Pew Hispanic Center
a PewResearchCenter project

Fact Sheet

May 30, 2007

Indicators of Recent Migration Flows from Mexico

While short-term changes in immigration flows are difficult to measure, several indicators suggest a possible slackening in migration from Mexico since mid-2006. The Mexican-born population in the U.S. has continued to increase, but the rate of growth appears to have slowed in recent months.

This assessment is based on data that indirectly reflect the pace of migration over time and are subject to statistical fluctuations, survey effects and other phenomena that limit the ability to accurately measure changes in immigration flows across short periods of time. No data offer specific measures of the number of foreign-born individuals entering the country at a given point in time.

Nonetheless, a similar pattern is evident across four indicators examined in this fact sheet: the size of the Mexican-born population living in the U.S.; the number of Hispanic immigrants employed in the U.S., particularly in the construction industry; remittance receipts reported by the Bank of Mexico; and apprehensions of people crossing illegally into the U.S. along the U.S.-Mexico border.

Overall migration flows to the U.S.—the number of foreign-born coming to live in the U.S.—surged at the end of the 1990s, peaked in 2000 and then fell off by more than a quarter following the 2001 recession and the slow recovery of the U.S. labor market. The size of migration flows then began to increase again in 2004. Mexicans accounted for roughly one-third of the annual flow throughout this period, and changes in the flow from Mexico closely tracked the overall trend. (See "Rise, Peak and Decline: Trends in U.S. Immigration 1992-2004, Pew Hispanic Center, 2005)

The available data suggest that the total population of Mexicans living in the U.S. grew steadily since 2004, with the total number entering the country—both legally and illegally—holding at relatively high levels or even increasing through mid-2006. The trend then appears to have changed towards smaller flows. Although the size of the change cannot be calculated with precision, the four indicators examined in this fact sheet all suggest less rapid growth in the first quarter of 2007 and perhaps also in the second half of 2006 compared to 2004 and 2005.

Migration flows, especially from Mexico, have been highly responsive in the past to levels of demand for new workers in the U.S. economy. However, a wide variety of factors, ranging from political conditions in sending countries to enforcement efforts by U.S. immigration authorities, can also affect the pace of immigration. The available data does not permit an assessment of which factors might be responsible for the slackening growth in migration flows from Mexico or their relative importance. This analysis does not attempt to forecast future flows, either for the short or long term.

The Mexican-born population

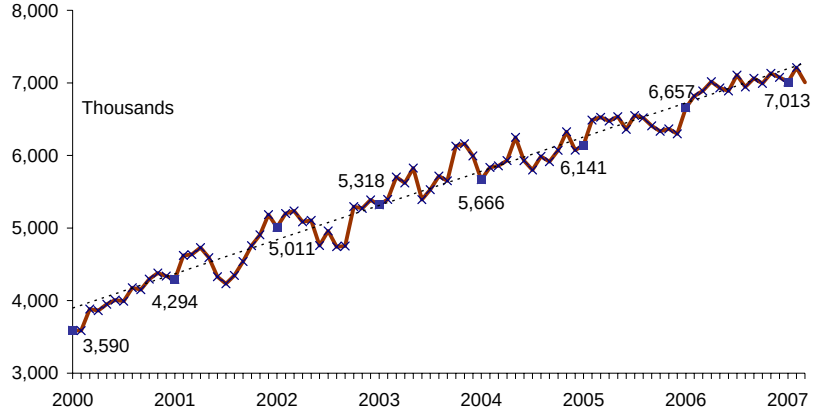
During the first quarter of 2007, the Mexican foreign-born population, including legal immigrants, legal visitors and unauthorized migrants, appears to have increased at a slower pace than in the previous two years overall.

Trend lines in the population data suggest generally rising growth rates through much of 2004 and 2005 with a flattening, albeit at a high level, apparently occurring in mid-2006. While the total number of Mexicans now being added to the U.S. population is significantly larger than it was two or three years ago, the pace of growth measured on a month-to-month or quarter-to-quarter basis seems to have slackened. These are tentative estimates because of the limitations of the available data.

The only reasonably current data on short-term changes in the U.S. population come from the monthly Current Population Survey (CPS), which is conducted by the Census Bureau and the Labor Department's Bureau of Labor Statistics and is best known for producing the monthly measures of the unemployment rate. This section of the fact sheet focuses on CPS population data for individuals born in Mexico who reported living in the U.S. since 1990 because it offers the most reliable sample for the purposes of this analysis (see "Methodological notes" below.)

In mid-2000, there were about 4 million Mexicans living in the U.S. who had arrived since 1990. That population reached 6 million at the beginning of 2004 and about 7 million in the first quarter of 2007 (Figure 1). All further references to the "Mexican immigrant population" in this section are for individuals who were born in Mexico and have resided in the U.S. since 1990, regardless of their immigration status.

Figure 1
Mexican-Born Population That Entered the U.S. in 1990 or Later
January 2000 - March 2007



Note: Points for January are highlighted each year for reference. Trend line represents a linear regression for the entire period. The slope of the line (39,000) can be interpreted as the average monthly increase in the Mexican-born population that entered the United States in 1990 or later.
Source: Pew Hispanic Center tabulations of Current Population Survey data

The analysis utilizes a variety of statistical techniques to assess trends in the CPS data for this population dating back to 1996, including year-to-year changes in monthly totals, quarterly averages, and moving averages as well as linear regressions covering the whole data series and overlapping 24-month periods. CPS data on discreet segments of the population are subject to fluctuations from one month to another as a result of a variety of statistical and survey effects.

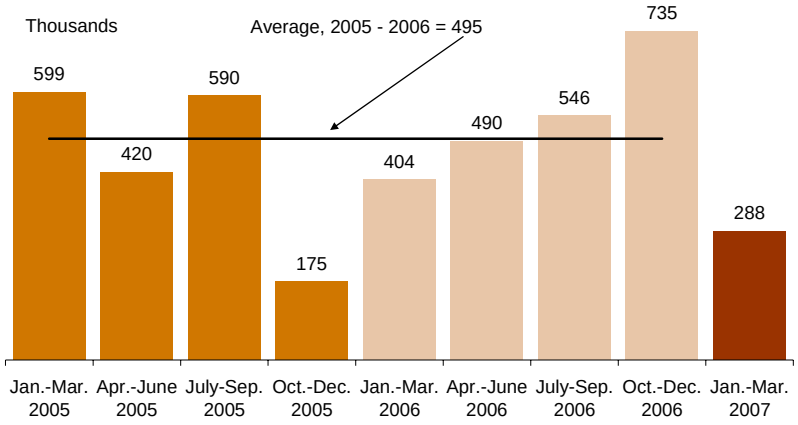
Analyzing the data on a quarterly basis has the advantage of accumulating larger sample sizes and smoothing out some of the fluctuation in the monthly data. With some consistency, the various analyses of the population data point to the same trend: the Mexican-born population continued to increase in 2006 and 2007 but at a slower rate than in 2004 and 2005. The new trend is most evident in the population data for the first quarter of 2007, but analysis of the data suggests that the trend began to develop in the middle of 2006.

One way of tracking this trend is to compare the size of the population in one quarter to the size of the population in the same quarter of the previous year. That provides a measure of how much the population has grown over the prior 12 months and shows how the level of growth varies during four periods across a year.

Across the eight quarters of 2005 and 2006, the annual increase in the Mexican immigrant population averaged 495,000 persons (Figure 2). To arrive at this estimate, each of the four quarters of 2005 were compared to the same quarters in

2004, and the four quarters of 2006 were compared to the same quarters in 2005. In other words, new immigration from Mexico, net of return migration and other smaller factors added an average of 495,000 people a year measured on a quarterly basis across the whole of 2005 and 2006. However, in the first quarter of 2007 the annual growth since the first quarter of 2006 dropped to 288,000 persons.

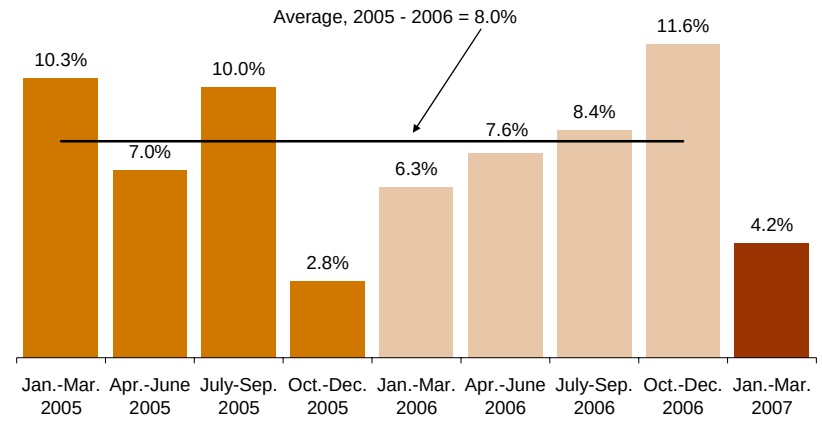
Figure 2
Annual Increase in Mexican-Born Population That Entered the U.S. in 1990 or Later Measured on a Quarterly Basis, 2005 to 2007



Note: The annual increase is the increase in population from the same quarter the previous year.
Source: Pew Hispanic Center tabulations of Current Population Survey data

Another way of looking at the data is to compare the *rate* of annual increase on a quarterly basis, i.e. the percent growth in population from the same quarter in the previous year. Again, the first quarter of 2007 is strikingly different from the average across the eight quarters that preceded it. On average, this population grew at a rate of 8.0% a year in 2005 and 2006 on a quarterly basis (Figure 3). In the first quarter of 2007, however, it continued to grow, but the annual increase on a quarterly basis was smaller—4.2%.

Figure 3
Annual Percentage Increase in Mexican-Born Population That Entered the U.S in 1990 or Later Measured on a Quarterly Basis, 2005 to 2007



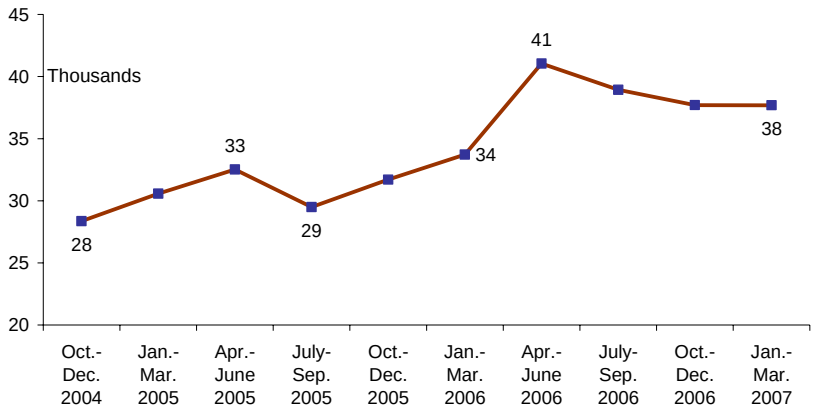
Note: The annual percentage increase is the increase in population from the same quarter the previous year.
Source: Pew Hispanic Center tabulations of Current Population Survey data

Several other types of statistical analyses can be applied to the CPS data to determine whether there are broad trends in the way the population numbers change from month-to-month or quarter-to-quarter. One technique averages the population numbers over various periods of time and isolates the variations among these averages using a regression analysis. That method does not yield precise measures of the rate of change, but it does provide a reliable indication of long-term trends while reducing short-term distortions in the data.

Applying this technique to monthly data and quarterly population averages as well as to three-month rolling averages produces similar results: The trend line slopes up more steeply in 2004 and 2005 than in 2006. Figure 4 is based on regression analyses of quarterly averages.[1] It shows a broad trend of increasing growth from the last quarter of 2004 through the second quarter of 2006 and a flattening of the growth rate since then.

[1] Figure 4 reports slopes of overlapping regressions covering 24 months of data, combined into quarterly averages. The changes measured, thus, occur over 2-year periods rather than the shorter 1-year changes reported in Figures 2 and 3.

Figure 4
Average Monthly Increase in Mexican-Born Population
That Entered the U.S. in 1990 or Later, 2004 to 2007



Note: Data points are slopes of regressions of Mexican-born population over time; each point covers a 2-year period ending in the quarter shown. (Successive data points overlap for 7 quarters.)
Source: Pew Hispanic Center tabulations of Current Population Survey data

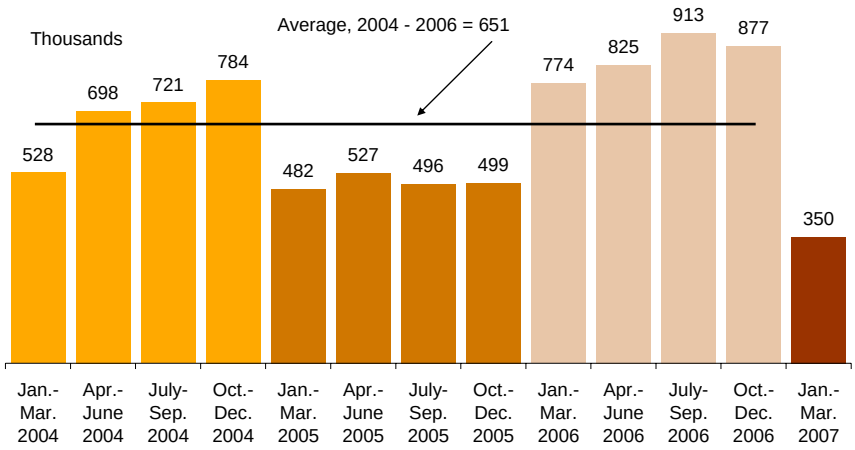
Employment of Foreign-born Hispanics

Employment of foreign-born Latinos has been rising since mid-2003, when the labor market began to recover from the recession. While the increase in employment has varied from year to year since 2004, the employment outcomes for foreign-born Hispanics overall have been positive and remain so. However, employment during the first quarter of 2007 showed the smallest increase since the recovery began.

As with the population statistics analyzed above, the only current and demographically-detailed data on employment comes from the CPS. And again measuring annual change on a quarterly basis offers a means of assessing short-term changes in the data while reducing some of the distortions in the monthly data. Comparing employment in one quarter to the same quarter in the previous year is also advantageous given seasonal fluctuations in the labor market. Given limitations in the size of CPS monthly samples, the employment data is analyzed here for all foreign-born Hispanics. The Mexican-born accounted for about 60% of that population in 2006.

Employment of foreign-born Latinos rose by 350,000 in the first quarter of 2007. (Figure 5) That was less growth than in any first quarter in the preceding three years, indeed less than for any one quarter. On average the annual gain measured on a quarterly basis was 651,000 from the beginning of 2004 to the end of 2006.

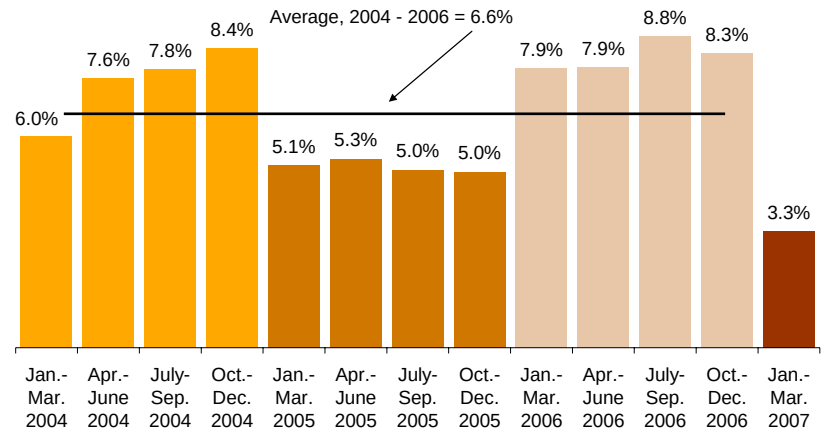
Figure 5
Annual Increase in Employment of Foreign Born Hispanics Measured on a Quarterly Basis, 2004 to 2007



Note: The annual increase is the increase in employment from the same quarter the previous year.
Source: Pew Hispanic Center tabulations of Current Population Survey data

Employment for foreign-born Hispanics increased at annual rate of 3.3% in the first quarter of 2007 (Figure 6). By this measure as well the employment growth was slower than for any other first quarter, indeed for any quarter, in the preceding three years. On average from the beginning of 2004 to the end of 2006 employment increased by an annual rate 6.6%.

Figure 6
Annual Percentage Increase in Employment of Foreign Born Hispanics Measured on a Quarterly Basis, 2004 to 2007



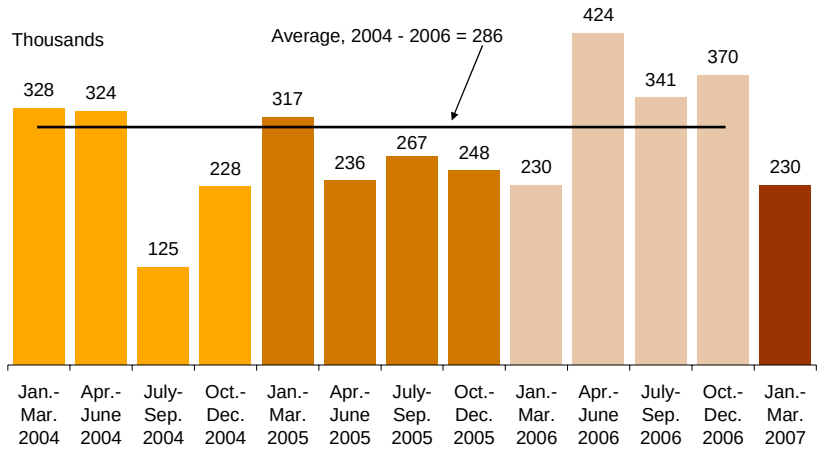
Note: The annual percentage increase is the increase in employment from the same quarter the previous year.
Source: Pew Hispanic Center tabulations of Current Population Survey data

Employment in Construction

Foreign-born Hispanic workers have benefited from employment growth in the U.S. construction industry since 2004. That trend continued into the first quarter of 2007. Employment of foreign-born Latinos in construction increased by 230,000 compared with the first quarter in 2006.

The increase in employment in the first quarter of 2007 is below the trend for the most recent period of robust industry expansion that preceded it as well as for the average of the previous three years (Figure 7). From the beginning of 2004 through the end of 2006, the employment of foreign-born Latinos in the construction industry increased by an average of 286,000 persons on an annual basis as measured from one quarter or to the same quarter in the previous year. In 2006, for example, employment was up by 424,000 in the second quarter, 341,000 in the third quarter and 370,000 in the fourth quarter compared to the same quarters in 2005. In the first quarter of 2007 the increase was 230,000 compared to the first quarter of 2006.

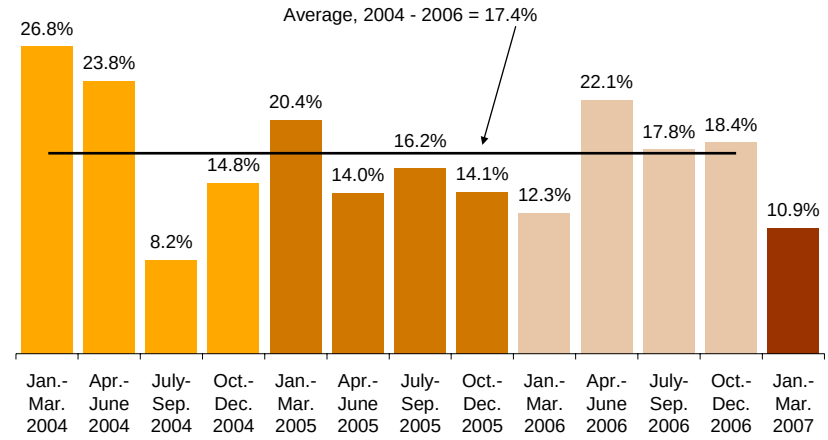
Figure 7
Annual Increase in Employment of Foreign Born Hispanics in the Construction Industry Measured on a Quarterly Basis, 2004 to 2007



Note: The annual increase is the increase in employment from the same quarter the previous year.
Source: Pew Hispanic Center tabulations of Current Population Survey data

Likewise, the percentage annual growth in construction employment measured on a quarterly basis was lower in the first quarter of 2007 than it had been in the three previous years (Figure 8). From the beginning of 2004 through the end of 2006, the employment of foreign-born Latinos in the construction industry increased by an average of 17.4%**.** In the first quarter of 2007, it was up 10.9% compared to the first quarter of 2006. That is indicative of substantial ongoing growth of employment for immigrant Latinos in the construction industry but at a somewhat slower rate than in the previous three years.

Figure 8
Annual Percentage Increase in Employment of Foreign Born Hispanics in the Construction Industry Measured on a Quarterly Basis, 2004 to 2007



Note: The annual percentage increase is the increase in employment from the same quarter the previous year.
Source: Pew Hispanic Center tabulations of Current Population Survey data

Remittances to Mexico

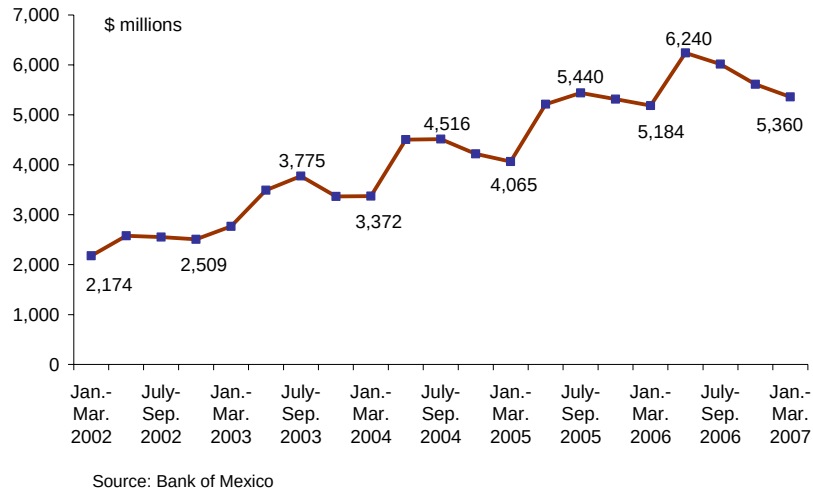
After rising steadily and substantially for several years, the growth in remittances sent to Mexico began slackening notably in mid-2006 and the rate of growth slowed through the first quarter of 2007. From the beginning of 2003 through the middle of 2006, remittance receipts showed annual increases averaging 26.5%, measured on a quarterly basis. Since mid-2006, the rate of annual growth has averaged 6.5%; in the first quarter of 2007 it was 3.4%.

The Bank of Mexico collects data on family remittances from banks, wire transfer companies and other financial agents on a monthly basis. These transfers are defined as money sent from an individual residing outside of Mexico to an individual living in the country. The vast majority originates in the U.S. and is believed to be dispatched by immigrants to family members still residing in Mexico. The flow of remittances can reflect a variety of factors, including the economic well-being of the persons on both ends of the remittance channel, the availability and cost of remittance transfer services as well as the flow of immigrants.

Remittance receipts have increased from a total of $13.4 billion in 2003 to $26 billion in 2006. Amid this overall growth, however, there have been seasonal fluctuations in remittance receipts, and as such the pace of increase is best measured by comparing the amount received in a given quarter to the receipts in the same quarter of the previous year (Figure 9). Remittance receipts posted

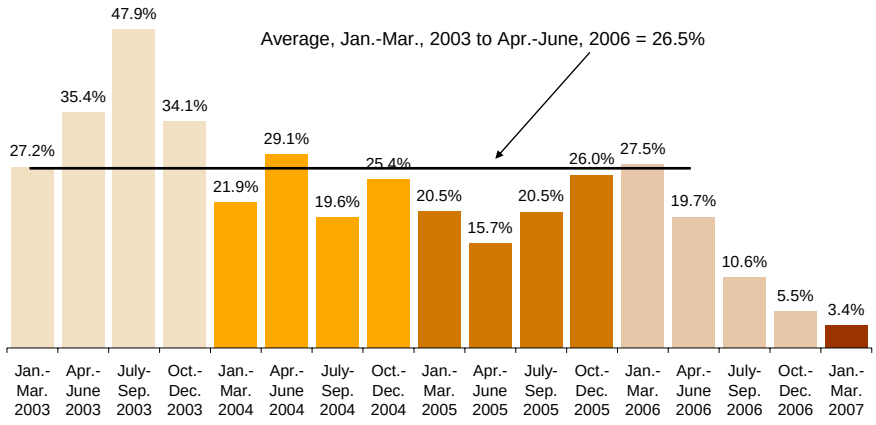
annual increases of at least 19% in 13 of the 14 quarters from the beginning of 2003 through the middle of 2006. That trend ended in the third quarter of 2006 with an increase of 10.5% followed by 5.5% in the last quarter of 2006 and 3.4% in the first quarter of 2007 (Figure 10).

Figure 9
Remittance Receipts in Mexico, Quarterly Totals, 2002 to 2007



Source: Bank of Mexico

Figure 10
Annual Percentage Increase in Mexico's Remittance Receipts
Measured on a Quarterly Basis, 2003 to 2007



Note: The annual percentage increase is the increase in remittances from the same quarter the previous year.
Source: Bank of Mexico

Apprehensions at the U.S.-Mexico Border

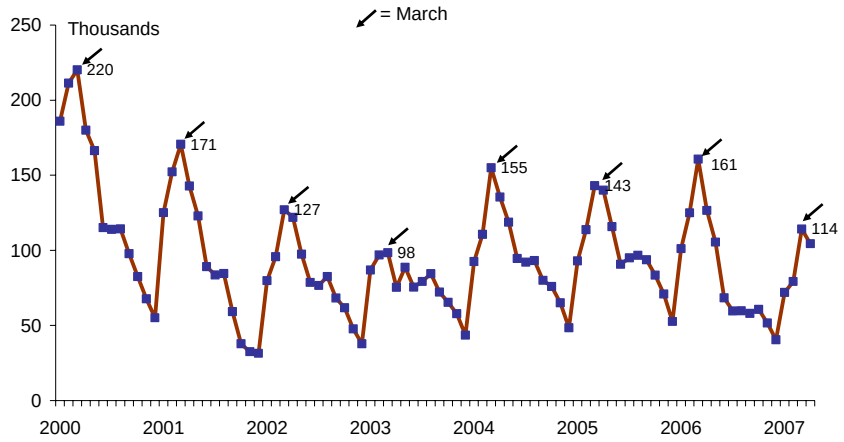
After rising in 2004 and 2005, the number of apprehensions by the Border Patrol along the U.S.-Mexico border has dropped steadily since the second quarter of 2006 once seasonal variations are taken into account. In the first quarter of 2007, the number of apprehensions was 31% lower than in the comparable period a year earlier.

Border Patrol apprehension data reflect the extent of law enforcement activity and its effectiveness as well as the level of migration across the border. Moreover, the data is for the number of apprehensions and not the number of individuals who are arrested. In other words, the total number of apprehensions in a given time period will be greater than the total number of unique individuals apprehended because some will have been apprehended more than once. The apprehension data, therefore, can only serve as a very rough and inexact proxy for the level of migration activity across the border. Nonetheless, looking back across several years of data suggests the possibility that the underlying trend changed in 2006.

Striking seasonal fluctuations are apparent in the apprehension data (Figure 11). The highest numbers of apprehensions are recorded from February to May as migrants move north for the construction and harvesting seasons. Meanwhile the lowest numbers of apprehensions are registered in November and December when many unauthorized migrants travel south for the holidays. That seasonal pattern has remained consistent for many years, regardless of whether the total number of apprehensions for the entire year is up or down. Looking back to the start of the

decade, for example, the highest number of apprehensions has occurred in March of every year.

Figure 11
Monthly Apprehensions on the U.S.-Mexico Border
January 2000 to April 2007

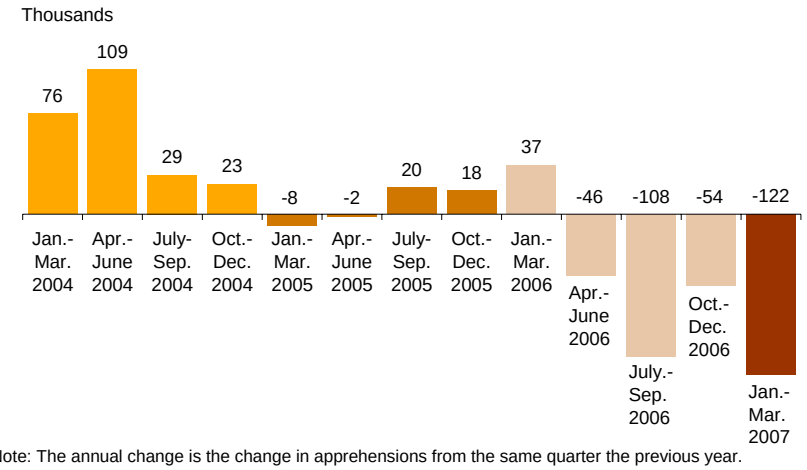


Source: U.S. Department of Homeland Security, Customs and Border Protection, unpublished data

From 2004 to 2006, monthly apprehensions during the peak months leveled off at about 150,000. The latest data, for March 2007, shows the number of apprehensions declined to about 114,000. That represents a 30% decrease from March 2006, when apprehensions exceeded 160,000.

Examining the annual change on a quarterly basis suggests a change in the trend occurred in mid-2006 (Figure 12). In 2004, apprehensions in every quarter were substantially higher than in the same quarter of 2003, with increases ranging from 23,000 in the fourth quarter to 109,000 in the second quarter. During the first two quarters of 2005, apprehensions were down somewhat compared to the same quarters of 2004, but quarter-to-quarter increases were registered through the second half of 2005 and the first quarter of 2006. For four quarters in a row since the second quarter of 2006, apprehensions have decreased on an annual basis. The sharpest drop occurred in the first quarter of 2007, when there were 122,000 fewer apprehensions than in the first quarter of 2006.

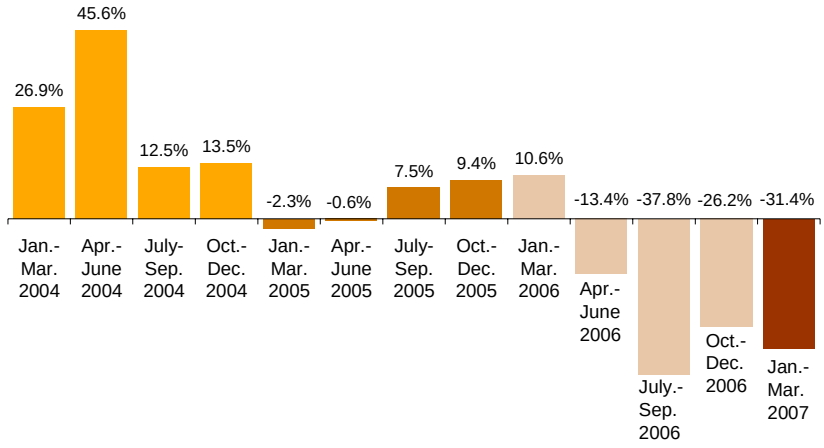
Figure 12
Annual Change in Apprehensions on the U.S.-Mexico Border
Measured on a Quarterly Basis, 2004 to 2007



Note: The annual change is the change in apprehensions from the same quarter the previous year.
Source: U.S. Department of Homeland Security, Customs and Border Protection, unpublished data

Analyzing the rate of annual change on a quarterly basis paints a similar picture (Figure 13). In percentage terms, apprehensions grew solidly in every quarter of 2004 compared to the same quarters of 2003, with increases averaging 25%. The trend was slightly negative in the first (-2%) and second (-1%) quarters of 2005 before it picked up for the next three quarters, which averaged gains of 9%. Since the second quarter of 2006, apprehensions have been down by an average of 27% in every quarter compared to the same quarter in the previous year.

Figure 13
Annual Percentage Change in Apprehensions on the U.S.-Mexico Border
Measured on a Quarterly Basis, 2004 to 2007



Note: The annual percentage change is the change in apprehensions from the same quarter the previous year.
Source: U.S. Department of Homeland Security, Customs and Border Protection, unpublished data

Methodological notes

The foreign born population of the U.S. changes through the arrival of new immigrants from abroad, the departure of immigrants from the U.S. and reductions resulting from the deaths of immigrants living in the country. When established through surveys, including the Census Bureau's Current Population Survey (CPS), both the size of the foreign-born population and the level of change within it are also affected by sampling variability.

Changes in the size of Mexican-born population that entered the U.S. since 1990 largely reflect net immigration, which is dominated by new in-flows that lead to an increasing population. The post 1990 Mexican population is relatively young and thus not subject to significant mortality. It also can be consistently measured throughout the period analyzed (1996–2007) and is large enough so as not to be subject to relatively large fluctuations from sampling variability. In contrast, the population of Mexican immigrants who entered the U.S. before 1990 steadily decreases in size over time. That group is subject to significant reductions from mortality and emigration and receives no new additions from in-migration.

In analyzing data on post 1990 entrants from Mexico, differences over time, as from the same month in the previous year, represent net additions from immigration. Those measures are analyzed over periods of at least one year to minimize the impact of sampling variability. Conceptually, month-to-month differences or quarter-to-quarter differences are also measures of change (from immigration). However, the sampling error on such measures is sufficiently large that the results tend to be statistically insignificant.

The fact sheet also uses the population data for two other measures. For a number of comparisons, the three monthly CPS figures from calendar quarters are averaged before the data are subjected to further analyses. That process serves to further minimize the impact of short term fluctuations (from sampling and other sources) on the results. In several places, the fact sheet includes the estimated slope of a regression line for the monthly or quarterly population data (one such regression line is shown in Figure 1.) The slope of the time trend represents the rate of change in the population. It is reported in units that can be interpreted as the average monthly increase in the population from immigration.