STATE-LEVEL ENFORCEMENT OF UNAUTHORIZED MIGRATION AND SELF-EMPLOYMENT AMONG MEXICAN-BORN MEN, 2005-2009*

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ABSTRACT

This paper uses a survey-based equation in order to assign probable legal status to foreign-born individuals in the 2005-2009 American Community Surveys (ACS). We then examine the respective effects of the recession and state-level immigration enforcement measures on participation in the informal economy (approximated by self-employment in certain occupations) among Mexican immigrant men, as well as how these effects vary depending on one's citizenship and immigration status. Participation in the informal economy increased among Mexican immigrant men nationwide, and increases were especially sharp among the unauthorized after the start of the recession in Fall 2008. Beyond the recession effects on the prevalence of self-employment among Mexican-born men, states implementing policies aimed at restricting access to the formal labor market among unauthorized immigrants (namely, Arizona), saw especially steep increases in low-skilled self-employment. While these increases were concentrated primarily among the unauthorized in Arizona, it appears that the state's restrictive policies may also have pushed Mexican-born legal residents into the informal sector. We conclude by discussing the policy implications of the findings.

INTRODUCTION

As recent legislative efforts at comprehensive immigration reform have stumbled in Congress, proposals focused exclusively on enforcement as a means through which to reduce unauthorized migration in the United States continue to be debated (Rosenblum 2011). One such proposal is the implementation of a federal mandate requiring all employers nationwide to verify the work-eligibility of all new hires using the Department of Homeland Security's (DHS) electronic verification system known as E-Verify. The rationale behind such proposals is that E-Verify, which checks new job applicants' identifying information against DHS and Social Security Administration (SSA) databases, is less susceptible to the use of fraudulent documents to secure employment in the United States, and is thus likely to discourage unauthorized migration by removing the jobs magnet that disproportionately drives illegal immigration into the country (Meissner and Rosenblum 2010). One of several concerns that has been raised in response to proposals supporting a universal E-Verify mandate is that rather than discouraging unauthorized migrants from seeking work in the United States, a non-trivial share of the work commonly performed by the unauthorized will move underground into the unregulated, informal labor market (U.S. Government Accountability Office 2011; Rosenblum 2011; Lofstrom 2011). To the extent that unauthorized workers and their employers respond to mandated E-Verify usage by shifting to "off the books" work arrangements, consequences might include the loss of federal tax revenue, increased difficulty and costs associated with enforcing unauthorized work, and the increased hardship borne by migrants and their families that often results from employment in the informal sector (Gonzelz 2007; Nightingale and Wandner 2011).

In this paper we build on recent work by Lofstrom et al. (2011) and provide empirical estimates of the relationship between state-level E-Verify legislation and the prevalence of informal labor market activity among Mexican immigrant men in the United States between 2005 and 2009. In order to assess the hypothesis that the effects of such legislation on informal labor market activity should be strongest among those in the country without authorization, we employ a probabilistic survey-based approach to distinguish between unauthorized, legal non-citizen, and naturalized U.S. citizens among immigrants

included in the 2005-2009 ACS microdata samples. Results from statistical models suggest that net of individual-level factors and state-level unemployment rates, increases in the prevalence of informal labor market activity among Mexican immigrants were especially sharp among unauthorized workers in states introducing full E-Verify mandates between 2005 and 2009 (a finding that is driven largely by Arizona). We conclude with a discussion of the policy implications of the results.

BACKGROUND

A major point of contention in debates over the nation's future direction with respect to immigration policy is the extent to which policy reforms should combine some form of legalization program on the one hand with increased measures of enforcement on the other (Migration Policy Institute 2006). With respect to enforcement, debate often centers on the likely effectiveness of so-called "enforcement-only" policies and the related issue of the likelihood that such policies will yield unintended and undesirable consequences. Such debates remain both heated and unresolved in large part because, as policy proposals, they are largely incapable of being tested with empirical data. However, as federal immigration legislation has recently stumbled in Congress, several state and local governments have put in place the restrictive enforcement policies aimed at deterring unauthorized residence and employment within their jurisdiction, the most notable of which is the 2008, Legal Arizona Workers Act LAWA) (Lofstrom 2011). This context in which some states have introduced such enforcement-only policies while others have not, provides a pseudo-experimental setting in which the effects of such policies can be tested, thus providing empirical evidence germane to current immigration policy debates.

The research reported in this paper makes use of this development in order to assess the potential unintended consequences of enforcement-only immigration policies. More specifically, we examine the extent to which the introduction of an E-Verify mandate at the state-level pushes unauthorized migrant workers into the underground labor market – an undesired side-effect inasmuch as such policies are aimed at deterring unauthorized employment altogether – irrespective of whether mandates also led to the out-migration of unauthorized workers. We thus test the hypothesis that recent observed growth in the informal sector among the foreign-born, some of which is likely due to the economic downturn, will be larger in states that recently introduced E-Verify legislation or executive orders. For this hypothesis to be confirmed, one would expect that the E-Verify effect on informal labor market activity should be the strongest, or perhaps only present, among the unauthorized foreign-born population.

DATA AND ANALYTICAL APPROACH

Data

We use microdata from the 2005-2009 American Community Surveys (ACS) (Ruggles et al. 2008). The ACS is a one percent annual sample of the U.S. population taken in April. We limit the analytical sample to Mexican-born Men between the ages of 18 and 64 who were employed at the time of the survey. These restrictions yield and analytical sample of 164,000 employed Mexican immigrant men between the ages of 18 and 64. All of the results presented below are based on a sample weighted by the person-weights calculated by the U.S. Census Bureau.

Defining Self-Employment

Similar to Lofstrom et al. (2011), we examine self-employment as an indicator of participation in the informal labor market. Given that self-employment, as measured in the ACS, captures a wide diversity of economic activity ranging from capital-intensive forms of entrepreneurship and business-ownership to day-labor and participation in an unregulated cash economy (Lofstrom 2010; Valenzuela 2003), we distinguish between three different "classes" of self-employment based on an individual's occupational classification. "Entrepreneurs" are those self-employed Mexican immigrants in managerial, proprietary, or administrator occupations. The "Skilled Manual" self-employed are those in craft, precision production, or trades occupations. And the "Unskilled Manual" self-employed refers to self-employed laborers and operators. As we discuss below, comparisons of the characteristics of self-employed Mexican immigrants grouped into the three classes of self-employment suggest meaningful differences between the two, and given the particularly low levels of human capital in the two "manual" self-employed groups, informal or underground labor market activity is expected to be the most prevalent in these two.

Individual-Level Determinants of Self-Employment

Citizenship and Immigration Status. A fundamental obstacle to testing the effects of internal enforcement policies on the labor market activity of unauthorized workers is the lack of information on the legal status of the foreign-born in most large-scale survey data sets, the ACS included. Here we

assign legal status to the Mexican immigrants in the ACS using a survey-based approach (Marcelli and Heer 1997; Heer and Passel 1987). Specifically, the 2001 wave of the Los Angeles Family and Neighborhood Study (L.A.FANS), a representative survey of households in Los Angeles County, asked respondents a series of questions that allows one to infer the legal status of foreign-born adults (Prentice, Pebley, and Sastry 2005).[1] Using this series of questions, we classified immigrant adults in the L.A.FANS into legal / non-legal categories and then estimated a logit model predicting unauthorized status as a function of one's country of birth, length of U.S. residence, and occupation. We then use the coefficients from this model in order to estimate a predicted probability of unauthorized status for each foreign-born individual in the 2005-2009 ACS and randomly assign each person with legal or unauthorized status based on his predicted probability. Among those not assigned unauthorized status, we further distinguish between *naturalized citizens* and *legal non-citizens* based on responses to the citizenship question asked of foreign-born respondents in the ACS. We stress here that our main objective in using this procedure to assign legal status to immigrants in the ACS is to identify those Mexican-born men who have the highest probability of being unauthorized, and thus are the most likely to be affected by state-level enforcement policies such as E-Verify mandates for employers.[2]

Indicators of Immigrant Incorporation, Demographic, Family, and Human Capital Variables. In models examining the respective effects of the recession and state-level enforcement on the probability of participation in the informal economy among Mexican immigrant men, we adjust for a number of individual-level dimensions along with the unauthorized are likely to differ from naturalized citizens and legal permanent residents and that we expect to be associated with the likelihood of self-employment.

[1] The survey first asked foreign-born respondents whether they were naturalized citizens. Non-citizens were then asked whether they had a green card. Those without green cards were then asked whether they had been granted asylum in the United States. Those who were not were asked whether they had a valid visa allowing them to reside temporarily in the United States. Those answering "no" to all of the above questions are assumed to be unauthorized.

[2] In comparison to estimates published by the Pew Hispanic Center (Passel and Cohn 2008), our survey-based assignment procedure underestimates the adult foreign-born population by 10 to 15 percent. A portion of the underestimate is due to the fact that the Pew estimates adjust for an assumed rate of undercount among the foreign-born. Other sources of discrepancy between the survey-based and residual-based approach of Pew could include differences between the unauthorized population in Los Angeles compared to that nationwide as well as non-response and mis-reporting bias among the unauthorized respondents in L.A.FANS.

Length of residence is measured in five-year intervals. Limited-English proficiency is a dummy-coded indicator. Models also adjust for age, age-squared, marital status, and the presence of children. And human capital is measured by level of educational attainment. Finally, models also control for differences in self-employment probabilities by major industrial groups.

Means and standard deviations of the individual-level variables are reported in Table 1 separately for four groups of male Mexican immigrant workers: those in wage or salary employment, self-employed "entrepreneurs", "skilled manual" self-employed, and those self-employed in "unskilled manual" occupations. Of the four groups, entrepreneurs are the most distinctive with respect to their characteristics described by the independent variables. Compared to their wage/salary counterparts and to those in the two manual self-employed groups, entrepreneurs are more likely to be naturalized and less likely to be unauthorized, have resided longer in the U.S., are more proficient in English, older, more likely to be married and have children, and better educated. Entrepreneurs are also disproportionately concentrated in the retail trade and services sector of the economy. With the exception of industrial concentration, by contrast, skilled and unskilled manual self-employed Mexican immigrant workers are not substantially dissimilar from their counterparts being paid by employers. Nearly two-thirds of skilled manual self-employed workers are in the construction industry. Half of all unskilled manual self-employed workers are in agriculture[3], with an additional 27 percent in construction. In other words, the two manual classes of self-employed Mexican immigrants are heavily concentrated in industrial sectors where informal economic activity is most prevalent (Gonzalez 2011).

State-Level Determinants of Self-Employment

At the state-level, our analysis concentrates on two determinants of Mexican immigrant self-employment: increases in unemployment associated with the recession and the introduction of legislation or executive orders requiring some or all employers to use the E-Verify system to confirm the work eligibility of all new hires. To measure unemployment, we use average annual estimates of the

[3] The overwhelming majority of self-employed Mexican immigrant men in the agricultural industry are in "gardening and groundskeeping" occupations. Few are farm workers.

percentage of the labor force that is unemployed by state and year reported by the U.S. Bureau of Labor Statistics (BLS). These state-year estimates are appended to the record of each individual Mexican immigrant respondent in the 2005-2009 ACS.

To code whether a state introduced an E-Verify mandate, and if so, when, we rely on a list of E-Verify related legislation and executive orders, by state and date of effectiveness, reported by the National Immigration Law Center (NILC, 2011). E-Verify is an electronic system through which employers can confirm the work eligibility of new hires by checking their identifying information (e.g., social security number, name, date of birth) against a database managed by the U.S. Customs and Immigration Service (USCIS) of the U.S. Department of Homeland Security (DHS), which compiles information from databases at DHS, the Social Security Administration (SSA), and the U.S. Department of State. In cases in which employer-usage of E-Verify is voluntary, employers are not required to enroll in the system, but once they do so, they must use the system to verify the work-eligibility of all new hires from that point forward (see Rosenblum (2011) for more on E-Verify).

Since the final year of its "pilot" stage in 2004, employer-usage of E-Verify has increased rapidly due in part to the adoption of E-Verify mandates by individual states, but also due to increasing efforts at the Federal level to market the program (Rosenblum 2011). As of 2005, no states had legislation in place requiring all or some employers to use E-Verify. Between 2006 and 2009, ten states adopted mandates requiring public agencies or public agencies and their contractors to check the work-eligibility of all new hires against the E-Verify database. These "public contracts" mandates went into effect in 2007 in five states – Colorado, Idaho, Minnesota, Nebraska, and North Carolina – and in 2009 in four additional states – Georgia, Missouri, Oklahoma, South Carolina, and Utah. In addition, two states adopted mandates requiring *all* employers to use E-Verify for all new hires. Arizona's universal mandate went into effect on January 1, 2008, while Mississippi's took effect a year later at the start of 2009. In addition, beginning in September of 2008, the Federal government required that all Federal agencies and Federal contractors use E-Verify for all new hires. Thus, between 2005 and 2009, the period for which we have data, unauthorized immigrants nationwide were faced with increased governmental efforts to restrict their

access to the formal labor market, with restrictions likely perceived most severely in states with all-employer mandates – Arizona starting in 2008 and Mississippi beginning in 2009 – and to a lesser degree by those residing in states adopting public-contracts mandates between 2007 and 2009. To the extent that E-Verify has a chilling effect on unauthorized Mexican immigrants that drives them into the informal economy, we expect this effect to be most pronounced among the unauthorized in states with "all-employer" mandates and least pronounced in "no mandate" states.

RESULTS

Patterns of Self-Employment by Citizenship / Immigration Status and State Policy Context

Overall, the number of employed Mexican immigrant men increased by a modest 2.5 percent between 2005 and 2009, from 4.5 to 4.6 million. Trends vary by migrants' citizenship and estimated legal status, however. The number employed among naturalized and legal non-citizens increased from 2.1 to 2.5 million between 2005 and 2009, while the number fell from 2.4 to 2.1 million among the unauthorized, a decline that is attributable to the economic downturn and return migration to Mexico (Passel and Cohn 2010). The number of self-employed workers increased for both groups, however, in raw numbers and as a percentage of all employed. Over the five year period, the share of employed Mexican born men that are self-employed increased from 9.5 to 10.8 percent among citizens / LPRs, and from 6.3 to 7.7 percent among the unauthorized. Among men in both citizenship categories, growth in self-employment was limited largely to the two forms of "manual" self-employment defined earlier, in which the unauthorized tend to be more concentrated (Table 3).

Figure 1 displays trends in all forms of self-employment among Mexican immigrant men separately for four types of states:

(1) *Arizona*, where an all-employer E-Verify mandate went into effect at the start of 2008;

(2) Five states – *Colorado, Georgia, Idaho, North Carolina, and Oklahoma* – implementing a mandate requiring public agencies and their contractors to use E-Verify starting in 2007;

(3) Five more states – *Minnesota, Missouri, Nebraska, South Carolina and Utah* – implementing public contracts mandates in 2009;

(4) The 40 states (including DC), that have not imposed any form of E-Verify mandate upon employers, private or public.

Trends among Mexican immigrant men who are naturalized citizens or legal non-citizens are shown in Panel A, while trends for their unauthorized counterparts are presented in Panel B.

Among legally resident Mexican immigrant men, self-employment rates remained relatively flat or declined in all types of states except for Arizona, where the percentage jumped from 9.5 percent to

12.2 percent during 2008. The extent to which this increase is related to E-Verify also driving some legally resident Mexican immigrant men into the informal economy (e.g., through increases in employer discrimination) or instead derives from our assignment procedure, which may have assigned legal status to migrants who are actually unauthorized, is unclear. Increases in self-employment in Arizona are even more distinctive among the unauthorized in Panel B. The share of employed unauthorized Mexican immigrant men in Arizona nearly doubled between 6.3 percent in 2005 to 12.2 percent in 2009. All of this increase occurred after 2006, with the largest annual increase taking place in 2008, the year Arizona's E-Verify mandate went into effect. From 2007 to 2008, the self-employment rate among unauthorized Mexican men jumped from 8.3 percent to 11.7 percent. Increases in unauthorized self-employed occurred in other types of states but increases are less-pronounced and rates in these states remained much lower as of 2009. States effecting public contract mandates in 2007 saw the unauthorized unemployment rate rise from 5.8 percent in 2005 to 7.4 percent in 2009. Moreover, the rate in these states dipped somewhat after public contracts mandates went into effect, only to jump considerably from 4.6 to 7.4 percent after 2008, a jump that appears to coincide more with the onset of the recession rather than the timing of the public contracts E-Verify mandate. The distinctiveness of Arizona with respect to trends in self-employment among Mexican unauthorized workers, especially, and to a lesser degree among citizens and LPRs, can be seen with greater clarity in Figure 2 where Arizona is compared to all other states.

Models of Mexican Immigrant Self-Employment in Manual Occupation

Given that the increases observed in Arizona could have result from differences in the individual characteristics of Mexican immigrants in that state, or more plausibly, from relatively more severe effects of the recession, we estimated a series of logit models in an effort to account for these sources of variation. These models predict self-employment among Mexican immigrant men in the skilled and unskilled manual occupations defined earlier. In other words, the dependent variable in the models is coded 1 for men in skilled or unskilled manual self-employment, and 0 for those employed for wages or salary or are self-employed entrepreneurs. The series of models reported in Table 4 include only individual level predictors and are designed to understand differences in the probability of manual self-

employment between naturalized citizens, legal non-citizens, and the unauthorized, after accounting for their respective differences in other factors likely to be associated with self-employment. Model 1 indicates that the unauthorized are significantly less likely to be self-employed in manual occupations compared to their naturalized counterparts. This difference is explained entirely by the relative lack of U.S. experience among the unauthorized, and once length of residence and English-language proficiency are entered into Model 2, both legal non-citizens and the unauthorized (especially the latter) are significantly *more* likely to be engaged in manual self-employment. The difference in the probability of manual self-employment between the unauthorized and naturalized citizens is diminished substantially in Model 3 with the addition of human capital family/demographic, and industry indicators.

Finally, models reported in Table 5 are an extension of those presented in Table 4, in which two state level indicators are incorporated into the logit equation. The state unemployment rate measures the rate of unemployment for a given state-year, and thus varies for individuals within states across survey years. This indicator is intended to capture recession effects that may have driven recent increases in Mexican immigrant self-employment. The second state-level indicator introduced in models for Table five is the E-Verify policy variable, measured by a series of dummy-variables comparing 2007 public mandate states, 2009 public mandate states, Arizona, and Mississippi, respectively to all other states with no E-Verify mandate in place. Mississippi is included as its own dummy-coded variable in this analysis given that the state legislature passed an all-employer mandate effective January 1, 2009. Owing to the fact that the 2009 ACS was conducted only three months after the Mississippi law went into effect, and given the very small number of Mexican immigrants in the state, we would advise readers to interpret the results pertaining to Mississippi with caution. Finally, the models reported in Table 5 also include but do not report all of the individual-level controls and the year dummies listed in Table 4.

Model 1 indicates that for Mexican immigrant men, the probability of manual self-employment is not significantly different among those in Arizona compared to their counterparts in states without any form of self-employment. However, Model 2, which interacts the migration status and type of E-Verify mandate, indicates that the positive association between unauthorized status and the probability of manual

self-employment is stronger in Arizona than it is in other states, consistent with the hypothesis that Arizona's all-employer E-Verify mandate pushes unauthorized migrants into the informal labor market.

CONCLUSIONS

One concern that has been expressed about policy proposals to make enrollment in the DHS's electronic employment verification system (E-Verify) mandatory for all employers nationwide is that rather than effectively deterring the employment of unauthorized immigrant workers, their employment will merely shift underground into the unregulated informal labor market (Rosenblum 2011). With respect to this policy concern, our results, consistent with those reported in Lofstrom et al. (2011), suggest that increases in the number of Mexican immigrant men participating in the informal labor market have been especially sharp in states introducing mandates requiring all employers to use the E-Verify system between 2005 and 2009, and that these increases cannot be explained by the recession alone. Evidence also suggests that such mandates were most strongly associated with the probability of participating in the informal sector among Mexican-born with the highest probability of being unauthorized, but to a lesser extent, is also associated with increased participation in the informal labor market among legally-resident Mexican-born workers. Whether this latter finding derives from employer discrimination that might be expected to increase in states with E-Verify mandates (see, e.g. U.S. Government Accountability Office 2011; or Rosenblum 2011), or stems instead from some other mechanism is beyond the scope of the research presented here.[4]

Of the roughly 90,000 unauthorized employed Mexican immigrant men in Arizona in 2009, 12.2 percent, or nearly 11,000 were self-employed, largely in low-skilled manual occupations. Of the estimated two million employed Mexican immigrant men in states other than Arizona, 7.5 percent, or about 150,000 were self-employed in 2009. If all-employer E-Verify mandates had the same impact on the prevalence of self-employment among unauthorized Mexican immigrant men in other states as it appears to have had in Arizona, and the self-employment rate increased to the same level of 12.2 percent, then the size of the self-employed unauthorized Mexican immigrant male population across the nation would jump by about 58 percent from 160,000 to 255,000. To the extent that a federal E-Verify mandate

[4] We also should note that the relatively larger increase in the probability of self-employment among citizens and legal-non-citizens in Arizona, could also be the result of our assignment procedure mis-categorizing individuals who are actually unauthorized as legal residents.

could swell the size of the informal and unregulated labor market, such proposals must take into consideration the additional enforcement efforts and associated costs needed to adequately police the underground economy, and weigh these costs against proposals seeking to curb unauthorized employment through alternative or complimentary approaches, such as mandated E-Verify usage in concert with a legalization program. The less immediate, though no less important, costs of federal mandates that drive increasing shares of unauthorized migrants underground also need to be considered, including the increased danger, marginalization and insecurity faced not only by migrants working in the underground economy, but also endured by their families and children (Gonzalez 2007; Nightingale and Wandner 2011), many of whom are U.S. citizens by birth.

At the same time, our conclusions about the effects of all-employer E-Verify mandates on participation in the informal labor market among unauthorized immigrants remain tentative given the narrow scope of our anlaysis, the recency of E-Verify mandates and the lack of evidence given that to date, such mandates have gone into effect in so few states. Additional research is needed that focuses on the labor market responses of unauthorized immigrants besides Mexicans and of unauthorized women as well. Additional sources of data, namely the forthcoming release of the 2010 ACS microdata, are also needed to further test the results reported here.

REFERENCES

Gonzalez, Arturo. 2007. "Day Labor in the Golden State." *California Economic Policy,* Vol. 3, Issue 3, San Francisco, CA: Public Policy Institute of California.

Heer, David and Jeffrey S. Passel. 1985. "Comparison of Two Methods for Estimating the Number of Undocumented Mexican Adults in Los Angeles County." *International Migration Review* 21(4): 1446-1473.

Lofstrom, Magnus. 2010. "Low Skilled Immigrant Entrepreneurship." *Review of Economics of the Household (2010)*: 1-20.

Lofstrom, Magnus, Sarah Bohn, and Steven Raphael. 2011. *Lessons from the 2007 Legal Arizona Workers Act*. San Francisco, CA: Public Policy Institute of California.

Marcelli, Enrico A. and David M. Heer. 1997. "Unauthorized Mexican Workers in the 1990 Los Angeles County Labour Force." *International Migration* 35(1): 59-83.

Meissner, Doris, and Marc Rosenblum. 2010. *The Next Generation of E-Verify: Getting Employment Verification Right.* Washington, DC: Migration Policy Institute.

Nightingale, Demetra Smith, and Stephen A. Wandner. 2011. *Informal and Nonstandard Employment in the United States: Implications for Low-Income Working Families.* Washington, DC: Urban Institute.

Passel, Jeffrey S., and D'Vera Cohn. 2010. *U.S. Unauthorized Immigration Flows Are Down Sharply Since Mid-Decade.* Washington, DC: Pew Hispanic Center.

Passel, Jeffrey S., and D'Vera Cohn. 2008. *Trends in Unauthorized Immigration: Undocumented Inlow Now Trails Legal Inflow.* Washington, DC: Pew Hispanic Center.

Prentice, Julia C., Anne R. Pebley, and Narayan Sastry. 2005. "Immigration Status and Health Insurance Coverage: Who Gains? Who Loses?" *American Journal of Public Health* 95(1): 109-116.

Rosenblum, Marc. 2011. *E-Verify: Strengths, Weaknesses, and Proposals for Reform.* Washington, DC: Migration Policy Institute.

Valenzuela, Abel. 2003. "Day Labor Work." *Annual Review of Sociology* 29: 307-333.

U.S. Government Accountability Office. 2010. *Federal Agencies Have Taken Steps to Improve E-Verify, But Significant Challenges Remain* GAO-11-146. Washington, DC: Government Accountability Office.

Table 1. Characteristics of Mexican Immigrant Men, Ages 18-64, by Type of Employment, 2005-2009

	Works for Wages or Salary		*Self-Employed*					
			Entrepreneur		Skilled Manual		Unskilled Manual	
Citizenship/Immigration Status	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
Naturalized Citizen	0.15	0.36	0.36	0.48	0.20	0.40	0.14	0.35
Legal Non-Citizen	0.34	0.47	0.44	0.50	0.37	0.48	0.39	0.49
Unauthorized	0.51	0.50	0.20	0.40	0.43	0.50	0.46	0.50
Years in the U.S.								
0-5 Years	0.21	0.40	0.08	0.27	0.12	0.33	0.17	0.37
6-10 Years	0.22	0.41	0.11	0.31	0.17	0.38	0.18	0.38
11-15 Years	0.15	0.36	0.12	0.33	0.15	0.35	0.15	0.35
16-20 Years	0.15	0.36	0.18	0.38	0.18	0.38	0.17	0.37
21+ Years	0.28	0.45	0.52	0.50	0.38	0.49	0.34	0.47
English Proficiency								
Limited English Proficient	0.53	0.50	0.30	0.46	0.43	0.49	0.54	0.50
Demographic/Family								
Age	35.74	10.47	42.35	10.10	38.77	9.85	38.24	10.31
Married, Spouse Present	0.51	0.50	0.70	0.46	0.64	0.48	0.58	0.49
Married, Spouse Absent	0.11	0.31	0.05	0.22	0.08	0.27	0.09	0.28
Separated/Divorced/Widowed	0.07	0.25	0.09	0.29	0.08	0.27	0.07	0.26
Never Married	0.32	0.47	0.15	0.36	0.20	0.40	0.26	0.44
Educational Attainment								
Less than 9 years	0.37	0.48	0.24	0.43	0.35	0.48	0.45	0.50
9-11 Years	0.18	0.38	0.13	0.33	0.18	0.38	0.18	0.38
12-15 Years	0.41	0.49	0.46	0.50	0.44	0.50	0.35	0.48
16+ Years	0.04	0.21	0.16	0.37	0.03	0.18	0.02	0.16
Industry								
Agriculture	0.14	0.34	0.01	0.11	0.00	0.06	0.53	0.50
Construction	0.28	0.45	0.17	0.38	0.64	0.48	0.27	0.44
Manufacturing	0.17	0.37	0.04	0.20	0.04	0.19	0.00	0.05
Transportion/Utilities	0.05	0.22	0.03	0.18	0.13	0.34	0.01	0.11
Wholesale Trade	0.04	0.19	0.07	0.25	0.01	0.08	0.01	0.10
Retail Trade	0.17	0.38	0.38	0.48	0.02	0.16	0.05	0.21
Finance, Ins., Real Estate	0.02	0.12	0.06	0.24	0.00	0.03	0.00	0.05
Services	0.13	0.34	0.23	0.42	0.16	0.36	0.12	0.33

Source: 2005-2009 American Community Surveys

Table 2. Self-Employment among Mexican-Born Men, Ages 18-64, by Legal Status, 2005-2009

	Naturalized Citizens / LPRs				*Probable Unauthorized*			
Year	Total Employed	Self-Employed	%	Annual % Change	Total Employed	Self-Employed	%	Annual % Change
2005	2,121,869	202,218	9.5	--	2,347,978	148,299	6.3	
2006	2,315,283	229,716	9.9	13.6	2,474,893	143,466	5.8	-3.3
2007	2,444,228	247,587	10.1	7.8	2,442,507	146,930	6.0	2.4
2008	2,466,042	246,277	10.0	-0.5	2,364,346	165,235	7.0	12.5
2009	2,493,990	269,045	10.8	9.2	2,088,701	160,458	7.7	-2.9

Table 3. Changes in the Percentage of Employed Mexican Immigrant Men, Ages 18-64, That Are Self-Employed, by Class of Self-Employment and Immigration Status

	NATURALIZED CITIZENS / LPRs					
	Entrepreneurial		*Skilled Manual*		*Unskilled Manual*	
Year	% of Employed	Annual % Change	% of Employed	Annual % Change	% of Employed	Annual % Change
2005	3.0	--	3.7		2.9	
2006	3.0	2.3	3.9	6.3	3.0	3.1
2007	3.0	-0.4	3.8	-2.1	3.3	10.2
2008	3.1	2.3	3.7	-3.4	3.2	-2.5
2009	3.2	4.9	3.9	5.2	3.7	14.3
	PROBABLE UNAUTHORIZED					
	Entrepreneurial		*Skilled Manual*		*Unskilled Manual*	
Year	% of Employed	Annual % Change	% of Employed	Annual % Change	% of Employed	Annual % Change
2005	0.9		2.7		2.7	
2006	0.6	-35.7	3.0	8.1	2.3	-15.8
2007	0.6	11.9	2.7	-9.6	2.7	19.3
2008	0.9	38.7	3.1	17.2	3.0	9.9
2009	0.9	-2.8	3.2	3.1	3.6	20.9

Table 4. Indidividual-Level Coefficients from Logit Models Predicting Self-Employment in Manual Occupations among Mexican Immigrant Men, 2005-2009 (N=164,299)

	Model 1		*Model 2*		*Model 3*	
	B	*S.E.*	B	*S.E.*	B	*S.E.*
Naturalized Citizen [ref.]						
Legal Resident	0.016	*0.033*	0.183 ***	*0.035*	0.125 ***	*0.036*
Unauthorized	-0.194 ***	*0.033*	0.301 ***	*0.043*	0.153 ***	*0.045*
0-5 Years in U.S.			-0.517 ***	*0.047*	-0.244 ***	*0.051*
6-10 Years in U.S.			-0.405 ***	*0.044*	-0.224 ***	*0.046*
11-15 Years in U.S.			-0.176 ***	*0.043*	-0.111 *	*0.044*
16-20 Years in U.S. [ref.]						
21+ Years in U.S.			0.201 ***	*0.036*	0.042	*0.038*
Limited English			-0.072 **	*0.025*	-0.264 ***	*0.028*
Age					0.081 ***	*0.009*
Age^2					-0.001 ***	*0.000*
Unmarried/Spouse Absent [ref.]						
Spouse Present					0.105 **	*0.037*
Minor Children Present					0.169 ***	*0.037*
<9 Yrs. Education					0.382 ***	*0.074*
9-11 Yrs. Education					0.462 ***	*0.076*
12-15 Yrs. Education					0.459 ***	*0.072*
16+ Yrs. Education [ref.]						
Construction [ref.]						
Agriculture					0.149 ***	*0.032*
Manufacturing					-2.702 ***	*0.072*
Transportation					-0.293 ***	*0.046*
Wholesale Trade					-2.211 ***	*0.123*
Retail Trade					-2.120 ***	*0.062*
Finance/Ins./R. Estate					-3.124 ***	*0.317*
Services					-0.581 ***	*0.038*
2005 [ref.]						
2006	0.009	*0.040*	0.001	*0.040*	-0.002	*0.041*
2007	0.042	*0.040*	0.029	*0.040*	-0.007	*0.041*
2008	0.085 *	*0.040*	0.062	*0.040*	0.027	*0.041*
2009	0.189 ***	*0.039*	0.158 ***	*0.039*	0.129 **	*0.040*
Constant	-2.663	*0.040*	-2.776	*0.050*	-4.515 ***	*0.195*
Psuedo R-Squared	0.002		0.008		0.101	

**** p < .001; ** p < .01; * p < .05; + p < .10*

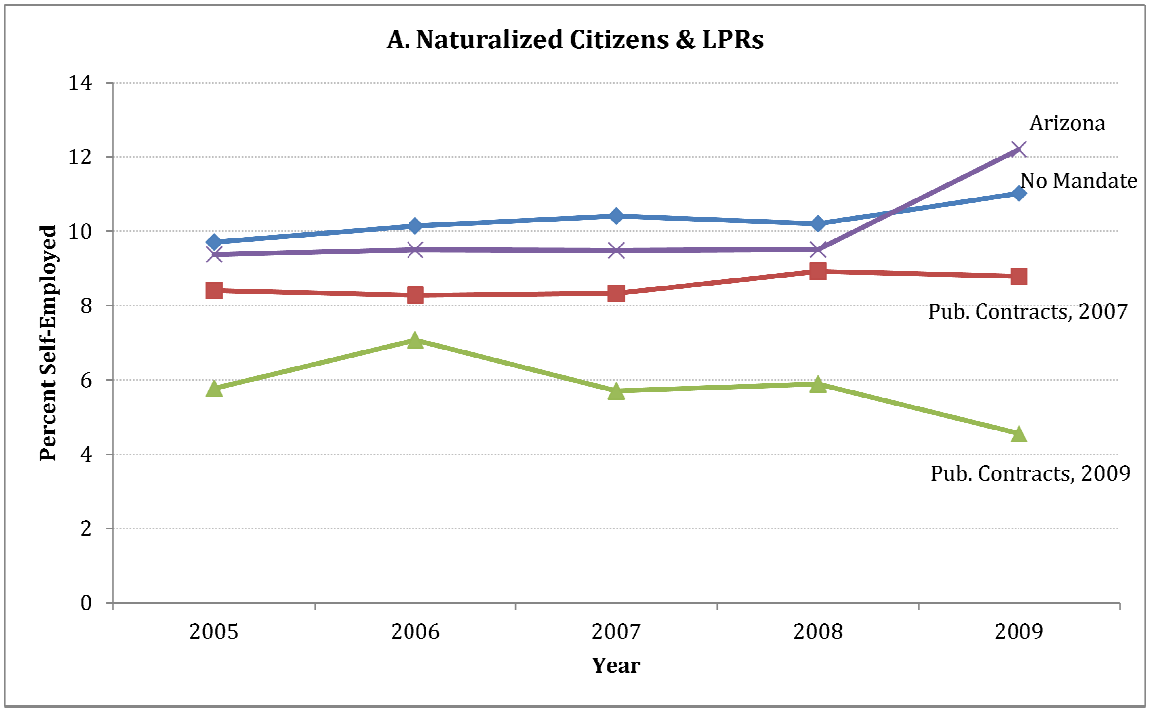
Table 5. Coefficients from Logit Models Predicting Manual Self-Employment among Mexican Immigrant Men, 2005-2009

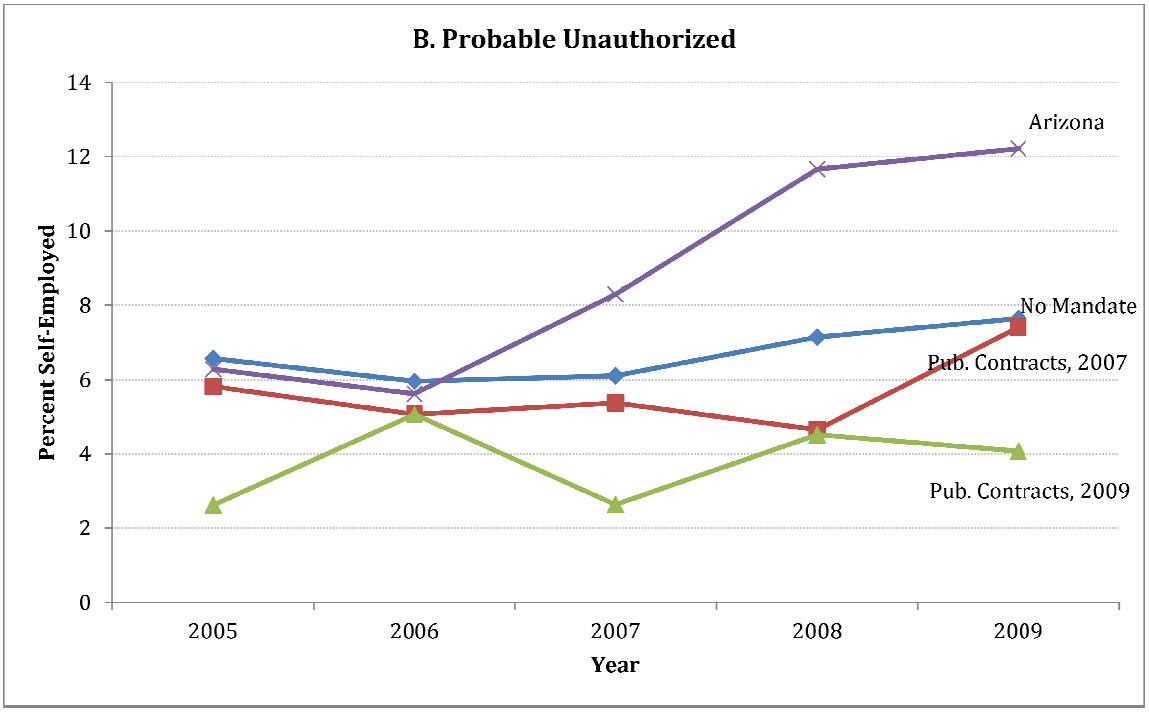
	Model 1		*Model 2*	
	B	*S.E.*	B	*S.E.*
Citizenship / Immigration Status				
Naturalized Citizen [ref.]				
Legal Resident	0.126 ***	*0.036*	0.114 **	*0.038*
Unauthorized	0.158 ***	*0.045*	0.138 **	*0.047*
Unemployment Rate	-0.038 **	*0.012*	-0.038 **	*0.012*
Type and Degree of E-Verify Law				
No State-Level E-Verify Mandate [ref.]				
Public Contracts Mandate, 2007 [ref.]	-0.244 ***	*0.052*	-0.087	*0.138*
Public Contracts Mandate, 2009 [ref.]	-0.622 ***	*0.114*	-1.324 ***	*0.383*
Arizona (All Employers, 2008)	-0.018	*0.055*	-0.425 **	*0.133*
Mississippi (All Employers, 2009)	-0.146	*0.236*	1.194 +	*0.639*
Legal X Public '07			-0.142	*0.164*
Legal X Public '09			0.854 *	*0.424*
Legal X Arizona			0.322 *	*0.161*
Legal X Mississippi			-1.554 +	*0.807*
Unauthorized X Public '07			-0.184	*0.154*
Unauthorized X Public '09			0.728 +	*0.414*
Unauthorized X Arizona			0.560 ***	*0.154*
Unauthorized X Mississippi			-1.566 *	*0.710*
Constant	-4.323 ***	*0.204*	-4.300 ***	*0.204*
N	164,299		164,299	
Psuedo R-Squared	0.102		0.102	

**** p < .001; ** p < .01; * p < .05; + p < .10*

Notes: Models include all of the individual-level background variables and year dummies shown in Table 4

Figure 1. Trends in Self-Employment Among Mexican Immigrant Men, 2005-2009





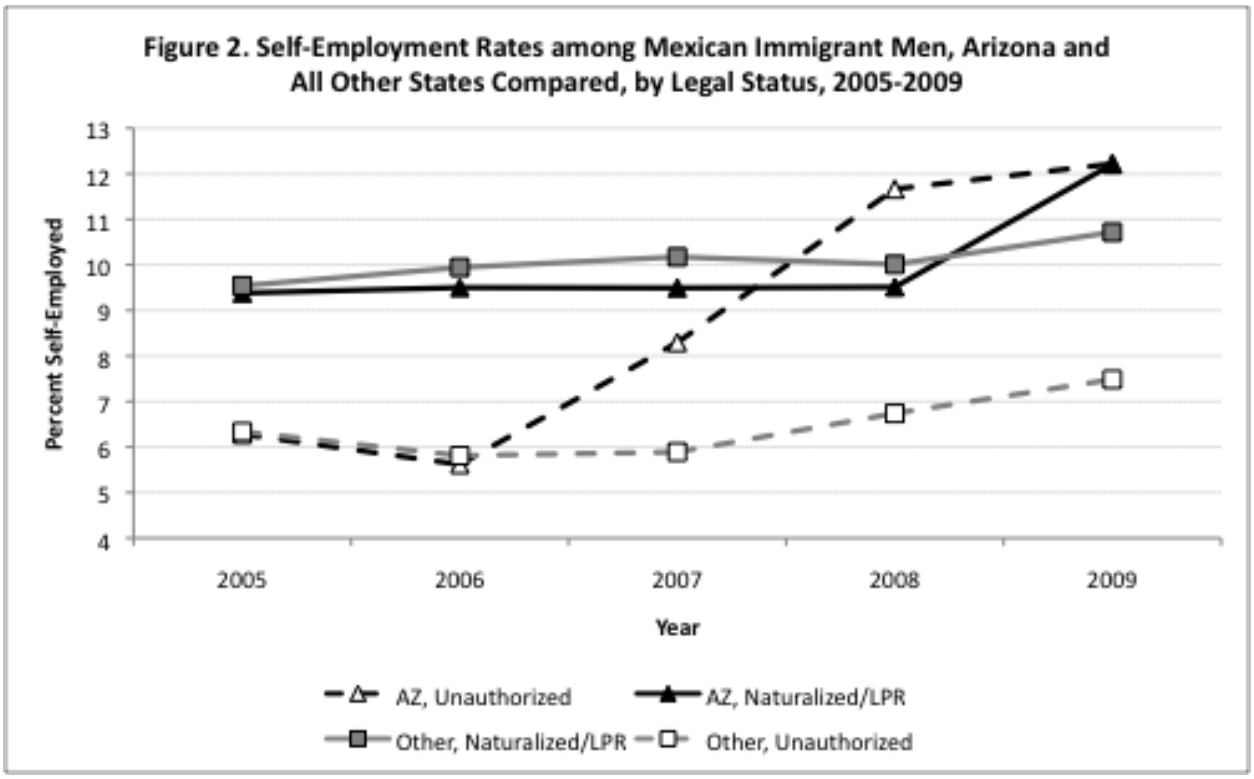


Figure 2. Self-Employment Rates among Mexican Immigrant Men, Arizona and All Other States Compared, by Legal Status, 2005-2009
Percent Self-Employed
13
12
11
10
9
8
7
6
5
4
2005
2006
2007
2008
2009
Year
AZ, Unauthorized
AZ, Naturalized/LPR
Other, Naturalized/LPR
Other, Unauthorized