

Economic Analysis

# Evolution of Poverty and Income Distribution in Mexico

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- **Between 2008 and 2018, poverty in Mexico fell from 44.4% to 41.9%, but increased in absolute terms from 49.5 to 52.4 million people.**
- **57.3% of Mexicans lack access to social security. It is the most widespread form of social deprivation included in the measurement of multidimensional poverty in Mexico, largely due to the high level of informal employment in the country.**
- **In Mexico, income in the tenth decile was 18 times that of the first decile, although Mexico's National Council for the Evaluation of Social Development Policy (CONEVAL) estimates this could be as high as 26 times. Half of the national current income was concentrated in 20% of households.**
- **In terms of income inequality, measured by the Gini coefficient, Mexico has moved up 14 positions from position 136 to position 122 out of 164 countries.**
- **The higher the income of a household, the lower the proportion of expenditure on food, drinks and tobacco, and the higher the proportion of expenditure on education and leisure, transport and communication.**
- **The highest proportion of the population in extreme poverty was in the states of Chiapas (29.7%), Guerrero (26.8%) and Oaxaca (23.3%), while the lowest was in Nuevo León (0.5%).**
- **On average, households in Mexico City have three times the income (MXN 26,362 per month) of households in Chiapas (MXN 8837).**

## Measuring poverty and extreme poverty in Mexico

On August 5, 2019, the National Council for the Evaluation of Social Development Policy (CONEVAL) published the results of the evolution of poverty in Mexico between 2008 and 2018 at national level and by federal entity. José Nabor Cruz Marcelo, Secretary General of the institution as of July 22 this year, presented the results. The main results of the analysis on welfare and deprivation of social rights classify the population into one of the following categories:

1. **Persons in multidimensional poverty.** The segment of the population whose income is below the income poverty line and who experience at least one form of social deprivation.
2. **Persons considered vulnerable due to social deprivation.** A segment of the population experiencing one or more forms of social deprivation, but whose income is at or over the poverty line.

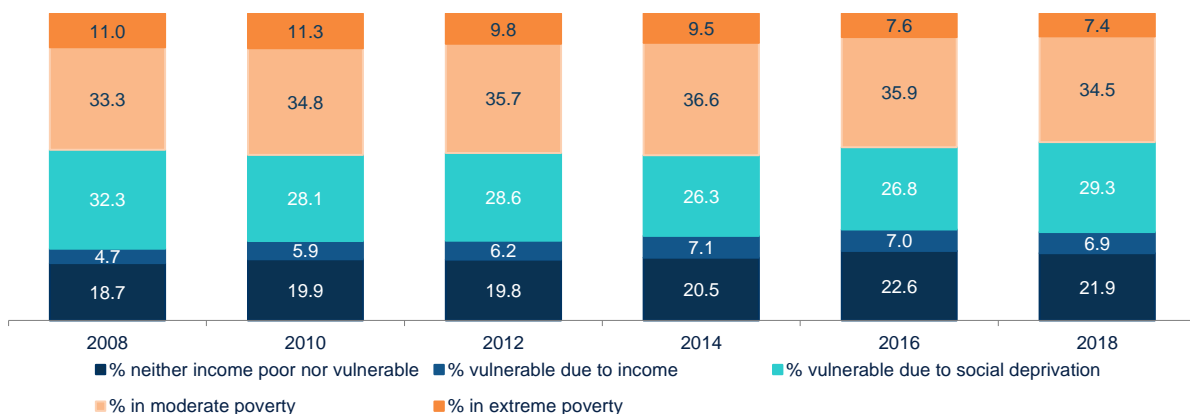
3. **Persons considered vulnerable due to income.** A segment of the population that does not report any form of social deprivation but whose income is at or under the income poverty line.
4. **Persons who are neither income poor nor vulnerable.** A segment of the population whose income is at or over income poverty line and experiences no form of social deprivation.

**Between 2008 and 2018, poverty in Mexico fell from 44.4% to 41.9%, but increased in absolute terms from 49.5 to 52.4 million people.** The percentage of the population living in poverty rose from 44.1% (49.5 million people) to 41.9% (52.4 million people) from 2008 to 2018. Concerning to extreme poverty, it fell by 3.6 percentage points (pp) from 11.0% to 7.4%, while moderate poverty increased by 1.2 pp.

A relevant fact regarding the evolution of poverty indicators in Mexico is that the last two years (2016-2018) have seen the number of persons classified as vulnerable due to social deprivation rise from 26.8% to 29.3% (an increase of 2.5 pp). This increase is due to two factors: 1) a fall in the population aged 65 years or older that reported benefiting from the seniors program and 2) a fall in the number of workers with social security (in the case of employees, this refers to receiving health care; illness, maternity, and work accident leave; and SAR or AFORE (retirement pension plans); in the case of independent workers, it refers to health care; and SAR or AFORE).

Lastly, persons considered vulnerable due to income increased by 2.2 pp between 2008 and 2018, while persons considered neither income poor nor vulnerable rose from 18.7% (20.9 million people) to 21.9% (27.4 million people) in the same period.

Figure 1. **Evolution of the population in poverty in Mexico, 2008–2018**  
(%)



Source: BBVA Research based on CONEVAL estimates.

**The end of the multidimensional poverty cycle.** CONEVAL has announced that the 2018 report will close a 10-year cycle of measuring multidimensional poverty in Mexico between 2008 and 2018. This is the result of changes that are to be implemented to re-direct the measurement of poverty. The institution states that it will continue to measure the indicator but that, given the changes observed in these 10 years, an improved methodology for measuring social development policy in Mexico is required.

**The new poverty measurement in Mexico: the Social Development Information System with a Human Rights Approach (SIDS-DH).** CONEVAL has announced that it will soon present the SIDS-DH. This new system will provide "information to establish what deprivation or problems should be addressed, where and in which areas of the population" (CONEVAL, 2019a). It was noted that, unlike the measurement of multidimensional poverty, where all information came from the National Household Income and Expenditure Survey (ENIGH) or from a module of that survey, SIDS-DH will integrate information from multiple sources.

## Evolution of the components of multidimensional poverty 2008–2018

In the measurement of multidimensional poverty, CONEVAL analyzes households' economic situation and social deprivation. It states that a person's social deprivation may be the result of one or more of the following privations:

1. Falling behind in education
2. Lack of access to health care services.
3. Lack of access to social security.
4. Lack of housing quality and space.
5. Lack of access to basic services at home.
6. Lack of access to food.

**The achievement gap in education in Mexico falls from 21.9% to 16.9% in 10 years.** Figures on the achievement gap in education measure whether each household member is currently attending school or has successfully completed the corresponding level of compulsory education depending on their age and year of birth. Data gathered by CONEVAL indicates that the number of people lagging behind in education fell by 3.4 million between 2008 and 2018. While this shows an improvement in this indicator, the pace at which this social deprivation is being reduced is very slow because of its importance in the development of individual skills and future opportunities in life.

**The lack of access to health care services falls from 42.8% in 2008 to 20.2% in 2018.** A person is said to be experiencing this form of deprivation when they are not registered or entitled to receive medical services from any institution. It is the social deprivation indicator that has improved the most in this 10-year analysis period as it has fallen to less than half its original number. This means that 22.4 million people have registered or become entitled to receive medical services between 2008 and 2018.

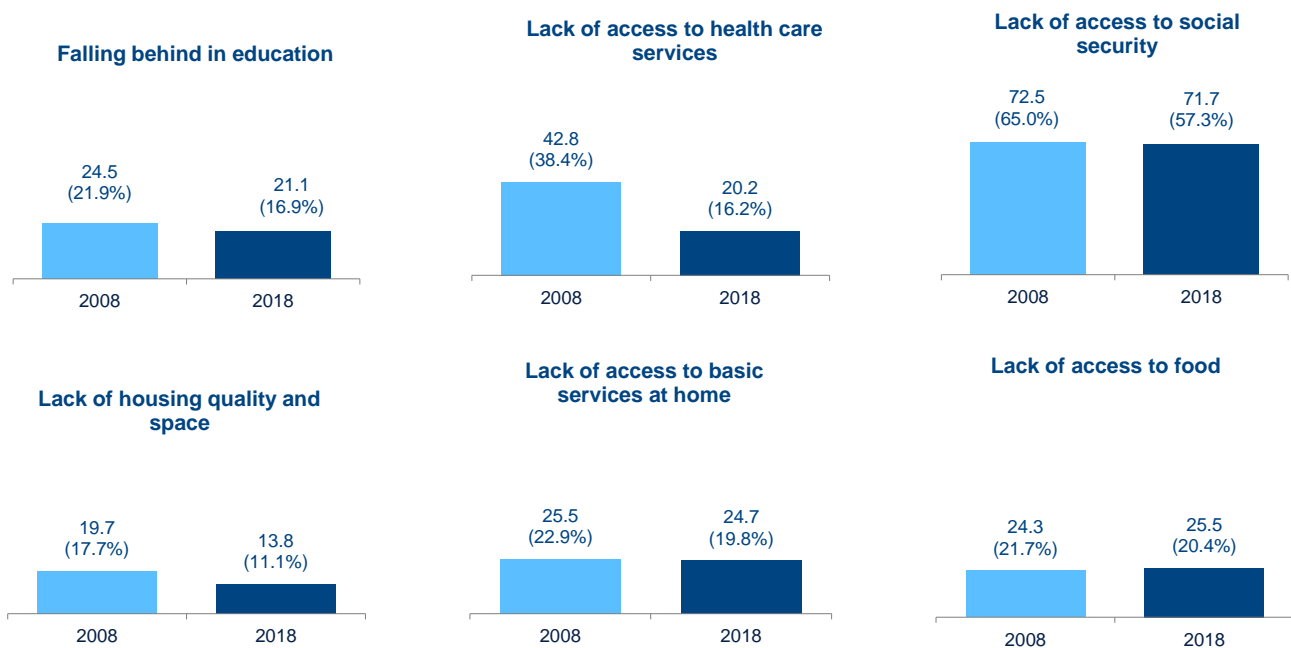
**The lack of access to social security falls from 65.0% to 57.3%.** Depending on the condition of each person's economic activity, social security is defined as the set of mechanisms designed to guarantee the livelihood of individuals and their families in the face of eventualities, which, in Mexico, are regulated by the law. Figures show that some 900,000 people fewer were experiencing this form of deprivation in 2018 than in 2008, but the percentage of people with no access to social security remains very high (57.3% in 2018), representing the most significant form of social deprivation of the six measured by CONEVAL. This is explained to a large extent by the high rates of informal employment in the Mexican economy, which remain a major unresolved challenge for the country's public policy makers.

**The lack of housing quality and space falls from 17.7% to 11.1%.** This variable measures the quality of housing materials (floor, walls, ceiling) and the level of overcrowding. CONEVAL estimates that 5.9 million fewer people are affected by a lack of housing quality and space than ten years ago. After access to health care, it is the form of social deprivation that has had the highest improvement rate over the past ten years, and it is the indicator in which Mexican households show the smallest gap.

**The lack of access to basic services in the home decreases from 22.9% to 19.8%.** To estimate this deprivation, CONEVAL uses data on access to drinking water and mains water; type of drainage; access to electricity and type of fuel used in the kitchen. In ten years, 800,000 people have gained access to basic housing services; that is, an average of 80,000 people per year. This represents very slow progress in the fight against poverty measured by this variable.

**Between 2008 and 2018, the lack of access to food fell from affecting 21.7% to 20.4% of the population, but in absolute terms it increased by 1.2 million people.** This variable measures when a household has moderate or severe food insecurity or has limited food consumption. Of the six forms of social deprivation measured by CONEVAL, lack of access to food is the only one which increased in absolute terms; the number of people affected by it rose from 24.3 million in 2008 to 25.5 million in 2018.

Figure 2. **Evolution of the components of social deprivation in multidimensional poverty, 2008–2018**  
(Million people and % of the population)



Source: Produced by BBVA Research based the National Council for the Evaluation of Social Development Policy (CONEVAL), 2019. 10 years of measuring poverty in Mexico, progress and challenges in social policy.

## Household income per decile

With the information collected through the National Survey of Household Incomes and Expenditures (ENIGH) on the different types of household income, it is possible to estimate the average income per decile, which gives an indication of how fairly it is distributed in Mexico. This methodology organizes households from lowest to highest income and uses this variable to arrange them in 10 groups (each with about 10% of households).

**Real household income estimates in Mexico fall by 4.1%.** The 2018 ENIGH shows that households in Mexico obtained a current income of MXN 16,537 per month on average; a figure that is 4.1% lower in real terms than the MXN 17,249 in 2016 (both figures are in 2018 pesos). Regarding this estimated fall in real household income, Julio Santaella, Chairman of INEGI, highlighted that: 1) the difference is not statistically significant, given the confidence intervals of both estimates, and 2) 2016 was atypical for ENIGH, since many households with very high levels of income were included in the sample.

**The difference in income in the tenth decile was 18 times that of the first but CONEVAL estimates that it could be up to 26 times.** In 2018, a household in decile I (the lowest income) received an average current income of MXN 3,038 per month, while a household in decile X (the highest income) received an average of MXN 55,588 per month, representing more than 18 times the income of decile I. CONEVAL made estimates based on the statistical model to compare it to the ENIGH and found that this difference can be up to 26 times the income of decile I.

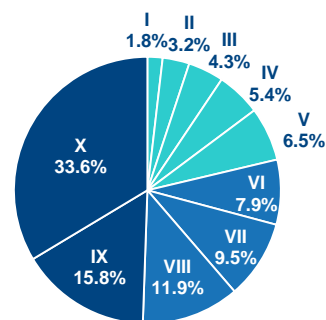
**Half of the national current income was concentrated in 20% of households.** Decile I — 10% of households with lower incomes — represents 1.8% of current income in Mexico. If we add deciles II-V, we can see that 21.3% of total current income (less than a quarter) is concentrated into 50% of households in the country with the lowest income. Moreover, deciles IX and X (the upper 20% of households with the highest income) represent 49.5% of total current income.

Figure 3. **Average monthly current income per deciles of households in Mexico, 2018 (2018 pesos)**



Source: BBVA Research Estimates from INEGI, National Household Income and Expenditure Survey (ENIGH) 2018

Figure 4. **Distribution of national current income by household deciles in Mexico, 2018**



Source: BBVA Research Estimates from INEGI, National Household Income and Expenditure Survey (ENIGH) 2018

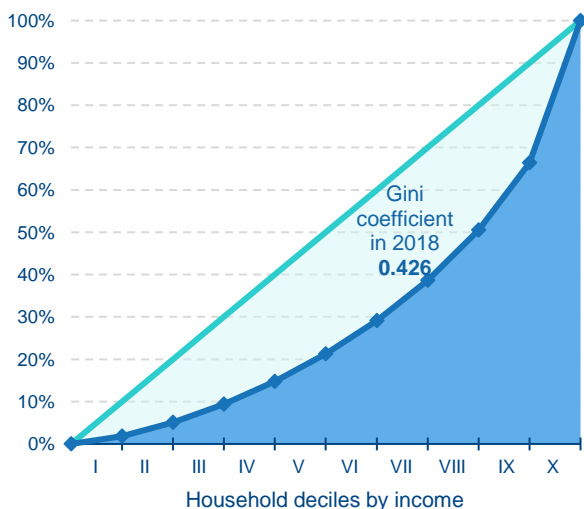
## The Gini coefficient, an international measure of inequality

The Gini coefficient is a statistical measure that shows the magnitude of inequality in the distribution of a variable, such as income, among a population. The Gini coefficient is equal to the proportion of the area between the Lorenz Curve (cumulative variable) and the even distribution line. When it approaches to one, it indicates that there is a high concentration in a small population, whereas when the value is close to zero, the concentration is very evenly balanced.

**Gini coefficient drops to 0.426 in 2018, the lowest level of inequality in 10 years?** From data collected through ENIGH, we estimate that the Gini coefficient for Mexico was 0.426 in 2018. Compared to the value of 0.448 in 2016, the result suggests that income inequality in the country has decreased over two years. Moreover, it is the lowest figure in the last 10 years, so it could suggest that Mexico has its lowest level of inequality in current income of the last 10 years. Although this result is positive, this indicator should be treated with caution given that the Gini coefficient simplifies a great deal of information into a single value, and disaggregated data have to be analyzed in greater detail.

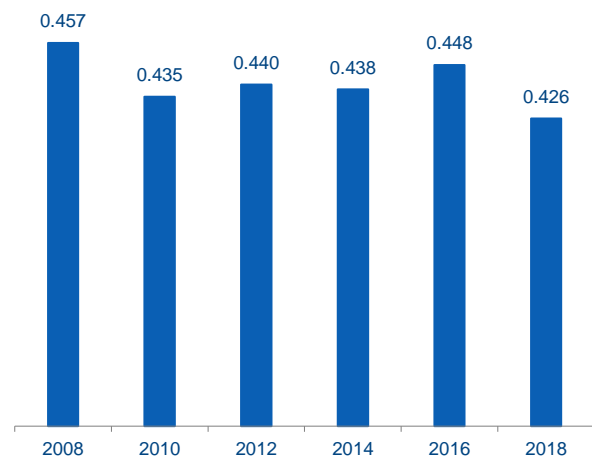
It should be noted that defining an internationally accepted indicator for measuring inequality among populations is a highly complex endeavor. The Gini coefficient, being relatively simple to estimate, is widely used and allows comparisons to be made at subnational and international levels.

Figure 5. Lorenz curve and Gini coefficient for current income in Mexico, 2018



Source: BBVA Research Estimates from INEGI, National Household Income and Expenditure Survey (ENIGH) 2018

Figure 6. Gini coefficient for current income in Mexico, 2008-2018



Source: BBVA Research Estimates from INEGI, National Household Income and Expenditure Survey (ENIGH), 2008-2018

**In terms of income equality, measured using the Gini coefficient, Mexico moves from position 136 to 122, moving up 14 positions** out of a total of 164 countries for which information is available. Mexico moves from 136, where the Gini coefficient is similar to that of Chile, Paraguay and the Dominican Republic, to 122, with a value close to that of Egypt, Guatemala and Nicaragua.

The countries with the highest levels of income equity as measured by the Gini coefficient have values of less than 0.300. According to this indicator, the most equitable countries in the world are: Belarus, with a value of 0.230, Slovakia, with a value of 0.243, and Iceland and Slovenia, with a value of 0.248. Canada is the most equitable country in the Americas, coming in 30th place worldwide with 0.305, while Uruguay is the least inequitable in Latin America, coming in 69th place with a value of 0.359.

Haiti is the most inequitable country in terms of income in the Americas, coming in 160th out of 164 countries, while the four most inequitable countries in the world for which information is available are: South Africa, Namibia, Botswana and Zambia.

Table 1 **Global Gini coefficients, selected countries**

Position	Country	Gini coefficient	Year of data	Position	Country	Gini coefficient	Year of data
1	Belarus	0.230	2017	122	Egypt	0.426	2015
2	Slovakia	0.243	2016	123	Guatemala	0.427	2014
3	Iceland	0.248	2015	124	Nicaragua	0.427	2014
4	Slovenia	0.248	2016	125	Dominican Republic	0.430	2016
5	Czech Rep.	0.250	2016	133	Chile	0.445	2017
6	Belgium	0.257	2016	134	Tajikistan	0.445	2015
7	Finland	0.257	2017	135	Paraguay	0.447	2017
8	Norway	0.258	2017	136	State of Mexico	0.448	2016
9	Kazakhstan	0.259	2018	137	Dominica	0.449	2010
10	Sweden	0.261	2017	140	Costa Rica	0.459	2017
19	Germany	0.292	2016	144	Brazil	0.465	2017
23	France	0.298	2016	145	Panama	0.465	2017
30	Canada	0.305	2017	148	Honduras	0.471	2017
34	Japan	0.317	2015	149	India	0.473	2012
57	Spain	0.342	2016	150	Indonesia	0.473	2017
69	Uruguay	0.359	2017	151	Colombia	0.477	2018
78	Argentina	0.372	2017	160	Haiti	0.530	2012
84	El Salvador	0.379	2017	161	Zambia	0.545	2015
90	United States	0.385	2017	162	Botswana	0.584	2015
117	Bolivia	0.420	2017	163	Namibia	0.594	2016
122	State of Mexico	0.426	2018	164	South Africa	0.602	2015

Source: BBVA Research estimates taken from Solt, Frederick. (2019). The Standardized World Income Inequality Database, Version 8.

Note: Countries with information available from 2010 to 2018 were selected. The most recent data are presented for each country.

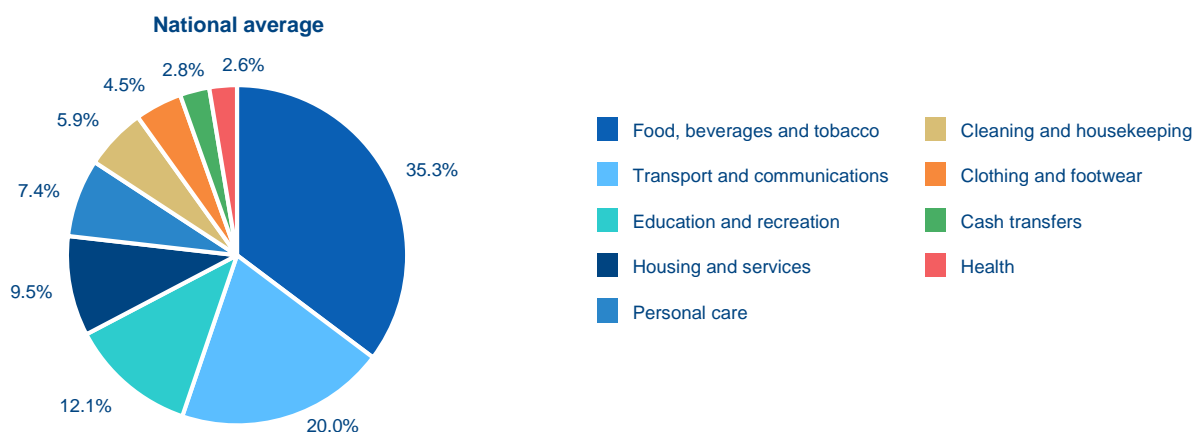
## Comparison of consumption patterns by income deciles

In addition to the different sources of income, ENIGH captures information on household expenditure. In 2018, on a national average, 35.3% of current monetary expenditure was on food, beverages, and tobacco, and 20% on transportation and communications. These two categories account for more than half of current expenditure in Mexico.

In order to make a comparative analysis of household consumption patterns in Mexico based on their income, the graphs on the following page illustrate the distribution of current household monetary expenditure for the lowest income decile and the highest income decile for 2018. The three main results for households are the following:

- 1. The higher the income, the lower the proportion of expenditure on food.** Households in the lowest income decile spent 50.0% of their monetary expenditure on food, beverages, and tobacco, while households in the highest income decile spent 25.5% on this category.
- 2. The higher the income, the higher the proportion of expenditure on education and recreation.** Households in the tenth income decile allocated 16.9% of their expenditure to education and recreation, while households in the first decile allocated 5.8%.
- 3. The higher the income, the greater the proportion of expenditure on transport and communications.** Households in the highest income decile spend 22.3% of their income on transportation and communications, while households in the lowest decile spend 12.3% on this category.

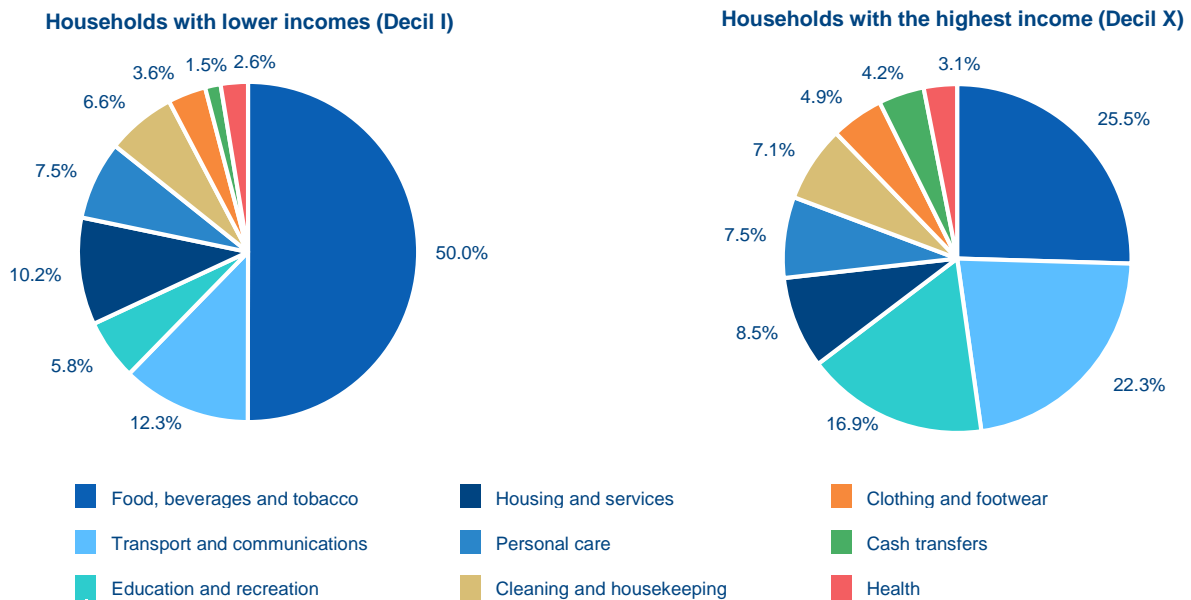
Figure 7. **Percentage distribution of current monetary expenditure in Mexico, 2018**



Source: BBVA Research Estimates from INEGI, National Household Income and Expenditure Survey (ENIGH) 2018



Figure 8. **Percentage distribution of current monetary expenditure in Mexico, first and tenth deciles of income, 2018**



Source: BBVA Research Estimates from INEGI, National Household Income and Expenditure Survey (ENIGH) 2018

## Poverty and extreme poverty by federal entity

**The states with the highest levels of poverty and extreme poverty in 2018 were concentrated in the south and southeast of the country.** In the states of Chiapas, Guerrero, Oaxaca, Veracruz, Puebla, Tabasco and Morelos more than half of the population were living in poverty. The State of Mexico was the state that reported the highest number of people in poverty, with just over 7.5 million living in such conditions.

In states such as Chiapas, Guerrero, Oaxaca, Veracruz, Puebla, and Tabasco, more than 10% of the population were living in extreme poverty. Chiapas was the federal entity with the largest number of people living in extreme poverty, with more than 1.6 million living in such conditions. Meanwhile, the lowest levels of poverty and extreme poverty were observed in Nuevo León, relative to its population.

**Mexico City and Tamaulipas saw significant setbacks in the form of a 10% increase in the number of their population living in poverty, adding around 380,000 people to this figure.** In terms of the evolution of poverty between 2016 and 2018, Michoacán, Baja California Sur, Chihuahua, Hidalgo exhibited the highest percentages of poverty reduction, with this number dropping by almost 740,000 people across the five states.

In terms of extreme poverty, during this same period, the states of Aguascalientes and Tlaxcala managed to reduce the number of people living in extreme poverty by over 40%. Similarly, the states of Baja California, Campeche, and Jalisco require further analysis given that they show an increase of around 50% of the population living in extreme poverty.

Table 2 **Federal entities with the highest levels of poverty and extreme poverty in Mexico, 2018**

Federal entity	% of the population in poverty	Thousands of people in poverty	Federal entity	% of the population in extreme poverty	Thousands of people in extreme poverty
Chiapas	76.4	4,174.6	Chiapas	29.7	1,623.3
Guerrero	66.5	2,412.2	Guerrero	26.8	971.4
Oaxaca	66.4	2,714.7	Oaxaca	23.3	951.8
Veracruz	61.8	5,088.6	Veracruz	17.7	1,457.9
Puebla	58.9	3,763.7	Tabasco	12.3	302.5
Tabasco	53.6	1,320.2	Campeche	9.8	93.0
Morelos	50.8	1,013.3	Puebla	8.6	551.9
Tlaxcala	48.4	645.8	Morelos	7.4	147.0
Zacatecas	46.8	755.2	San Luis Potosí	7.3	207.6
Campeche	46.2	440.4	Yucatán	6.7	147.1
Michoacán	46.0	2,161.9	Hidalgo	6.1	181.5
Hidalgo	43.8	1,311.1	Michoacán	6.1	284.4
San Luis Potosí	43.4	1,229.0	Nayarit	5.9	76.2
Guanajuato	43.4	2,587.8	State of Mexico	4.9	865.7
State of Mexico	42.7	7,546.5	Guanajuato	4.2	253.3
Yucatán	40.8	900.5	Quintana Roo	3.5	59.8
Durango	37.3	680.0	Zacatecas	3.4	54.4
Tamaulipas	35.1	1,287.9	Tamaulipas	3.3	121.8
Nayarit	34.8	451.0	Tlaxcala	3.1	41.7
Sinaloa	30.9	946.9	Jalisco	3.0	244.5
Colima	30.9	235.6	Sinaloa	2.7	82.3
Mexico City	30.6	2,682.7	Sonora	2.6	80.6
Jalisco	28.4	2,337.6	Chihuahua	2.6	99.8
Sonora	28.2	863.0	Colima	2.4	18.2
Querétaro	27.6	579.2	Durango	2.2	40.4
Quintana Roo	27.6	474.8	Querétaro	2.0	41.2
Chihuahua	26.3	1,005.7	Mexico City	1.7	153.3
Aguascalientes	26.2	351.5	Baja California	1.6	59.3
Baja California	23.3	848.4	Baja California Sur	1.5	12.6
Coahuila	22.5	691.1	Coahuila	1.4	44.5
Baja California Sur	18.1	151.7	Aguascalientes	1.2	15.6
Nuevo León	14.5	773.0	Nuevo León	0.5	25.2
<b>National</b>	<b>41.9</b>	<b>52,425.9</b>	<b>National</b>	<b>7.4</b>	<b>9,310.2</b>

Source: BBVA Research based on CONEVAL estimates.

Table 3 **Evolution of poverty and extreme poverty by federal entity, 2018**

Federal entity	Percentage change in poverty (2016-2018)	Absolute change (thousands of people)	Federal entity	Percentage change in extreme poverty (2016-2018)	Absolute change (thousands of people)
Michoacán	-15.7	-403.9	Aguascalientes	-48.1	-14.5
Baja California Sur	-13.6	-23.9	Tlaxcala	-44.1	-33.0
Chihuahua	-12.5	-144.2	Michoacán	-34.7	-151.0
Hidalgo	-11.3	-167.7	Querétaro	-31.0	-18.5
Querétaro	-8.9	-56.5	Nayarit	-23.3	-23.1
Jalisco	-8.7	-222.9	Hidalgo	-22.5	-52.8
State of Mexico	-8.3	-683.7	Nuevo León	-19.9	-6.3
Tlaxcala	-8.0	-56.0	Durango	-18.5	-9.2
Coahuila	-7.3	-54.8	State of Mexico	-18.1	-191.2
Colima	-5.3	-13.1	Chihuahua	-17.4	-21.0
Aguascalientes	-4.9	-18.1	Quintana Roo	-13.6	-9.4
Oaxaca	-4.7	-132.6	Oaxaca	-12.4	-135.3
Nayarit	-4.1	-19.2	Coahuila	-10.4	-5.2
Zacatecas	-3.2	-25.1	Sinaloa	-5.5	-4.8
San Luis Potosí	-3.1	-38.7	Colima	-5.4	-1.0
Yucatán	-0.2	-1.4	Zacatecas	-3.0	-1.7
Veracruz	0.8	39.1	San Luis Potosí	-2.9	-6.2
Quintana Roo	0.8	3.8	Puebla	-1.8	-9.9
Puebla	1.0	35.4	Guanajuato	-1.7	-4.3
Chiapas	1.5	60.6	Baja California Sur	-1.4	-0.2
Sinaloa	1.8	17.2	Mexico City	-1.2	-1.8
Sonora	3.8	31.6	Tabasco	6.4	18.3
Guanajuato	3.9	98.1	Sonora	7.0	5.3
Guerrero	4.2	97.5	Chiapas	8.3	124.7
Nuevo León	4.8	35.3	Veracruz	9.4	125.3
Morelos	4.9	47.5	Yucatán	11.1	14.7
Durango	5.7	36.7	Tamaulipas	17.6	18.2
Tabasco	7.5	92.1	Guerrero	17.7	146.2
Baja California	7.5	59.3	Morelos	27.4	31.6
Campeche	8.7	35.4	Baja California	49.4	19.6
Mexico City	10.2	248.3	Campeche	51.0	31.4
Tamaulipas	11.4	131.7	Jalisco	68.8	99.6
<b>National</b>	<b>-1.9</b>	<b>-992.3</b>	<b>National</b>	<b>-0.7</b>	<b>-65.4</b>

Source: BBVA Research based on CONEVAL estimates.

## Current income by federal entity

A household in Mexico City has on average three times the income (MXN 26,362 per month) of a household in Chiapas (MXN 8837). Through ENIGH, it is possible to estimate the average current income per federal entity and compare the differences on a national level. The states with the highest average household income were: Mexico City (MXN 26,362 per month), Nuevo Leon (MXN 22,986), Baja California Sur (MXN 22,926), Querétaro (MXN 20,446) and Jalisco (MXN 20,180).

Conversely, the states with the lowest average household income were: Chiapas (MXN 8837), Guerrero (MXN 9778), Oaxaca (MXN 10,531) and Veracruz (MXN 10,815); i.e. states in the south and southeast of the country. Thus, on average, a household in Mexico City has a current income that is three times that of a household in Chiapas.

Table 4 **Average monthly current household income in Mexico by federal entity, 2018**  
 (2018 pesos)

Federal entity	Current income	Federal entity	Current income
Mexico City	26,362	State of Mexico	16,004
Nuevo León	22,986	Campeche	15,900
Baja California Sur	22,926	San Luis Potosí	15,499
Querétaro	20,446	Guanajuato	15,381
Jalisco	20,180	Durango	14,549
Sonora	19,961	Morelos	14,324
Aguascalientes	19,782	Michoacán	14,218
Baja California	19,726	Tlaxcala	13,434
Quintana Roo	18,904	Tabasco	13,150
Coahuila	18,642	Puebla	12,992
Sinaloa	18,491	Hidalgo	12,928
Chihuahua	18,010	Zacatecas	12,652
Colima	17,589	Veracruz	10,815
Yucatán	16,626	Oaxaca	10,531
<b>National</b>	<b>16,537</b>	Guerrero	9,778
Tamaulipas	16,383	Chiapas	8,837
Nayarit	16,049		

Source: BBVA Research Estimates from INEGI, National Household Income and Expenditure Survey (ENIGH) 2018

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