
Blake Sisk and Katharine M. Donato
Department of Sociology
Vanderbilt University

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Abstract

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2 Email: blake.sisk@vanderbilt.edu; Address: PMB 351811, Nashville, TN 37235-1811.
Abstract
Two bodies of social science literature generate contradictory expectations for the Mexican employment experience during the recent recession. Explanations based on human capital theory would posit that, among workers with comparable educational and work experience, Mexican immigrants would experience similar levels of unemployment as whites. Hypotheses based on work that highlights the "distinctiveness" of Mexican immigrants’ labor market position would expect that factors like employer preferences and immigrant flexibility would lead to more favorable employment outcomes for Mexicans relative to similarly educated workers. Using matched CPS data from 2003-2011 to examine employment transitions among workers with less than high school, we find support for the "distinctiveness" theory. Mexican immigrants were more likely to maintain employment and less likely to transition from employment to unemployment than whites. However, Mexicans experienced high levels of involuntary part-time employment during the recession, suggesting that their relative success was not without its costs.
**Introduction**

The late 2000’s recession in the US created a severe employment crisis, evidenced by the high unemployment rate and the record numbers of underemployed workers (Papademetriou et al 2010). While workers across the educational spectrum and of all racial and ethnic backgrounds experienced diminished levels of employment during the recession, minority workers and those without high-school diplomas were among those most affected. The literature on immigrant integration into the labor market is dominated by work on hourly wages, occupational prestige, and occupational mobility; however, measures of employment status – and transitions between employment and unemployment, in particular – are also important measures of immigrant incorporation (Chiswick et al 1997). The purpose of this analysis, then, is to examine how the employment transitions of Mexican immigrants with less than a high school degree fared in the recession relative to US-born, non-Hispanic whites.

Two bodies of social science literature generate contradictory expectations for the Mexican employment experience during the late-2000s recession. Explanations based on human capital theory would posit that, among workers with comparable educational and work experience, Mexican immigrants would experience similar levels of unemployment as whites. On the other hand, hypotheses based on work that highlights the “distinctiveness” of Mexican immigrants’ labor market position would expect that factors like employer preferences and immigrant flexibility would lead to more favorable employment outcomes for Mexicans relative to similarly educated workers. We use matched Current Population Survey data from 2003-2011 to examine employment transitions among Mexican and US-born white men with less than high school. Specifically, this analysis seeks to address the following questions: 1) How do the employment transitions of low-skill Mexicans compare to those of comparably skilled whites? 2)
Did the late-2000’s recession change the returns to education experienced low-skill white and Mexican workers?

**Human Capital Theory and Unemployment**

Mincer (1993) notes that more educated workers generally experience three primary advantages in the labor market: higher wages, greater occupational mobility, and higher employment stability. Classic formulations of human capital theory (Becker 1962; Schultz 1961; Sweetland 1996) posit that greater investments in human capital will protect workers from job losses, and, in the case of unemployment, will decrease the length of time it takes to return to employment. Looking broadly at unemployment rates by educational level, it is clear that workers without a high school degree are severely disadvantaged, and this has remained true during the recent recession (Elsby et al 2011). Human capital theory, then, provides a straightforward explanation for differentials in labor force outcomes.

While human capital differentials are helpful in explaining gaps in the unemployment rate between levels of educational attainment, there is substantial heterogeneity within educational groups by race, ethnicity, and nativity that human capital theory does not adequately address (Cairo and Cajner 2011). While low-educated workers suffered the highest rates of unemployment during the recession, African-American workers without a high school degree were the most affected (Elsby et al 2010). Likewise, while the overall unemployment rates for the US-born and foreign-born were relatively similar during throughout the recession, among those with a high school degree or less, foreign-born Hispanics experienced higher levels of unemployment than the US-born, while foreign-born Asians were the least likely to be unemployed (Papademetriou et al 2010). This indicates that examining unemployment rates by education only among whites (Mincer 1989), for all racial and ethnic groups together as an
aggregate (Cairo and Cajner 2011), or by controlling for race (Riddell and Song 2011), glosses over important differences that exist between groups with similar levels of human capital.

**Immigrant Distinctiveness in the Labor Market**

There is considerable evidence that human capital disparities alone do not explain differential outcomes in employment for immigrants. For foreign-born immigrants, human capital obtained abroad is often not considered as commensurate with US credentials by employers in the United States (Chiswick et al 1994; Chiswick 1978). Chiswick et al. (1994) find that education serves as less of a protective factor against unemployment for immigrants than it does for US-born workers. Akresh (2008) demonstrates that employment trajectories for immigrants upon arriving in the United States are typically characterized by occupational downgrading, with some recuperation of status over time. For Mexican immigrants specifically, several analyses have indicated that the returns to human capital have declined in recent years (Gentsch and Massey 2011; Hall and Farkas 2008). Likewise, persistent inequality across a wide variety of labor market outcomes between whites and African-Americans (Wilson et al 1995; Queniea and Sen 2009), whites and Hispanics (De Jong and Madamba 2001; Slack and Jensen 2007), and white women and minority women (Tienda, Donato, and Cordero-Guzman 1992), even when controlling for education, suggests that race/ethnicity also shapes employment outcomes independently of human capital.

Evidence suggests that foreign-born Mexicans have experienced a deterioration of their labor market position in recent decades. Immigration enforcement policies, both at the Mexico-US border and internally, have become increasingly restrictive since 1986 (Donato and Armenta 2011; Massey et al 2002). Research has linked these policy shifts to stagnating wages and declining returns to human capital like English language ability and education (Donato et al
Evidence suggests that female Mexican immigrants have faced the largest challenges in the US labor force as enforcement has intensified (Donato et al 2008). Given this body of research, then, it is unsurprising that the earnings of Mexican immigrants have fallen behind those of the US labor market as a whole (Donato and Sisk 2012).

Previous research provides mixed results in regards to employment and foreign-born Mexicans. Analysis by Chiswick, Cohen, and Zach (1997) indicates that while the Mexican-born have higher levels of labor force participation than other immigrant groups, they are also among the groups most likely to be unemployed. Zhou (1993) finds that although Mexicans are less likely than African-Americans and Puerto Ricans to be unemployed, they are more likely than other minority groups to be partially employed or work for low wages. Overall, research demonstrates that the foreign-born experience higher levels of underemployment than the US-born, and that non-citizens are the most susceptible (Slack and Jensen 2007; De Jong and Madamba 2001). Foreign-born, non-citizen Hispanics experience the highest levels of underemployment, and Mexicans have the highest rates among Hispanic national origin groups.

**Susceptibility to the Business Cycle**

A related issue to the discussion above is the extent to which Mexican immigrant workers are more or less sensitive to gyrations in the US economy. Previous research indicates that African-Americans experience much higher rates of joblessness are more vulnerable to fluctuations in the economy than other racial and ethnic groups (Freeman 1973; Fairlie and Sundstrom 1999; Couch and Fairlie 2010). To date, the few studies to address the issue of immigrant and Hispanic sensitivity to business cycles is inconclusive. Borjas (2008) finds that, among workers without a high school degree, African-Americans are most sensitive to business
cycle shifts, followed by US-born Hispanics and foreign-born Hispanics. Overall, he asserts that immigrant unemployment is less sensitive than that of the US-born to the business cycle, although the wages of immigrants are more likely to decline during downturns. Reimers (2000) find that, in the tight labor market of the 1990s, black workers benefited more than white workers from falling unemployment levels when holding education and occupation constant; on the other hand, Hispanics, on average, were less sensitive to changes in local unemployment rates than whites.

Chiswick et al (1997:297) find some evidence for the hypothesis that immigrants are more susceptible to business cycles, however they do conclude that their analysis provides only “weak support” for that claim. Orrenius and Zavodny (2011) find that from 1994-2009, the unemployment rate for immigrants is more closely tied to real growth in the US Gross Domestic Product than that of US-born workers. This cannot be attributed only to the fact that immigrants possess less education than US-born workers, they conclude, as this trend holds true for both high-skill and low-skill workers. In an analysis that specifically examines the outcomes of Mexican workers, Orrenius and Zavodny (2010) find that the employment outcomes of Mexican immigrants are more sensitive to national and state macroeconomic changes than US-born whites and US-born Hispanics. This holds across educational groups except for those with more than a high school degree. In sum, there are mixed findings in regards to how Mexican immigrants fare when the United States’ economic outlook shifts. While it appears that Hispanics overall are more sensitive to changes in the economy than whites (although not as much as blacks), it is not clear from previous literature how the labor market outcomes of Mexican immigrants (and low-skilled immigrants in particular) are impacted by the business cycle.
Employer Preferences and Immigrants

Previous research on the employers of immigrants has found that they often hold favorable views of their Mexican immigrant employees. Employers have characterized Mexican immigrant workers as highly motivated and willing to get along with others (Kirschenmann and Neckerman 1991). Donato and Bankston (2008) find that employers in Louisiana valued the “soft skills” they found in immigrants, such as a positive attitude, willingness to learn, motivation to work hard, and social skills. This suggests that even among low-educated workers, immigrant workers possess certain traits that are desirable for employers. In addition, employers also take into account the dual frame of reference of immigrant workers, in that they compare their treatment in the US to work conditions in Mexico. As a result, employers view immigrant workers as more willing to work in unfavorable work conditions for lower pay (Donato and Bankston 2008). Moreover, employers believe Mexican immigrants to be “willing subordinates” due to their comparison of the US to Mexico (Waldinger and Lichter 2003:40).

Research Questions

How does the unique labor market position of immigrants shape employment transitions, particularly during a time of recession? The literature indicates that in recent years, the labor market position of Mexican immigrants has declined, measured primarily in regards to wages However, it is unclear how this decline in returns to education for Mexican workers translates into labor force status. If the labor market position of Mexican workers had declined such that it is more economical to employ Mexican labor as opposed to US-born labor, then during times of economic duress and high unemployment, employers may continue to prefer to employ Mexicans compared other workers due to perceived “soft skills”. Even as their position in the US labor force deteriorates, the distinctive nature of low-skill Mexican immigrant workers may
leave them less susceptible to the business cycle in comparison to similarly educated workers.

Based on the discussion above, this analysis addresses two research questions.

1) How do the employment transitions of low-skill Mexicans compare to those of comparably skilled whites?

2) Did the late 2000’s recession lead to differential changes in the employment transitions of Mexicans and US-born whites without high school diplomas?

**Data and Methods**

To investigate the questions above, we utilize matched samples of the March Annual Demographic File of the Current Population Survey (CPS) from 2003-2011. The CPS is a joint effort between the US Census Bureau and the US Bureau of Labor Statistics, and interviews around 50,000 households and 130,000 individuals each month. Even though researchers typically use the CPS as a cross-sectional survey, the survey design of the March Annual Demographic File allows for the linking of respondents across two March-to-March surveys. The CPS interviews households for four consecutive months and then returns eight months later to conduct four more consecutive months of interviews with that household. As a result, responses for CPS participants can be linked over time.

We take advantage of this feature of the CPS to create one-year longitudinal cohorts for each year included in the study, which allows us to examine how respondents shifted employment status from March in $t_0$ to March in $t_1$. So, for example, CPS respondents in March of 2003 can be linked to their responses to the CPS in the March of 2004, after which they drop out of the CPS sample; the matching process produces another one-year longitudinal cohort that follows the respondents from March of 2004 to March of 2005, and so on. Matches were generated across March CPS files using the strategy developed by Madrian and Lefgren (1999;
2000), which matches respondents based on their location in the household, education, martial status, and race\(^3\).

For this analysis, we focus only on men with less than a high school degree who are either Mexican immigrants or US-born, non-Hispanic whites. We also limit the sample to those who are not enrolled in school and are employed at \(t_0\). Additionally, we limit the sample to respondents ages 18-55; we do this in order to both include the largest sample of Mexican immigrants possible (Mexican immigrant workers tend to have a lower age profile than US-born workers) and to avoid the issue of respondents dropping out of the labor force due to retirement. This yields a sample size of 4,477 respondents (approximately 42% Mexican and 58% white) with matched data across two March CPS files.

The primary dependent variable in the analysis is a nominal categorical variable. It is coded 1 if the respondent reports being out of the labor force at \(t_1\), 2 if the respondent reports being employed at \(t_1\), and 3 if the respondent reports being unemployed at \(t_1\). This coding allows us to track the labor force transitions of employed workers from March in a given year to the subsequent March. Given the nature of the dependent variable, we use multinomial logistic regression models to predict transitioning from employment to one of the three labor force status categories.

The multinomial logit models include several independent variables, including dummy variables for being Mexican (vs. being US-born white), marital status, having a child under the age of 6, being the household head, US region, residing in the central city, and industry in \(t_0\). Controls are also included for age and age-squared. Additionally, we also include controls for year; sensitivity analysis indicated that the most efficient way to model year was to include both

\(^3\) For more information, see this reference page on the website of the National Bureau of Economic Research: [http://www.nber.org/data/cps_match.html](http://www.nber.org/data/cps_match.html).
squared and cubed terms for year. This coding of year reflects the descriptive pattern of employment transitions over time and also avoids the substantial loss of statistical power that arises when continuous variables are coded as categorical (see Maxwell and Delaney (1993) for a discussion of this issue). From the multinomial logit model, we then generate predictive probabilities for transitioning from employment to each of the three outcomes for both Mexicans and whites across years, holding all other variables at their means.

**Results**

**Descriptive Results**

Figures 1A-1C display the percent of respondents that transitioned from employed to one of three options: continued employment, unemployment, or dropping out of the labor force. Figure 1A demonstrates that for all of the years in the sample, US-born whites were much more likely than Mexicans to transition from employment to being out of the labor force. For both groups, we see that more workers were dropping out of the labor force in the later years of the study compared to the earlier years. Figure 1B shows that the percent of Mexican workers that remained employed from one March to another is much higher than that of US-born whites, although both groups experienced declines in those percentages during the years of the recession and the “jobless recovery” that followed after the official end of the recession. Prior to the recession, around 95% of employed Mexicans reported being employed the year after, compared to about 90% of US-born whites. While that percentage for Mexicans dropped substantially for the 2008-2009 cohort, Mexican workers recovered much more quickly than whites, as they experienced diminished levels of employment earlier than Mexicans and saw their levels of employment recover later. For example, while close to 90% of employed Mexican immigrants in 2009 reported being employed one year later in 2010, only about 80% of US-born whites
reported the same. Figure 1C shows the percentage of employed workers that reported being unemployed one year later, by year cohort. Similar to the employed-to-employed transitions shown in Figure 1B, Mexicans were less likely to transition into unemployment than whites overall. While 12% of employed Mexicans and whites were unemployed the following year from 2008-2009, that number had declined to less than 9% for Mexicans by the following year, while it climbed to over 13% for whites. Thus, while Mexicans did experience a sharp rise in transitions into unemployment like whites, the increase for Mexicans was much more short-lived that that for whites.

Multivariate Results

Table 1 shows selected results from the multinomial logistic regression model that predicts a respondent’s one-year transition from employment to continued employment, unemployment, or dropping out of the labor force. The model indicates that Mexicans were significantly less likely to drop out of the labor force, less likely to be unemployed, and more likely to continue to be employed than US-born whites. Further, the curvilinear terms for year indicate that the pattern examined in the descriptive results remains after controlling for other variables. In order to further examine the differences between Mexicans and whites on these outcomes, we now turn to the predicted probabilities, which are displayed in Figures 2A-2C.

Figure 2A shows the probability of transitioning from employment to out of the labor force for Mexicans and whites across year cohorts. As the 95% confidence intervals indicate, the two groups are significantly different from one another except for the 2003-2004 and 2010-2011 year cohorts. While the probability of transitioning to out of the labor force for whites ranges from about 4% to a little over 6%, the probability for Mexicans is much lower at 2-3%. Moreover, the gap between whites and Mexicans appears to widen during the peak years of the
recession, as the difference between the groups grows from 2% in 2004-2005 to over 3% in 2008-2009.

Figure 2B shows the probability of transitioning from employment to continued employment. Throughout the period under study, Mexicans experience a significantly higher propensity to report continued employment than whites. For Mexican immigrants, the predicted probability falls from 95% to around 90% during the height of the recession. For US-born whites, the predicted probability drops from 93% to 83%, indicating a much larger drop in employment transitions for whites than Mexicans. Like in Figure 2A, there is evidence of a widening of the gap between whites and Mexicans during the recession, but that the gap closes once more as begin to recover during the 2010-2011 period.

Figure 2C displays the predicted probability of transitioning from employment to unemployment. In this case, the probabilities for Mexicans and whites are only significantly different from one another in the 2007-2008, 2008-2009, and 2009-2010 periods. This, however, fits the pattern observed in the earlier figures, where the differences between Mexicans and white are accentuated during the period of greatest economic crisis. While the propensities of both groups to transition into unemployment were statistically the same prior to the recession (ranging from 2%-5%), whites experienced a steeper increase than Mexicans in the late 2000s. As a result, 11.5% of whites were predicted to shift into unemployment during the 2009-2010 period, as opposed to 7% of Mexicans, and this difference is significant at the 95% confidence level.

In Figure 3, we explore a possible explanation for why Mexican immigrants experienced more favorable employment outcomes during the recession. To do this, we provide the results from an additional multinomial logit model, this time predicting the shift between participating in the labor force to three options: unemployment, full-time employment, or involuntary part-
time employment. The same covariates that were included in the previous model are also included in this model, except that here we provide a dummy variable that indicates whether the year cohort is from 2003-2007 as opposed to 2008-2011; the latter category represents the years of the recession and the jobless recovery, while the first category represents the pre-recession years. Figure 3 displays the predicted probabilities from that model. From Figure 3, we find that while Mexicans were less likely to be unemployed than US-born whites in both periods, Mexicans were no longer more likely than whites to be employed full time during the 2008-2011 period. Instead, Mexicans increased their probability of transitioning into involuntary part-time work from 5.3 to 14.5; while whites did see some increase in this outcome, Mexicans were significantly more likely to be in this kind of work form 2008-2011. This suggests that even while Mexicans were more likely to remain employed during the recession, the kinds of jobs that they were working in were not necessarily full-time work. Therefore, while Mexicans appear to have experienced more favorable outcomes than whites during this time, Figure 3 indicates that there was also some cost to that success.

**Discussion**

Did Mexicans with less than a high school diploma weather the storm? The late-2000’s recession triggered exceptionally high levels of unemployment for workers of all skill levels, but minority and low-skill workers were the most affected. Our analysis indicates that, in comparison to comparably educated non-Hispanic, US-born whites, Mexican immigrants with less than a high school degree experienced more preferable employment outcomes, particularly during the most turbulent years of the recession.

On a descriptive level, whites were more likely to transition from employment to out of the labor force or unemployment, and less likely to remain employed across all March-to-March
yearly cohorts. This finding is surprising, given that foreign-born Mexicans are heavily concentrated in the construction industry, a sector of the economy that was disproportionately impacted by the recession. This suggests that some form of employer preference for Mexican labor might have reduced the layoffs experienced by Mexican immigrant workers.

The predicted probabilities in provide further evidence that there was a persistent demand for Mexican labor in the US labor market, even during the peak years of the recession. Throughout the years included in the analysis, Mexican workers were more likely than whites to remain employed from March in \( t_0 \) to March in \( t_1 \), and the gap between whites and Mexicans widened during the recessionary period. Further, during the period of the recession where unemployment was the highest, Mexicans became significantly less likely than whites to shift from employment to unemployment. Together, this indicates that, all else equal, low-skill Mexicans fared substantially better than whites during the recession.

The results in Figure 3 suggest that the recessionary period was not without its difficulties for Mexican immigrant workers, however. Before the recession hit, Mexicans were more likely than whites to be employed full-time and less likely to be unemployed. However, during the years of economic crisis from 2008-2011, the Mexican advantage in full-time employment eroded, and Mexicans were much more likely to be employed part-time for economic reasons (or, involuntary part-time). This shift complicates the findings above, suggesting that although Mexicans were doing better than other low-skilled workers, they too were negatively affected by the employment crisis. During the recession, rather than return to Mexico or draw unemployment benefits (which many are ineligible for), Mexican workers were more likely to take fewer hours in return for continued employment. Based on this analysis, it is clear that Mexican immigrants with less than a high school degree occupy a unique position in the US
labor market. While Mexican workers do appear to have successfully weathered the storm of the late 2000’s recession, that relative success was not without its costs.
Tables and Figures

**Figure 1A:** % Transitioning from Employed to Out of the Labor Force

**Figure 1B:** % Transitioning from Employment to Continued Employment

**Figure 1C:** % Transitioning from Employment to Unemployment
Table 1: Selected Results from Multinomial Logistic Regression Predicting Transition from Employment to Continued Employment (base), Unemployment, Or Out of the Labor Force

<table>
<thead>
<tr>
<th>Variable</th>
<th>Out of LF</th>
<th>Unemployed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coef.</td>
<td>SE^</td>
</tr>
<tr>
<td><strong>Year</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year</td>
<td>-0.838^</td>
<td>0.456</td>
</tr>
<tr>
<td>Year-Squared</td>
<td>0.250*</td>
<td>0.116</td>
</tr>
<tr>
<td>Year-Cubed</td>
<td>-0.020*</td>
<td>0.009</td>
</tr>
<tr>
<td><strong>Ethnicity/Nativity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>USB White (ref.)</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>FB Mexican</td>
<td>-0.771**</td>
<td>0.199</td>
</tr>
<tr>
<td><strong>Industry</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional (ref.)</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Agriculture</td>
<td>-0.099</td>
<td>0.444</td>
</tr>
<tr>
<td>Mining</td>
<td>-0.551</td>
<td>0.773</td>
</tr>
<tr>
<td>Construction</td>
<td>0.425</td>
<td>0.306</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>0.116</td>
<td>0.326</td>
</tr>
<tr>
<td>Trade</td>
<td>0.076</td>
<td>0.347</td>
</tr>
<tr>
<td>Transportation</td>
<td>0.290</td>
<td>0.384</td>
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<tr>
<td>Information</td>
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<td>Financial</td>
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<td>Education/Health</td>
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<td>Hospitality</td>
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<tr>
<td>Other Service</td>
<td>0.288</td>
<td>0.396</td>
</tr>
<tr>
<td>Public Admin.</td>
<td>-0.450</td>
<td>1.060</td>
</tr>
</tbody>
</table>

N: 4,477
Psuedo R^2: 0.075
Log Likelihood: -1751.03
\( \chi^2 \): 282.46**

** p<0.01, * p<0.05, ^ p<0.10. Data: Matched March CPS, 2003-11

Note: Models also include controls for age/age-squared, marital status, being the household head, having children under the age of 5, and US region.
**Figure 2A**: Predicted Probability of Transitioning from Employment to Out of the Labor Force

**Figure 2B**: Predicted Probability of Continued Employment

**Figure 2C**: Predicted Probability of Transitioning from Employment to Unemployment
**Figure 3**: In the Labor Force to Type of Labor Force Participation

*Indicates significant difference between Mexicans and whites within the time period.*
References


