigrants													
Sex (%)	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
Men	55.6	53.9	55.1	55.2	55.5	55.2	56.0	55.5	55.0	55.1	53.9	53.6	52.5
Women	44.4	46.1	44.9	44.8	44.5	44.8	44.0	44.5	45.0	44.9	46.1	46.5	47.5
Age groups (%)	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	10.4	9.4	8.6	8.6	8.6	7.7	7.3	6.6	6.1	5.5	5.3	4.4	3.5
From 15 to 29 years old	36.5	32.6	31.9	32.3	31.4	30.2	28.6	27.9	25.8	25.0	24.3	21.9	21.8
From 30 to 44 years old	33.4	36.1	37.5	37.4	36.9	37.4	38.1	37.9	38.0	38.7	37.6	38.5	39.1
From 45 to 64 years old	15.2	17.3	17.5	17.3	18.6	20.1	20.8	22.1	24.2	25.0	26.6	28.8	28.5
From 65 years or over	4.6	4.6	4.6	4.5	4.5	4.7	5.2	5.5	5.9	5.9	6.3	6.4	7.1
Average age (years)	32.7	33.8	34.3	34.2	34.5	35.2	35.9	36.6	37.6	38.0	38.6	39.6	40.1
State of residence (%)	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
California	51.99	47.8	39.3	38.3	42.1	39.5	39.5	40.2	39.7	39.9	38.2	37.3	35.6
Texas	21.89	19.0	23.0	21.4	20.3	19.4	19.2	19.5	20.3	20.0	22.5	21.6	22.3
Illinois	5.51	5.8	6.5	5.5	5.5	4.7	5.3	5.2	5.4	5.4	5.6	6.1	6.1
Arizona	5.38	5.3	6.0	6.2	5.5	6.4	5.7	5.9	5.0	5.1	5.0	5.4	5.6
North Carolina	0.53	1.4	1.6	2.6	2.0	2.5	2.2	1.9	1.7	2.2	2.0	1.9	2.8
Colorado	0.8	2.3	2.5	2.3	2.2	2.4	2.0	2.2	1.6	1.7	1.8	1.6	2.0
Nevada	1.29	2.0	1.8	1.6	1.9	1.8	1.9	2.0	1.6	1.7	1.9	1.8	1.9
Florida	2.1	2.4	2.2	2.0	2.4	2.8	3.3	2.5	2.1	2.1	2.0	1.8	1.9
Georgia	0.92	0.7	1.5	2.0	2.2	2.8	2.5	2.1	2.3	2.1	2.0	2.0	1.9
New York	1.11	1.8	1.8	1.7	1.1	1.9	2.0	1.7	1.8	1.8	1.8	2.2	1.9
Washington	0.56	1.4	1.5	1.9	1.0	1.0	1.4	1.4	1.5	1.9	1.8	2.2	1.8
Oregon	1.2	1.4	1.6	1.4	1.0	1.1	1.3	1.5	1.3	1.3	0.7	1.1	1.2
New Jersey	0.44	0.4	0.6	1.0	0.8	1.2	0.8	1.8	1.3	1.6	1.8	1.2	1.1
Other states	6.28	8.3	10.1	11.9	12.1	12.5	13.0	12.3	14.5	13.4	12.9	13.9	13.7
Period of entry (%)	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	24.0	17.3	13.5	12.3	11.8	10.6	10.3	10.6	10.7	10.3	9.7	8.9	9.6
From 1975 to 1985	33.5	24.4	20.9	19.0	16.6	17.0	15.9	15.9	15.7	15.3	15.3	15.5	14.5
From 1986 to 1995	42.4	39.2	35.8	30.2	29.7	28.9	28.3	27.4	26.6	27.4	27.1	26.4	24.8
From 1996 to 2007	n.a.	19.1	29.9	38.5	41.9	43.6	45.5	44.0	44.2	42.8	43.0	43.3	44.0
2008 onwards	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	2.1	2.9	4.2	4.9	5.8	7.1

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	1995	2000	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Mobility condition in the last year (%)													
Non-migrants	100.0	91.6	92.3	93.2	89.6	93.1	94.9	95.5	95.6	96.3	97.2	96.6	96.8
Internal migrants ¹	0.0	4.9	5.0	4.4	5.4	4.5	3.4	3.0	3.2	2.8	1.9	2.6	2.5
International migrants ²	0.0	3.6	2.7	2.4	5.0	2.5	1.8	1.5	1.2	1.0	1.0	0.9	0.8
Social characteristic of the Mexican immigrants													
Education³													
Less than 10 grades	61.4	56.2	54.1	52.8	52.5	51.0	49.5	50.0	49.2	46.0	47.0	47.0	44.9
From 10 to 12 grades	25.7	29.9	31.4	32.9	33.0	34.3	35.3	35.0	35.2	37.2	36.8	37.0	37.8
Higher technical	8.9	9.6	9.0	9.1	9.2	9.3	9.3	9.4	9.7	9.9	10.3	9.9	10.9
Professional & postgraduate	4.0	4.3	5.5	5.3	5.3	5.4	5.9	5.6	5.9	6.9	5.9	6.1	6.5
Citizenship in the U.S. (%)													
U.S. citizen	14.6	22.6	21.8	21.4	20.4	21.3	21.5	22.7	24.1	25.8	27.0	27.9	27.0
Non - U.S. citizen	85.4	77.4	78.2	78.7	79.7	78.7	78.5	77.3	75.9	74.2	73.0	72.1	73.0
Poverty condition⁴ (%)													
Poor	35.6	25.7	25.4	25.7	26.2	25.7	22.1	24.8	27.1	28.8	29.9	27.7	28.4
Not poor	64.4	74.3	74.6	74.3	73.8	74.3	77.9	75.2	73.0	71.3	70.2	72.3	71.6
Type of health coverage (%)													
Public	16.6	12.8	13.1	13.1	14.6	14.3	13.0	14.1	15.0	16.7	16.0	16.8	17.1
Private	27.2	30.5	30.8	29.0	28.7	28.6	27.0	28.5	28.5	25.5	27.4	26.6	26.8
Both	2.7	1.9	2.0	1.6	2.4	2.1	2.3	2.0	2.3	2.4	2.4	2.5	3.2
None	53.6	54.8	54.2	56.3	54.3	55.1	57.7	55.4	54.2	55.4	54.3	54.1	52.9
Labor characteristics of Mexican immigrants (%)													
Population 15 years old or over (Millions)													
Economically-active pop.	4.2	5.0	6.5	6.7	7.0	7.2	7.7	7.6	7.7	7.7	7.6	7.8	7.7
Employed	3.7	4.6	5.8	6.2	6.5	6.8	7.2	7.0	6.7	6.8	6.7	7.0	7.0
Unemployed	0.5	0.4	0.6	0.5	0.4	0.4	0.4	0.6	1.0	1.0	0.9	0.8	0.7
Economically-inactive pop.	2.0	2.3	2.9	3.1	3.2	3.1	3.3	3.4	3.5	3.5	3.5	3.5	3.7
Weekly hours worked (%)													
34 or less	15.7	10.3	12.5	11.3	11.9	10.8	11.7	12.4	16.4	20.2	19.7	18.7	19.1
From 35 to 44 hours	69.2	75.7	74.0	75.1	74.3	74.6	74.2	74.8	71.0	68.6	70.0	69.1	67.6
45 or more	15.2	14.0	13.5	13.6	13.8	14.6	14.1	12.8	12.6	11.1	10.4	12.2	13.3

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	1995	2000	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Annual wage (U.S. dollars) (%)	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	35.2	22.6	15.9	15.3	14.2	13.7	11.7	11.7	13.0	13.7	13.0	11.9	11.3
From 10 000 to 19 999	41.9	44.0	40.0	41.3	39.7	37.2	34.5	32.5	30.6	34.1	32.8	30.6	31.4
From 20 000 to 29 999	14.2	19.4	24.0	23.0	23.9	26.1	27.1	27.4	26.3	24.6	26.0	26.7	25.2
From 30 000 to 39 999	4.6	7.4	10.6	11.0	11.2	11.9	13.6	13.2	14.2	13.4	13.5	14.4	14.7
From 40 000 or more	4.2	6.6	9.6	9.4	11.0	11.1	13.1	15.1	15.8	14.2	14.7	16.4	17.3
Sector of activity (%)	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	11.7	12.1	4.4	5.0	5.7	4.2	4.0	5.2	5.2	5.5	4.7	4.9	4.8
Secondary	35.3	36.6	35.8	36.1	37.0	39.6	40.6	37.2	33.2	30.9	32.4	31.8	30.6
Tertiary	53.0	51.2	59.8	58.9	57.3	56.2	55.4	57.7	61.7	63.6	62.8	63.3	64.6
Industry (%)	n.a.	n.a.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Leisure and hospitality	n.a.	n.a.	16.6	15.3	14.9	16.3	14.4	14.9	16.8	16.6	15.1	16.8	17.6
Construction	n.a.	n.a.	15.9	19.3	20.9	22.6	24.7	21.5	17.2	16.6	17.4	16.8	17.0
Professional and business services	n.a.	n.a.	9.4	11.2	11.1	10.3	10.0	11.0	11.4	12.2	12.8	12.6	13.4
Manufacturing	n.a.	n.a.	19.4	16.6	15.8	16.8	15.6	15.2	15.6	13.8	14.5	14.4	12.9
Wholesale and retail trade	n.a.	n.a.	12.2	12.5	11.6	10.6	11.2	11.0	10.9	11.5	11.8	10.5	10.3
Educational and health services	n.a.	n.a.	7.0	6.7	6.3	6.8	7.0	7.6	9.0	9.2	9.7	8.6	8.7
Other services, excl. government	n.a.	n.a.	6.1	6.5	6.6	5.3	5.7	5.9	6.2	6.2	6.0	6.4	6.3
Agriculture, forestry, fishing, and hunting	n.a.	n.a.	4.4	5.0	5.7	4.2	4.0	5.2	5.2	5.5	4.7	4.9	4.8
Transportation and utilities	n.a.	n.a.	3.5	3.1	3.1	3.1	3.4	3.6	3.6	4.0	4.0	4.3	4.2
Financial activities	n.a.	n.a.	3.0	2.4	2.5	2.6	2.3	2.2	2.1	1.9	1.8	2.5	2.8
Public administration	n.a.	n.a.	1.0	0.7	0.6	0.8	0.9	0.8	0.9	1.1	1.0	1.2	0.9
Mining	n.a.	n.a.	0.4	0.2	0.3	0.3	0.3	0.5	0.3	0.5	0.5	0.6	0.7
Information	n.a.	n.a.	0.9	0.6	0.7	0.4	0.5	0.6	0.7	0.9	0.7	0.4	0.5

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. For more information, refer to <http://www.census.gov/hhes/povmeas/>.

n.a.: not available.

Source: BBVA Research with CONAPO estimations based on the Census Bureau, Current Population Survey (CPS), March 1994-2007 and BBVA Research estimations from Current Population Survey (CPS), March 1995-2013.

Table 11

**Remittances' average total cost for sending US\$200 dollars to top 10 receiving-remittances countries worldwide
 (Cost as % of amount sent)**

Global ranking *	Country	Estimated remittances inflow in 2012 * (Million of US\$)	2009								
			2008	Q1	Q3	Q1	Q3	Q1	Q3	Q1	Q3 p/
1	India	69,349.9	7.7	7.6	7.5	8.2	7.8	7.8	8.7	8.6	8.6
2	China	60,245.5	13.6	13.0	12.1	11.0	12.3	12.3	12.1	12.3	12.3
3	Philippines	24,453.1	7.4	6.8	5.7	6.2	6.1	6.2	7.0	6.5	6.5
4	Mexico	23,219.0	6.8	5.8	7.4	7.1	6.9	6.0	5.8	5.6	5.6
5	Nigeria	20,568.3	8.2	9.8	8.1	8.0	9.0	10.8	11.2	10.9	10.9
6	Egypt	20,515.3	5.4	6.2	5.0	4.0	4.0	4.2	4.3	4.3	4.3
7	France	19,450.8	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
8	Bangladesh	14,060.1	4.8	5.1	4.6	4.4	4.1	4.0	4.4	4.4	4.4
9	Pakistan	14,010.1	8.0	6.3	4.9	7.0	7.8	7.2	6.0	5.9	5.9
10	Germany	13,655.2	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

Table 12

**Remittances' average total cost for sending US\$200 dollars to top 10 receiving-remittances countries in Latin America and
 the Caribbean (Cost as % of amount sent)**

Global ranking *	Country	Estimated remittances inflow in 2012 * (Million of US\$)	2009								
			2008	Q1	Q3	Q1	Q3	Q1	Q3	Q1	Q3 p/
4	Mexico	23,219.0	5.8	6.8	5.8	7.4	7.1	6.9	6.0	5.8	5.6
25	Brazil	4,935.5	8.8	9.3	8.5	13.7	10.4	9.9	12.8	10.7	12.5
26	Guatemala	4,922.4	6.6	5.8	6.4	6.3	5.8	6.0	5.4	5.7	6.0
29	Colombia	4,109.8	6.7	6.0	5.9	6.9	5.6	4.8	6.6	7.3	7.3
30	El Salvador	3,965.3	4.6	4.1	4.1	4.6	5.0	5.2	4.7	5.3	5.3
35	Dominican Rep.	3,505.2	9.8	7.6	7.8	6.9	6.4	6.0	5.9	6.2	7.4
37	Honduras	2,971.4	4.7	6.0	5.8	4.4	6.7	6.4	5.1	5.7	7.7
39	Peru	2,808.5	10.1	8.2	5.1	4.6	4.5	4.5	5.3	6.4	5.8
42	Ecuador	2,681.5	5.3	5.4	4.3	4.7	5.1	4.6	4.6	5.1	4.6
45	Jamaica	2,157.7	10.6	11.2	9.7	8.9	9.2	8.5	8.8	8.9	8.1

p/ preliminary figures

* According to World Bank estimations

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 based on World Bank Remittance Prices Worldwide (RPW) and World Bank staff calculation.

Table 13

Remittance fee for sending US\$300 from the United States to Mexico (in dollars)

	Chicago	Dallas	Houston	Indianapolis	Los Angeles	Miami	New York	Sacramento	San Jose	Average
2000	11.8	11.9	11.6		11.7	15.6	11.3	10.3		12.0
2001	11.4	11.1	11.1		11.1	14.6	11.1	10.5	11.5	11.5
2002	11.3	11.6	12.0		11.6	11.7	11.2	10.7	11.3	11.4
2003	10.4	10.8	10.8	10.6	10.4	11.0	10.9	10.3	10.3	10.6
2004	10.0	11.1	10.8	10.0	9.9	10.7	10.5	9.6	9.7	10.3
2005	9.5	11.7	11.2	10.0	10.0	10.1	10.0	9.2	9.7	10.1
2006	9.4	11.6	11.5	10.0	10.2	10.2	10.2	8.9	10.1	10.2
2007	9.1	10.9	11.5	10.0	9.5	9.7	9.5	7.6	9.6	9.7
2008	8.0	9.9	11.0	10.0	8.6	8.7	8.1	6.8	8.2	8.8
2009	7.0	9.0	10.4	9.4	7.5	7.4	7.5	5.9	7.4	8.0
2010	5.7	8.0	10.0	8.6	5.9	5.5	6.7	4.9	6.4	6.9
2011	6.5	8.9	10.7	9.5	7.5	7.1	7.9	7.0	7.3	8.0
2012	6.3	9.1	10.8	9.7	7.9	7.6	7.8	7.6	7.6	8.3
2013 p/	6.3	8.8	10.5	10.3	7.8	7.7	7.7	7.7	7.7	8.3

p/ 2013 preliminary figures updated on November 2013.

Source: BBVA Research estimations based on PROFECO weekly database

Table 14

Annual Remittance Inflows at the National Level

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013 p/
Million dollars										
Total	18,331.7	21,688.3	25,566.8	26,058.8	25,145.0	21,306.3	21,303.9	22,803.0	22,438.3	16,248.3
Electronic transfers	16,228.5	19,667.2	23,854.0	24,802.7	24,113.7	20,547.5	20,583.3	22,228.9	21,857.6	15,908.8
Cash and payment in kind	233.6	273.2	353.2	396.5	432.6	372.6	330.9	367.3	385.9	207.6
Money Orders	1,869.7	1,747.9	1,359.7	859.7	598.6	386.2	389.7	206.8	194.8	131.9
Personal checks	-	-	-	-	-	-	-	-	-	-
Thousands of transactions										
Total	57,013.4	64,921.7	74,184.6	75,651.5	72,627.7	67,109.6	67,535.6	69,860.9	71,611.3	55,210.3
Electronic transfers	52,087.9	60,509.4	70,697.7	73,278.7	70,478.0	65,381.4	65,930.0	68,553.1	70,350.5	54,455.1
Cash and payment in kind	322.7	345.4	642.3	786.9	796.3	861.8	789.4	880.5	867.5	499.9
Money Orders	4,602.8	4,066.9	2,844.6	1,585.9	1,353.3	866.4	816.1	427.3	393.3	255.3
Personal checks	-	-	-	-	-	-	-	-	-	-
Average remittance (dollars)	321.0	333.7	344.2	344.2	345.5	317.5	314.9	326.0	312.5	294.2

Table 15

Annual Remittance Inflows by State (Million Dollars)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013 p/
National	18,331.7	21,688.3	25,566.8	26,058.8	25,145.0	21,306.3	21,303.9	22,803.0	22,438.3	16,248.3
Michoacán	2,281.4	2,442.4	2,503.7	2,435.8	2,448.9	2,132.3	2,144.5	2,245.1	2,209.4	1,614.3
Guanajuato	1,728.0	1,904.8	2,311.2	2,389.0	2,317.7	1,944.9	1,981.3	2,155.8	2,138.3	1,553.8
Jalisco	1,462.2	1,695.7	1,975.5	1,996.7	1,914.8	1,695.1	1,755.6	1,895.8	1,883.5	1,347.7
State of Mexico	1,445.8	1,764.9	2,079.1	2,167.0	2,066.7	1,700.8	1,637.6	1,658.4	1,563.8	1,095.6
Puebla	1,009.1	1,182.1	1,482.6	1,617.6	1,615.7	1,374.9	1,371.2	1,469.6	1,403.2	1,052.4
Oaxaca	948.9	1,080.2	1,360.2	1,517.4	1,522.2	1,298.5	1,296.5	1,427.4	1,366.2	949.8
Guerrero	1,018.3	1,174.6	1,455.7	1,489.6	1,435.5	1,200.3	1,201.5	1,262.4	1,231.0	905.9
Veracruz	1,168.1	1,373.5	1,680.8	1,775.7	1,618.3	1,296.3	1,237.4	1,273.1	1,176.0	813.4
Distrito Federal	921.7	1,312.6	1,490.4	1,058.6	1,083.9	965.9	999.3	1,151.9	1,013.6	563.7
San Luis Potosí	469.2	562.3	714.5	778.4	760.8	626.8	629.5	700.8	738.7	552.1
Hidalgo	725.6	815.0	982.8	1,092.2	961.0	752.1	715.5	762.7	721.5	506.2
Zacatecas	484.6	540.5	667.7	687.4	681.6	573.3	581.7	625.5	654.5	506.0
Tamaulipas	284.1	425.3	496.7	516.7	500.5	415.0	402.3	445.3	485.5	443.9
Chiapas	587.5	765.3	940.8	921.2	811.1	609.7	574.5	594.8	572.7	407.2
Baja California	165.0	256.6	302.1	334.6	334.3	322.1	348.0	396.8	464.9	403.4
Morelos	433.2	505.2	588.0	635.4	622.6	548.1	554.9	586.8	561.3	399.4
Sinaloa	374.0	451.1	503.2	523.0	487.7	456.7	470.2	511.8	501.2	363.8
Chihuahua	279.4	389.2	473.9	460.2	474.8	407.8	397.8	419.3	466.8	341.5
Durango	329.7	384.3	428.5	453.1	442.0	374.8	379.1	416.6	431.1	324.7
Querétaro	353.4	405.9	484.1	475.1	436.4	360.2	354.5	383.3	378.6	274.9
Nuevo León	295.9	284.0	342.6	327.1	323.8	293.0	284.0	308.9	340.0	256.2
Nayarit	262.4	302.7	348.2	375.2	376.5	341.6	337.4	356.4	339.5	247.2
Sonora	170.4	294.7	326.0	332.3	311.0	278.7	292.0	326.9	326.8	247.0
Aguascalientes	314.8	322.6	379.4	373.0	332.3	282.2	293.9	306.3	332.7	234.6
Coahuila	180.0	240.8	275.3	293.2	278.4	234.2	234.0	247.0	283.5	211.5
Tlaxcala	185.1	221.1	270.7	303.3	305.2	258.9	258.5	274.5	253.2	172.4
Colima	134.3	165.1	183.1	199.7	184.7	164.8	171.5	183.8	180.2	132.2
Yucatán	75.7	94.1	122.1	136.8	136.1	109.9	112.7	117.8	119.2	93.2
Tabasco	105.3	156.5	187.8	182.8	156.0	114.4	111.3	111.7	111.3	84.9
Quintana Roo	67.5	85.0	99.5	98.5	97.3	85.6	86.8	92.1	93.3	75.9
Campeche	53.3	65.7	82.0	80.4	72.8	55.8	55.1	57.8	55.6	42.4
Baja California Sur	17.8	24.5	28.5	32.0	34.7	31.9	33.7	36.7	41.4	31.1

p/ Preliminary figures accumulated to 2013 Q3
 Source: BBVA Research with figures from Banxico

Table 16

Annual Remittance Inflows at the National Level (Breakdown %)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013 p/
Million dollars										
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Electronic transfers	88.5	90.7	93.3	95.2	95.9	96.4	96.6	97.5	97.4	97.9
Cash and payment in kind	1.3	1.3	1.4	1.5	1.7	1.7	1.6	1.6	1.7	1.3
Money Orders	10.2	8.1	5.3	3.3	2.4	1.8	1.8	0.9	0.9	0.8
Personal checks	-	-	-	-	-	-	-	-	-	-
Thousands of transactions										
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Electronic transfers	91.4	93.2	95.3	96.9	97.0	97.4	97.6	98.1	98.2	98.6
Cash and payment in kind	0.6	0.5	0.9	1.0	1.1	1.3	1.2	1.3	1.2	0.9
Money Orders	8.1	6.3	3.8	2.1	1.9	1.3	1.2	0.6	0.5	0.5
Personal checks	-	-	-	-	-	-	-	-	-	-

Table 17

Annual Remittance Inflows by State (Breakdown %)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013 p/
National	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Michoacán	12.4	11.3	9.8	9.3	9.7	10.0	10.1	9.8	9.8	9.9
Guanajuato	9.4	8.8	9.0	9.2	9.2	9.1	9.3	9.5	9.5	9.6
Jalisco	8.0	7.8	7.7	7.7	7.6	8.0	8.2	8.3	8.4	8.3
State of Mexico	7.9	8.1	8.1	8.3	8.2	8.0	7.7	7.3	7.0	6.7
Puebla	5.5	5.5	5.8	6.2	6.4	6.5	6.4	6.4	6.3	6.5
Oaxaca	5.2	5.0	5.3	5.8	6.1	6.1	6.1	6.3	6.1	5.8
Guerrero	5.6	5.4	5.7	5.7	5.7	5.6	5.6	5.5	5.5	5.6
Veracruz	6.4	6.3	6.6	6.8	6.4	6.1	5.8	5.6	5.2	5.0
Distrito Federal	5.0	6.1	5.8	4.1	4.3	4.5	4.7	5.1	4.5	3.5
San Luis Potosí	2.6	2.6	2.8	3.0	3.0	2.9	3.0	3.1	3.3	3.4
Hidalgo	4.0	3.8	3.8	4.2	3.8	3.5	3.4	3.3	3.2	3.1
Zacatecas	2.6	2.5	2.6	2.6	2.7	2.7	2.7	2.7	2.9	3.1
Tamaulipas	1.5	2.0	1.9	2.0	2.0	1.9	1.9	2.0	2.2	2.7
Chiapas	3.2	3.5	3.7	3.5	3.2	2.9	2.7	2.6	2.6	2.5
Baja California	0.9	1.2	1.2	1.3	1.3	1.5	1.6	1.7	2.1	2.5
Morelos	2.4	2.3	2.3	2.4	2.5	2.6	2.6	2.6	2.5	2.5
Sinaloa	2.0	2.1	2.0	2.0	1.9	2.1	2.2	2.2	2.2	2.2
Chihuahua	1.5	1.8	1.9	1.8	1.9	1.9	1.9	1.8	2.1	2.1
Durango	1.8	1.8	1.7	1.7	1.8	1.8	1.8	1.8	1.9	2.0
Querétaro	1.9	1.9	1.9	1.8	1.7	1.7	1.7	1.7	1.7	1.7
Nuevo León	1.6	1.3	1.3	1.3	1.3	1.4	1.3	1.4	1.5	1.6
Nayarit	1.4	1.4	1.4	1.4	1.5	1.6	1.6	1.6	1.5	1.5
Sonora	0.9	1.4	1.3	1.3	1.2	1.3	1.4	1.4	1.5	1.5
Aguascalientes	1.7	1.5	1.5	1.4	1.3	1.3	1.4	1.3	1.5	1.4
Coahuila	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.3
Tlaxcala	1.0	1.0	1.1	1.2	1.2	1.2	1.2	1.2	1.1	1.1
Colima	0.7	0.8	0.7	0.8	0.7	0.8	0.8	0.8	0.8	0.8
Yucatán	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6
Tabasco	0.6	0.7	0.7	0.7	0.6	0.5	0.5	0.5	0.5	0.5
Quintana Roo	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5
Campeche	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3
Baja California Sur	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2

p/ Preliminary figures accumulated to 2013 Q3

Source: BBVA Research with figures from Banxico

Table 18

Monthly Remittance Inflows to Mexico (Million Dollars)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Jan	456.2	655.0	711.0	1,051.3	1,081.9	1,367.6	1,758.3	1,872.9	1,781.7	1,573.0	1,323.8	1,403.2	1,506.3	1,461.9
Feb	447.2	637.7	718.9	979.8	1,171.8	1,428.4	1,823.2	1,856.8	1,859.7	1,810.8	1,553.5	1,651.1	1,788.2	1,587.5
Mar	494.5	718.1	744.5	1,139.1	1,480.2	1,691.6	2,152.8	2,186.5	2,116.3	2,115.1	1,954.8	2,055.9	2,091.7	1,773.0
Apr	498.8	734.8	805.9	1,202.5	1,513.5	1,753.3	2,072.7	2,166.6	2,184.7	1,794.8	1,794.8	1,880.9	2,031.5	1,901.8
May	590.7	798.2	912.2	1,351.0	1,770.4	2,057.3	2,534.6	2,411.8	2,371.6	1,905.5	2,146.2	2,168.5	2,342.5	2,034.1
Jun	541.6	747.8	860.0	1,351.2	1,684.7	1,923.3	2,340.3	2,300.6	2,264.6	1,934.0	1,894.9	2,022.3	2,096.1	1,945.5
Jul	557.6	796.6	843.1	1,361.4	1,654.4	1,840.3	2,191.6	2,369.5	2,183.2	1,850.2	1,874.4	1,906.7	1,862.7	1,841.0
Aug	608.1	789.3	849.1	1,401.2	1,786.8	2,059.2	2,334.3	2,412.1	2,097.6	1,799.4	1,957.7	2,143.9	1,889.7	1,907.7
Sep	568.5	772.1	860.6	1,365.5	1,586.8	1,886.0	2,141.0	2,186.1	2,113.8	1,747.2	1,719.0	2,086.0	1,661.6	1,795.7
Oct	559.5	792.8	848.3	1,391.0	1,529.9	1,862.3	2,316.5	2,367.6	2,637.7	1,696.0	1,731.0	1,912.6	1,771.3	1,853.1
Nov	583.1	693.8	741.4	1,203.7	1,506.2	1,887.0	1,962.8	1,958.5	1,752.2	1,510.8	1,631.9	1,785.9	1,692.3	
Dec	666.8	759.0	919.4	1,341.1	1,565.1	1,932.1	1,938.7	1,969.8	1,781.9	1,569.5	1,721.8	1,786.0	1,704.4	
Total	6,572.7	8,895.3	9,814.4	15,138.7	18,331.7	21,688.3	25,566.8	26,058.8	25,145.0	21,306.3	21,303.9	22,803.0	22,438.3	

Monthly Remittance Inflows to Mexico (Annual % Change)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Jan	14.2	43.6	8.6	47.8	2.9	26.4	28.6	6.5	-4.9	-1.7	-15.8	6.0	7.4	-2.9
Feb	15.0	42.6	12.7	36.3	19.6	21.9	27.6	1.8	0.2	-2.6	-14.2	6.3	8.3	-11.2
Mar	6.4	45.2	3.7	53.0	29.9	14.3	27.3	1.6	-3.2	-0.1	-7.6	5.2	1.7	-15.2
Apr	6.3	47.3	9.7	49.2	25.9	15.8	18.2	4.5	0.8	-17.8	0.0	4.8	8.0	-6.4
May	3.4	35.1	14.3	48.1	31.0	16.2	23.2	-4.8	-1.7	-19.7	12.6	1.0	8.0	-13.2
Jun	3.8	38.1	15.0	57.1	24.7	14.2	21.7	-1.7	-1.6	-14.6	-2.0	6.7	3.7	-7.2
Jul	10.1	42.9	5.8	61.5	21.5	11.2	19.1	8.1	-7.9	-15.2	1.3	1.7	-2.3	-1.2
Aug	14.3	29.8	7.6	65.0	27.5	15.2	13.4	3.3	-13.0	-14.2	8.8	9.5	-11.9	1.0
Sep	15.9	35.8	11.5	58.7	16.2	18.9	13.5	2.1	-3.3	-17.3	-1.6	21.4	-20.3	8.1
Oct	17.9	41.7	7.0	64.0	10.0	21.7	24.4	2.2	11.4	-35.7	2.1	10.5	-7.4	4.6
Nov	16.2	19.0	6.9	62.3	25.1	25.3	4.0	-0.2	-10.5	-13.8	8.0	9.4	-5.2	
Dec	13.5	13.8	21.1	45.9	16.7	23.5	0.3	1.6	-9.5	-11.9	9.7	3.7	-4.6	
Total	11.2	35.3	10.3	54.2	21.1	18.3	17.9	1.9	-3.5	-15.3	0.0	7.0	-1.6	

12-month Remittance Inflows to Mexico (Million Dollars)

Jan	5,966.2	6,771.5	8,951.3	10,154.7	15,169.3	18,617.4	22,079.0	25,681.5	25,967.6	24,936.3	21,057.2	21,383.2	22,906.1	22,393.9
Feb	6,024.5	6,962.0	9,032.5	10,415.6	15,361.3	18,874.0	22,473.8	25,715.0	25,970.5	24,887.3	20,799.8	21,480.8	23,043.3	22,193.2
Mar	6,054.0	7,185.6	9,059.0	10,810.1	15,702.4	19,085.4	22,935.1	25,748.7	25,900.3	24,886.1	20,639.6	21,581.9	23,079.1	21,874.6
Apr	6,083.7	7,421.5	9,130.1	11,206.8	16,013.4	19,325.2	23,254.5	25,842.6	25,918.5	24,496.2	20,639.6	21,668.0	23,229.7	21,744.9
May	6,102.9	7,629.0	9,244.0	11,645.5	16,432.9	19,612.1	23,731.8	25,719.8	25,878.3	24,030.1	20,880.3	21,690.3	23,403.7	21,436.5
Jun	6,122.5	7,835.3	9,356.2	12,136.7	16,766.4	19,850.6	24,148.8	25,680.1	25,842.3	23,699.5	20,841.1	21,817.7	23,477.5	21,285.8
Jul	6,173.5	8,074.3	9,402.7	12,655.0	17,059.4	20,036.6	24,500.1	25,857.9	25,656.0	23,366.6	20,865.3	21,850.0	23,433.5	21,264.1
Aug	6,249.4	8,255.5	9,462.5	13,207.1	17,445.0	20,309.0	24,775.2	25,935.8	25,341.4	23,068.4	21,023.7	22,036.2	23,179.2	21,282.2
Sep	6,327.5	8,459.1	9,551.0	13,712.0	17,666.3	20,608.1	25,030.2	25,980.9	25,269.1	22,701.8	20,995.4	22,403.2	22,754.9	21,416.3
Oct	6,412.5	8,692.4	9,606.5	14,254.7	17,805.3	20,940.5	25,484.4	26,032.1	25,539.2	21,760.1	21,030.5	22,584.8	22,613.5	21,498.1
Nov	6,493.6	8,803.1	9,654.1	14,717.0	18,107.7	21,321.2	25,560.3	26,027.8	25,332.8	21,518.7	21,151.6	22,738.8	22,519.9	
Dec	6,572.7	8,895.3	9,814.4	15,138.7	18,331.7	21,688.3	25,566.8	26,058.8	25,145.0	21,306.3	21,303.9	22,803.0	22,438.3	

12-month Remittance Inflows to Mexico (Annual % Change)

Jan	5.7	13.5	32.2	13.4	49.4	22.7	18.6	16.3	1.1	-4.0	-15.6	1.5	7.1	-2.2
Feb	6.3	15.6	29.7	15.3	47.5	22.9	19.1	14.4	1.0	-4.2	-16.4	3.3	7.3	-3.7
Mar	6.1	18.7	26.1	19.3	45.3	21.5	20.2	12.3	0.6	-3.9	-17.1	4.6	6.9	-5.2
Apr	6.1	22.0	23.0	22.7	42.9	20.7	20.3	11.1	0.3	-5.5	-15.7	5.0	7.2	-6.4
May	5.5	25.0	21.2	26.0	41.1	19.3	21.0	8.4	0.6	-7.1	-13.1	3.9	7.9	-8.4
Jun	5.5	28.0	19.4	29.7	38.1	18.4	21.7	6.3	0.6	-8.3	-12.1	4.7	7.6	-9.3
Jul	6.2	30.8	16.5	34.6	34.8	17.5	22.3	5.5	-0.8	-8.9	-10.7	4.7	7.2	-9.3
Aug	6.6	32.1	14.6	39.6	32.1	16.4	22.0	4.7	-2.3	-9.0	-8.9	4.8	5.2	-8.2
Sep	7.7	33.7	12.9	43.6	28.8	16.7	21.5	3.8	-2.7	-10.2	-7.5	6.7	1.6	-5.9
Oct	8.8	35.6	10.5	48.4	24.9	17.6	21.7	2.1	-1.9	-14.8	-3.4	7.4	0.1	-4.9
Nov	9.4	35.6	9.7	52.4	23.0	17.7	19.9	1.8	-2.7	-15.1	-1.7	7.5	-1.0	
Dec	11.2	35.3	10.3	54.2	21.1	18.3	17.9	1.9	-3.5	-15.3	0.0	7.0	-1.6	

Source: BBVA Research with figures from Banxico

Table 19

Intensity of Migration and Remittance Inflows Indicators, by State

State	Households in 2000				Households in 2010				Remittance dependency indicator 2010*	Remittance dependency degree**
	Receiving remittances (%)	With immigrant in US in the previous five years (%)	With circular immigrant in US in the previous five years (%)	With returnee migrant from US in the previous five years (%)	Receiving remittances (%)	With immigrant in US in the previous five years (%)	With circular immigrant in US in the previous five years (%)	With returnee migrant from US in the previous five years (%)		
National	4.4	4.1	0.9	0.8	3.6	1.9	0.9	2.3	2.3	
Guerrero	7.9	6.8	0.8	1.1	6.6	3.2	1.0	3.5	14.6	Very high
Michoacán	11.4	10.4	2.8	2.3	9.3	4.4	2.0	4.9	9.4	Very high
Oaxaca	4.1	4.8	0.6	0.7	4.9	4.1	0.9	3.1	9.3	Very high
Hidalgo	5.1	7.1	1.6	0.9	4.3	3.5	1.6	4.1	8.2	Very high
Zacatecas	13.0	12.2	3.3	2.5	11.0	4.5	2.3	5.7	6.9	Very high
Nayarit	9.6	6.8	2.0	2.0	9.1	2.1	2.3	4.4	6.0	Very high
Morelos	6.4	7.5	1.3	1.1	5.4	2.5	1.1	3.6	5.3	Very high
Tlaxcala	2.2	2.7	0.5	0.4	2.6	2.4	1.2	1.8	5.1	High
Puebla	3.3	4.0	0.5	0.7	3.8	3.0	1.0	2.1	4.4	High
Guanajuato	9.2	9.6	2.2	1.6	7.7	5.3	2.3	4.3	4.3	High
San Luis Potosí	8.2	7.4	1.3	1.2	6.6	3.1	1.3	3.3	3.7	High
Durango	9.7	7.3	1.8	1.6	6.5	2.4	1.3	3.4	3.3	High
Colima	7.3	5.6	1.4	2.1	5.2	1.8	1.1	4.2	3.3	High
Chiapas	0.8	0.8	0.1	0.1	1.1	1.1	0.5	0.9	3.3	High
Aguascalientes	6.7	6.7	2.7	1.5	4.8	2.6	1.6	3.3	2.8	Medium
Veracruz	2.7	3.2	0.5	0.2	2.5	1.8	0.8	2.0	2.7	Medium
Sinaloa	4.6	3.6	0.9	0.6	3.3	1.0	0.7	1.9	2.4	Medium
Querétaro	3.7	4.8	1.4	0.7	3.3	3.0	1.6	2.6	2.1	Medium
Mexico	2.1	2.6	0.6	0.3	1.5	1.0	0.6	1.1	2.0	Medium
Baja California	4.0	2.4	0.4	2.3	3.7	1.1	0.5	4.2	1.5	Low
Tamaulipas	3.6	3.0	0.6	0.7	3.0	1.2	0.7	2.5	1.4	Low
Chihuahua	4.3	3.7	1.0	1.3	4.4	1.7	0.7	2.8	1.4	Low
Sonora	3.2	1.6	0.3	0.9	2.7	1.1	0.7	2.9	1.3	Low
Jalisco	7.7	6.5	1.8	1.7	5.4	2.2	1.3	3.0	1.2	Low
Yucatán	1.4	1.0	0.2	0.2	1.4	0.7	0.4	0.7	0.8	Very low
Coahuila	3.4	2.2	0.8	0.7	2.4	0.9	0.5	1.5	0.8	Very low
Distrito Federal	1.7	1.6	0.4	0.3	1.2	0.6	0.4	0.6	0.7	Very low
Quintana Roo	1.0	0.7	0.2	0.2	1.2	0.5	0.3	1.0	0.7	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 León	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	0.3	Very low
Campeche	1.0	0.9	0.2	0.1	0.9	0.5	0.3	1.0	0.1	Very low

Note: For 2010, CONAPO estimated migration intensity indicators by house. To make data comparable between 2000 and 2010, for this last year was estimated information directly from databases.

* Remittances / GDP*100. Preliminary figures

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

Source: For 2000, CONAPO estimation based on the sample of ten percent of the XII Censo General de Población y Vivienda 2000. For 2010, BBVA Research estimations based on the sample of ten percent of Censo de Población y Vivienda 2010. For dependency index, BBVA Research based on INEGI and Banxico.

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