Selection and Assimilation of Mexican Immigrants:
New versus Traditional Destinations

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Abstract

We study the selection and earnings assimilation of Mexican immigrants in their traditional and newer destinations. Our analysis shows that during 2001-2009, recently arrived Mexican men living in the newer destinations were two percentage points more likely to be employed, 10 percentage points (38%) more likely to be working in construction, and had a 4 to 5% higher average wage than recently arrived Mexican men in the traditional destinations. Recently arrived Mexican women were four percentage points more likely to be employed in the newer destinations, but their wages were statistically the same as those of recently arrived Mexican women at the traditional destinations. Longitudinal analysis shows that during the study period the real wage of Mexican immigrants at traditional destinations increased 1-2% a year; wage growth of Mexicans at the newer destinations was mostly statistically insignificant. Mexicans in the traditional destinations also exhibited greater residential stability: internal migration, non-follow up in the longitudinal data and predicted return migration were higher among immigrants at the newer destinations than among immigrants at the traditional destinations. Predicted return migration was also found to be selective on past earnings among men, but not among women. For men, a 10 percentage point increase in predicted probability of return migration was associated with a 0.3 to 0.5% lower wage in the year prior to return.

Introduction

The United States has experienced an unprecedented geographic dispersion of Mexican immigrants in last two decades (Massey 2008). Since 1990, Mexicans have migrated to states such as North Carolina, Georgia, Tennessee, Nevada, Utah, Oregon, and Wisconsin, which not only had a negligible presence of Mexican immigrants at that time but also had never received immigrants from any country in significant numbers. In 1990, 85% of the immigrants from Mexico lived in just three states: California, Texas, and Illinois. By 2010, this proportion fell to 57%. News media, almost on a daily basis, report the travails of Mexican immigrants in the new destinations and how residents, local communities, and state governments are responding to the immigrant influx. However, there are no national-level studies of the selection (entry-level characteristics) and earnings growth of Mexican immigrants in the newer versus traditional destinations.

The objective of this paper is to use nationally representative cross-sectional and longitudinal data to investigate the selection patterns and earnings growth of Mexican immigrants at the newer and traditional destinations. A unique contribution of this paper is to predict the probability of return migration of Mexican immigrants at the traditional and newer destinations, and investigate if predicted return migration is influenced by past US earnings. Our study of these three inter-related processes - selection, earnings assimilation, and return migration – is likely to provide a more thorough understanding of Mexican immigration than studies that have focused on only one or two of these processes.

Mexican immigrants have a growing and critical presence in the US economy. As of 2008, they constituted 6% of the country's working-age population and 23% of the working-age population without a high-school degree.[1] They are the most disadvantaged in terms of education, earnings, and legal residence status in the US (Duncan et al. 2006; Passel and Cohn 2009; Ramirez 2004; and Rumbaut 2006). Previous research has found that Mexican immigrants experience much slower convergence in earnings than other immigrant groups causing fears that Mexican immigrants may be becoming the new underclass (Blau and Kahn 2007; Borjas and Katz 2007; Lazear 2007). These studies used Census data from 2000 or earlier years and did not distinguish between Mexican immigrants living in newer versus traditional destinations.[2] We use more recent data and study Mexican immigrants' entry level earnings and earnings growth at traditional and newer destinations. In addition, our analysis also addresses some of the key weaknesses in previous research on Mexican earnings assimilation. For instance, previous research on Mexican earnings assimilation was based on repeated cross-sectional data, and did not adjust for potential bias on account of selection in immigration and emigration (Borjas 1994; Kaushal 2011; Lubotsky 2007). Thus, if Mexicans who do not do well in the US economy have a higher propensity to return to Mexico, estimates based on multiple cross-sections of data would indicate earnings growth even when there is none.

We address this issue in a number of ways. First, in the cross-sectional analysis, we compare the earnings of Mexican immigrants who arrived in the US during the same period but settled in newer versus traditional destinations after controlling for a rich set of variables including the period of arrival, age at arrival, and year of observation. The cross-sectional analysis thus provides estimates of the relative earnings of Mexicans at different destinations at any single point in time since immigration.

[1] Mexican immigrants in the United States: http://pewhispanic.org/files/factsheets/47.pdf.

[2] Two studies have used more recent data, but both have a regional focus and neither has examined Mexican immigrants per se. Bohn (2009) studied the new patterns of immigrant settlement within California focusing on broader immigrant groups (e.g., Latinos, Asians). Kochhar et al. (2005) studied the characteristics of Hispanics in six southern states.

Second, we use longitudinal data to study earnings growth of Mexican immigrants at traditional and newer destinations. This analysis includes person-fixed effects to eliminate bias resulting from return migration. Finally, we predict the probability of return migration of Mexicans in the traditional and newer destinations and investigate if the predicted propensity to return differs by destination and if it is selective on the lagged earnings (earnings prior to return).

Background and Theoretical Framework

Historically, new immigrants have followed earlier arrivals from the same country. Living in co-ethnic communities provides access to and information about the local labor, housing, and credit markets. Social networks and cultural and linguistic affinity with the community also help the migration process (Amuedo-Dorantes and Mundra 2007; Aguilera and Massey 2003; Munshi 2003; Zhou and Logan 1989).

Until 1990, the migration pattern from Mexico to the US was typical of the historical trend – with 89 % of all Mexican immigrants settling in four states- California, Texas, Illinois and Arizona[3]. Over the past two decades, however, Mexican immigrants have displayed unprecedented geographic dispersion. Researchers have expounded several theories to describe this phenomenon. Massey (2008) argues that the initial change began with California becoming a less attractive place for Mexicans due to a series of state and federal policy changes including Proposition 187, which barred undocumented persons from utilizing public services, and the tightening of the US–Mexico border, which diverted Mexican immigrants from California to other border states. Card and Lewis (2007) found that county-level demand pull factors and city-level supply push factors were significant predictors of Mexican immigrant inflows. Kaushal

[3] Traditionally a large proportion emigrated from Mexico's central west plateau, but during the past two decades Mexicans are emigrating from all across the country.

and Kaestner (2010), on the other hand, found that economic factors were only weakly associated with the geographic dispersion of Mexicans.

The choice of destination is not random (Borjas 1987). Immigrants move to new destinations because they expect the economic and noneconomic benefits of migration, net of costs, to be higher at the newer destinations than at the traditional ones. Because newer destinations provide fewer ethnic amenities and limited co-ethnic support, immigrants would move to these destinations only if net economic benefits compensate for the loss of network externalities. Massey (1987) argues that immigrants become less positively selected with each successive wave of immigration as expanding migrant networks help reduce the risk of migration.

In short, due to these various selection factors, initial earnings of immigrants should be higher at the newer destinations than at traditional ones. However, it is not clear how earnings will grow over time. At the newer locations, immigrants are more likely to develop US-specific skills (e.g. English language proficiency) since the demand for ethnic skills (to produce goods and services for Mexican immigrants) would be lower at these newer destinations and the demand for US-specific skills higher. Acquisition of US-specific skills will improve eligibility for better paid jobs, facilitating faster assimilation. Community support and network externalities at traditional destinations are also conducive to labor market assimilation. The relative earnings growth at traditional versus newer destinations will therefore depend on network externalities, post-migration investments in skill development as well as relative opportunities at the three destinations.

Immigration to the newer destinations is more likely to be for economic factors and less likely to unite with the family since by definition these destinations have fewer Mexicans (family members) who arrived in earlier cohorts. If so, compared to Mexicans at the traditional destinations, those at the newer destinations face lower costs (economic and non-economic) of return and internal migration, and thus they may have a higher propensity to return to Mexico or move within the US. In the empirical analysis, we test these hypotheses with regard to immigrant selection, earnings growth, and return migration.

Traditional and New Destinations

We divide Primary Metropolitan Statistical Areas (PMSA) in three categories based on vintage Mexican presence in PMSA population and their growth during the 1990s: traditional destinations, new high-growth destinations, and new low-growth destinations. PMSAs with at least 4% of the population born in Mexico (Mexican density) in 1990 are defined as traditional destinations. The non-traditional PMSAs are further divided into two groups: new high-growth destinations and low-growth destinations. New high-growth destinations are non-traditional PMSAs with at least 4% population born in Mexico in 2000. New low-growth destinations are non-traditional PMSAs with less than 4% Mexican density in 2000.

Appendix table 1 provides the list of traditional and new high-growth destinations and the Mexican density levels at these PMSAs in 1990, 2000 and 2007-2009. The data for the 1990 and 2000 Census are taken from Integrated Public Use Microdata Series (IPUMS) and the data for 2007-2009 are drawn from the CPS Outgoing Rotation group files. The traditional destinations for Mexicans – 27 PMSAs - are mostly located in the southwest and include several PMSAs in California, New Mexico, Arizona, and Texas and one PMSA (Chicago) in the Midwest. Overall, 8 % of the population in these PMSAs was from Mexico in 1990; it rose to 11% in 2000 and 13% by 2007-2009. There are 21 new high-growth destinations where Mexican population density rose from 3% in 1990 to 6% in 2000 and further to 9% by 2007-2009. Our analysis includes 169 low-growth destinations, where Mexican population density was 0.2% in 1990, 0.9% in 2000 and 1.5% in 2007-2009. We have elected to keep this category as 45% of recent Mexican immigrants (in the US for 5 years or less) and 33% of all Mexican immigrants in our sample lived in these low-growth destinations.

Figure 1 plots Mexican immigrant density at the three destinations. The PMSAs are ranked (the numbers on the X-axis) by the proportion of Mexico-born persons in the PMSA population in 1990. In 1990, 81% of all Mexicans in the US lived in the traditional PMSAs. Over the next two decades, a massive dispersion occurred such that in 2007-2009, only 46% of the post-1990 arrivals lived in traditional destinations; 22 % lived in new high-growth destinations and 32% lived in new low-growth destinations. By 2000, 48 PMSAs had Mexican population density of over 4%, and by 2007-2009 the number had climbed to 59.

Data

The empirical analysis uses the Current Population Survey, Outgoing Rotation Group files (CPS-ORG) from 2001 to 2009.[4] Because few Mexican immigrants in the new destinations migrated before 1980, we focus on adults aged 18 to 64 who arrived in the US in 1980 or later. The CPS provides Metropolitan Statistical Area and Primary Metropolitan Statistical Area codes of residence for the 1996 to April 2004 period and the Combined Statistical Area of residence as defined by the Office of Management and Budget from May 2004 onwards. The CPS also contains data on county of residence for about 60% of the observations for the entire study period. We use the county-level information as well as a crosswalk prepared by the Bureau of Labor Statistics to create PMSA codes for the May 2004 to December 2009 data that match with the codes for January 1996 to April 2004.

[4] We also did all analysis for 1996-2009 and results were similar to those obtained with the 2001-2009 data. We have elected to present results for the post 2000 period (for 2001-2009) because our definitions of new high-and low-growth destinations are based on 1990 and 2000 density levels.

The CPS-ORG provides information on individual characteristics such as age, sex, educational attainment, country of birth, and labor-market outcomes, which include employment status, usual hours worked per week, usual weekly earnings, hourly wage for hourly paid workers, and industry of employment. These data are used to create the outcome and control variables. Consumer price index from the Bureau of Labor Statistics is applied to convert the wage data to constant dollars (base year 1982-1984=100).[5] Observations with real wages of less than $2 or more than $250 are dropped from the wage analysis. The CPS provides data on period of arrival at two to three years intervals for those who arrived in the US in 1980 or later. We use this information to assign immigrants to the following years-since-immigration categories: 0 to 3 years, 3 to 7 years, 7 to 11 years, 11 to 15 years, 15 to 20 years, and 20 to 29 years. PMSA unemployment rates computed from CPS-ORG are used as a control in some model specifications. Real wage of second generation Mexicans (with at least one parent born in Mexico), by age (18-39 and 40-64), education (less than high-school, high-school, some college, and BA or more), destination (traditional, new high-growth, and new low-growth), gender, and year of the survey are constructed from the CPS-ORG data and used as control in some models.

The CPS interviews persons living within the same housing unit for four consecutive months, drops them from the survey for the next eight months, and re-enters them into the survey for the following four months. The CPS public-use data provide identifiers that can be used to match individuals in two consecutive years. Because the CPS sampling frame is residences and not people, we use a number of additional variables such as respondent's age, sex, race/ethnicity, nativity, state of residence, and period of arrival in the US to match individuals in years t-1 and t (Madrian and Lefgren 1999).

[5] Ideally, we would like to use PMSA specific price index to adjust for cost of living. However, reliable PMSA level prices cannot be constructed for all years due to lack of detailed data on housing costs for non-census years.

The CPS has a few limitations that may affect the proposed analyses. The data on year of arrival are based on the question, "In which year did the respondent move to the US permanently?" The question is likely to be subject to different interpretations by repeat migrants; some may provide the year of first entry to the US and others may provide the year of the most recent entry (Redstone and Massey 2004). We assume that their responses refer to the year of permanent entry as specified in the question.[6] In the longitudinal sample, we find response to the above question to be consistent in both years (t-1 and t) for all respondents, suggesting that measurement error on this account would be low in the longitudinal data that are the basis of our preferred analysis.

There is also a concern that the CPS undercounts the Mexican population in the US. Researchers have documented that the CPS misses approximately 10% of the undocumented population (Passel 2005). This limitation afflicts all publicly available datasets but is perhaps less severe in the case of the CPS, which attempts to cover the entire civilian, noninstitutional US population. The final data issue relates to the length of the longitudinal panel. Theoretically, we cannot observe a difference in earnings over longer periods, for example 10 years, without observing changes in earnings between two years. Thus, the issue is not whether observing a person one additional year is a sufficiently long time, which it is, but rather whether there will be sufficient statistical power to detect potentially small changes.

Empirical Strategy: Earnings Analysis

Our first objective is to investigate the selection patterns of Mexican immigrants in the traditional, new high-growth and low-growth destinations. To accomplish this, we study the

[6] It is not obvious what the appropriate measure is. Arguably, the ideal measure would be one that counts only the time in the US, which for those who move back and forth is neither captured by the first reported date of arrival nor the last date of arrival. For this group, it may be the cumulative number of years in the US and perhaps whether the years have been consecutive or interspersed that matters.

descriptive data on the demographic and labor-market characteristics of Mexico-born persons who have been in the US for five or fewer years.

Next, we study earnings trajectories of Mexican immigrants at the two destinations using the following model on a sample of Mexican immigrants, who arrived in the US in 1980 or later:

$$Ln(Wage)_{ijt} = X_{it}\beta + Z_{pt}\gamma + \sum_{m=1}^{M}\alpha_m * YSI_{im} + \sum_{m=1}^{M}\alpha_{mh} * (YSI_{im} * NH) + \sum_{m=1}^{M}\alpha_{ml} * (YSI_{im} * NL) + \eta_t + \lambda_k + \sigma_{j-(t-k)} + u_{ijkt} \quad (1)$$

k = 1980 - 1989, 1990 - 2000, 2001 - 2009 (period of arrival)

t = 2001,....,2009 (year of survey)

YSI_m = 0 - 3, 3 - 7, 7 - 11, 11 - 15, 15 - 20, 20 - 29 years (years since immigration)

$Ln(Wage)_{ijt}$, the log real wage of individual (i) of age (j) in year (t) is a function of the individual's characteristics (*X*), namely age (a dummy variable for each year of age), education (< high school, high school, some college, and a bachelor's degree or higher), whether married, whether US citizen, industry of work, and location specific variables (Z), namely, PMSA unemployment rate[7], the real wage of second generation Mexicans[8] (by age, education, destination, gender, and year of observation) and PMSA fixed effects. The variable λ_k denotes period of arrival, η_t denotes year of observation, YSI_m denotes years-since-immigration categories, and $\sigma_{j-(t-k)}$ is age at arrival. The variable *NH* is coded1 if the respondent lives in a high-growth new destination and 0 otherwise; *NL* is coded 1 if the respondent lives in low-growth new destination, and 0 otherwise. Age at arrival is measured in the following intervals: < 15, 15 to 22, 23 to 30, 31 to 40, and > 40 years.

We address the well-known collinearity between year of observation, year of arrival, and years since immigration (years since immigration = year of observation − year of arrival) by

[7] Estimates from models that did not control for the unemployment rate were similar to those with the control.
[8] Estimates from models that did not control for the real wage of second generation Mexicans were similar to those with the control.

grouping observations by years since immigration and year of arrival. Similarly, there is perfect collinearity between age, age at arrival, and years since immigration [age at arrival = age − (year of observation − year of arrival)]. Here too, we group the variable *age at arrival* into categories described above (Mason et al. 1973; Yang 2008). In equation (1), the effects of age at arrival, period of arrival, and year of observation are restricted to be the same for immigrants living in the three destinations. We tested these restrictions. Statistical tests rejected the restriction that year of observation has the same effect across destinations, but failed to reject the restriction that age at arrival and period of arrival has the same effect across destinations. Therefore, in the empirical analysis we allow the effect of year of observation to differ across destinations, but restrict the effect of age at arrival and period of arrival to be the same across destinations.

The parameter α_m estimates changes in wage earnings with time in the US at traditional destinations with newly arrived Mexican immigrants (in the US for 0-3 years) as the comparison category, and $\alpha_m + \alpha_{mh}$ and $\alpha_m + \alpha_{ml}$ estimate the same for Mexicans at the new high-growth and low-growth destinations. Throughout the analysis standard errors are computed by clustering on PMSA of residence using the Huber-White sandwich estimator. Because educational attainment, citizenship status, marital status, and industry of work change with time in the US and may have a causal association with earnings assimilation, equation (1) is estimated without and with these controls. Estimated trajectories without these controls provide changes in real wage with time in the US and estimates with the controls provide the same after controlling for some of the pathways through which changes in earnings take places. The difference between the two provides a rough estimate of the extent to which earnings growth could be attributed some of the known mechanisms of assimilation: e.g. investment in education, marriage, civil incorporation.

We observe the current PMSA of residence of the respondents, and not the PMSAs where they had lived since they first arrived in the US. It is likely that some individuals may have moved across destinations, and their current earnings may be influenced by experience acquired at another destination. Although it is important to study how experience at other destinations has affected current earnings, due to lack of data this issue is beyond the scope of this paper. However, we study interstate moves to draw inferences about migration at various destinations. Our analysis, as discussed in detail below, suggests that inter-state migration is relatively modest and unlikely to cause much bias in this analysis.

Mexicans at the newer destinations are more likely to be temporary migrants and more likely to return if they do poorly in the labor market compared with Mexicans at traditional destinations. A cross-sectional comparison of the earnings trajectories across destinations, as specified in equation (1), is therefore likely to be affected by selective return migration. We address this issue by using longitudinal data that follow the same individuals over time. Equation (2) describes the longitudinal analysis carried out on a sample of Mexican immigrants:

$$(2)\quad Ln(Wage)_{ijt} = \pi_i + X_{it}\tilde{\beta} + Z_{pt}\tilde{\gamma} + \tilde{\delta}_j + \tilde{\eta}_t + \sum_{m=1}^{M}\tilde{\alpha}2_{mt}(YSI_{i(t-1)m} * YEAR\_T * Trad) + \sum_{m=1}^{M}\tilde{\alpha}2_{mh}(YSI_{i(t-1)mh} * YEAR\_T * NH) + \sum_{m=1}^{M}\tilde{\alpha}2_{ml}(YSI_{i(t-1)m} * YEAR\_T * NL) + u_{ijkt}$$

There are three things to note about equation (2). First, the equation includes person-specific fixed effects (π_i). Second, each person is in the sample for two periods: t-1 and t, and the value of years since immigration in the US (YSI) is fixed at year t-1. Third, we allow the effect of years since immigration to differ by whether the observation is from year t-1 or year t. In equation (2) this choice is reflected by the interaction term $(YSI_{i(t-1)m} * YEAR\_T)$. The parameters of interest are: $\tilde{\alpha}2_{mt}$, $\tilde{\alpha}2_{mn}$ and $\tilde{\alpha}2_{ml}$, which measure changes in earnings of Mexican immigrants, between t-1 and t, at the traditional, new high-growth and low-growth destinations respectively. Note that the main effect of years-since-immigration drops out of the model because in the longitudinal analysis this variable is time invariant for a specific immigrant.

The inclusion of person fixed effects is important because unmeasured, person-specific factors may be correlated with time in the US and earnings. For example, Mexican immigrants who are more likely to be successful in the US economy may be less likely to leave the country. If so, the association between time in the US and earnings would be positive, all else equal, even if earnings did not improve over time. By including the person fixed effect, this type of bias from return migration is eliminated. In addition, our model allows controlling for unobserved location specific factors correlated with earnings in a parsimonious manner. Given that the estimates are conditional on person-specific effects, the estimates are not applicable to a random sample of immigrants. Conditional on these fixed effects, we measure how earnings change with an additional year spent in the US. This approach yields estimates of how the earnings of Mexican immigrants change with time in the US for the sample of immigrants who are present (i.e., have not exited the sample) for all the years-since-immigration categories at the three destinations. The use of individual fixed effects, however, does not control for the time-varying effect of characteristics (e.g., ambition) that may be correlated with residential choice and earnings.

Results

Selection: New versus Traditional Destinations

Our first objective is to study if there are any distinct selection patterns of recently arrived Mexican immigrants at the three destinations. Table 1 presents the descriptive data for this analysis and reveals that close to 88-91% of the sample of recently arrived Mexican men and 83-87% of the sample of recently arrived Mexican women have a high-school or less education.

Recently arrived Mexicans at traditional destinations are 2 to 4 percentage points (about 25-30%) more likely to have at least some college than recently arrived Mexicans at newer destinations.

Among recent arrivals, Mexican men at the new destinations are two percentage points more likely to be employed and have a 4-5% higher real wage than Mexican men at the traditional destinations. Mexican women at the new low growth destinations are 6 percentage points more likely to be employed than those at the traditional or new high growth destinations but there is no statistical difference in wages across destinations.

The industry level profiles of recent Mexican immigrants differ across destinations. During 2001-2009, the period covered by this study, 40% of recently arrived Mexican men at the new high-growth destinations worked in construction versus only 26% of those at the traditional destinations and 34% in the low-growth destinations. Similarly, 37% of recently arrived Mexican women at the new high-growth destinations worked in retail/wholesale compared to only 30% at the traditional destinations and 31% at the low-growth destinations.

The last two rows of Table 1 provide data on residential moves since last year. These data are taken from the March CPS because the CPS-ORG does not include information on place of residence in the previous year. Recent Mexican immigrants, in general, have a high propensity to change residences, and this propensity is higher among those living in the new destinations (high and low-growth) than among those in the traditional destinations. Overall, 31 to 35% of recently arrived Mexicans in the new destinations and 25 to 27% of recently arrived Mexicans in the traditional destinations lived in a different house in the previous year. The vast majority of the moves, however, are within the same state. About 1% of Mexicans in the traditional destinations and 4 to 6% of Mexicans in the new destinations lived in a different state in the preceding year. Ideally, we would like to study inter-PMSA migration to investigate if there is any large scale movement between the three destinations that may affect the findings of this research. Unfortunately, the March CPS does not provide the PMSA of residence last year. Our second-best option is to look at interstate migration. The relatively modest levels of inter-state moves provide some partial evidence that the migration between destinations in our sample is likely to be modest.

To sum up, our analysis suggests that the geographic dispersion of recent Mexican immigrant men has been associated with both immigrant characteristics (selection) and labor market opportunities at the newer destinations. Further, the influx of Mexican men to new destinations could partly be driven by the construction boom of the past decade as indicated by 34 to 40% of all recently arrived Mexican men at the new destinations working in construction. Next, we study the earnings growth of Mexicans at the three destinations using cross-sectional and longitudinal data.

Earnings Trajectories: Cross-sectional

Table 2 presents estimated coefficients based on a model similar to equation (1) and adjusts for age, age at arrival, period of arrival and years since immigration in the US, PMSA unemployment rate, real wage of second generation Mexicans (by age, education, destination, gender, and year of observation) and PMSA and year of observation fixed effects. The regressions in columns 2-3 and 5-6 allow the effect of year of observation to differ across destinations as statistical tests reject the restricted models; but the effects of age at arrival and period of arrival are restricted to be the same across destinations because statistical tests fail to reject the restriction. New arrivals (in the US for 0-3 years) are the comparison category.

Results in Columns 1 and 3 suggest a modest growth in Mexican immigrants' wages with time in the US: two to three decades of residency in the US is associated with a 10 percent increase in the hourly wage of men and an 8% increase in the hourly wage of Mexican women. This finding of modest earnings growth with time in the US is similar to previous research that used data from 2000 or earlier (see, for example, Borjas and Katz 2007). More recent arrival cohorts have a lower wage than earlier arrivals (not shown in Table 2). Further, Mexicans who arrived in the US at a younger age have a wage advantage over those who arrived at an older age, but in women's regressions the coefficients on the age at arrival variables are often statistically insignificant (not shown in Table 2).

Mexican men in the US for 3-15 years who live in high-growth new destinations earn a 3 to 5 percent higher wage than comparable Mexican men at traditional destinations; there is no statistically significant difference in the real wage of Mexican men at traditional and new high-growth destinations in other YSI categories (column 2). Mexican men at new low growth destinations who have been in the US for more than 15 years have a lower wage than similar Mexican men at traditional destinations. Further, statistical tests suggest that the real wage of Mexican men at new high-growth destinations is higher than that of Mexican men at new low-growth destinations. Combining this evidence with the evidence in Table 1 for new immigrants suggests that after 15 years of residency in the US the earnings advantage of recent immigrant men at new high-growth destinations, compared to those at traditional destinations, disappears. The initial earnings advantage of Mexican men at new low-growth destinations (compared to those at traditional destinations) disappears after the first three years of residency and turns negative after 15 years of residency. Estimates remain roughly the same in model 3 that includes additional controls for education, marital status, citizenship status and industry of work.

In the women's analysis too, there is evidence that the real wage in the new high growth destinations is higher than the real wage in the traditional destinations, and there is no clear indication of the wage gap disappearing with time in the US. A serious limitation of the analysis examining multiple years of cross-sectional data is that the estimates are likely to be biased if return migration is selective on earnings. Thus, any comparison of the wage trajectories of Mexicans at the three destinations would be biased if there is selective return migration, an issue we investigate in detail below. First, however, we use the two-year panel (matched data) of the CPS to study changes in real wages with an additional year of stay in the US.

Earnings Analysis: Longitudinal data

Table 3 presents changes in the log real wages of Mexican immigrants between years t-1 and t. During 2001-2009, the real wages increased 1.9% annually for Mexican men living in the traditional destinations, 0.4% for Mexican men living in the new high-growth destinations, and 1.9% for those in the new low-growth destinations. Statistical tests fail to reject the hypothesis that wage growth was the same across traditional and new low growth destinations; but reject the hypothesis of equality in wage growth across new high-growth and traditional destinations. Over the same period, the real wage increased 1.3% annually for Mexican women in the traditional destinations, 0.9% for Mexican women in the new high growth destinations and 2.2% for Mexican women in the new low-growth destinations. Statistical tests fail to reject the hypothesis that wage growth is statistically the same across the three destinations.

For comparison, we also present the wage growth of second-generation Mexican men and women and second generation Mexican men and women with a high-school or lower education across destinations: the wage growth is 3.2 to 5.7% for men and 2.9 to 4.9% for women and between 3-5% for low-educated men and -1 to 3.7% for low-educated women. Statistical tests fail to reject the hypothesis that the growth rates are the same across destinations. Comparing the point estimates of wage growth of Mexican immigrants with those of second generation low-educated Mexicans, we find that whereas first-generation Mexican men and women experienced a positive annual wage growth during 2001-2009, it was modest in comparison to the annual growth experienced by second-generation Mexican men and women, except for first generation Mexican women at low growth destinations who experienced a 2% (statistically insignificant) growth annual growth in wages compared to a statistically insignificant 1% annual decline in earnings experienced by low educated second generation Mexican women over the study period. We also estimate the earnings growth of first-generation Mexicans by years since immigration. The estimates are often positive and sometimes statistically significant, but there is no clear trend across destinations or across years since immigration categories.

Next, we investigate the effect of an additional year of residence in the US on the real wage of Mexico-born men and women, using person-fixed-effects models based on equation (2) (Table 4). In this analysis we explicitly include a control for the real wage of second generation Mexicans as a measure of local economic conditions. The samples are restricted to Mexico-born men and women and models control for age (a dummy variable for each year of age), education, marital status, industry of work, whether the respondent is a citizen, PMSA unemployment rate, and the average real wage of second generation Mexicans (by age, education, destination, year of observation and gender), year of observation, interaction of the years since arrival categories with whether the observation is taken from year t, and individual fixed effects. The person-fixed-effects model allows inclusion of only those controls that vary over time. Columns 1 and 5 are based on separate regressions. Columns 2-4 and 6-8 are also based on different regressions and estimate the effect of an additional year of residence in the US separately for Mexicans living at the three destinations by including additional variables on the interactions of years since immigration, whether the observation is taken from year t, and place of residence (traditional, new high-growth or new low-growth) as described in equation (2).

Estimates suggest that the average real wage of Mexican men, after adjusting for a rich set of variables, changes by -1.8 to 1.2 % with one additional year of US residency, and the estimates are always statistically insignificant. The increase in the real wages of Mexican women with an additional year in the US is1 to 4%, and is statistically significant for women who have been in the country for 11 to 20 years. There is no noticeable trend in wage growth with time in the US (rising or falling). In models that compute the adjusted annual earnings by place of residence, statistical tests fail to reject the hypothesis that the wage growth is the same in the traditional and newer destinations.

Return Migration-Empirical Strategy

Next, we study whether the propensity to return to Mexico differs for Mexican immigrants across the three destinations using a somewhat modified version of the methodology applied by Van Hook et al. (2006).[9] The methodology exploits the longitudinal feature of the CPS. In the CPS, an immigrant interviewed in year t-1 cannot be followed up in the subsequent interview in year t if he or she died in the intervening period (D), moved to another address within the US (IM), emigrated to another country (E), or was not tracked for other data-related reasons (NM). Equation (3) describes the non-follow-up (L) of Mexican immigrants who lived at the traditional destination in year t-1:

(3) $L_{it} = D_{it} + IM_{it} + E_{it} + NM_{it}$

Similar equations can be used to describe the non-follow-up of Mexican immigrants at the new high- and low-growth destinations.

[9] Van Hook et al. (2006) used the March CPS, whereas we are using the CPS-ORG.

We use the National Health Interview Surveys-National Death Index (NHIS-NDI) to compute the probability of death of first- and second-generation Mexicans by each year of age and sex. The CPS-ORG does not provide data on internal migration. We use the March CPS, which provides data on whether the respondent changed residences between t-1 and t, and impute this outcome for second-generation Mexicans in the CPS-ORG for year t-1 using the following set of regression variables: age (a dummy variable for each year of age), education (< high school, high school, some college, and a bachelor's degree or higher), sex, whether married, whether employed, industry of work, year of observation, and state of residence in year t-1.[10] ~~Three~~ Four additional variables are added in imputing whether moved residence for first-generation Mexicans: whether US citizen, period of arrival, age at arrival, and years-since-immigration categories. Assuming that the probability of outmigration for the second generation is zero[11], we arrive at the residual nonmatch rate (for other reasons) for second-generation Mexicans who live in the traditional destinations:

(4) $NM_{st} = L_{st} - D_{st} - IM_{st}$

Further assuming that conditional on demographic characteristics, the probability of a residual nonmatch in the traditional destinations is the same for the first and second generation

[10] Using the March CPS data, we apply a logit regression with whether the respondent changed residences between years t-1 and t as the dependent variable and the explanatory variables mentioned in the text. The coefficients on the regression variables are used to predict the internal migration for first- and second-generation Mexicans in the CPS-ORG. The March-CPS does not provide the PMSA of residence in year t-1 for those who moved but does provide the state of residence at t-1, which is controlled in this analysis.

[11] We make this assumption following Van Hook et al. (2006). We examine the validity of this assumption by investigating the country of birth of individuals who had returned to Mexico in the past five years in the 2000 Mexican Census and find that 14% of all return migrants were born outside of Mexico. Some of them are likely to be born in the US. This suggests that although a nontrivial number of US-born individuals may be returning to Mexico every year, relative to Mexican-born returnees, their number is small.

immigrants, we predict the outmigration rate of the first generation Mexicans in the traditional destinations (equation 5).[12]

(5) $\hat{E}_{it} = L_{it} - \hat{D}_{it} - I\hat{M}_{it} - N\hat{M}_{it}$

In the same manner, we predict the outmigration rate of first generation Mexicans living in the new high growth and low growth destinations. Finally, we test whether the predicted probability of out-migration of Mexicans is selective on their wages in year t-1.

Return Migration - Results

Table 5 provides a summary statement of predicted return migration of first-generation Mexicans and the variables used in its computation. The non-follow-up rate of first-generation Mexican men is 40% at the traditional destinations and 48% at the new high-growth destinations and 54% at low-growth destinations (column 1). The non-follow-up of second-generation Mexican men is also lower in the traditional destinations (31%) than in the new high-growth (38%) and low-growth destinations (41%), indicating that location-specific factors may be causing differences in non-follow-up rates across the three locations. Column 2 lists the predicted probability of death, based the NHIS-NDI. The mean predicted mortality rate for our sample is 0.3 to 0.4%, which is unlikely to be a factor in explaining the difference in the non-follow-up in the three locations.

Column 3 provides the average probability of internal moves imputed from the March CPS data. A rich set of variables, as described above, are employed in the imputation. Mexico-born men living in the traditional destinations have a 19% imputed probability of changing residence between t-1 and t; the corresponding figure for Mexican men in the new high-growth

[12] We use the second-generation Mexican sample and apply a linear regression with the imputed residual non-match as the dependent variable and the following explanatory variables: age (a dummy variable for each year of age), education (< high school, high school, some college, and bachelor's degree or higher), sex, whether married, whether employed, industry of work, year of observation, and state of residence in year t-1. The coefficients on the regression variables are used to predict residual non-match for first-generation Mexicans.

destinations is 21% and in the low-growth destinations 25%. The imputed probability of changing residences among second-generation Mexican men is also lower in the traditional destinations (17%) than in the new high-growth destinations (20%) or new low-growth destinations (21%).

The mean residual nonmatch rate for second-generation Mexican men is: 14% at the traditional destinations, 17% at the new high-growth destinations and 20% at the low-growth destinations. Assuming that return migration is zero for the second-generation and conditional on a large number of characteristics, we predict the residual nonmatch rate of Mexico-born men at the three destinations. Finally, we use the non-follow-up rate, the predicted probability of mortality, the imputed probability of internal migration, and the predicted residual nonmatch rate to estimate return migration. The estimated return migration rate is 5.3% for Mexican men in the traditional destinations, 11% for Mexican men at high-growth destinations and 10% for Mexican men at low-growth destinations; and statistical tests reject the hypothesis that the predicted rates of return at the newer destinations are the same as at the traditional destination; but fail to reject the hypothesis that predicted return migration is statistically the same at high and low-growth new destinations.

Panel 2 of Table 5 provides the results for Mexico-born women. The non-follow-up rate for first-generation Mexican women is 7 to 10 percentage points lower than that for the first-generation Mexican men. Non-follow-up is also somewhat lower – about 2-4 percentage points less for second-generation Mexican women than men. As in the men's analysis, the non-follow-up is the highest for Mexican women (first- and second-generation) at the low-growth destinations followed by those at the new-high-growth destinations and the traditional destinations. Internal migration is also the highest for first- and second-generation Mexican women living in the low growth destinations, followed by women in the high-growth destinations and women in the traditional destinations. The estimated outmigration rate is 1.5% for Mexican women living in the traditional destinations, 5.4% for Mexican women living in the new high growth destinations, and 5.1% for Mexican women at the low-growth destinations. [13] Statistical tests reject the hypothesis that the predicted outmigration rates are the same for Mexican women in traditional versus newer destinations, but fail to reject the hypothesis that the predicted return migration is the same across new high and low growth destinations.

Figure 2 plots the average predicted outmigration rate of Mexican immigrants by years since immigration to the US. Predicted outmigration, particularly of Mexican men, is high in the first seven years after arrival and declines sharply during the next 7 to 15 years. Outmigration is negligible for Mexican women who have been in the US for more than 7 years, and about 3 to 4% per year for Mexican immigrant men who have been in the US for more than a decade.

Our objective is to investigate if return migration is selective on earnings in the US. For this, we study the association between non-follow-up (and estimated probability of outmigration) and the real wages of Mexican men and women in period t-1 (Table 6). Using the sample of Mexico-born men and women in period t-1, we run regressions with the log of the real wage in year t-1 as the dependent variable. The model includes controls for age, education, US citizenship, marital status, industry of work, PMSA unemployment rate, and PMSA and year-of-observation fixed effects, age at arrival, period of arrival, and years since immigration.

Estimates suggest that in the traditional destinations, the real wages of Mexico-born men in year t-1who are not in the sample in year t are 3.2% lower than the real wages of men who are in the sample in both years (column 1). The coefficient for the interactions between non-follow-

[13] Van Hook et al. (2006) estimated the out-migration rate to be 5.5% for Mexico-born men and women. They did not estimate outmigration of Mexicans by gender. For the foreign-born population as a whole, they also found that outmigration was higher for men than for women.

up and the new high-growth destination is negative and statistically significant, and of non-follow-up and the new low-growth destinations is close to zero and statistically insignificant. Column 2 includes additional controls for the predicted probability of internal migration and the predicted probability of nonmatch due to residual factors. Estimates suggest that non-follow-up is associated with a 4% lower wage in period t-1. Here too the coefficient for the interactions between non-follow-up and the new high growth destinations is negative and statistically significant and of non-follow-up and the new low-growth destinations is modest and statistically insignificant.

Next we study the association between predicted outmigration between years t-1 and t and real wage in t-1 (columns 3-4). For this analysis, we predict the outmigration rate of Mexicans in two ways. First, we predict the outmigration rate of only those who were not matched in t-1 and t, and for the remaining individuals the outmigration rate is 0. This analysis is presented in column 3 and suggests that a 10 percentage-point increase in the predicted probability of outmigration between t-1 and t was associated with a 0.5% lower real wage in period t-1 at traditional destinations, 1% lower wage in period t-1 at new high-growth destinations and 0.6% lower wage at new low-growth destinations. The outmigration prediction in column 3 is based on the assumption that non-follow-up is random, which is not true for our sample given the results in columns 1 and 2 (Cameron and Trivedi 2005). Therefore, next we predict outmigration for all observations in t-1(including those who were matched in t). The estimates from this analysis are shown in column 4 and suggest that a 10 percentage point increase in predicted outmigration is associated with a 0.3% lower average wage for Mexican men at t-1 in traditional destinations. Here too the coefficient of interaction between predicted outmigration and new-high-growth destination is negative and significant, but of predicted out-migration and new low-growth destinations is modest and statistically insignificant.

To sum up, our analysis shows that non-follow up and predicted return migration among Mexican men are associated with lower earnings in the year prior to return, and the association is significantly more negative for those at new high-growth destinations than for those at traditional or new low-growth destinations. Given this evidence, our analysis thus suggests that the steeper rise in earnings of men at new high-growth destinations observed in Table 2 is at least partly due to the difference in negative selection of return migrants across destinations. In the women's analysis (columns 5-8), neither non-follow-up nor predicted outmigration has any statistically significant association with the lagged wage of Mexican women, suggesting that return migration among women is not selective on earnings.

Conclusions

We use the Current Population Survey, Outgoing Rotation Group data from 2001to 2009 to study the selection, earnings growth and return migration of Mexican immigrants across destinations. We divide PMSAs in three categories based on vintage Mexican presence in PMSA population and its growth during the 1990s: traditional destinations, new high-growth destinations and new low-growth destinations.

Our analyses lead to three main findings. First, recently arrived Mexican men living in the newer destinations (high and low-growth) are two percentage points more likely to be employed and have a 4 to 5% higher average wage than recently arrived Mexican men in the traditional destinations. Mexican women at the new low growth destinations are 6 percentage points more likely to be employed than those at the traditional or new high growth destinations but there is no statistical difference in wages across destinations. We also find that recently arrived Mexican men at new destinations were about 10 percentage points (about 38%) more likely to work in construction suggesting that the influx of Mexican men to new destinations could partly be driven by the construction boom of the past decade. It is also likely that the presence low cost Mexican labor to some extent contributed to the construction boom.

Second, analysis based on multiple years of cross-sectional data, after controlling for a rich set of variables including period of arrival and age at arrival, shows a modest growth in Mexican immigrants' wages with time in the US: two to three decades of residency in the US is associated with a 10% increase in the hourly wage of Mexican men and an 8% increase in the hourly wage of Mexican women. This result is somewhat similar to previous research that used data for 2000 and earlier years (see, for example, Borjas and Katz 2007). Analysis based on cross-sectional data also showed different earnings trajectories across destinations. However, subsequent analysis shows differences in selective return migration across-destinations leading us to conclude that the earnings trajectories based on cross-sectional analyses are misleading.

Third, the longitudinal analysis suggests that the real wages of first-generation Mexicans increased 0.4 to 2% a year during 2001-2009, and the real wages of low-educated second-generation Mexicans increased (minus) - 1 to 5% per year. Comparing the point estimates of wage growth of Mexican immigrants with those of second generation low-educated Mexicans, we find that whereas first-generation Mexican men and women experienced positive annual wage growth during 2001-2009, their wage growth was modest in comparison to the annual growth experienced by second-generation Mexican men and women, except for the first generation Mexican women at low growth destinations who experienced a 2% (statistically insignificant) annual growth in wages compared to a statistically insignificant 1% annual decline experienced by low educated second generation Mexican women over the study period.

Further, longitudinal analysis shows that Mexicans in the traditional destinations exhibited greater residential stability: internal migration, non-follow up in the longitudinal data and predicted return migration (based on the residual method from Van Hook et al. (2006)) were higher among immigrants at the newer destinations than among immigrants at the traditional destinations. Predicted return migration was also found to be selective on past earnings among men, but not among women. For men, a 10 percentage point increase in predicted probability of return migration was associated with a 0.3 to 0.5% lower wage in the year prior to return. Statistical tests rejected the hypothesis that the selection pattern was the same for Mexican men in the traditional versus new high-growth destinations, underscoring the inherent weakness in estimates of earnings trajectories based on multiple cross-sections of data. Further, this evidence thus suggests that studies on selection and earnings assimilation without corresponding knowledge of selection in return migration provide an incomplete picture of Mexican immigration to the US.

The combined evidence on earnings growth and selective return migration thus suggests that concerns about Mexicans becoming the new underclass are somewhat exaggerated since those who do poorly in the labor market also choose to return to Mexico. There is also very high residential mobility among Mexican immigrants, in particular those living in non-traditional destinations, which also points towards high level of dynamism among Mexican immigrants. The analysis thus suggests that policies that create incentives for Mexicans to restrict their cross-border mobility (e.g. stricter border controls) are likely to limit the choices of Mexicans who are not successful in the US economy. These immigrants may decide to extend their stay in the US, in the presence of policies that restrict cross-border flows, even when they are better off in returning to Mexico.

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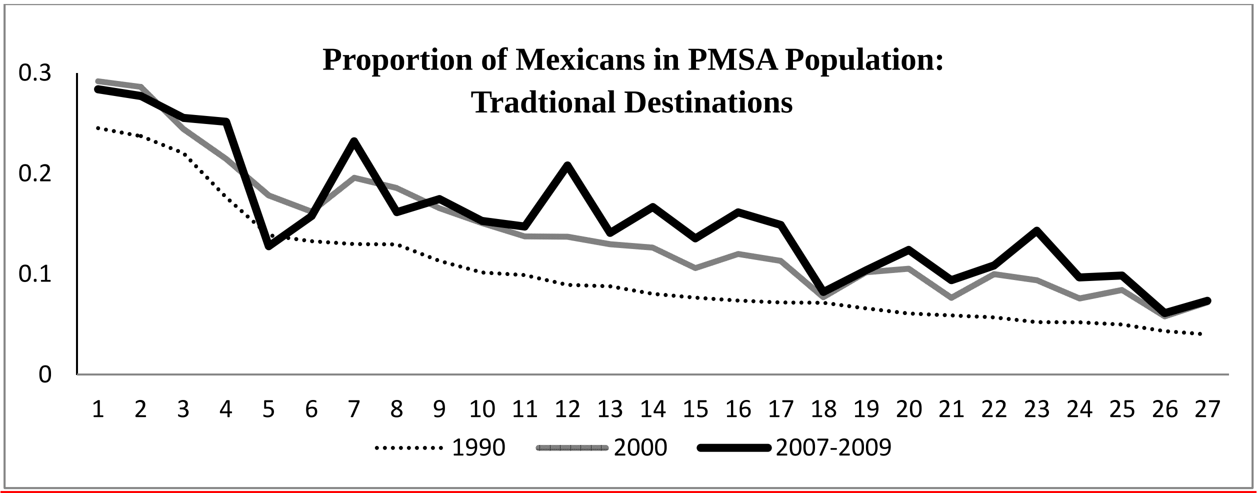
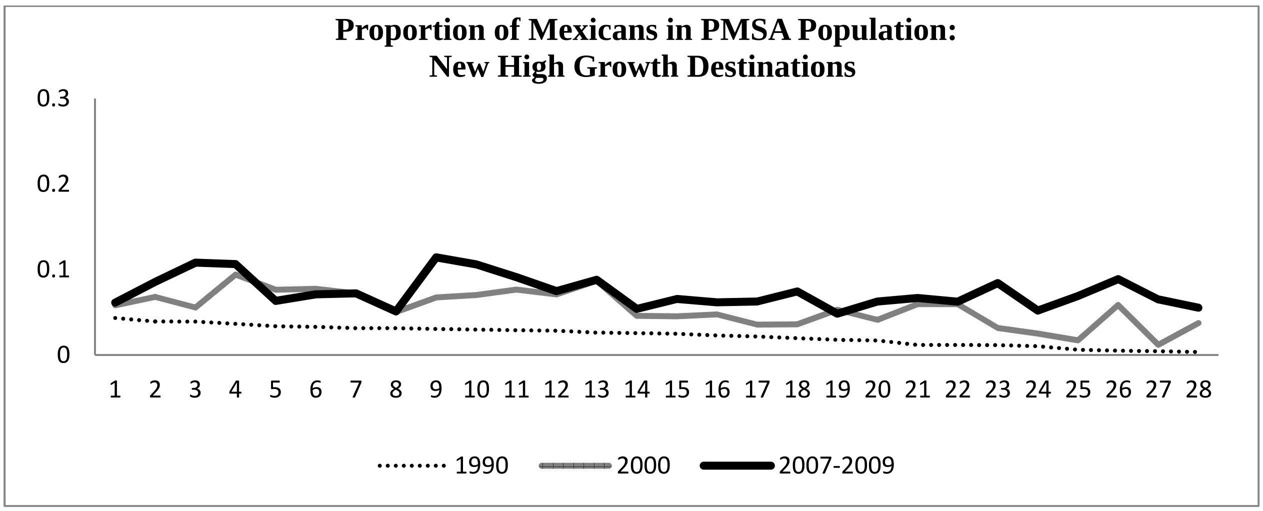




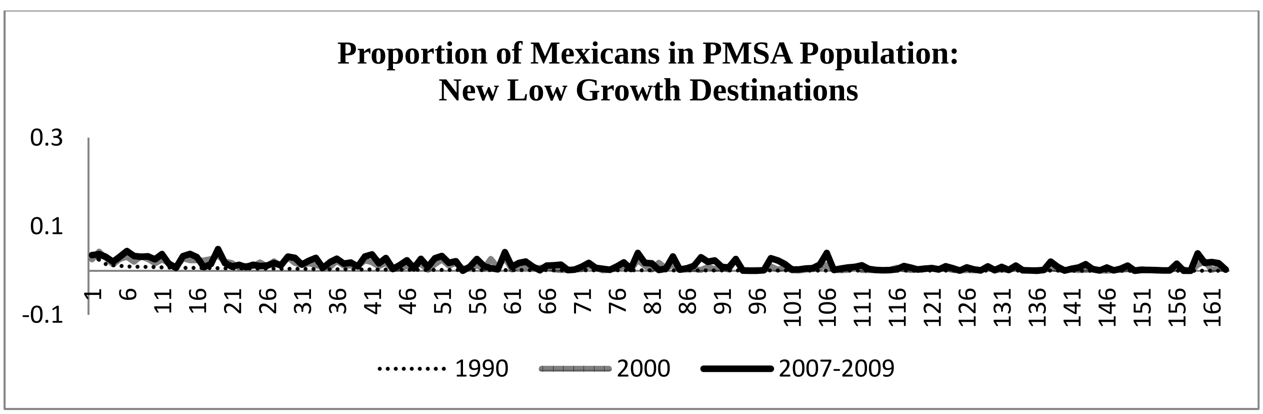
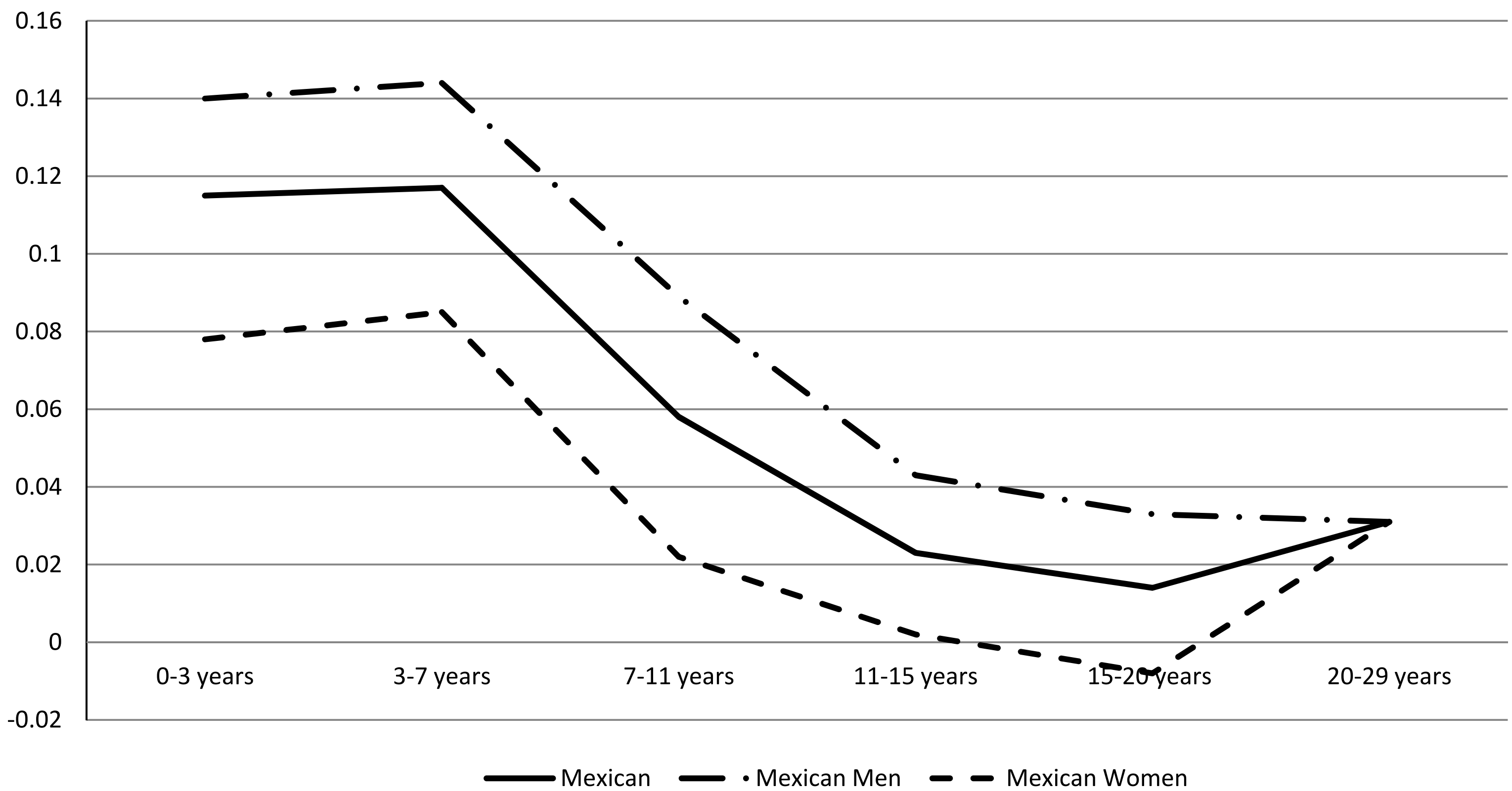


Figure 1: Proportion of Mexicans in PMSA Population

Figure 2. Predicted outmigration rates of Mexican Immigrants, by Years Since Immigration



Note: See the text for the methodology used to predict outmigration rates.

Table 1. Descriptive Statistics: Mexican Men and Women Aged 18-64, CPS Outgoing Rotation 2001-2009

	Men						Women					
	Mexico-born			Newly Arrived Mexico-born			Mexico-born			Newly Arrived Mexico-born		
	Trad	New High Growth	New Low Growth	Trad	New High Growth	New Low Growth	Trad	New High Growth	New Low Growth	Trad	New High Growth	New Low Growth
Age	34.66	33.24~	32.01~+	29.53	28.98~	28.69~	35.54	33.96~	32.71~+	31.56	30.59~	29.36~+
Education:												
% less than high school	61.20	62.90~	60.45+	66.82	66.32	62.46~+	60.22	60.50	59.79	61.17	61.34	59.84
% high school	24.72	25.32	28.92~+	21.42	24.98~	27.96~+	23.81	25.82~	26.55~	22.01	25.23~	26.82~
% some college	9.77	7.53~	6.53~+	7.13	4.87~	5.54~	10.98	9.16~	7.95~+	10.39	7.50~	6.56~
% college or higher	4.32	4.25	4.11	4.63	3.83	4.04	4.99	4.53	5.71~+	6.42	5.93	6.78
% married	65.28	62.03~	56.54~+	47.59	46.12	42.51~+	68.06	69.13	67.90	63.88	66.51	64.10
Employment status												
% currently employed	86.30	88.97~	89.29~	86.99	88.59	89.15~	45.54	45.94	48.52~+	37.60	37.56	43.80~+
Avg. hours work per week	38.14	38.41	38.85~+	38.11	37.75	38.58+	32.48	33.14~	33.77~+	31.29	32.05	33.78~+
Real wage	6.07	6.16	5.82~+	5.16	5.36~	5.34~	5.10	5.08	4.89~+	4.70	4.55	4.52
Log real wage	1.69	1.72~	1.67~+	1.55	1.60~	1.59~	1.53	1.53	1.51+	1.46	1.44	1.45
Industry of employment												
% working in agriculture	7.42	5.02~	8.13~+	11.15	5.24~	8.91~+	3.99	2.20~	3.14~+	6.63	1.24~	3.66~+
% working in manufacturing	17.73	9.42~	18.09+	15.71	8.75~	14.42+	18.27	9.62~	24.75~+	17.87	10.68~	22.05~+
% working in construction	23.15	36.23~	31.27~+	26.10	39.80~	33.66~+	1.15	1.53	1.47	1.46	2.32	2.08
% working in retail/trade/ whole sale	21.46	19.81~	20.09~	23.01	22.49	21.25	26.51	29.99~	26.46+	29.89	36.53~	30.53+
% working in other industries	30.24	29.53	22.41~+	24.04	23.72	21.76~	50.08	56.66~	44.18~+	44.16	49.23~	41.68+
Internal Migration[1]												
% moved	17.99	22.36~	24.38~+	27.07	35.28~	34.71~	15.41	20.27~	21.45~	25.14	30.91~	33.26~
% Inter-state Migration	0.82	2.92~	3.79~+	1.10	5.18~	5.69~	0.91	2.99~	3.77~	1.09	3.64~	5.08~
N	15779	8964	14113	2568	2218	4582	15289	7534	9644	2367	1720	2744

Note: Traditional destinations (Trad) are defined as PMSAs with at least 4% of the population born in Mexico in 1990; new high growth destinations are non-traditional PMSAs with at least 4% population born in Mexico in 2000; new low-growth destinations are non-traditional PMSAs with less than 4% of the population born in Mexico in 2000. Newly arrived are defined as immigrants in the US for 5 or fewer years. Samples are restricted to Mexicans who arrived in the US in 1980 or later. See Appendix Table 1 for the list of traditional and new high-growth destinations.[1]Based on March CPS data from 2001 to 2009. + indicates that the mean for new high-growth and low-growth destinations are significantly different at a 95 % confidence interval. ~indicates that the mean for traditional and new destinations (high or low-growth) are significantly different at a 95 % confidence interval.

Table 2. Estimates of the Association between Log Real Wage and Years since Arrival in the US of Mexican Immigrants, CPS Outgoing Rotation 2001-2009, Cross-sectional Data

	Mexican Men			Mexican Women		
	1	2	3	4	5	6
Years since immigration						
YSI =3-7 years	0.013	0.003	-0.0002	0.005	0.002	0.003
	(0.009)	(0.011)	(0.011)	(0.013)	(0.024)	(0.025)
YSI =7-11 years	0.023**	0.028**	0.017	0.003	-0.022	-0.025
	(0.011)	(0.013)	(0.013)	(0.022)	(0.022)	(0.023)
YSI=11-15years	0.054***	0.051***	0.049***	0.016	-0.003	-0.007
	(0.015)	(0.016)	(0.015)	(0.026)	(0.026)	(0.026)
YSI=15-20years	0.075***	0.085***	0.064***	0.051*	0.036	0.021
	(0.020)	(0.020)	(0.019)	(0.029)	(0.031)	(0.030)
YSI= 20-29years	0.095***	0.124***	0.097**	0.083**	0.070**	0.036
	(0.024)	(0.023)	(0.023)	(0.036)	(0.032)	(0.032)
3-7 years*New high-growth	--	0.049***	0.052***	--	0.023	0.027
		(0.014)	(0.015)		(0.030)	(0.029)
7-11years *New high-growth	--	0.034*	0.042**	--	0.084**	0.093***
		(0.020)	(0.019)		(0.034)	(0.032)
11-15years *New high-growth	--	0.043**	0.045**	--	0.059*	0.066**
		(0.021)	(0.020)		(0.031)	(0.031)
15-20 years *New high-growth	--	0.021	0.030	--	0.048	0.059*
		(0.029)	(0.026)		(0.031)	(0.032)
20-29 years*New high-growth	--	-0.010	-0.0003	--	0.045*	0.059**
		(0.026)	(0.022)		(0.025)	(0.025)
3-7 years* New low-growth	--	-0.002+	-0.005+	--	-0.003	-0.001
		(0.015)	(0.015)		(0.030)	(0.030)
7-11 years* New low-growth	--	-0.027+	-0.025+	--	0.023+	0.028+
		(0.017)	(0.016)		(0.028)	(0.029)
11-15 years * New low-growth	--	-0.015+	-0.021+	--	0.023	0.026
		(0.019)	(0.016)		(0.031)	(0.032)
15-20 years * New low-growth	--	-0.038*+	-0.027+	--	0.019	0.026
		(0.020)	(0.019)		(0.033)	(0.034)
20-29 years* New low-growth	--	-0.086***+	-0.069***+	--	0.015	0.028
		(0.023)	(0.020)		(0.031)	(0.031)
N	30908	30908	30908	13656	13656	13656

Note: Figures in each column are based on a single regression. Samples are restricted to Mexican men (columns 1-3) and Mexican women (columns 4-6) who arrived in the US in 1980 or later. See notes to table 1 for the definitions of destinations. All regressions control for age (a dummy variable for each year of age), period of arrival and age at arrival, PMSA unemployment rate, average real wage of second generation Mexicans by age, education, destination, gender, and year of observation, and PMSA and year of observation effects. The effects of year of observations in columns 2, 3, 5 and 6 are allowed to differ across destinations because statistical tests reject the restricted models. Models 3 and 6 also include controls for educational attainment, marital status, citizenship status and industry of work. Standard errors clustered around PMSA of residence are in parentheses. + indicates the coefficients for new high-growth and low-growth destinations are significantly different at 95% confidence interval. *$0.05 < p \leq 0.1$, **$0.01 < p \leq 0.05$, ***$p \leq 0.01$.

Table 3. Estimates of Change in Log Real Wage, between t-1 and t, of Mexico-born Men and Women, by Years since Arrival in the US

CPS Outgoing Rotation 2001-2009, Matched data

Years since immigration (YSI)	Men			Women		
	Traditional	New High Growth	New Low Growth	Traditional	New High Growth	New Low Growth
YSI =0-3	-0.002	-0.017	0.014	0.003	-0.005	0.017
	(0.022)	(0.033)	(0.031)	(0.052)	(0.044)	(0.036)
YSI =3-7	0.033	0.059***	0.041*	0.003	-0.025	0.041
	(0.022)	(0.021)	(0.021)	(0.023)	(0.026)	(0.033)
YSI =7-11	0.015	0.021	0.012	0.012	0.077*	-0.018
	(0.012)	(0.025)	(0.019)	(0.019)	(0.039)	(0.029)
YSI =11-15	-0.003	-0.036*	0.041*+	0.017	0.044*	-0.008
	(0.014)	(0.022)	(0.022)	(0.018)	(0.026)	(0.032)
YSI =15-20	0.013	-0.006	0.049**	0.015	0.004	0.076*
	(0.012)	(0.016)	(0.024)	(0.017)	(0.027)	(0.044)
YSI =20-29	0.024**	0.029	-0.016	0.005	-0.001	0.014
	(0.010)	(0.021)	(0.024)	(0.020)	(0.057)	(0.035)
All Mexico-born	0.019***	0.004~	0.019**	0.013*	0.009	0.022
	(0.005)	(0.006)	(0.009)	(0.007)	(0.009)	(0.013)
Second-generation Mexicans	0.055***	0.057**	0.032	0.038***	0.049***	0.029
	(0.010)	(0.023)	(0.024)	(0.008)	(0.012)	(0.021)
Second-generation Mexicans with	0.052***	0.047**	0.033	0.037***	0.031	-0.013
High-school or less	(0.014)	(0.023)	(0.028)	(0.009)	(0.023)	(0.029)

Note: See notes to table 1 for the definitions of destinations. Mexico-born samples are restricted to individuals who arrived in the US in 1980 or later. Robust standard errors clustered on PMSA of residence are in parenthesis. + indicates that the coefficients for new high-growth and new low growth destinations are significantly different at a 95% confidence interval. ~indicates that the coefficients for traditional and new destinations (high or low-growth) are significantly different at a 95 % confidence interval. *$0.05 < p \leq 0.1$, **$0.01 < p \leq 0.05$, ***$p \leq 0.01$.

Table 4. Estimates of the Association between Log Real Wage and Years since Arrival in the US CPS Outgoing Rotation 2001-2009, Longitudinal Analysis (Person-Fixed-Effects Model)

	Men				Women			
	All	Traditional	New High Growth	New Low Growth	All	Traditional	New High Growth	New Low Growth
	1	2	3	4	5	6	7	8
YSI 0-3*t	-0.015	-0.0003	-0.040	-0.013	0.026	0.038	0.001	0.023
	(0.025)	(0.043)	(0.038)	(0.029)	(0.030)	(0.063)	(0.046)	(0.034)
YSI 3-7*t	0.012	0.008	0.026	0.005	0.009	-0.005	-0.026	0.044
	(0.017)	(0.022)	(0.031)	(0.020)	(0.018)	(0.021)	(0.033)	(0.031)
YSI 7-11*t	-0.014	0.005	-0.009	-0.040*	0.024	0.017	0.044	0.017
	(0.012)	(0.015)	(0.020)	(0.023)	(0.018)	(0.025)	(0.033)	(0.028)
YSI 11-15*t	-0.018	-0.020	-0.070***	0.022+	0.041***	0.056***	0.059**	-0.001
	(0.013)	(0.015)	(0.025)	(0.024)	(0.015)	(0.019)	(0.030)	(0.031)
YSI 15-20*t	0.001	-0.004	-0.015	0.024	0.032*	0.030	0.009	0.053
	(0.011)	(0.013)	(0.012)	(0.020)	(0.017)	(0.020)	(0.025)	(0.040)
YSI 20-29*t	0.008	0.002	0.017	0.009	0.004	-0.002	0.033	-0.011
	(0.013)	(0.015)	(0.025)	(0.026)	(0.022)	(0.025)	(0.057)	(0.045)
N	14109	14109	14109	14109	7370	7370	7370	7370

Note: See notes to table 1 for the definitions of destinations. Figures in column 1 and column 5 are based on separate regressions with log real wage as the dependent variable. Years-since-immigration (YSI) is measured as of t-1 and is the same for an individual in both periods t-1 and t. All regressions control for individual fixed effects, age (a dummy variable for each year of age), education, whether married, whether citizen, industry of work, average real wage of second generation Mexicans (by age, education, destination, year of observation and gender), year of observation, and PMSA unemployment rate. Figures in columns 2-4 and 6-8 are also based on separate regressions, where the effect of years-since-immigration is allowed to differ across destinations with the inclusion of three way interactions of: years since immigration, whether the respondent lives in a traditional (or new high-growth or new low growth) destination and whether the observation is taken from year t. + indicates that the coefficients for new high-growth and new low growth destinations are significantly different at a 95% confidence interval. ~indicates that the coefficients for traditional and new destinations (high or low-growth) are significantly different at a 95 % confidence interval. Standard errors clustered on PMSA of residence are in parenthesis.

*0.05 < p ≤ 0.1, **0.01 < p ≤ 0.05, ***p ≤ 0.01.

Table 5. Summary of Non-follow-up, Predicted Mortality, Internal Migration, Residual Nonmatch, and Predicted Outmigration, CPS Outgoing Rotation 2001-2009

	Panel 1: Men					Panel 2: Women				
	Non-follow-up	Imputed Probability of Mortality[1]	Imputed Probability of Internal Migration[2]	Residual Nonmatch [3]	Predicted out-migration	Non-follow-up	Imputed Probability of Mortality[1]	Imputed Probability of Internal Migration[2]	Residual Nonmatch [3]	Predicted out-migration
	1	2	3	4	5	6	7	8	9	10
Traditional Destinations										
First Generation	0.397	0.004	0.189	0.151	0.053	0.330	0.004	0.166	0.145	0.015
	(0.006)	(0.00002)	(0.001)	(0.001)	(0.005)	(0.005)	(0.00002)	(0.001)	(0.001)	(0.005)
Second Generation	0.311	0.003	0.170	0.137	--	0.291	0.002	0.147	0.142	--
	(0.007)	(0.0001)	(0.001)	(0.007)		(0.007)	(0.00003)	(0.001)	(0.007)	
New High Growth Destinations										
First Generation	0.483~	0.004	0.211~	0.155~	0.113~	0.385~	0.004	0.181~	0.146	0.054~
	(0.008)	(0.00003)	(0.002)	(0.001)	(0.007)	(0.008)	(0.00003)	(0.001)	(0.001)	(0.008)
Second Generation	0.378~	0.004	0.202~	0.172~	--	0.351~	0.002	0.180~	0.169	--
	(0.014)	(0.0001)	(0.003)	(0.014)		(0.013)	(0.0001)	(0.003)	(0.013)	
New Low-Growth Destinations										
First Generation	0.543~+	0.004	0.251~+	0.186~+	0.102~	0.444~+	0.004	0.216~+	0.173~+	0.051~
	(0.006)	(0.00002)	(0.002)	(0.002)	(0.006)	(0.007)	(0.00003)	(0.002)	(0.002)	(0.008)
Second Generation	0.412~	0.004	0.211~	0.197~	--	0.367~	0.002	0.191~+	0.173~	--
	(0.014)	(0.0001)	(0.004)	(0.014)		(0.013)	(0.0001)	(0.003)	(0.013)	

Note: See notes to table 1 for the definitions of destinations. [1]Mortality is imputed based on NHIS-NDI data. [2] Internal Migration is imputed based on the March CPS. [3]Residual nonmatch figures for first-generation Mexicans are imputed on the assumption of zero return migration (to Mexico) for second-generation Mexicans. See text for methods used for imputations. + sign indicates that the predicted terms/ non-follow up rate is statistically different at the new high growth and new low-growth destination at 95% confidence interval. ~indicates that the predicted terms/ non-follow up rate for traditional and new (high or low-growth) destinations are significantly different at a 95 % confidence interval. Standard errors are in parenthesis.

Table 6. Estimates of the Association between Log Real Wage in Year t-1 and Non-follow-up and Predicted Outmigration between t and t-1, CPS Outgoing Rotation 2001-2009

	Men				Women			
	1	2	3	4	5	6	7	8
Non-follow-up	-0.032***	-0.042**			0.002	0.001		
	(0.008)	(0.020)			(0.015)	(0.037)		
Non-follow-up*New High Growth	-0.032*	-0.075*			-0.021	-0.051		
Destination	(0.19)	(0.041)			(0.019)	(0.066)		
Non-follow-up*New Low Growth	-0.002	-0.014			-0.0002	-0.006		
Destination	(0.012)	(0.012)			(0.023)	(0.025)		
Predicted Outmigration		--	-0.045***	-0.025***		--	0.004	0.003
			(0.013)	(0.007)			(0.024)	(0.016)
Predicted Outmigration*New High		--	-0.059*	-0.042**		--	-0.035	-0.024
Growth Destinations			(0.032)	(0.020)			(0.031)	(0.020)
Predicted Outmigration* New Low-		--	-0.017	-0.018		--	-0.004	-0.004
Growth Destinations			(0.012)	(0.012)			(0.022)	(0.023)
N	14829	14829	14829	14829	6407	6407	6407	6407

Note: See notes to table 1 for the definitions of destinations. Samples are restricted to Mexico-born men (or women) in t-1, who arrived in the US in 1980 or later. The dependent variable is log real wage in year t-1. In addition to the variables listed as row headings, all regressions control for age (a dummy variable for each year of age), education, whether married, whether US citizen, industry of employment, PMSA unemployment rate, PMSA and year of observation fixed effects, age at arrival, period of arrival and years since immigration. Standard errors clustered on PMSA of residence are in parenthesis. The regressions in columns 2 and 6 also control for imputed internal migration and residual non match and these effects are allowed to differ across destinations. *$0.05 < p \leq 0.1$, **$0.01 < p \leq 0.05$, ***$p \leq 0.01$.

Appendix Table 1 Proportion of PMSA/MSA Population born in Mexico

PMSA/MSA	1990[a]	2000[a]	2007/09[b]	PMSA/MSA	1990[a]	2000[a]	2007-09[b]
Traditional Destinations				**New High Growth Destinations**			
California, non CBSA area	0.061	0.105	0.124	Arizona, non CBSA area	0.039	0.055	0.108
Bakersfield, CA, MSA	0.080	0.126	0.167	Nevada, non CBSA area	0.025	0.045	0.066
Brazoria, TX, PMSA	0.057	0.100	0.109	New Mexico, non CBSA area	0.026	0.046	0.054
Brownsville-Harlingen-San Benito, TX	0.220	0.244	0.255	Washington, non CBSA area	0.017	0.041	0.062
El Paso, TX, MSA	0.176	0.214	0.251	Albuquerque, NM, MSA	0.023	0.047	0.062
Fresno, CA, MSA	0.101	0.151	0.153	Austin-San Marcos, TX	0.028	0.071	0.075
Las Cruces, NM, MSA	0.139	0.178	0.128	Boulder-Longmont, CO, PMSA	0.012	0.059	0.067
Los Angeles-Long Beach, CA, PMSA	0.133	0.162	0.158	Denver, CO	0.012	0.059	0.062
McAllen-Edinburg-Mission, TX, MSA	0.237	0.286	0.277	Fort Worth-Arlington, TX, PMSA	0.030	0.067	0.114
Merced, CA, MSA	0.113	0.165	0.175	Greeley, CO	0.033	0.077	0.071
Modesto, CA, MSA	0.072	0.113	0.149	Las Vegas, NV-AZ	0.026	0.087	0.088
Odessa-Midland, TX, MSA	0.072	0.077	0.082	Naples, FL	0.005	0.059	0.089
Orange County, CA, PMSA	0.099	0.137	0.147	Oakland, CA, PMSA	0.031	0.072	0.072
Riverside-San Bernardino, CA, PMSA	0.074	0.120	0.161	Phoenix-Mesa, AZ	0.036	0.094	0.106
Salinas, CA MSA	0.130	0.196	0.232	Reno, NV	0.039	0.068	0.086
San Antonio, TX, MSA	0.059	0.076	0.094	Salem, OR	0.029	0.077	0.091
San Diego, CA, MSA	0.077	0.106	0.136	San Luis Obispo-Atascadero-Paso Robles, CA	0.031	0.050	0.051
San Jose, CA, PMSA	0.050	0.084	0.099	Santa Fe, NM	0.018	0.053	0.048
Santa Barbara-Santa Maria-Lompoc, CA	0.089	0.137	0.208	Santa Rosa, CA	0.034	0.076	0.063
Stockton-Lodi, CA, MSA	0.066	0.102	0.104	Vallejo-Fairfield-Napa, CA	0.030	0.070	0.106
Tucson, AZ, MSA	0.052	0.076	0.097	Waco, TX, MSA	0.025	0.043	0.037
Ventura, CA, PMSA	0.088	0.130	0.141				
Visalia-Tulare-Porterville, CA, MSA	0.129	0.185	0.162				
Yolo, CA, PMSA	0.052	0.094	0.143				
Chicago, IL, PMSA	0.050	0.072	0.073				
Laredo, TX, MSA	0.245	0.292	0.284				
Texas, non CBSA area	0.043	0.058	0.061				
Total – Traditional destinations	**0.079**	**0.111**	**0.127**	**Total – New high-growth destinations**	**0.025**	**0.061**	**0.087**
Total – New low growth Destinations	**0.002**	**0.009**	**0.015**				

[a] Based on the 1990 and 2000 Census. [b] Based on monthly outgoing rotation of CPS 1997-2009.