

How Do Tougher Immigration Measures Affect Unauthorized Immigrants?

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Abstract The recent impetus of tougher immigration-related measures passed at the state level raises concerns about the impact of such measures on the migration experience, trajectory, and future plans of unauthorized immigrants. In a recent and unique survey of Mexican unauthorized immigrants interviewed upon their voluntary return or deportation to Mexico, almost a third reported experiencing difficulties in obtaining social or government services, finding legal assistance, or obtaining health care services. Additionally, half of these unauthorized immigrants reported fearing deportation. When we assess how the enactment of punitive measures against unauthorized immigrants, such as E-Verify mandates, has affected their migration experience, we find no evidence of a statistically significant association between these measures and the difficulties reported by unauthorized immigrants in accessing a variety of services. However, the enactment of these mandates infuses deportation fear, reduces interstate mobility among voluntary returnees during their last migration spell, and helps curb deportees' intent to return to the United States in the near future.

Keywords Immigration · Policy · Undocumented · Unauthorized · Mexico

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Introduction

Immigration is a complex issue that raises strong feelings. Concerns about whether border security and enforcement were tough enough were the greatest impediments to the passage of a much-needed comprehensive immigration reform back in 2006 and 2007. Since then, some states have taken immigration matters into their own hands and adopted employment verification (i.e., E-Verify) systems as a means to curtail the hiring of unauthorized workers.¹ By 2010, more than a dozen states required that public agencies or public contract recipients use E-Verify to determine employment eligibility for new hires, and four states had enacted E-Verify mandates for all employers (Rosenblum 2011). This trend has only increased over time, with five additional states enacting E-Verify mandates in 2011. Moreover, some of the states with E-Verify mandates in place have gone further and approved increasingly tougher measures, such as Arizona's well-known Senate Bill 1070, that not only pertain to the hiring of unauthorized immigrants but also make it a misdemeanor crime for an alien to be without proper documentation.² Nationwide, evidence of the increasingly hostile environment faced by unauthorized immigrants has also become evident through the dramatic increase in the number of deportations, from 50,924 in 1995 to 387,242 in 2010 (more than a 600 % increase in 15 years; Office of Immigration Statistics 2010).³

All these measures might reduce unauthorized immigration only if they seriously deteriorate the migration experience of undocumented immigrants. While one might assume they do, information is lacking on the extent to which the adoption of more-punitive measures against unauthorized immigrants is correlated with (a) heightened deportation fear or difficulties in accessing social, legal, or health care services, (b) increased or restricted mobility across state lines (see Rosenblum and Gorman 2010), or (c) a curbed intent to return to the United States in the near future among voluntary returnees or deported migrants.

In this article, we exploit a recent and unique survey of unauthorized Mexican immigrants interviewed in 2009 upon their voluntary return or deportation to Mexico to learn about the impact of tougher immigration measures, as captured by the enactment of E-Verify mandates, on the migration experiences and migratory plans of that population. We focus on the impact of E-Verify mandates for two reasons. First, the core of our survey was administered before the implementation of alternative immigration measures, such as SB1070 in Arizona. Second, for the most part, SB1070-like measures were adopted as follow-up measures by the same states that

¹ The E-Verify system was originally established by the Illegal Immigration Reform and Immigrant Responsibility Act of 1996 as a voluntary pilot program. Logistically, E-Verify is an internet-based, free program run by the United States government that compares information from an employee's employment eligibility verify form (I-9) to data from U.S. government records. If the information matches, that employee is considered eligible to work in the United States. If there is a mismatch, E-Verify alerts the employer, and the employee is allowed to work while the problem is resolved.

² Georgia, Alabama, and Utah are some of the states that have followed Arizona, passing laws that expand the power of local police to check the immigration status of residents. Like bills have been passed by at least one chamber of state legislatures in Indiana, Oklahoma, and South Carolina. In total, up to 30 states are contemplating similar measures.

³ See Menjivar and Abrego (2012) for more information on the dramatic increase in deportations taking place nationally.

had previously enacted an E-Verify mandate. As such, the enactment of E-Verify mandates is a good indicator of the more punitive atmosphere against unauthorized immigration taking place in some U.S. states that we are interested in addressing. Using that information, we address the following questions: Are unauthorized immigrants in our sample more likely to report having experienced fear of deportation or difficulties in accessing various types of services following the enactment of E-Verify mandates? Are they more or less likely to move across states lines in response to the enactment of E-Verify mandates? And do these mandates curb their intent to return to the United States in the near future? Answers to these questions are of great relevance for the ongoing debate on the impact of this type of legislative measure and on its effectiveness in ultimately curbing repetitive crossings by unauthorized immigrants—allegedly the largest component of overall apprehensions (Cornelius 1998; Sherry 2004; Spener 2001). First-order effects, if they exist, should be observed among unauthorized immigrants exposed to these more-punitive measures, whereas second-order effects may expand to future unauthorized immigrants contemplating migration to the United States.

Brief Literature Review

Several studies have examined the impact of *federal* immigration laws, such as the 1986 Immigration Reform and Control Act (IRCA), on the flow of unauthorized immigrants. Most of that literature looked at changes in aggregate series (frequently, apprehension data) before and after the enactment of the law (e.g., Bean et al. 1990a, b; Cornelius 1998; Dávila et al. 2002; Espenshade 1990, 1994; Hanson and Spilimbergo 1999; Orrenius and Zavodny 2003; Singer and Massey 1988; White et al. 1990). Others used individual-level data on small or local samples from specific Mexican communities at certain periods (see, e.g., Bustamante 1990; Chavez et al. 1990; Cornelius 1989, 1990; González de la Rocha and Escobar Latapi 1990; Kossoudji 1992; Massey et al. 1990) or relied on individual-level data collected from a large number of Mexican communities over an extended period.⁴ Overall, regardless of the data source being used, most of these studies conclude that the enhanced border enforcement accompanying the implementation of such laws did not seem to have much impact on illegal immigration. Instead, it had the unintended consequences of prolonging unauthorized immigrants' migratory spells in the United States (Massey et al. 2002) and disrupting remittances and family ties (Hagan et al. 2008).

⁴ For instance, Donato et al. (1992) and Orrenius (2001) relied on data from the Mexican Migration Project (MMP) to examine changes in the likelihood of a variety of events—such as taking a first illegal trip, repeat migration, being apprehended, using a border smuggler or *coyote*, and changes in smuggling costs or border-crossing sites—before and after the 1986 Immigration Reform and Control Act (IRCA). Angelucci (2005) also relied on MMP data to assess the impact of border enforcement on net flows (i.e., coming into and exiting the United States) of illegal Mexican immigrants. Ritcher et al. (2007), however, used data from the *Encuesta Nacional a Hogares Rurales de Mexico* (ENHRUM) to examine the impact of three policies: IRCA, NAFTA, and increased border enforcement expenditures on migration. And Amuedo-Dorantes and Bansak (2011) relied on data from the *Encuesta sobre Migración en la Frontera Norte de México* (EMIF) to explore how changes in border enforcement helped deter undocumented migrants from repetitively attempting to cross the Mexico-U.S. border.

Likewise, a fairly large number of studies have examined the impact of other federal laws, such as the Illegal Immigration Reform and Immigrant Responsibility Act (IIRIRA) and the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) of 1996, on unauthorized immigrants' access to services and deportation fear. Under PRWORA, unauthorized immigrants continued to be ineligible for any retirement, welfare, health, disability, or other similar benefits provided by state or local government agencies. Exceptions included emergency medical services funded through Medicaid and immunizations of communicable diseases. Title IV of the act referred to legal immigrants' (noncitizen permanent residents) eligibility for public benefits. Yet, because of unfamiliarity with the law and the U.S. health care system, fear of deportation, and language barriers, among other things, this type of measure was believed also to have the potential of severely restricting unauthorized immigrants' ability to access health services (see, e.g., Bell 2004; De la Torre and Estrada 2001; Kaiser Commission on Medicaid and the Uninsured 2003; Kullgren 2003; Rivers and Patino 2006; Schur and Albers 1996; Solis et al. 1990; Woloshin et al. 1995).⁵ In this vein, Ku (2009) found that restrictions placed by welfare reform reduced the share of both legal and undocumented immigrants using Medicaid. Likewise, Rodríguez and Hagan (2004) and Hagan et al. (2010) found that increased enforcement following IIRIRA and PRWORA created anxiety, stress, and confusion, leading immigrants to voluntarily withdraw from using public services to which they were entitled. In contrast, Capps et al. (2009) failed to find evidence of such a pattern after PRWORA. For instance, they documented that Medicaid use among immigrants did not decline after welfare reform was passed.

More recently, after the bipartisan-fueled effort for a comprehensive immigration reform died in 2007, states have started to take action on these issues within their jurisdiction, and researchers have been assessing the impact that state-level legislation has on unauthorized immigration.⁶ For example, Lofstrom et al. (2011) explored how the passage and implementation of the 2007 Legal Arizona Workers Act (LAWA) altered the internal demographic composition of the resident population of the state. Despite the controversial efficacy of E-Verify,⁷ they found that LAWA, which required all employers to use the Federal E-Verify system, reduced the shares of Hispanic noncitizens—a group more likely to be unauthorized—residing and working in the state of Arizona. In a similar line, Amuedo-Dorantes and Lozano (2011) examined the impact of Arizona's SB1070. They found that SB1070 was enacted precisely as the population of likely unauthorized workers recovered in the state, suggesting that, while this legislation is seemingly effective at deterring Hispanic noncitizen males, its effect may be short-lived.

⁵ In 2002, more than 40 % of immigrants are without health insurance (Bell 2004). Kaiser Commission on Medicaid and the Uninsured (2003) found that low-income immigrants are more than twice as likely to be uninsured as low-income citizens. Moreover, immigrants' health coverage varies by state. Uninsured immigrants ranged from 46 % in California and New York to 56 % in Texas during a 2001–2002 population survey by this agency.

⁶ A comprehensive overview of state and local immigration policy-making in the United States can be found in Varsanyi (2010).

⁷ Rosenblum (2011) discussed the strengths and weaknesses of the E-Verify system and how E-Verify is highly vulnerable to identity fraud and employer noncompliance, as documented by Westat Corporation (2009) and numerous audits by the Social Security Administration Office of the Inspector General.

To date, we still lack an understanding of the degree to which the passage of more-punitive state-level measures against unauthorized immigrants increases their deportation fears or their difficulties in getting government assistance or legal and health services. More importantly, even if it does, it is questionable whether unauthorized immigrants actually end up changing their migration trajectories and future plans because of such policy measures. These are important queries if one of the purposes of these state-level policy measures is to reduce unauthorized immigration, and, as noted earlier, repetitive crossings by unauthorized immigrants are the largest component of overall apprehensions.

In what follows, we try to shed some light on these questions using a unique database with detailed information on the recent migratory experiences and difficulties encountered by unauthorized Mexican immigrants, who compose by far the largest group among unauthorized immigrants residing in the United States (58 %; see Passel and Cohn 2011).

Data

In this study, we take advantage of data gathered between July 2009 and August 2010 from a cross-sectional probability survey of migrants traveling through the Tijuana–San Diego border region. The survey, funded by the National Institutes of Health (NIH), is the result of a binational collaboration effort between the University of Wisconsin at Madison, the Center for Behavioral Epidemiology and Community Health (CBEACH) at San Diego State University, and the Colegio de la Frontera Norte (COLEF) in Tijuana, Mexico. The survey is modeled after the large periodic survey of Mexican migrants known as the *Encuesta sobre Migración en la Frontera Norte de México* (EMIF)—a migration survey conducted by COLEF for the Secretaría del Trabajo y Previsión Social and the Consejo Nacional de Población along the U.S.-Mexico border (Secretaría del Trabajo y Previsión Social 1998). Like the EMIF, the survey methodology involves the use of probability sampling methods and the computation of similar survey weights—in our case to guarantee that the estimates based on survey data reflect the distribution of the sociodemographic characteristics and experiences of the migrant population crossing through the San Diego–Tijuana border.⁸ The San Diego–Tijuana region constitutes a natural port of entry to the State of California; it accounts for 37 % of the total migrant flow across the U.S.-Mexico border and 71 % of the migrant flow in the western region of the U.S.-Mexico border.⁹

The survey uses a multistage sampling design, with random selection of geographic units (i.e., sampling sites and points) and time units (i.e., days and eight-hour long sampling shifts) to recruit representative samples of the different Mexican migrant flows traveling through the San Diego–Tijuana border region. Sampling sites for these flows included the Tijuana International Airport, the Tijuana Central bus

⁸ See the [Appendix](#) for more detailed information on the survey methodology.

⁹ See Secretaría de Gobernación, Consejo Nacional de Población, Instituto Nacional de Migración, Secretaría de Relaciones Exteriores, Secretaría del Trabajo y Previsión Social, El Colegio de la Frontera Norte (2007).

station, and the San Ysidro deportation station at the San Diego–Tijuana border. During each survey shift, an interviewer applied a screening form that permits differentiating migrants from tourists and individuals born in the United States. Once a person is considered eligible (i.e., a migrant 18 years of age or older), the questionnaire was administered anonymously by a trained interviewer. Data were collected from four representative samples of Mexican migrant populations traveling through the San Diego–Tijuana border region: (1) migrants returning to Mexico from the United States; (2) migrants traveling north from other Mexican regions; (3) migrants arriving at Tijuana from other Mexican border cities; and (4) unauthorized migrants deported by the U.S. Border Patrol. The second population (that is, group (2)) arrived at the border region as their final destination or as an intermediate site in their journey to the United States. The other three populations arrived at Tijuana from the United States or from other Mexican border cities—most of the time on their journey home or back to the United States. We focus on unauthorized immigrants from groups (1), (3), and (4) for whom detailed information was gathered regarding difficulties migrants encountered while trying to access a variety of services during their last trip to the United States.¹⁰ Our sample thus consists of individuals aged 18 and older, who were not born in the United States and who last migrated to the United States illegally with the intent of staying over one month. Overall, we work with a sample of approximately 1,200 unauthorized Mexican migrants returning from the United States, either voluntarily or through deportation.

It is important to recognize that, despite providing us with recent and relevant information about the struggles of unauthorized migrants while in the United States, our data set lacks information on three groups of unauthorized Mexican emigrants traveling through the San Diego–Tijuana region. In addition to data about any unauthorized migrant in group (2) with past U.S. migration experience, we lack information on unauthorized Mexican emigrants who returned to interior points in Mexico via air. However, because migrants traveling to interior points of Mexico via air are less likely to be unauthorized, this deficiency is not likely to greatly compromise our final results. The third category omitted from the survey is that of unauthorized Mexican emigrants who never return to Mexico.

Because of the proximity between the two countries, returnees still account for a rather large group (Lindstrom 1996; Lowell and de la Garza 2002; Orrenius 1999; Reyes 1997).¹¹ The lack of data on nonreturnees restricts our ability to extrapolate our findings to the overall population of unauthorized immigrants. Unfortunately, no survey fully captures all unauthorized immigrants—that is, those staying in the United States and those returning home, along with information on the outcomes'

¹⁰ Unlike migrants in groups (1) and (4), who are return migrants, or migrants in group (3), who have resided in the border region and have often crossed to the United States before, the vast majority of individuals in group (2) did not have previous U.S. migratory experience and, as such, they were not questioned about their experiences in obtaining needed services while in the United States.

¹¹ This hypothesis is supported by the fact that other surveys—such as the Mexican Migration Project (MMP; www.pop.upenn.edu/mexmig/databases/databases.htm)—in their attempt to obtain a representative sample of Mexican migrants, interviewed a relatively small number of Mexican migrant households residing in the United States, while the vast majority of households with U.S. migration experience were interviewed in Mexico.

object of study.¹² However, we can try to assess the consequences of the sample selection bias incurred from the lack of information on nonreturnees. We do so by carrying out the analysis separately for unauthorized immigrants who return voluntarily and those who were deported. Like nonreturnees, deported migrants do not wish to return to Mexico. As such, a comparison of our estimates for voluntary returnees and deported migrants may shed some light on the bias incurred from the lack of information on nonreturnees with return intentions that diverge from those of voluntary returnees.

Some Descriptive Evidence

Table 1 provides summary statistics for the population of unauthorized immigrants captured by the survey. Because of probable differences between unauthorized immigrants who voluntarily returned and those who were deported, we report these descriptive statistics separately for each sample. In many respects, unauthorized immigrants in both samples are rather similar. For instance, the vast majority are migrant men who were, on average, aged 31 to 32.¹³ Educational attainment is relatively low: about a third have a primary education (i.e., attended only elementary school), followed by another third with a secondary education (i.e., attended up to middle school), and slightly more than 20 % with Preparatoria (i.e., attended up to high school). Only 4 % to 5 % have an educational attainment higher than Preparatoria, and a slightly smaller share (around 2 % to 3 %) have no education at all. On average, they have crossed to the United States three times. Approximately 25 % of them worked in the United States during their last migration spell,¹⁴ and 3 % resided in what we refer to as “poor housing.”¹⁵ Lastly, most immigrants last entered the United States after 2005. Nevertheless, because some returned to Mexico after being in the United States more than 20 years, the average duration of the last migration spell ranges between 6 and 7 years.

There are, however, some notable differences between the two groups that justify their separate analysis. Most of these relate to marital status, living arrangements while in the United States, and past migratory experiences. Unauthorized immigrants who voluntarily return home are approximately 13 percentage points more likely to be married than their deported counterparts. Likewise, about 47 % of voluntary returnees reported having lived with a partner while in the United States, relative to 38 % of deported immigrants. Yet, compared with deported immigrants, a smaller share of voluntary returnees

¹² Indeed, even surveys that interview migrants both in Mexico and in the United States, as is the case with the Mexican Migration Project (MMP), lack data on the questions’ object of study, including those regarding encountered difficulties, deportation fears, interstate mobility, or the intent to go back to the United States in the foreseeable future.

¹³ Because of the small number of women in our sample, we also conducted the analysis using only men. Results, available from the authors upon request, were robust to the use of that alternative sample.

¹⁴ The low unemployment rate follows from the fact that the samples used in this article are undocumented returnees, many of them deported while crossing or voluntarily returning home after not finding work.

¹⁵ “Poor housing” includes a mobile home, homeless shelter, halfway house or boarding home, car or truck, and on the streets.

Table 1 Means and standard deviations (SD) of key regressors

Variables	Deported Sample		Voluntary Returnee Sample	
	Observations	Mean (SD)	Observations	Mean (SD)
Age	947	31.53 (8.78)	286	31.77 (9.98)
Male	947	0.94 (0.24)	286	0.92 (0.27)
No Education	947	0.03 (0.18)	286	0.02 (0.13)
Primary Education (elementary school)	947	0.34 (0.48)	286	0.33 (0.47)
Secondary Education (middle school)	947	0.37 (0.48)	286	0.36 (0.48)
Preparatoria (high school)	947	0.21 (0.41)	286	0.24 (0.43)
Higher Education (more than high school)	947	0.04 (0.19)	286	0.05 (0.22)
Married	947	0.47 (0.5)	286	0.6 (0.49)
Lived With Partner While in the U.S.	947	0.38 (0.49)	286	0.47 (0.5)
Lived With Children in the U.S.	947	0.23 (0.42)	286	0.13 (0.34)
Previous Number of Crossings	915	4.26 (20.94)	264	2.70 (3.15)
Previous Number of Deportations	918	2.35 (3.14)	264	0.77 (2.18)
Worked in the U.S. Last Migration Spell	947	0.28 (0.45)	286	0.23 (0.42)
Lived in Poor Housing While in the U.S.	947	0.03 (0.18)	286	0.03 (0.17)
Length of Stay in the U.S. Last Migration Spell	872	2,729.71 (2,974.89)	286	2,135.62 (2,390.6)
Year Last Crossed to the U.S.	900	2005.31 (6.26)	257	2005.99 (4.25)
E-Verify State	947	0.09 (0.28)	286	0.06 (0.23)

lived with children while in the United States. Finally, while both groups of migrants reported crossing to the United States an average of three times, deported migrants have been apprehended and returned to Mexico twice and voluntary returnees only once.

Of particular interest to us is the impact of E-Verify mandates on the experiences and migratory decisions of unauthorized immigrants in our sample. We use state-level data on the enactment dates of E-Verify mandates from the National Conference of State Legislatures (NCSL) to create a dummy variable (*E-Verify*) equal to 1 if the migrant was headed to a state that had adopted an E-Verify mandate either prior to her/his arrival or during her/his migration spell. Approximately 6 % of voluntary returnees fall in that category, as opposed to 9 % of deported immigrants. These figures suggest that, despite our small sample size, there could be significant differences between the migratory experiences of unauthorized immigrants who voluntarily return home and those of their deported counterparts.

Table 2 shows data on the migratory experiences of unauthorized immigrants. Specifically, because the first aim of this study is to examine the extent to which the adoption of tougher immigration policy measures is correlated with a heightened deportation fear or to increased difficulties in accessing government assistance, health care, or legal services, we focus on the following survey items:

Thinking about your most recent stay in the United States, please tell me if you agree with the following statements:

1. You thought you would be deported if you went to a social or government agency.
2. *You experienced difficulties in finding legal services due to your legal status.*¹⁶
3. You experienced difficulties in obtaining health care due to your legal status.
4. You feared being deported.

We use respondents' endorsement of these statements to create a set of dummy variables to capture the prevalence of such difficulties as well as that of deportation fear—namely, *Difficulties in getting government assistance*, *Difficulties in finding legal services*, *Difficulties in obtaining health care services*, and *Fear of deportation*.¹⁷

Table 2 displays the mean values for the aforementioned variables for unauthorized immigrants according to whether they returned to Mexico voluntarily or involuntarily. Two points are worth making. First, for the most part, the reported incidence of the various difficulties and deportation fear being examined does not significantly vary with the type of return; the only exception is difficulties in finding legal services, which appear to be experienced by a 5 percentage-point higher share of deported migrants than by their nondeported counterparts—although the difference is statistically significant only at the 10 % level. Second, half of unauthorized immigrants reported experiencing fear of deportation, and almost a third of them documented experiencing difficulties in accessing legal, health, or government-related services during their most recent migration spell.

¹⁶ These refer to difficulties in finding legal assistance when encountering difficulties in renting, when experiencing discrimination, or when being abused, for example.

¹⁷ The various categories of encountered difficulties originate from different scales of acculturative stress used in the literature (e.g., Finch et al. 2001, 2003; Finch and Vega 2003).

Table 2 Incidence of difficulties among deported and voluntary returnees

Variables	Deported	Voluntary Returnees	<i>t</i> Statistic
Difficulties in Obtaining Government Assistance	0.33 (0.47)	0.31 (0.46)	0.86
Difficulties in Finding Legal Services	0.23 (0.42)	0.18 (0.39)	1.78 [†]
Difficulties in Obtaining Health Care Services	0.18 (0.38)	0.17 (0.38)	0.06
Fear of Deportation	0.50 (0.50)	0.47 (0.50)	0.75
Moved Across States	0.19 (0.39)	0.14 (0.35)	1.96*
Plan to Return to the U.S. in the Near Future	0.75 (0.03)	0.67 (0.47)	2.07*
Observations	947	286	

Notes: Standard deviations are in parentheses. The null hypothesis being tested is whether the means of those deported and the means of the voluntary returnees are the same.

[†] $p < .10$; * $p < .05$; ** $p < .01$

Hence, from the figures in Table 2, we would infer that, while a nonnegligible share of unauthorized migrants reported experiencing deportation fear or difficulties in getting government assistance, finding legal services, or obtaining health care services during their last migration spell because of their legal status, the vast majority did not. This is true even in the midst of an increasingly hostile environment against unauthorized immigrants.

Our second aim is to explore how the enactment of tougher state-level immigration measures, such as E-Verify mandates, affect the mobility of unauthorized migrants as captured by (a) their interstate migration and (b) their intentions to return to the United States in the near future. Table 2 provides some information on the share of unauthorized immigrants in our sample who move across state lines, as captured by residing most of their migration spell in a state different from their reported destination when they last migrated. Given the greater share of deported immigrants headed to a state with an E-Verify mandate adopted prior to or during their migration spell, it may not be surprising that 19 % of them reported having moved across state lines, relative to 14 % of voluntary returnees. The difference is statistically different from zero at the 5 % level. Table 2 also informs on unauthorized migrants' intentions to return to the United States. Perhaps not surprisingly, given that their migration spell was cut short because of apprehension, a significantly larger percentage of deported immigrants (75 %) reported planning to return to the United States in the near future, compared with 67 % of voluntary returnees.

Methodology

Our main objective is to address the following questions: (1) Is the enactment of E-Verify mandates correlated with an intensified fear of deportation or with increased

difficulties in accessing various types of services among unauthorized immigrants in our sample? (2) Are such punitive measures correlated with their increased mobility across state lines? And, more importantly, (3) do such measures ultimately curb immigrants' intentions to return to the United States in the near future?

To answer these questions, we exploit the variation in the enactment of E-Verify mandates over time and across states. Specifically, to assess how more-punitive legislation toward unauthorized immigrants affects both (a) the likelihood of experiencing fear of deportation or difficulties in getting government assistance, finding legal services, or obtaining health care services, and (b) the likelihood of moving across states, we estimate the following equation:

$$Y_{ist} = \alpha + \beta EVerify_{st} + X_{ist}\gamma + \delta_s + \phi_t + \delta_s t + \varepsilon_{ist}, \quad \varepsilon_{ist} \sim N(0, \sigma^2), \quad (1)$$

where Y_{ist} is the dependent variable equal to 1 if the unauthorized migrant i , who last migrated to state s in year t , indicates having experienced (a) fear of deportation or difficulties experienced in seeking various types of services, or (b) has moved across state lines.¹⁸ $EVerify_{st}$ is a dummy variable equal to 1 if the migrant's destination state had an E-Verify mandate adopted prior to her/his arrival or if that state adopted an E-Verify mandate during her/his migration spell. For example, $EVerify_{st}$ equals 1 if the migrant was headed to Arizona—a “treated state”—and last entered the United States on/after July 2007—the “treatment date” for Arizona.¹⁹ Likewise, it equals 1 if the migrant was headed to Arizona before July 2007 and reported being in the United States after that date. However, it equals 0 if the migrant was headed to a “nontreated” state, such as California.²⁰ Therefore, our primary interest is β , which captures how E-Verify mandates may affect the deportation fear, difficulties in obtaining services, and mobility across state lines of our sample of unauthorized immigrants during their last U.S. migration spell.

Additionally, the analysis includes the demographic and migration-related controls displayed in Table 1 in vector \mathbf{X} , as well as a battery of state fixed effects, last year of entry fixed effects, and state-level time trends. The fixed effects are intended to account for a wide range of regional and macroeconomic factors that are potentially correlated with the experiences and migratory choices of this population and the passage of an E-Verify mandate by a particular state. Examples include residing in a state with a large share of unauthorized immigrants, who are likely to provide an information network and a safety net that lowers migration costs and the likelihood of reporting difficulties in obtaining services. Alternatively, an economic downturn can

¹⁸ We do not have information on all moves across state lines. We know, however, the migrant's destination state when he or she last entered the United States, as well as the state in which he or she spent most of the migration spell. We use that information to identify mobility across state lines during the last migration spell.

¹⁹ E-Verify was mandated in Arizona in July 2007 (see <http://www.ncsl.org/issues-research/immig/2011-state-laws-addressing-e-verify.aspx>). We use the enactment dates of E-Verify mandates, regardless of their scope.

²⁰ The vast majority of our sample, modeled after the EMIF, was headed to California (75.26 %) and Arizona (6.81 %) during their last visit.

damage state budgets, reduce the availability of services, and deteriorate the labor market prospects of unauthorized immigrants—all of which can affect both the likelihood of reporting difficulties in obtaining services and immigrants' future migratory decisions. Finally, state-level time trends help capture changing socioeconomic or political characteristics at the state level that are potentially correlated with the outcomes being examined, such as changing immigration inflows or other immigration policies to a particular state over time.²¹

Note that the decision to voluntarily return to Mexico may depend on experienced difficulties while in the United States, just as the likelihood of being apprehended and deported could be a byproduct of the migrant's mobility within the United States. Because of those endogeneity concerns, we cannot pool deportees and voluntary returnees and include a dummy variable that is indicative of how their migration spell ended in order to differentiate between the two groups. Instead, the models are estimated separately for voluntary returnees and for deported migrants. This allows us to assess (a) whether they significantly differ in their mobility across state lines or in their likelihood of experiencing deportation fear or difficulties in obtaining some services, and (b) the extent to which E-Verify mandates affected the aforementioned outcomes differently for the two groups of immigrants.

To conclude, we examine how the adoption of more-punitive measures against unauthorized immigrants affects the intent to return to the United States in the near future expressed by returnees by estimating the following equation:

$$Y_{ist} = \alpha + \beta_1 EVerify_{st} + \beta_2 Deported_{ist} + \beta_3 EVerify_{st} \times Deported_{ist} + X_{ist} \gamma + \delta_s + \phi_t + \delta_s t + \varepsilon_{ist}, \quad (2)$$

where $\varepsilon_{ist} \sim N(0, \sigma^2)$, and Y_{ist} denotes the declared intent to return to the United States in the near future of migrant i , who last migrated to state s in year t . Because the intention to return to the United States in the near future depends, to a large extent, on how the last migration spell ended, Eq. (2) includes a dummy variable to identify whether the migrant was apprehended and deported (the variable *Deported*) and is estimated for the pooled sample of returnees.²² To further assess whether E-Verify mandates affect the migrant's declared intent to return to the United States in the near future differently for the two groups, the *Deported* and *E-Verify* dummy variables are interacted. Overall, our interest is on β_1 and β_3 , which capture the impact of E-Verify mandates on the reported intention to return to the United States and the differential impact that the mandates might be having on voluntary returnees and deported migrants, respectively.

²¹ Examples of the latter include any ICE agreements with state law enforcement agencies under Section 287(g) of the Immigration and Nationality Act (INA).

²² We also estimate Eq. (2) separately for voluntary returnees and deportees. Our main finding regarding the impact of E-Verify mandates on the intent to return to the United States proves robust. However, the model fails to document the very important role that deportation during the last migration spell plays in explaining the intention to cross again in the near future or the extent to which the enactment of an E-Verify mandate offsets such an impact.

Lastly, we estimate Eqs. (1) and (2) as linear probability models (LPMs). Although, in some instances, LPMs can yield predicted probabilities that fall outside the unit circle, they impose fewer restrictions on the distribution of the error term and facilitate convergence when working with small samples (Wooldridge 2008).

Findings

The main purpose of our study is to learn about how the enactment of tougher immigration measures, such as E-Verify mandates, is correlated with (a) heightened deportation fears or increased difficulties in accessing government assistance, health care, or legal services by unauthorized returnees, and with (b) their migratory choices. The latter are captured by (1) their mobility across state lines while in the United States, and (2) their intention to return to the United States in the near future.

The Impact of E-Verify on Deportation Fear and Access to Services

Table 3 displays the results from estimating Eq. (1) as a linear probability model of the likelihood of fearing deportation or experiencing difficulties in receiving government assistance, finding legal services, or obtaining health care services because of legal status. We distinguish between voluntary returnees and deported immigrants on the premise that voluntary returnees might significantly differ from their deported counterparts. After all, they returned to Mexico voluntarily, whereas deported migrants did not. In that regard, deported migrants may look more like other unauthorized immigrants who do not return to Mexico in terms of their intention to remain in the United States. As such, a comparison of the estimated impact of E-Verify mandates on the experiences of voluntary returnees and deported migrants may shed light on the bias incurred from the lack of information on nonreturnees with return intentions that diverge from those of voluntary returnees.

Two results are worth discussing here. First, Chow tests reveal that, after we account for various individual characteristics, state and time fixed effects, and state-level time trends, deported migrants and voluntary returnees significantly differ with regard to their migration experience in the United States. Specifically, deportees appear more likely than do voluntary returnees to report fearing deportation and encountering difficulties in receiving government assistance and legal services.²³ These differences provide support for their separate analysis. Second, E-Verify mandates do not appear to have a significant impact on the likelihood of experiencing difficulties in receiving government assistance, finding legal services, or obtaining health care services because of legal status. This is true regardless of unauthorized immigrants' return intentions. Likewise, the enactment of E-Verify mandates does not seem to increase deportation fears among deported migrants. Nevertheless, it does raise deportation fears among voluntary returnees. In particular, a 1 % increase in the share of voluntary returnees headed to a state with an E-Verify mandate in place prior to or during their migration spell—equivalent to an increase of half

²³ The *F* statistics from the Chow tests determining whether deportees and voluntary returnees differ in their experienced difficulties in receiving government assistance or finding legal services, or in their fear of deportation are 3.23, 4.33, and 4.96, respectively. These differences are statistically significant at 10 %, 5 %, and 5 % levels, respectively.

Table 3 Likelihood of experiencing any of the following while in the United States for deported and voluntary returnees

Independent Variables	Deported				Voluntary Returnees			
	Difficulties With Government Assistance	Difficulties With Legal Services	Difficulties With Health Care Services	Fear of Deportation	Difficulties With Government Assistance	Difficulties With Legal Services	Difficulties With Health Care Services	Fear of Deportation
Constant	0.87** (0.17)	1.00** (0.16)	1.10** (0.14)	0.72** (0.19)	-0.59 (0.51)	-0.23 (0.49)	0.08 (0.46)	-0.86 (0.59)
Age	0.001 (0.002)	-0.001 (0.002)	-0.001 (0.002)	0.0002 (0.002)	0.002 (0.004)	0.001 (0.003)	0.002 (0.003)	-0.01 (0.004)
Male	-0.09 (0.07)	-0.02 (0.06)	0.04 (0.05)	-0.02 (0.07)	0.13 (0.11)	0.07 (0.08)	-0.02 (0.11)	0.05 (0.14)
Secondary Education	-0.03 (0.04)	-0.03 (0.04)	-0.06* (0.03)	-0.03 (0.04)	0.06 (0.08)	0.05 (0.07)	0.01 (0.07)	0.01 (0.09)
Preparatoria	-0.01 (0.05)	-0.07† (0.04)	-0.05 (0.04)	0.01 (0.05)	-0.01 (0.10)	0.07 (0.08)	-0.14* (0.07)	-0.08 (0.10)
Higher Education	-0.003 (0.09)	-0.02 (0.09)	-0.03 (0.08)	0.04 (0.11)	-0.24* (0.10)	-0.26** (0.08)	-0.15 (0.13)	-0.17 (0.14)
Married	0.01 (0.04)	0.01 (0.03)	0.05 (0.03)	0.06 (0.04)	0.03 (0.07)	-0.07 (0.06)	-0.04 (0.06)	0.24** (0.08)
Lived With Partner While in the U.S.	0.12** (0.04)	0.13** (0.04)	0.06 (0.04)	0.16** (0.05)	-0.05 (0.08)	0.06 (0.06)	0.0567 (0.06)	-0.01 (0.09)
Lived With Children While in the U.S.	0.11* (0.05)	0.09* (0.05)	0.08† (0.04)	0.14** (0.05)	-0.05 (0.11)	0.27** (0.11)	0.16† (0.10)	0.05 (0.12)
Previous Number of Crossings	0.003 (0.003)	0.004 (0.003)	0.006* (0.002)	-0.002 (0.004)	-0.01 (0.01)	-0.01† (0.01)	-0.01 (0.01)	-0.01 (0.01)

Table 3 (continued)

Independent Variables	Deported			Voluntary Returnees				
	Difficulties With Government Assistance	Difficulties With Legal Services	Difficulties With Health Care Services	Fear of Deportation	Difficulties With Government Assistance	Difficulties With Legal Services	Difficulties With Health Care Services	Fear of Deportation
Previous Number of Deportations	-0.01 (0.01)	-0.007 (0.006)	-0.01** (0.004)	-0.001 (0.01)	0.02 (0.01)	0.02* (0.01)	0.02* (0.01)	0.03** (0.01)
Worked in the U.S. Last Migration Spell	0.11* (0.04)	0.04 (0.04)	0.04 (0.04)	0.09* (0.04)	0.14 (0.09)	0.07 (0.08)	0.13 (0.08)	0.05 (0.10)
Lived in Poor Housing While in the U.S.	0.18† (0.10)	0.01 (0.09)	0.08 (0.09)	0.02 (0.11)	0.29 (0.24)	0.22 (0.20)	0.40* (0.20)	0.19 (0.21)
Length of Stay in the U.S. Last Migration Spell	-2.80e-06 (7.60e-06)	3.67e-06 (6.64e-06)	2.63e-06 (6.35e-06)	8.45e-06 (7.99e-06)	-2.14e-05 (1.73e-05)	8.18e-06 (1.38e-05)	-2.05e-06 (1.29e-05)	1.01e-05 (2.20e-05)
E-Verify State	0.21 (0.25)	-0.22 (0.23)	-0.18 (0.23)	-0.06 (0.21)	-0.40 (0.50)	-0.60 (0.43)	-0.48 (0.40)	2.82** (0.54)
Time Fixed Effects	Yes				Yes			
State Fixed Effects	Yes				Yes			
State-Level Time Trends	Yes				Yes			
Observations	836	836	836	836	256	256	256	256
R ²	.13	.11	.11	.11	.21	.20	.20	.20

Note: Robust standard errors are in parentheses.

† $p < .10$; * $p < .05$; ** $p < .01$

a percentage point in that share (see Table 1)—increases their likelihood of experiencing deportation fear by 3 percentage points, to an average slightly above 50 % (see Table 2). As such, only in that regard does the impact of E-Verify mandates appear to differ significantly between deportees and voluntary returnees.²⁴

Table 3 also informs on other determinants of the likelihood of experiencing various types of difficulties in obtaining services or fearing deportation according to whether the migrant returned voluntarily to Mexico or was deported. In both instances, more-educated individuals were between 6 and 26 percentage points less likely to document limitations in acquiring government or health care services than their less-educated counterparts. In contrast, married migrants, as well as migrants who reported living in the United States with a partner or with children, were between 8 and 27 percentage points more likely to report experiencing fear of deportation or difficulties in accessing government assistance or legal or health care services. Another factor related to the likelihood of having experienced various types of difficulties in obtaining services or deportation fear is the individual's migratory history, which has a differential impact on deportees and voluntary returnees. For instance, voluntary returnees who frequently crossed the border appear less likely to report difficulties in securing health services, whereas the opposite is true for their deported counterparts. Likewise, the number of previous deportations seems to be directly related to a higher likelihood of experiencing deportation fear and difficulties in obtaining services among voluntary returnees. However, the opposite appears to be the case among deported immigrants. Finally, having worked in the United States and having lived in relatively poor housing are positively correlated with a higher likelihood of experiencing deportation fear and various types of difficulties in securing services.

Overall, it is not surprising that migrants with more to lose—because they have jobs or family responsibilities in the United States (as is more likely to be the case for those who reside with a partner or children or are married)—and those in greater economic need (as might be the case with less-educated immigrants or those who reside in very poor housing) might be more likely to report experiencing difficulties in accessing services and, overall, fear of deportation. After all, they are more likely to seek such services. It is also interesting to note that the adoption of punitive measures against unauthorized immigrants, such as E-Verify mandates, does not seem to significantly worsen their experiences in acquiring services.

The Impact of E-Verify on Interstate Mobility and Future Migration Plans

Does the enactment of more-punitive measures against unauthorized immigrants change their migratory decisions? In particular, are unauthorized immigrants more likely or less likely to move across state lines because of such measures? And do these measures curb migrants' intent to return to the United States in the near future as a result of a more hostile environment? Tables 4 and 5 address these questions. Specifically, Table 4

²⁴ The *F* statistics from the Chow tests determining whether the impact of E-Verify on the experienced difficulties in receiving government assistance, finding legal services, and finding health care services differs between deportees and voluntary returnees are 1.39, 0.64, and 0.46, respectively. None of these differences are statistically significant at standard significance levels. The *F* statistic from the Chow test determining whether the impact of E-Verify mandates on the experienced fear of deportation differs for these two groups of immigrants is 26.68, which is significant at the 1 % level.

displays the results from estimating Eq. (1) to examine the likelihood of moving across states in response to the adoption of E-Verify mandates separately for voluntary returnees and deported immigrants. In that manner, we gauge the extent to which the interstate mobility patterns of these two groups of migrants might differ.

Furthermore, we are able to assess whether E-Verify mandates induce greater mobility for unauthorized immigrants and, if so, whether such an impact differs according to the migrant's willingness to return home. With that purpose in mind, we perform two separate Chow tests. The first one tests for a difference between deportees and voluntary returnees with regard to their decision to move across states; the second tests for a difference between deportees and voluntary returnees with respect to the effect of E-Verify on the decision to move across states. According to the first Chow test, deported immigrants and voluntary returnees differ in their internal mobility patterns, with the former exhibiting a higher likelihood of moving across state lines than the latter.²⁵

In turn, the coefficient on the *E-Verify* dummy variable hints at the differential response of both groups to states' adoption of tougher immigration measures, with voluntary returnees being more fearful to move than deportees. In particular, a 1 % increase in the share of voluntary returnees headed to a state with an E-Verify mandate in place prior to or during their migration spell reduces their interstate mobility by 1 percentage point—from an average of 14 % to 13 %. Therefore, E-Verify mandates display a statistically significant and differential impact on the internal mobility patterns of unauthorized returnees according to their intent to return home.²⁶ Why would E-Verify depress the internal mobility of voluntary returnees but not that of deported migrants? We can only hypothesize. We know that voluntary returnees appear to display a lower tendency to move across states than deportees. Perhaps their increased fear following the enactment of an E-Verify mandate (see Table 3) only serves to reinforce their lower interstate mobility.

Although the enactment of E-Verify mandates does not appear to significantly reduce the internal mobility patterns of deportees, factors that reduce their likelihood of moving across state lines are educational attainment, having lived with a partner or children while in the United States, having worked during their last visit, and the length of their last migration spell. Among voluntary returnees, the only remaining factor associated with a greater internal mobility is being male. Specifically, male migrants are up to 7 percentage points more likely to move across state lines than their female counterparts.

Do E-Verify mandates help curb unauthorized returnees' desire to return to the United States in the near future? Table 5 addresses this question with the estimation of Eq. (2). The effect of E-Verify mandates on the likelihood of indicating the intent to return to the United States in the near future is essentially zero for voluntary returnees (the 0.03 coefficient is not statistically different from zero at standard significance levels). On the contrary, E-Verify mandates reduce that likelihood among deportees by 0.23 ($-0.26 + 0.03$).²⁷ How do these impacts compare with those of being the subject of deportation? Deportation significantly increases the likelihood of reporting

²⁵ The *F* statistic from the Chow test determining whether deportees and voluntary returnees differ in their decision to move across states is 8.06, which is significant at the 1 % level.

²⁶ The *F* statistic from the Chow test determining whether deportees and voluntary returnees differ with respect to the effect of E-Verify on the decision to move across states is 10.73, which is significant at the 1 % level.

²⁷ The coefficient estimates for *Deported* and *E-Verify State* × *Deported* are jointly significant at the 1 % level.

Table 4 Likelihood of moving across states for deported and voluntary returnees

Independent Variables	Deported	Voluntary Returnees
Constant	0.80* (0.40)	0.13 (0.37)
Age	0.001 (0.002)	-0.002 (0.002)
Male	-0.07 (0.06)	0.07* (0.03)
Secondary Education	-0.05 (0.03)	-0.02 (0.03)
Preparatoria	-0.04 (0.03)	0.001 (0.04)
Higher Education	-0.11 [†] (0.06)	-0.003 (0.04)
Married	-0.04 (0.03)	0.02 (0.04)
Lived With Partner While in the U.S.	-0.19** (0.03)	0.02 (0.04)
Lived With Children While in the U.S.	-0.16** (0.03)	0.07 (0.05)
Previous Number of Crossings	-0.002 (0.002)	-0.01 (0.01)
Previous Number of Deportations	-0.001 (0.004)	-0.003 (0.003)
Worked in the U.S. Last Migration Spell	-0.04 (0.03)	0.05 (0.04)
Lived in Poor Housing While in the U.S.	-0.04 (0.09)	-0.07 (0.07)
Length of Stay in the U.S. Last Migration Spell	-2.67e-05** (4.55e-06)	-6.48e-06 (7.76e-06)
E-Verify State	-0.19 (0.22)	-1.22** (0.26)
Time Fixed Effects	Yes	Yes
State Fixed Effects	Yes	Yes
State-Level Time Trends	Yes	Yes
Observations	825	255
R ²	.26	.52

Note: Robust standard errors are in parentheses.

[†] $p < .10$; * $p < .05$; ** $p < .01$

an intention to return to the United States regardless of whether migrants reside in an E-Verify state. Deportees residing in non-E-Verify states will be 0.35 (or 35 percentage points) more likely to report planning to cross again, whereas deportees in E-Verify states will be only 0.09 (or 9 percentage points) more likely to report a similar intent. Therefore, the restraining effect of E-Verify mandates is still not large enough to offset the stimulating impact of a deportation.

Other factors also appear to curtail the intent to return to the United States. For instance, older returnees appear less likely to report planning to return to the United States in the near future. However, more-educated migrants and migrants who lived with a partner or children while in the United States appear to be more interested in returning to the United States. Likewise, longer migration spells help increase the desire to try to cross again in the near future, just as deportations do.²⁸

In sum, the passage of more-punitive measures against unauthorized immigrants, such as E-Verify mandates, does not seem to significantly increase the difficulties experienced by unauthorized immigrants in securing services.²⁹ However, it appears to infuse

²⁸ Deportations may not increase the desire to return to the United States in the near future if, as noted by Hagan et al. (2008), they disrupt the stream of remittances and separate families.

²⁹ Our results are similar to Parrado (2012), who studied the effect of the 287(g) program on the geographic dispersion of Mexican immigrants. Parrado (2012) found no direct impact of the program on the number of undocumented Mexican migrants in the locality.

Table 5 Likelihood of planning to return to the United States in the near future

Independent Variables	Coefficient
Constant	1.01** (0.29)
Age	-0.003 [†] (0.002)
Male	-0.01 (0.05)
Secondary Education	0.001 (0.03)
Preparatoria	0.06 [†] (0.04)
Higher Education	-0.01 (0.07)
Married	0.02 (0.03)
Lived With Partner While in the U.S.	0.15** (0.03)
Lived With Children While in the U.S.	0.22** (0.04)
Previous Number of Crossings	0.003 (0.003)
Previous Number of Deportations	0.016** (0.01)
Worked in the U.S. Last Migration Spell	0.02 (0.04)
Lived in Poor Housing While in the U.S.	0.01 (0.09)
Length of Stay in the U.S. Last Migration Spell	1.70e-05** (6.54e-06)
Deported	0.35** (0.02)
E-Verify State	0.03 (0.19)
E-Verify State × Deported	-0.26** (0.09)
Time Fixed Effects	Yes
State Fixed Effects	Yes
State-Level Time Trends	Yes
Observations	1,092
R ²	.34

Notes: The regression also includes dummy variables for those who resided most of the time in several states. Observations in the regression contain all undocumented immigrants in our sample, both voluntary returnees and the deportees. Robust standard errors are in parentheses.

[†] $p < .10$; * $p < .05$; ** $p < .01$

deportation fear, reduce the interstate mobility among voluntary returnees, and partially lessen deportees' desire to return to the United States in the near future.

Summary and Conclusions

The recent impetus of tougher immigration-related measures passed at the state level leads anyone to question their incidence and effectiveness in reducing unauthorized immigration. Unauthorized immigrants exposed to such measures should be the first ones to report being more fearful of deportation or having greater difficulties in securing a variety of services. Additionally, if these newly adopted measures are effective, we would expect them to alter unauthorized immigrants' migratory plans, either by inducing or preventing them from moving across state lines or by changing their intentions to return to the United States in the foreseeable future.

Using a recent and unique survey of Mexican unauthorized immigrants interviewed in 2009 and 2010 upon their voluntary return or deportation to Mexico, we find that the

adoption of punitive measures against unauthorized immigrants, such as E-Verify mandates, does not appear to increase the difficulties experienced by unauthorized immigrants in securing a variety of social, legal, and health-related services. However, the enactment of more-punitive measures raises the likelihood of experiencing fear of deportation and reduces the internal mobility of voluntary returnees. Additionally, the mandates appear to partially curb deportees' intentions to return to the United States in the foreseeable future.

As noted throughout the article, because of limited information on undocumented immigrants, our findings need to be taken with caution. For instance, differences in the profile of migrants traveling through the San Diego–Tijuana area versus other Mexican border towns might limit the generalizability of the study results, even if the San Diego–Tijuana border region accounts for about 37 % of the total migrant flow across the U.S.–Mexico border. Another data limitation is the lack of detailed information on all moves across state lines, which leads us to use the information on the states migrants were *headed to* and the states where they *spent most of their time* during their last migration spell to create the interstate mobility measure.

More importantly, our findings pertain to unauthorized returnees and, as such, need to be taken with caution when trying to make inferences about the overall impact on the unauthorized population. We try to assess the consequences of the sample selection bias incurred from lacking information on nonreturnees with return intentions that deviate from those of voluntary returnees for our findings using information on deportees. Our findings suggest that the impact of E-Verify mandates on the deportation fear and interstate mobility of unauthorized immigrants would move closer to zero if unauthorized nonreturnees were to be included. Possibly of greater importance, given that repetitive illegal crossings constitute the largest component of overall apprehensions, is that although E-Verify mandates do curb deportees' intentions to return to the United States in the near future, their impact is not large enough to overturn the stimulating impact of their past deportations on their return migration plans. Therefore, overall, our findings cast some doubt on the effectiveness of tougher immigration policies if their intent is to curtail illegal immigration by deteriorating unauthorized immigrants' U.S. experiences and by ultimately curbing their desire to return to the United States.

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Appendix: Survey Methodology

The survey uses methods suited to the observation of migrant flows modeled after the EMIF, which relies on the following premises: (a) migrants represent mobile units that can be intercepted at certain times and places; (b) the vast majority (more than 90 %) of migrants traveling across the U.S.–Mexico border do so through eight Mexican border cities, one of them being Tijuana, Mexico; (c) migrants arrive at these border cities from other regions in Mexico through specific crossing areas (e.g., airports, bus stations, and migration facilities) identified through formative research; (d) after returning from the United States, migrants depart from these border cities to other regions in Mexico through the same crossing areas; (e) within these venues,

there are specific sites (e.g., gates, doorways) migrants necessarily cross by when arriving or departing from these border cities; (f) observation and screening for migration status of individuals crossing in these specific sites allows an accurate enumeration, sampling, and characterization of the migrant population traveling through the U.S-Mexico border.

Specifically, a multistage sampling design with two dimensions and several stages within each dimension is employed. The geographic dimension takes into account the region, city within the region, area within the region, and site within the area where the migrant is intercepted. The sampling areas are defined as facilities through which migrants typically pass when arriving at Tijuana, such as the Tijuana International Airport, the Tijuana central bus station, and the San Ysidro deportation station on the San Diego–Tijuana border. The temporal dimension consists of the quarter of the year, day of the week, and survey shift (i.e., each day was divided into eight-hour shifts) when the respondents are intercepted. Every three months, a random sample of sampling pairs “place–time” was generated to determine the specific combinations of sites and times where and when the survey was to be conducted during the following three months. The weighting procedures take into account that not all individuals have equal probability of being selected and included in the survey, and adjust for this unequal probability. Moreover, the survey weights include expansion factors to reflect the volume of migrants traveling through each sampling site during specific time periods. This information is also used to estimate the size of the population represented by the study sample.

For weight computation, the survey uses an adapted version of a formula developed by researchers at *El Colegio de la Frontera Norte* and used routinely for computing survey weights for the EMIF. The formula follows the logic behind standard weighting procedures for surveys using multistage sampling methods and has been adapted to reflect the specific sampling design of our survey. Each observation is assigned a weight W , which is calculated as follows:

$$W = [(k/n) \times p_{Point} \times p_{Site} \times p_{City} \times p_{Region} \times p_{Shift_D} \times p_{Days} \times p_{Study}]^{-1},$$

where k is the number of individuals who crossed by the sampling shift, were screened for participation in the survey, and did not meet eligibility criteria or refused to participate; for deported migrants, n is the number of persons released by Mexican migration officers within the sampling shift when the questionnaire was administered; for sites other than the deportation site, n reflects the number of persons traveling through the sampling site from the beginning of the sampling shift to the end of the administration of the first questionnaire (for the first respondent) and from the end of the administration of the first questionnaire to the end of the administration of the second questionnaire (for the second respondent), and so on; p_{Point} equals the proportion of individuals traveling through the sampling point relative to the estimated total volume of individuals traveling through the sampling site where the point is located; p_{Site} represents the proportion of individuals traveling through the sampling site relative to the estimated total flow traveling through the city where the site is located; unlike for the EMIF, p_{City} and p_{Region} are both equal 1, given that the city (Tijuana) is only one, and the region (western U.S.–Mexico border) is only one, and they are all included with probability equal to 1 in the sampling design; $(p_{Shift_D})^{-1}$ is

Table 6 Variable names and definitions

Variables Names	Definitions
Dependent Variables	
Difficulties and deportation fears	Dummy variables equal to 1 when the unauthorized migrant agrees with the following statements: You thought you would be deported if you went to a social or government agency.
Difficulties in obtaining government assistance	You experienced difficulties in finding legal services.
Difficulties in finding legal services	You experienced difficulties in obtaining health care due to your legal status.
Difficulties in obtaining health care services	You feared being deported.
Fear of deportation	A dummy variable equal to 1 if the migrant moved across states during his/her last migration spell.
Move across state lines	A dummy variable equal to 1 if the migrant plans to return to the United States in the future.
Intent to return to the United States	
Independent Variables	
Age	Age in years.
Male	A dummy variable equal to 1 when the unauthorized migrant is a male.
No education	A dummy variable equal to 1 when the unauthorized migrant has no education.
Primary education (elementary school)	A dummy variable equal to 1 when elementary school is the highest educational attainment.
Secondary education (middle school)	A dummy variable equal to 1 when middle school is the highest educational attainment.
Preparatoria (high school)	A dummy variable equal to 1 when high school is the highest educational attainment.
Higher education (more than high school)	A dummy variable equal to 1 when more than high school is the highest educational attainment.
Married	A dummy variable equal to 1 if married.
Lived with partner while in the U.S.	A dummy variable equal to 1 if living with spouse, partner, or boyfriend/girlfriend during the migration spell.
Lived with children while in the U.S.	A dummy variable equal to 1 if living with children during the migration spell.
Previous number of crossings	Number of times the unauthorized migrant has crossed the border to the United States.
Previous number of deportations	Number of times the unauthorized migrant has been deported by the United States immigration authorities.
Worked in the U.S. last migration spell	A dummy variable equal to 1 if the migrant worked during the last 12 months in the United States.
Lived in poor housing while in the U.S.	A dummy variable equal to 1 if the migrant reported living in any of the following places during most of their migration spell: a mobile home, homeless shelter, halfway house or boarding home, car or truck, on the streets.
Length of stay in the U.S. last migration spell	Duration (in days) of the last migration spell.
E-Verify state	A dummy variable equal to 1 if the migrant's destination is a state that either adopted an E-Verify mandate prior to the migrant's arrival or during her/his migration spell.

the probability of selecting the sampling shift of all possible sampling shifts on a day; $(pDays)^{-1}$ is calculated for each day of the week and reflects the probability of selecting each day of the week considering the total number of Mondays, Tuesdays, and so on, included in the period during which the survey was implemented; and $pStudy$ is equal to 1, given that the study period was included with probability 1 in the sampling frame.

At the beginning of each sampling shift at each sampling site, an interviewer intercepted the first adult-looking subject who crossed by the sampling site and applied a screening intercept survey to determine if he/she qualified as a migrant. If the participant did not meet the inclusion criteria, the interviewer intercepted the next adult-looking person crossing by the sampling site and repeated the process. For the current study, we focused on migrants who were returning from the United States either voluntarily or via deportation, who were not born in the United States, and who were 18 years of age or older. A short screening survey determined eligibility.

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