

# Economic Watch

## Mexico

### Migration and Remittances

#### Did the fall in remittances contribute to increased poverty?

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Economic Analysis

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- The recent crisis (2009) partially reverses the advances made in reducing poverty. The effects are significantly less than those seen in 1994
- Mexico is one of the hardest hit in the region by the economic crisis in terms of poverty.
- The reduction in remittances had greater effects on increasing poverty in states that depend on them the most. The importance of remittances to incomes in the poorest households has reduced.

#### **A new definition of poverty that is wider than before and multi-dimensional**

The institute responsible for issuing the guidelines and criteria for defining, identifying and measuring poverty in Mexico is the National Evaluation Commission for Social Policy (CONEVAL). Before, the official measurement was made from a single perspective which used income as the main approach for people's economic well-being; however, at present, it is performed from a multi-dimensional perspective, i.e. using different indicators.

Further, results continue to be presented with the prior poverty index on three different levels: food, capability and asset.<sup>1</sup> Available estimates cover different years over the period 1992 to 2010.

With the new classification, a person is considered poor in Mexico when his/her income falls below the minimum necessary amount to meet certain basic needs. This threshold is known as the poverty line given from a monetary value of a set basket of basic goods and services. The Net Current Total Income Per Capita (INTPC) is used for this measurement which comes from the Household Income and Expenditure Survey (ENIGH).

Poverty is not only a lack of income but includes a wider range of variables in its measurement. In this way, by taking into account more indicators the multi-dimensional methodology allows those elements where people have the greatest shortages to be identified. This methodology is applied in some countries and, in general, is flexible; for example, after identifying relevant indicators for a person to be considered poor, in some cases it must comply with shortages in all those indicators, in others, it is enough to have shortages in some of the indicators and, in others still, a combination of the indicators is preferred. In addition, it is possible to weight the indicators differently.

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<sup>1</sup> **Food poverty:** The inability to obtain a basic basket of food even if all available household income were used to buy only the goods in said basket.

**capability poverty:** A lack of available income to purchase the value of the food basket and cover necessary expenditure on health and education, even using all household income only for these purposes.

**Asset poverty:** A lack of available income to purchase the food basket and cover necessary expenditure on health, education, clothing, housing and transport even using all household income exclusively to purchase these goods and services.

The segment of the population in **multi-dimensional poverty** in Mexico is that with **insufficient income** to purchase the goods and services required to meet essential needs and with **a shortage in at least one of the following six indicators: access to food, access to healthcare services, access to social security, basic housing services, educational gap and, lastly, the quality and space of housing**. The population in **extreme poverty** is that with **three or more** social shortages and income below the minimum welfare line<sup>2</sup>. Under this definition, the non-poor may be classified into 3 groups: **Vulnerable due to social deprivation, Vulnerable due to income and Non-multidimensional poor and non-vulnerable**<sup>3</sup>.

In this instance, available estimates cover the period 2008 to 2010.

Table 1:  
**New indicators and criteria used in calculating multi-dimensional poverty in Mexico**

Indicator	Minimum criteria to consider
<b>Educational gap</b>	<ul style="list-style-type: none"> <li>a) Population 3 to 15 who have not completed secondary education and not attending school.</li> <li>b) Population born until 1981 that has not completed primary education.</li> <li>c) Population born after 1982 that have not completed secondary education.</li> </ul>
<b>Access to health services</b>	<ul style="list-style-type: none"> <li>d) Population not affiliated or registered to receive health services by the Seguro Popular, which is not entitled to any social security institution.</li> </ul>
<b>Access to Social Security</b>	<ul style="list-style-type: none"> <li>a) Wage-working population that not receive from his work the medical services, paid disability and SAR or Afore.</li> <li>b) Working population that do not receive salary, and do not receive as a job benefit or for own contracting medical services by a public institution of Social Security and SAR or Afore.</li> <li>c) Population without access to social security considering one of the first two criteria, that does not enjoy any retirement or pension, nor is family of a person inside or outside the home with access to social security.</li> <li>d) Populations 65 years and over that do not have access to social security considering any of the above criteria nor is a beneficiary of a social pension scheme for older adults.</li> </ul>
<b>Quality and space of housing</b>	<ul style="list-style-type: none"> <li>a) The material most of the floors is land</li> <li>b) The material of most of the roof is sheet of cardboard or waste material</li> <li>c) The material most of the walls is muddy or wattle, reeds, bamboo or palm sheet of cardboard, metal or asbestos, or waste material</li> <li>d) with overcrowding</li> </ul>
<b>Access to basic housing services</b>	<ul style="list-style-type: none"> <li>a) Water is obtained from a well, river, lake, stream, pipe, or tap water is obtained from other dwelling or public key or hydrant.</li> <li>b) They have no drainage, or drain is connected to a pipe that flows into a river, lake, ocean, canyon or crack.</li> <li>c) They do not have electricity.</li> </ul>
<b>Access to food</b>	<ul style="list-style-type: none"> <li>a) Population in households with a degree of moderate or severe food insecurity.</li> </ul>

Source: General guidelines and criteria for defining, identifying and measuring poverty, DOF, 2010

Taking into account these new criteria, CONEVAL recently stated that (multi-dimensional) poverty in Mexico increased from 2008 to 2010 from 44.5% to 46.2%. This meant an increase from 48.8 to 52 million people. Over the same period, extreme poverty went from 10.6% to 10.4% of total population with the number of people in this situation remaining steady at 11.7 million. In turn, the lines considered in income-based poverty show that, in the same period, nearly one million people fell into food-based poverty, 2.3 million into capabilities-based poverty and 5.4 million in asset-based poverty. As can be seen, while extreme poverty remained steady, food-based poverty increased by nearly 1 million people over these years. In this regard, some researchers such as Gerardo Esquivel

<sup>2</sup> Which is equal to the cost of the food basket.

<sup>3</sup> Vulnerable due to social shortages - the population with one or more social shortages but whose income is above the welfare line. Vulnerable due to income - the population with no social shortages and whose income is below or equal to the welfare line. Non-multidimensional poor and non-vulnerable - the population with no social shortages and whose income is above the welfare line.

(2011) have suggested that the way in which the poor are classified in Mexico be revised with the new multi-dimensional methodology so as to correctly identify the poor and the type of poverty. For example, some people with a shortage in access to food would not be extremely poor if they did not have at least 2 other shortages in addition to income below the minimum welfare line. This explains why 21.2 million people suffer food-based poverty but only 11.7 suffer extreme poverty.

The recent economic crisis (2009) had a major effect on the advances in poverty in Mexico as it has been one of the hardest hit in the region in this sense. CEPAL figures (2010) show that poverty between 2008 and 2009 in Latin America only showed a slight drop, equivalent to a 0.1 percentage point increase while extreme poverty increased by 0.4 percentage points. However, it is estimated that poverty is below 2008 levels in 2010.

In the case of Mexico, if we consider income-based poverty we see that the 3 poverty levels come in at similar levels in 2010 to those seen in 2002. However, these results largely contrast with what took place between 1994 and 1996 when food-based poverty increased by 16 percentage points and asset-based poverty by 17 percentage points. This was when the Progresa Program (the predecessor to Oportunidades) was not in place and when the economy was not at the macroeconomic stability levels it currently enjoys. This means it is likely that the results between 2006 and 2010 would have been worse if it were not for social programs in Mexico since in food poverty, where these welfare programs are mainly aimed, the increase has been lower.

Table 2:  
**Poverty measurement in Mexico, 2008-2010**

Poverty	Percentage		Millions of people	
	2008	2010	2008	2010
<b>Multidimensional poverty</b>				
Population in poverty	44.5	46.2	48.8	52.0
Population in moderate poverty	33.9	35.8	37.2	40.3
Population in extreme poverty	10.6	10.4	11.7	11.7
Vulnerable by social deprivation population	33.0	28.7	36.2	32.3
Income vulnerable population	4.5	5.8	4.9	6.5
Non-poor and non-vulnerable population	18.0	19.3	19.7	21.8
<b>Income based-poverty</b>				
Food	18.4	18.8	20.2	21.2
Capabilities	25.3	26.7	27.8	30.0
Assets	47.7	51.3	52.3	57.7

Source: CONEVAL estimates based on the MCS-ENIGH 2008 and 2010

NB: 2008 and 2010 estimates use adjusted expansion factors to definitive results from the Population and Housing Census 2010 estimated by INEGI.

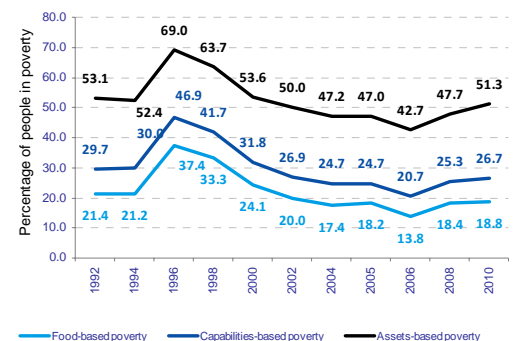
### Poverty by states

The increase in poverty between 2008 and 2010 was not across the board. In some states, the percentage people living in poverty reduced, as in Morelos, Coahuila, State of México, Guerrero, Michoacán, Nayarit, Nuevo León, Hidalgo and Jalisco. Meanwhile, major increases were recorded in the percentage of people living in poverty in Veracruz, Colima, Baja California Sur and Zacatecas.

Although in most states extreme poverty saw no rise, in some there were greater increases in the percentage of people in this situation: State of Mexico, Campeche, Querétaro, Nayarit, Yucatán, Baja California Sur and Veracruz.

As we know, after the economic crisis Mexican household income decreased and this led to an increase in poverty among other effects. One source of income received by some Mexican households is remittances which, as we analyzed in *Migration Outlook Mexico*, decreased between

Chart 1  
**Poverty by income national change 1992 to 2010**  
(Percentage of people, prior methodology)

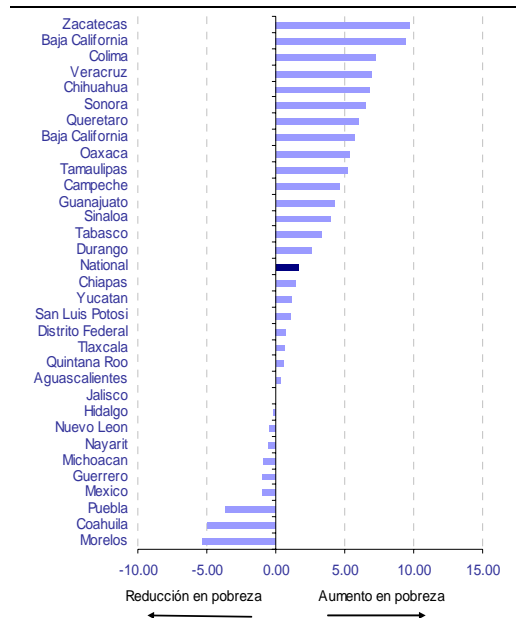


Source: CONEVAL estimates based on the ENIGH 1992 to 2010.

NB: 2008 and 2010 estimates use adjusted expansion factors to definitive results from the Population and Housing Census 2010 estimated by INEGI.

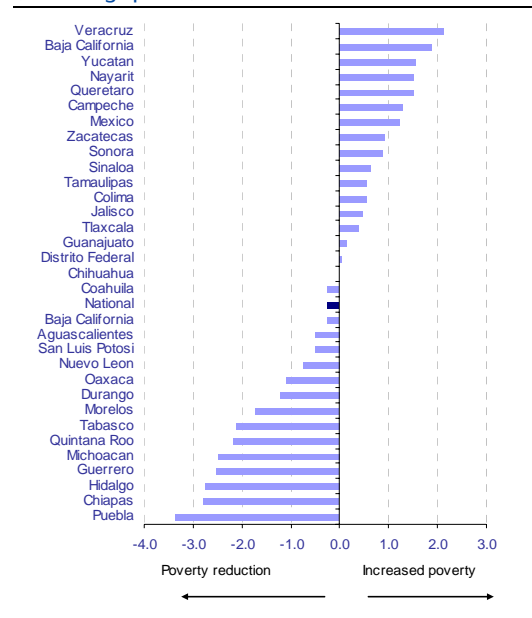
2007 and 2010 by 18.3% in dollar terms. In this way, the number of households receiving remittances decreased by 27% between 2006 and 2010. Although the proportion of people receiving remittances in Mexico is low (4% in 2010), it is likely that the decrease in remittances would have contributed to an increase in poverty. As some studies have shown, remittances have effects on poverty in Mexico (see Esquivel and Huerta, 2006 and López Córdoba, 2006).

Chart 2  
Percentage change of people in poverty, 2008-2010  
(Percentage points)



Source: BBVA Research based on CONEVAL estimates based on the ENIGH 2008 to 2010.

Chart 3  
Percentage change of people in extreme poverty, 2008-2010  
(Percentage points)



Source: BBVA Research based on CONEVAL estimates based on the ENIGH 2008 to 2010.

### The reduction in remittances had an effect on poverty

In order to discover which states may have been the most affected in terms of an increase in poverty due to lower remittances, we classify them into 3 groups as per the importance of remittances as a part of GDP. The states with high dependency, where remittances have a weight of at least 4%, are: Puebla, Hidalgo, Tlaxcala, Morelos, Guanajuato, Nayarit, Zacatecas, Guerrero, Oaxaca and Michoacán. The states where remittance dependency is average, with a weight as part of GDP from 1.5% to under 4% are: Chihuahua, Tamaulipas, State of México, Querétaro, Sinaloa, Aguascalientes, Jalisco, Veracruz, Durango, Colima, Chiapas and San Luis Potosí. Meanwhile, those where remittances have a very low weight, under 1.5%, are: Campeche, Tabasco, Nuevo León, Baja California Sur, Federal District, Quintana Roo, Yucatán, Coahuila, Sonora and Baja California. In this instance, the new construction ENIGH database was used released by the INEGI where the new expansion factors are used from 2010 Census data.<sup>4</sup>

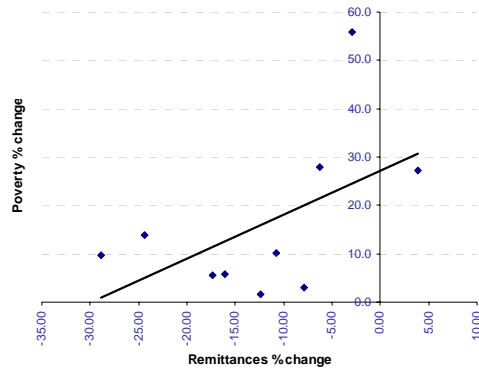
Once the states were classified, the change in remittance reception was compared to the change in poverty between 2008 and 2010. In general, one would expect that when remittances fall, poverty would tend to increase when their effects are important.

As can be seen in the charts, in those states with a low remittance dependency the ratio between both variables is positive meaning that the reduction in remittances does not generally appear to play as an important role in increased poverty. Something similar occurs with states with an average

<sup>4</sup> Therefore some of the estimates are different to those obtained with the previous expansion factors and with the traditional ENIGH database.

remittance dependency. Nonetheless, in states with a high remittance dependency we do see an inverse ratio between both variables meaning that it is likely that, in these states, the decrease in remittances has had greater effects on increasing poverty.

Chart 4  
**Remittances vs. poverty in states with a low remittance dependency (Change % 2008-2010)**



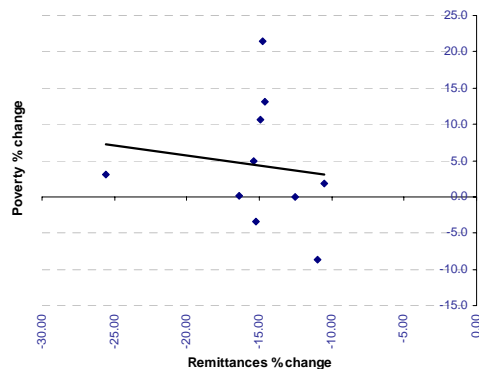
Source: BBVA Research based on CONEVAL estimates based on the ENIGH 1992 to 2010.

Chart 5  
**Remittances vs. poverty in states with an average remittance dependency (Change % 2008-2010)**



Source: BBVA Research based on CONEVAL estimates based on the ENIGH 1992 to 2010.

Chart 6  
**Remittances vs. poverty in states with a high remittance dependency (Change % 2008-2010)**



Source: BBVA Research based on CONEVAL estimates based on the ENIGH 1992 to 2010.

Table 3:  
**People receiving remittances in their households in Mexico (Thousands)**

	2008	2010	% change
<b>Total</b>	<b>6,158</b>	<b>4,649</b>	<b>-24.5</b>
<b>Poor</b>	<b>3,007</b>	<b>2,552</b>	<b>-15.1</b>
Moderate poverty	2,323	2,064	-11.1
Extreme Poverty	685	489	-28.6
<b>Non poor</b>	<b>3,150</b>	<b>2,097</b>	<b>-33.4</b>
Vulnerable by social deprivation population	2,558	1,634	-36.1
Income vulnerable population	141	89	-36.6
Non-poor and non-vulnerable population	452	374	-17.4

Source: BBVA Research based on CONEVAL estimates based on the ENIGH 1992 to 2010.

In this way, taking into account the ENIGH figures and the new expansion factors from the survey, the number of people receiving remittances fell from 6.2 to 4.6 million, meaning a 24.5% reduction. The number of non-poor receiving remittances fell by 33.4%, falling from 3.1 to 2.1 million. Among the poor, it was the extreme poor who saw the greatest reduction in relative terms in the number of people, 28.5%. As with the non-poor, the population vulnerable to shortages and the population vulnerable to income recorded similar falls in relative terms - 36% and 36.6% respectively.

Although in general the importance of remittances in current income for households receiving them increased at a national level between 2008 and 2010 (a situation seen both in the countryside and in the cities), in households living in communities with a high marginalization rate and in poor households remittances reduced their weight as part of total income, suggesting that for this group, households which continued to receive these resources did so in lower amounts.

In this way, the reduction in remittances does appear to have contributed somewhat to the increase in poverty in Mexico seen between 2008 and 2010, especially in migrant communities.

Table 4  
Proportion of income from remittances in receiving households in relation to current total income by household type (%)

		2008	2010
	<b>Total</b>	27.4	29.7
	<b>City</b>	24.3	25.7
<b>Region</b>	<b>Rural</b>	29.8	32.3
	<b>Very high</b>	38.3	35.5
<b>Marginalization rate</b>	<b>High</b>	27.9	35.0
	<b>Middle</b>	31.2	33.6
	<b>Low</b>	28.8	27.1
	<b>Very low</b>	21.9	26.3
<b>City poverty type</b>	<b>Food</b>	28.3	23.5
	<b>Capabilities</b>	32.4	21.9
	<b>Assets</b>	27.9	25.9
<b>Rural poverty type</b>	<b>Food</b>	27.8	25.1
	<b>Capabilities</b>	28.9	26.0
	<b>Assets</b>	31.3	28.2

Source: BBVA Research based on CONEVAL estimates based on the ENIGH 1992 to 2010.

## CONCLUSIONS

The recent global crisis reversed some of the advances made in reducing poverty in Mexico. In a certain way, due to the social programs in the country and current macroeconomic stability, poverty did not expand as was seen after the 1994 crisis. Nonetheless, it is clear that there are elements where improvements are needed so as to avoid situations like this repeating. It is undoubtedly important that Mexico achieves higher economic growth since poverty is strongly linked to economic performance.

The new methodology for measuring poverty in Mexico shows that advances have been made in reducing social deprivation among the Mexican population and that the increase in poverty was mainly due to the reduction seen in income in Mexico. In addition, it shows that there are indicators where we need to make greater efforts such as access to social security, access to healthcare services and, of course, in generating more and better quality jobs. However, it is important to review the way in which the indicators are being weighted to classify a person as poor or not since, in some instances, there may be certain discrepancies between poverty due to income and multi-dimensional poverty, as occurs between food poverty and extreme poverty. It is also important to strengthen the way in which poverty is being tackled. In recent years, Mexico has been one of the countries in Latin America to make fewer advances in reducing poverty.

As we stated in *Migration Outlook Mexico* the lack of opportunities in Mexico is one of the factors mainly incentivizing migration - a high proportion of higher-qualified Mexican human capital is not used in Mexico but in other countries. Therefore, a labor reform is required which takes into account not only elements which encourage job supply such as a possible labor flexibilization, social security or training in certain areas, but also factors which increase job demand such as improving the Rule of Law or justice, increasing competition in certain markets and raising incentives to generate greater investment, both public and private, which would gradually lead to efficiency gains and, in turn, raise potential growth in the economy and create a more attractive atmosphere helping to develop better opportunities.

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