

Remittance Flows from the U.S. to Mexico at the State Level: Drivers and Trends

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While Mexican emigration has been declining for the past decade, Mexico continues to be among the top recipients of family remittances worldwide.

Remittances coming from the United States are the majority, making up 94% of total remittances received.¹ Overall, remittance flows from the United States to Mexico have increased from 22.8 billion USD in 2014 to 28.7 billion USD in 2017.

In this piece, we attempt to reconcile the slowdown in Mexican migration with the strong remittance growth we have seen. The absence of a generalized relationship between remittance flows and Mexican-born migrant population growth during the 2014-2017 period leads us to look at several potential factors driving the growth in remittances to Mexico:

1. Remittance flows increased because more migrants (who are already in the U.S) are sending remittances.²
2. Remittance flows increased because migrants are sending more money (larger principal).

What is unique about this research is that we tackle these questions not just on a national level but among specific US states, recognizing that there are important state-level differences at play. We look at years living in the U.S, income of the Mexican population in the US, average remittance, number of transactions and number of senders, to shed some light to our research.

The article shows that overall, remittance growth is linked to increased transactions and increased principal. Increased transactions are the result of inter-state migration for states with lower Mexican population. For states with greater Mexican population, increased transactions are not explained by new immigration inflows but are happening because more migrants are sending money, many of which staying longer in the U.S. The frequency of transactions is slightly higher in states with less Mexican population.

Increases on the principal appear to be relatively income and time inelastic. However, they are higher for states with lower Mexican population and great remittances growth: the principal remitted is moderate in states sending more remittances but is larger in states experiencing higher growth.

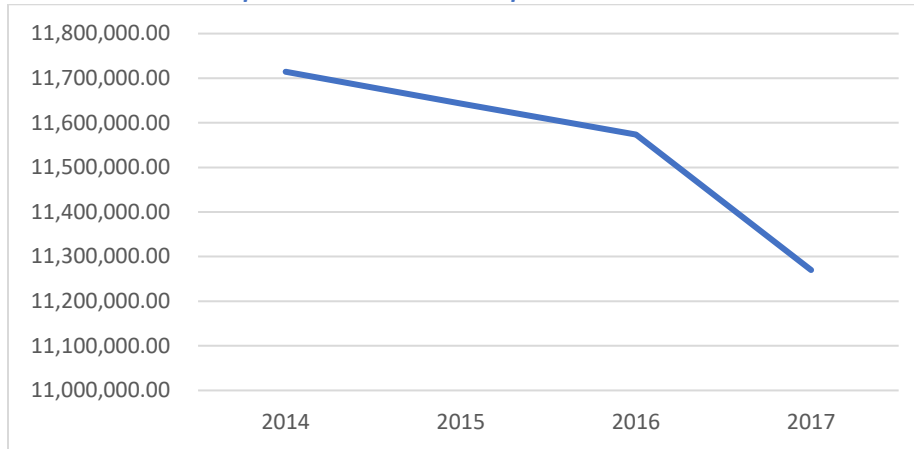
¹ Banxico 2017.

² Orozco, Porras and Yansura, "The continued growth of family remittances to Latin America and the Caribbean in 2015," Inter-American Dialogue, 2016.

Mexican Immigration to the United States: Overall Trend

Mexican migration to the US is decreasing. US Census estimates show that from 2014 to 2017, there has been a decline in the Mexican-born population living in the US of 1.3% (Graphic 1)³. If we look at data over the longer term, the decline in Mexican immigration is more dramatic since 2007 (Graphic 2). Moreover, according to data from the Pew Research Center, net migration from Mexico to the United States has fallen to negative numbers, meaning that more Mexicans are leaving the U.S than entering.⁴

Graphic 1: Mexican-Born Population in the U.S.⁵

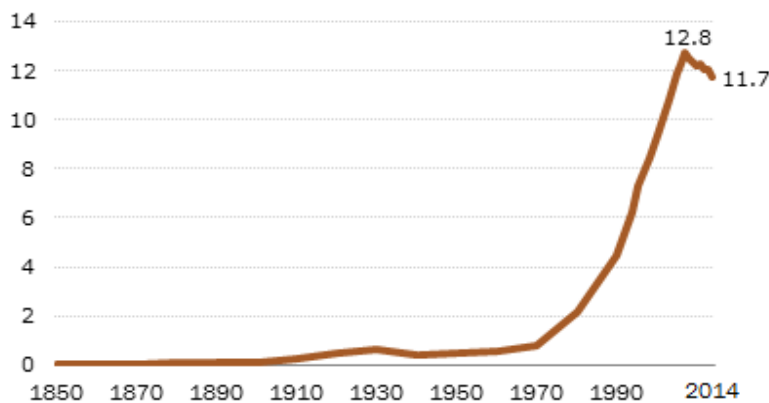


Source: US Census Bureau 2017

Graphic 2: Decline in Mexican Population in the U.S.⁶

Mexican Immigrant Population in the U.S. in Decline

In millions



Source: Pew Research Center

³ Data available for 23 states in the period 2014-2017: Arizona, California, Colorado, Florida, Georgia, Illinois, Indiana, Kansas, Michigan, Minnesota, Nevada, New Jersey, New Mexico, New York, North Carolina, Oklahoma, Oregon, South Carolina, Tennessee, Texas, Utah, Washington and Wisconsin.

⁴ Gonzalez Barrera, Ana "More Mexicans Leaving Than Coming to the U.S.," Pew Research Center.

⁵ US Census Bureau 2017. (Data available for Mexican-born only for 23 states).

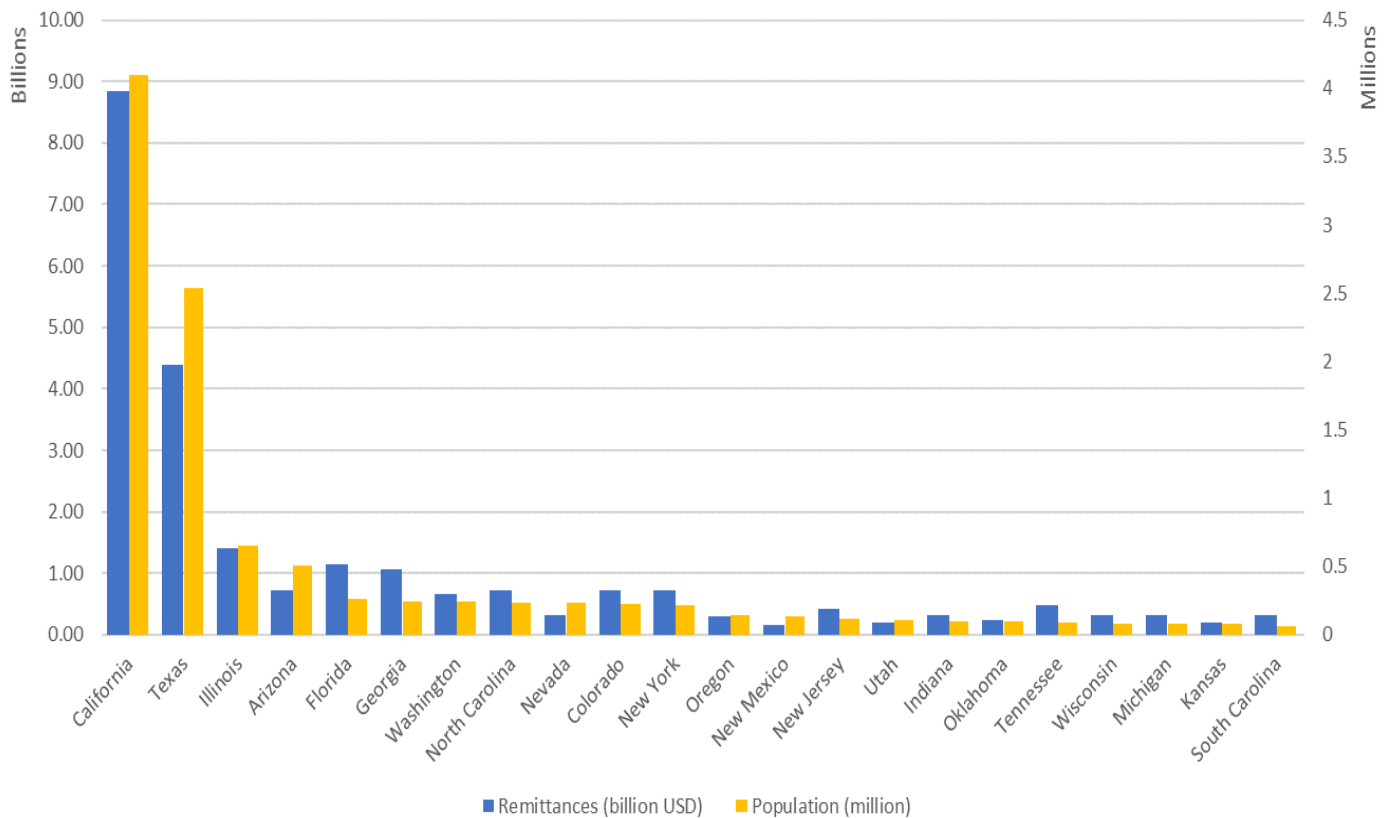
⁶ Gonzalez Barrera, Ana "More Mexicans Leaving Than Coming to the U.S.," Pew Research Center.

Rising Remittance Flows from the U.S. to Mexico

Despite the decreasing immigration levels, remittances from the US to Mexico have been rising. From 2016 to 2017, remittances from the U.S. to Mexico increased by 12%, an important growth compared to previous years, such as 9% in 2016 and 4% in 2015.

As might be expected, states with the largest Mexican-born populations are among those sending the most both in value and transactions. Among the top states sending remittances were California (\$8.84 billion), Texas (\$4.3 billion), Illinois (\$1.4 billion), New York (\$1.8 billion), Florida (\$1.15 billion), and Georgia (\$1.0 billion).⁷ In fact, from 2014 to 2017, California accounted for 28.9% of remittance flows, followed by Texas (13.95%), Illinois (4.92%), New York (3.98%), Florida (3.86%), and Georgia (3.52%). Approximately 2,348,251 total transactions were carried out from the United States to Mexico.⁸

Graphic 3: States with the Largest Remittance Flows to Mexico and Largest Mexican-born Population (2017, 2017)⁹



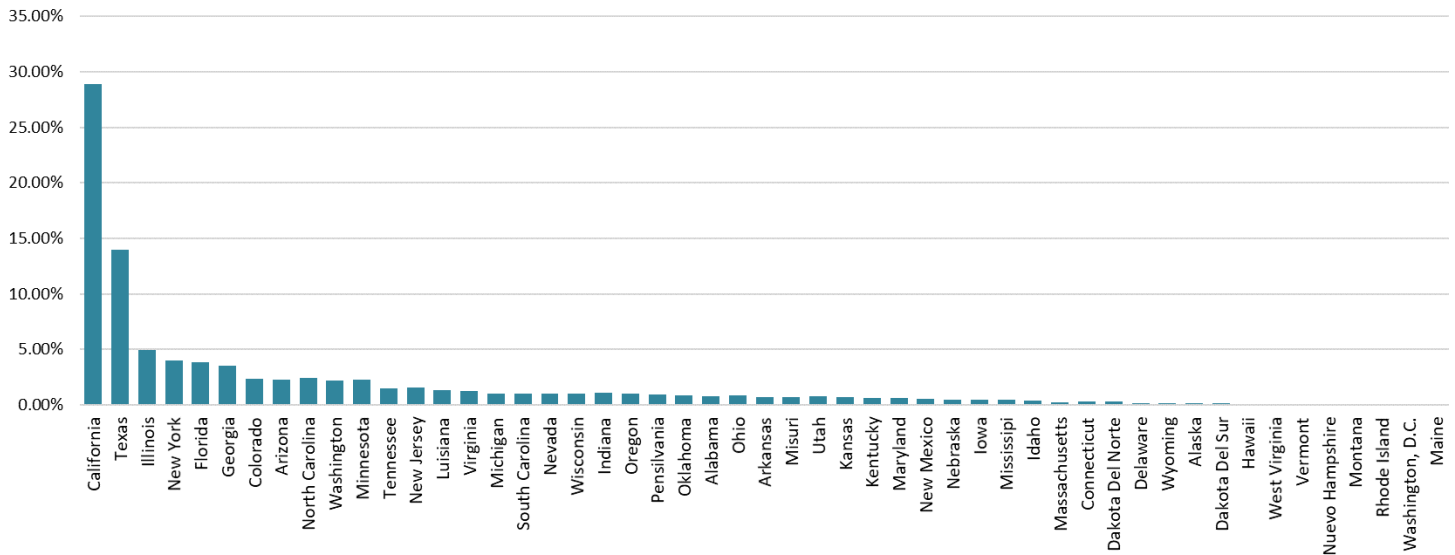
Source: Banco de Mexico and US Census Bureau, 2017 (Population data available for 22 states)

⁷ All currency in USD unless otherwise stated.

⁸ Inter-American Dialogue with data on average remittance for the year 2017. The states selected are those for which data on average remittance is available.

⁹ Inter-American Dialogue using data available retrieved from Banco de Mexico: Banxico 2017 and US Census Bureau 2017. Data for the Mexican-born population is only available for 22 states.

Graphic 4: Share of Total Remittance Flows U.S-Mexico (2017)¹⁰

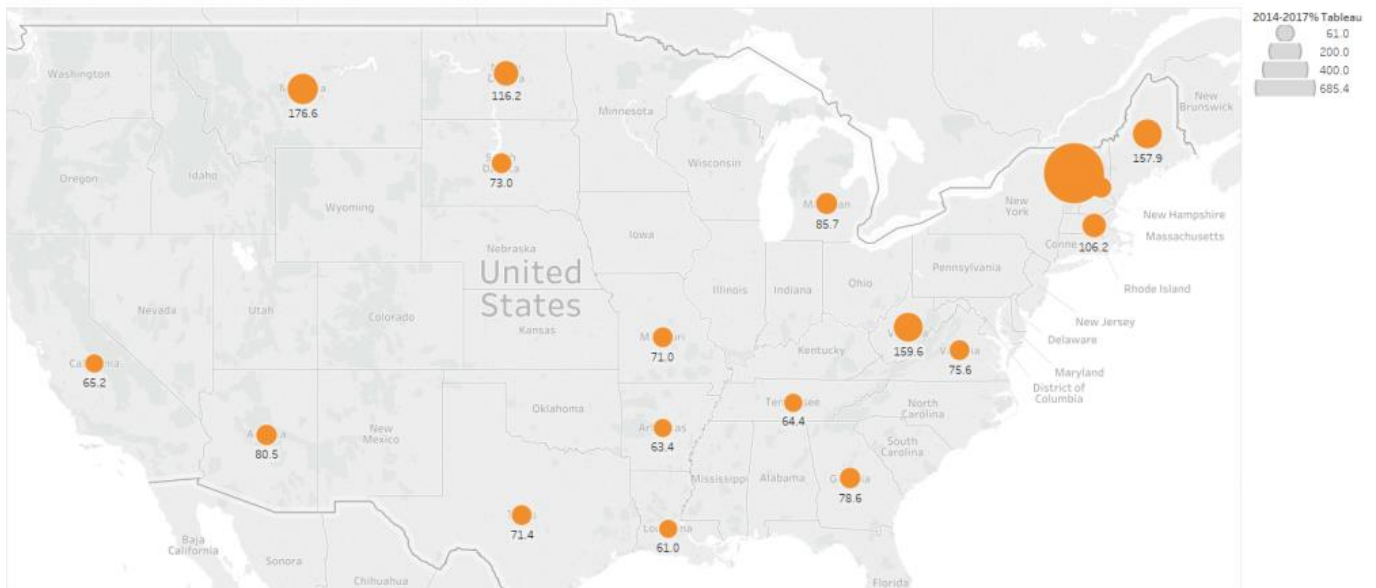


Source: Banco de Mexico 2017

Among the top five states with the highest growth in remittance flows from 2014 to 2017 were Vermont (98.78%), Hawaii (56.80%), Montana (40.37%) West Virginia (37.43%) and Maine (37.13%).

Graphic 5: State-level Growth in Remittances to Mexico (2014-2017)¹¹

Remittance flows to Mexico by state of origin- growth rate % (2014-2017)



Source: Banco de Mexico 2017

¹⁰ Inter-American Dialogue with data retrieved from Banco de Mexico: Banxico 2017

¹¹ Ibid

Table 1: Remittances to Mexico 2014 to 2017¹²

Remittance flows – State of origin	Remittance growth 2014-2017	Share of total remittances value (2014-2017)
US	7.99%	100%
Vermont	98.78%	0.06%
Hawaii	56.80%	0.10%
Montana	40.37%	0.07%
West Virginia	37.43%	0.08%
Maine	37.13%	0.04%
North Dakota	29.31%	0.30%
Massachusetts	27.27%	0.27%
Michigan	22.92%	1.01%
Arizona	21.75%	2.30%
New Hampshire	21.63%	0.07%
Georgia	21.32%	3.52%
Virginia	20.64%	1.22%
South Dakota	20.04%	0.13%
Texas	19.67%	13.95%
Missouri	19.59%	0.68%
California	18.22%	28.93%
Tennessee	18.02%	1.52%
Arkansas	17.78%	0.72%
Louisiana	17.21%	1.33%
Nebraska	16.82%	0.50%
Wisconsin	16.57%	1.04%
New York	15.15%	3.98%
Alabama	13.57%	0.80%
Pennsylvania	12.50%	0.95%
Nevada	12.45%	1.06%
Florida	12.38%	3.86%
South Carolina	12.32%	1.03%
Colorado	11.60%	2.32%
Illinois	10.83%	4.92%
Maryland	10.62%	0.63%

Source: Banco de Mexico, 2017 (Data for 30 states with highest remittances growth rate)

The absolute percent increase for remittance flows is more sensitive for states with small base values. For instance, in the case of Hawaii, remittance growth from 2014 to 2017 was 56.80% but its share of total remittance value for that period was only 0.10%. Meanwhile, in California, remittances increased by 18.22% while its share of total remittances was 28.9%, for the same period. Interesting trends are

¹² Inter-American Dialogue with data retrieved from Banco de Mexico: Banxico 2017. The table includes the top 30 states where remittance flows grew the most from 2014 to 2017.

happening in states like Tennessee, Texas, Michigan, Missouri, Vermont, Alabama, and Arizona, who have been above the U.S average growth rate on remittance flows for the third consecutive year (2014-2017).¹³

Immigration and Remittances at the State Level

In the period from 2014 to 2017, according to the US Census, the Mexican-born population in the United States slightly declined by 1.3%, while remittances grew by almost 8% (See Table 2).

At the state level, some states show a positive relationship between growth in remittance flows and fluctuations in the Mexican-born population. For instance, from 2014 to 2017, Tennessee was among the top states with a greater increase in remittance flows and in Mexican-born population, while Oregon was among the top states with the largest decrease in Mexican-born population and the lowest increase in remittance flows.

However, nationwide there is no relationship between Mexican immigration and remittance flows. With a decreasing number of Mexican migrants in the US, the increase on remittance flows may be explained by other factors.

Table 2: Changes in Mexican-born Population and Remittance Flows to Mexico (2014-2017)¹⁴

State of origin: Remittance Flows	Mexican-born population – Growth rate 2014-2017	Remittance flows – growth rate 2014-2017
Highest record		
Lowest record		
United States (total)	-1.3%	7.99%
California	-1%	18.22%
Texas	0%	19.67%
Illinois	-1%	10.83%
Arizona	-1%	21.75%
Florida	-2%	12.38%
Georgia	-3%	21.32%
Washington	2%	10.60%
North Carolina	-3%	8.51%
Nevada	-1%	12.45%
Colorado	-2%	11.60%
New York	-5%	15.15%
Oregon	-3%	3.70%
New Mexico	-4%	10.58%
New Jersey	-3%	4.99%
Utah	0%	3.93%
Indiana	-2%	9.70%
Oklahoma	-3%	9.60%
Tennessee	1%	18.02%
Wisconsin	-4%	16.57%
Michigan	0%	22.92%
Kansas	-4%	7.88%
South Carolina	-6%	12.32%

Source: Banco de Mexico and US Census Bureau, 2017(Only states for which population data is available)

¹³ Inter-American Dialogue with data retrieved from Banco de Mexico: Banxico 2017.

¹⁴ Ibid

The absence of a generalized relationship between remittance flows and Mexican-born population growth during this short period of time (2014-2017) leads us to look at potential factors driving the growth in remittances to Mexico:

1. Remittance flows increased because more migrants (who are already in the U.S) are sending remittances (more transactions).¹⁵
2. Remittance flows increased because the same pool of migrants is sending more frequently (increased frequency).
3. Remittance flows increased because migrants are sending more money (larger principal).

In the next sections, we analyze which one of these factors may help explain remittance flow growth to Mexico. Information such as years living in the U.S, income of the Mexican population in the US, average remittance, number of transactions and number of senders, can help shed light.

Years Living in the United States

The number of years that migrants have lived in the United States could be an important variable explaining the growth. After a few months or years in the US, migrants may start to send money for the first time. Similarly, after a certain period of time in the US, they may achieve more ties and responsibilities in Mexico and may need to send more money.

Overall, in the long term, the relationship is not there. Sixty percent of Mexican migrants have been living in the US for more than 17 years, with no correlation with remittance flows growth. However, for states with new Mexican population such as Michigan and Tennessee, there appears to be an increase of remittances related to new Mexican population, a result of inter-state migration.

Table 3: Changes in Remittance Flows to Mexico and Years Living in the U.S, by State (2014-2017)¹⁶

State of origin: Remittance flows	Growth in Remittances, 2014-2017	Share of total remittances 2014-2017	Percentage of Mexican-born population who entered....		
			In 2010 or later (-8 yrs)	Between 2000-2009 (8-18 yrs)	Before 2000 (+18 yrs)
	Highest record				
	Lowest record				
Michigan	22.92%	1%	16.5	35.5	48
Arizona	21.75%	2%	8.4	26.5	65.1
Georgia	21.32%	4%	9.9	43.5	46.6
Texas	19.67%	14%	11.9	28.8	59.4
California	18.22%	29%	6.2	24.3	69.5
Tennessee	18.02%	2%	15.7	49.3	35
Wisconsin	16.57%	1%	13.8	36.8	49.3
New York	15.15%	4%	12.2	40.3	47.5
Nevada	12.45%	1%	6.4	30	63.6

¹⁵Orozco, Porras and Yansura, "The continued growth of family remittances to Latin America and the Caribbean in 2015," Inter-American Dialogue, 2016.

¹⁶ Ibid

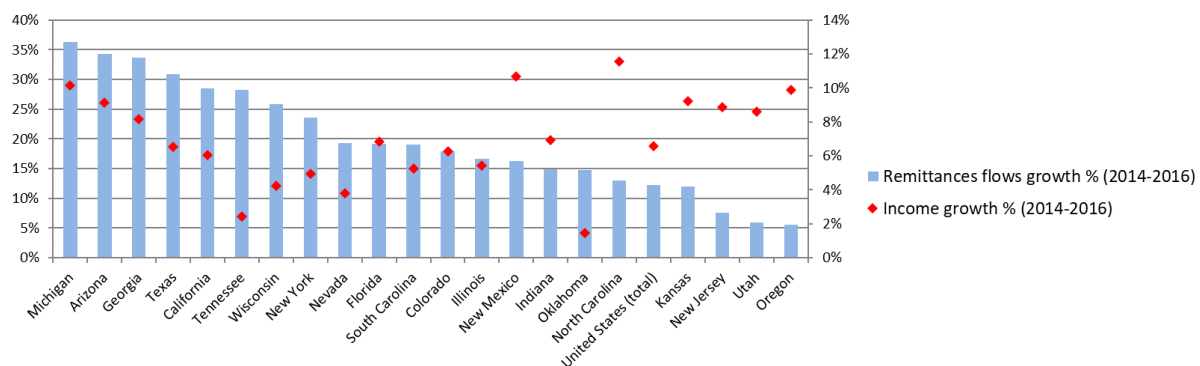
Florida	12.38%	4%	13.6	38.8	47.7
South Carolina	12.32%	1%	15.3	49.1	35.5
Colorado	11.60%	2%	9.5	34.5	56
Illinois	10.83%	5%	5.8	26.2	68
New Mexico	10.58%	1%	8.3	26.4	65.3
Indiana	9.70%	1%	10.6	37.9	51.5
Oklahoma	9.60%	1%	15.1	41.4	43.5
North Carolina	8.51%	2%	11.6	40.5	47.9
United States	7.99%	100	9.3	29.9	60.80
Kansas	7.88%	1%	10.9	38	51.1
New Jersey	4.99%	2%	10.9	46.6	42.4
Utah	3.93%	1%	10.2	38.8	51.1
Oregon	3.70%	1%	7.5	30	62.5
Washington, D.C.	1.93%	0	10.9	38.8	50.4
Minnesota	-6.62%	2%	9.8	44.9	45.3

Source: Banco de Mexico and US Census Bureau (Only states for which population data is available)

Income Levels of Mexican Migrants in the United States

Income of the Mexican population is a factor that could impact the capacity of migrants to send more money (increased principal). Yet, when analyzing the relationship between changes in income among Mexican migrants and changes in remittance flows, data shows no clear relationship between these variables for the period 2014-2016 (Graphic 6).

Graphic 6: Changes in Remittance Flows to Mexico and Income of the Mexican-born Population, by State (2014-2017)¹⁷



Source: Banco de Mexico and US Census Bureau (Only states for which population data is available)

For California, Illinois, and to a lower extent Arizona, Texas and Colorado, we would expect that the Mexican-born population who has lived in the U.S for more than 18 years has increased its capacity to send remittances. However, as we have explored elsewhere, remittances are relatively income and time inelastic.

Table 4. Remittances sent, years in the U.S. and income

¹⁷ Ibid

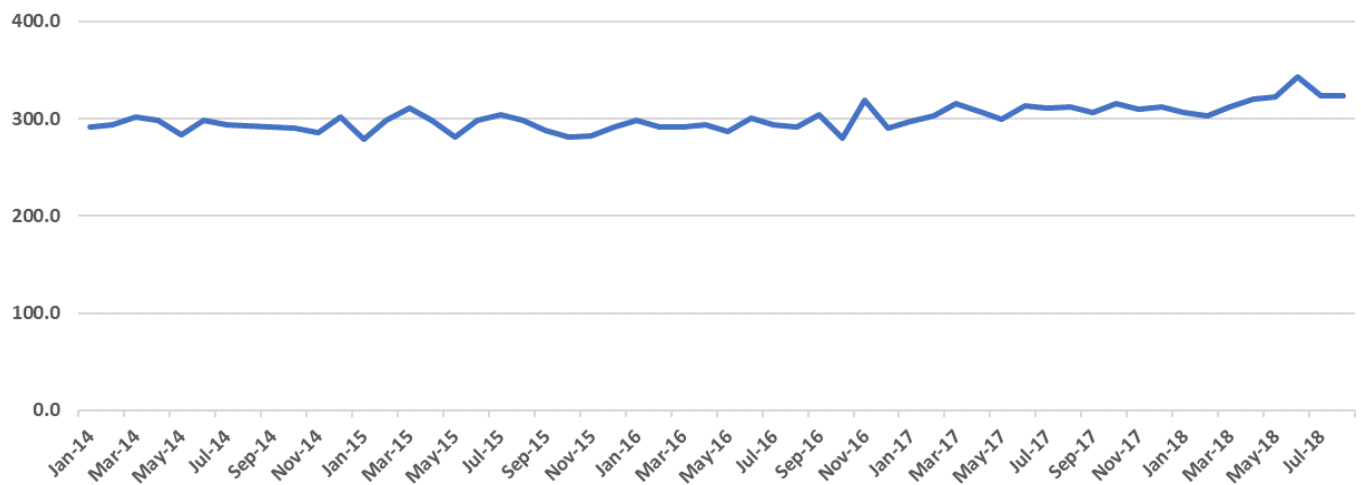
Annual Income of Latin American migrants in the U.S.	Annual Amount Remitted (USD)	Percentage of migrants within income threshold	Years living in the U.S.
Below 10,000	1458.63	14.9%	20
Between 10,001 and 15,000	4608.93	17.8%	23
Between 15,001 and 20,000	2676.00	16.3%	18
Between 20,001 and 25,000	3188.24	13.9%	19
Between 25,001 and 30,000	3677.63	11.9%	22
Between 30,001 and 34,999	3020.00	11.4%	21
More than 35,000	3514.77	13.4%	22

Source: Orozco, Manuel and Yansura, Julia. On the Cusp of Change 2017, with data from an Inter-American Dialogue survey of 1,227 migrants, 2016.

Average Remittance Sent over time

A look into the average remittance sent is also helpful to explore migrants’ capacity to send more money (increased principal). However, when looking at the average remittance over time, there are no meaningful fluctuations nationwide.

Graphic 7: Average amounts sent to Mexico (2014-2018)¹⁸



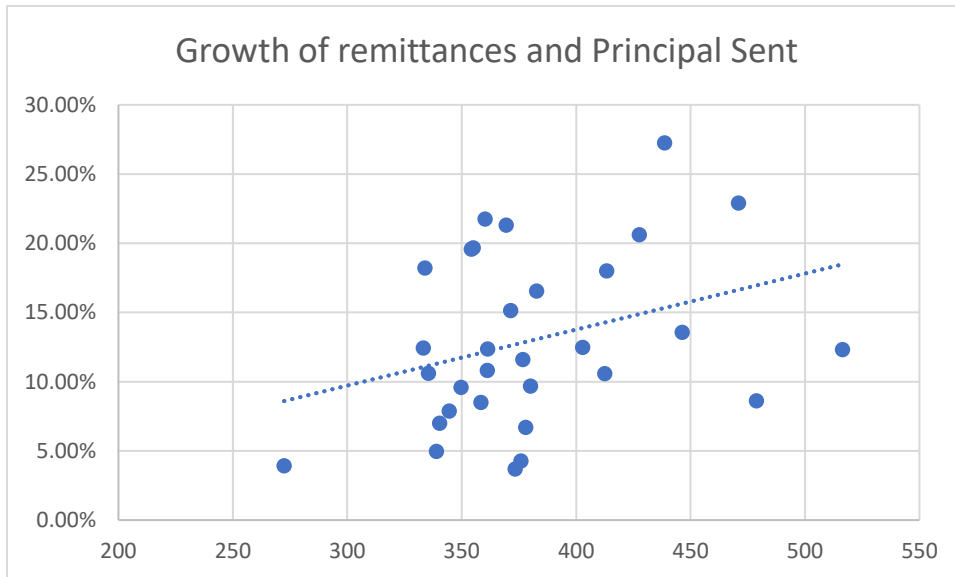
Source: Banco de Mexico

Number of Transactions and Principal Sent by state

Data on average transaction and number of transactions per state shows that in states where more Mexicans live, the average transaction number and amount is lower. But in states with less Mexican population and greater remittances growth, transaction principal and frequency are slightly higher. Thus, while the average transaction over time hasn’t shifted, transaction principal is greater in states where year on year growth is greater (See Graphic 8 and Table 5).

¹⁸ Banxico, 2018

Graphic 8: Average Remittance Principal and Year on year growth¹⁹



Source: Inter-American Dialogue data on average remittance for the year 2017.

Table 5: Average remittance sent (USD) by state.²⁰

State	Average remittance USD	Share of total remittances
SOUTH CAROLINA	520	1.0
RHODE ISLAND	480	0.1
MICHIGAN	470	1.0
ALABAMA	450	0.8
MASSACHUSETTS	440	0.3
VIRGINIA	430	1.2
TENNESSEE	410	1.6
WASHINGTON	410	2.2
PENNSYLVANIA	400	1.0
WISCONSIN	380	1.1
INDIANA	380	1.1
IDAHO	380	0.4
COLORADO	375	2.3
DELAWARE	375	0.2
OREGON	375	1.1
NEW YORK	375	4.0
GEORGIA	370	3.6

¹⁹ Inter-American Dialogue with data on average remittance for the year 2017. The states selected are those for which data on average remittance is available.

²⁰ Ibid.

FLORIDA	360	3.9
ILLINOIS	360	5.0
ARIZONA	360	2.3
NORTH CAROLINA	360	2.5
TEXAS	360	14.1
MISSOURI	350	0.7
OKLAHOMA	350	0.9
KANSAS	350	0.7
CONNECTICUT	340	0.3
NEW JERSEY	340	1.6
MARYLAND	335	0.6
CALIFORNIA	335	29.2
NEVADA	335	1.1
UTAH	270	0.8

Source: Inter-American Dialogue with data on average remittance for the year 2017, and Banco de Mexico data.

Estimated Remittance Senders

Furthermore, we estimated the number of people sending remittances and compared it to the US Census data on Mexican-born adult population.²¹ The numbers show that there are states, like New York or Florida, where our estimate is higher than the population Census estimate. The difference may be explained by undercounts of the Mexican population²² as well as by more migrants sending money, sending higher principal or frequency amounts remitted. In fact, the average remitted from Florida, New York or Georgia is 20% higher than what Mexicans in California remit.

Moreover, in another study we found that while less than 2% of remittance senders arrived in 2016 and 2017, the percent of all Mexican migrants sending money increased from 50% in 2006 to 66% in 2016.²³ That increase reflected a higher number of migrants sending money, many of which have moved across states, but who are staying a longer time in the United States.

Table 6: Percent of migrants sending remittances yearly²⁴

State of origin: Remittance flows	Estimated number of people sending remittances, yearly	Percentage of migrants sending remittances in relation to US Census data
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²¹ Estimates based on remittance flows (Banxico 2017) and average amount sent by state. An annual frequency of 13 transactions per migrant per year was used for this estimation. See Manuel Orozco, "Remittances to Latin America and the Caribbean in 2017," 2018.

²² Some studies argue that the undercount is more than 10%, Differential undercount of Mexican immigrant families in the U.S. Census, July 2017 Statistical Journal of the IAOS 33(3):1-20

²³ Orozco, Manuel, Remittances to Latin America and the Caribbean in 2016 <https://www.thedialogue.org/wp-content/uploads/2017/02/Remittances-2016-FINAL-DRAFT-1.pdf>

²⁴ Author's estimates

California	2,035,900	51%
Texas	952,360	40%
Illinois	301,400	47 %
Florida	245,300	99%
New York	245,200	119%
Georgia	223,200	95%
North Carolina	153,800	68%
Arizona	153,700	32%
Colorado	147,200	70%
Washington	123,000	55%
New Jersey	96,900	85%
Tennessee	89,800	104%
Nevada	72,400	33%
Indiana	63,100	66%
Wisconsin	62,800	81%
Oregon	61,900	45%
Utah	59,100	59%
Oklahoma	54,200	57%
Michigan	52,600	70%
South Carolina	47,400	79%
Kansas	44,800	58%

Source: Inter-American Dialogue with data on average remittance for the year 2017, and US Census Bureau.

Conclusions

Overall, the growth in remittances from the US to Mexico is best explained by more Mexicans sending money as well as by Mexicans in smaller states sending higher amounts.

Moreover, there are interesting trends happening in the flow of remittances coming from the US to Mexico at the state level. US states with the largest share of the Mexican-born population continue to have the largest share of remittances sent to Mexico. However, there is new growth in remittances coming from states like Tennessee and Michigan, which are states with an increasing Mexican-born population.

Many factors drive remittance flows, and immigration continues to be one of them, at least when looking at the state level. For states with a lower share of Mexican population, the rise in remittance flows is closely related to new inter-state migration. For instance, the majority of the states with high rates of remittance flows have experienced a significant inflow of Mexican migration for the past 18 years.