INTERNATIONAL MIGRATION REVIEW

When the Border Is "Everywhere": State-level Variation in Migration Control and Changing Settlement Patterns of the Unauthorized Immigrant Population in the United States

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Governments increasingly exclude unauthorized migrants from labor markets and public provisions and apprehend those who have settled in the territory. In the U.S., recent increases in interior control coincided with a reduction in (the growth of) the estimated unauthorized population. This study describes the mechanisms through which interior control may impact migration patterns and analyzes whether interior control has been responsible for the changing settlement patterns. We find that when the effects of labor markets and internal dynamics of migration processes are controlled, policy has a (moderate) negative effect on estimated levels of unauthorized residence, both in individual states and the U.S. as a whole.

INTRODUCTION

"The border is everywhere." Evidently, this aphorism by Lyon (2006) is an overstatement, but it is true that the distinction between who can reside legally in a country, and who cannot or no longer, is increasingly enforced by forms of migration control *within* territories, or "internal border control" (Lahav and Guiraudon, 2000; Walters, 2006; Guiraudon and Lahav, 2007;

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Engbersen and Broeders, 2009). For research purposes, the case of the U.S. is especially interesting as it represents a quasi-experiment in interior control: Since 2005 in particular, various states have created restrictive policies to curb unauthorized residence within their jurisdictions, while others have not or not to the same extent (Rodriguez, 2008; Varsanyi, 2010; Leerkes, Leach, and Bachmeier, 2012). For example, several states introduced policies to exclude unauthorized migrants from driver's licenses or restricted state contracts to employers who do not employ unauthorized migrants. Likewise, the federal government initiated a number of restrictive programs, such as *E-verify, 287g* and *Secure Communities*, which have been "embraced" to differing degrees in different states (Leerkes, Engbersen, and Van der Leun, 2012; Leerkes, Leach, and Bachmeier, 2012). This distinctive policy context within the U.S. offers unique opportunities to research the consequences of interior control for patterns of unauthorized migration: State-level estimates of the unauthorized population are available from 1990 onwards (*see* Fortuny, Capps, and Passel, 2007; Passel and Cohn, 2009, 2010, 2011). (On the lack of systematic and comparable country and subcountry estimates in the European Union, *see* Triandafyllidou, 2010.)

Research on the demographic effects of internal border control is academically relevant as migration patterns are usually explained by economic variables, social networks, and/or international differences in civil liberties and political stability (*cf.* Castles and Miller, 2003). Relatively little is known about the effects of migration policy, in spite of an increased scientific interest in policy effects in recent years (*cf.* Hatton and Williamson, 2005; Massey *et al.*, 2005). This is especially true for policies of internal border control. With the exception of our explorative study that prefaces the multivariate study reported here (Leerkes, Engbersen, and Van der Leun, 2012) and four studies on the effects of certain aspects of interior control (Massey and Riosmena, 2010; Lofstrom, Bohn, and Raphael, 2011; Parrado, 2012; Amuedo-Dorantes, Puttitanun, and Martinez-Donate, 2013), we are not aware of similar research on the migration responses to internal control policies. Researchers interested in policy effects have mainly looked at the consequences of restrictive *admission* policies – does a more selective granting of residence permits discourage (legal) migration? (Neumayer, 2004; Hatton and Williamson, 2005; Thielemann, 2006; Leerkes and Kulu-Glasgow, 2011) – or have examined the effects of *external* border control, especially at the U.S.–Mexican border (Espenshade, 1994; Massey, Durand, and Malone, 2002; Dávila, Pagan, and Soydemir, 2002; Cornelius and Salehyan, 2007; Gathmann, 2008; Massey and Riosmena, 2010).

Using published estimates of the unauthorized foreign-born population, we examine whether the increases in interior control in recent years have decreased levels of unauthorized residence – both at the level of individual states and at the level of the U.S. as a whole – when known factors of migration and immigrant settlement patterns are controlled. One confounding factor that has to be controlled is the development of labor market opportunities under the influence of the 2008 fiscal crisis, which led to a recession in 2009. Furthermore, there was an earlier slowdown in the construction industry, which is an important sector for unauthorized workers (Kochhar, 2008; Cornelius *et al.*, 2009). Network effects also have to be taken into consideration. Theories of cumulative causation hold that the presence of migrants in a location may promote additional international migration to that location (Jones, 1982; Massey *et al.*, 1987; Bachmeier, 2013). However, if a substantial migrant community has grown and matured there, newcomers increasingly explore residence opportunities elsewhere (Light, 2006; Leach and Bean, 2008; De Haas, 2010). Indeed, in the last two decades, immigrants have increasingly tried their luck in places where few "established" migrants live. If the estimated number of unauthorized immigrants has kept growing in relatively permissive states, the reason could simply be that such states are overrepresented among new destination states.

CONCEPTUALIZATION AND HYPOTHESIZED EFFECTS

Policy Effects

Lahav and Guiraudon (2000) have argued that a significant and increasing part of governmental control of migration takes place away from the border, that is, before "undesirable" prospective migrants reach the territory ("remote control") or afterward ("internal controls"). Both remote control and internal control are characterized by "deputization" (Torpey, 1998) or "responsibilization" (Garland, 2001: 124): This means that an increasing number of non-state or semi-state actors, including employers and local social services, are urged to exclude unauthorized migrants, or even to report them. Based on this literature, we define internal border control as all legally mandated practices that national, state, or local governments engage in or promote in their jurisdictions, but not at country borders, to exclude, either directly or through third parties, certain categories of noncitizens from the country's territory, or parts of that territory.

There are two main types of internal border control (Leerkes, 2009). The first type pertains to all efforts to identify and ultimately remove unauthorized migrants. Examples in point are the issuing of removal orders, the administrative apprehension of suspected unauthorized migrants by federal or state police, and the transfer of persons to immigration detention centers who have become deportable on account of a criminal conviction. Here, there is a relatively direct link between interior control and the objective of territorial exclusion, and there is usually a strong direct involvement of governmental institutions. The second type involves all laws and practices that reduce unauthorized migrants' access to "life chances," that is, the opportunities individuals have to reach a certain quality of life, given certain social conditions (Dahrendorf, 1979). Examples in point are the discouragement of illegal labor through employer sanctions and the creation of a link, usually with the help of technology, between residence status and access to key institutions of society such as the labor market, healthcare and social insurance systems, the educational system, and so forth (Van der Leun, 2003). We propose to call these two forms of internal control "territorial exclusion" and "social exclusion," respectively. Empirically, these ideal types are often intertwined; when employer sanctions are enforced, workers may be apprehended and expelled, and immigration detention may diminish access to life chances.

Territorial exclusion makes use of the mechanism of *direct control* (*cf.* Carling and Hernández-Carretero, 2011): It counters unauthorized migration via expulsion or compulsory departure under the threat of expulsion. Additionally, both types of internal control may reduce unauthorized migration indirectly via the mechanism of *deterrence*. Deterrence is often explained in terms of rational choice (Akers, 1990). An intervention is assumed to be effective if, as a result of the intervention, the utility of the proscribed behavior becomes lower than some relevant alternative course of action. From the perspective of neoclassical economics, international migration becomes less attractive to potential migrants if expected earnings decrease and/or if costs increase (Todaro and Maruszko, 1987; Massey *et al.*, 1993; Hatton and Williamson, 2005). The expected earnings of migrants have been defined as the product of (1) the likelihood of not being deported after migration; (2) the likelihood of finding employment; and (3) earnings while employed (*cf.* Massey *et al.*, 1993). Thus, if deportation rates rise as a consequence of an increased involvement of state and local police in migration control, or if employers become less

willing to employ unauthorized workers, this will make unauthorized immigration (or continued residence after immigration) less attractive as it lowers expected earnings. Internal control may also be expected to increase costs, including psychological costs. Reduced access to housing as a result of internal border control may increase housing costs, and fear of the police may reduce well-being.

Although restrictive immigration laws and policies tend to be implemented only partially (*cf.* Calavita, 1996; Van der Leun, 2003; Leerkes, Varsanyi and Engbersen, 2012), even "symbolic" legislation is not necessarily ineffective. For example, the laws and restrictive policies that were introduced in recent years in the U.S. were often widely announced by the media. Therefore, regardless of actual levels of implementation and enforcement, if migrants defined these laws and policies as real, they may have had a real impact on migration patterns. Furthermore, if employers and other relevant actors felt more normative pressure to follow certain laws, legislation may have had a real impact on the life chances of unauthorized migrants, quite independently of actual enforcement through legal sanctions. In the latter case, internal control operates via the mechanism of *legal authority* (*cf.* Weber, 1947).[1]

Migrants may choose among the following alternative courses of action. First, potential immigrants may remain in the country of origin in the face of restrictive policies, and existing immigrants may decide to return to their country of origin (Kobach, 2007). Second, they may migrate to other destinations. Neumayer (2004), for example, in his analysis of asylum migration patterns in Europe, has shown that a more restrictive admission of asylum seekers in one country increased the number of asylum applications in other EU countries. By analogy, migrants may also move to a more permissive location within the same territory, which, in the case of the U.S., means either (2a) a different state or (2b) a different locality within the state (Leerkes, Engbersen, and Van der Leun, 2012). Third, migrants may spend more time and resources on obtaining legal (Massey, 2013), assuming such avenues exist or their opportunities to migrate legally may increase as employers have a stronger interest to employ legal migrants. On the aggregate level, the second option brings

[1]Carling and Hernández-Carretero (2011) distinguish "persuasion" as a third mechanism in addition to "direct control" and "deterrence." Persuasion is related to the concept of "legal authority", but we prefer the latter term because it is commonly used in the sociology of law.

about "displacement effects," that is, when an intervention causes the targeted behavior to increase in an adjoining locality (Bowers and Johnson, 2003). Arguably, the third option implies a "nominal" displacement effect, as unauthorized migration is deterred as *unauthorized* migration.

The present analysis examines whether increases in internal border control in recent years have reduced levels of unauthorized migration, both in individual states and in the U.S. as a whole. An attempt is also made to estimate state-level displacement (option 2b). The data do not permit us to actually test the remaining possibilities, but in the conclusion we will discuss such outcomes in a more qualitative vein. Likewise, the data do not allow for a precise test of the relative importance of the various theoretical mechanisms underlying eventual policy effects (direct control, deterrence, and legal authority) in inducing the policy effects observed. Yet, a comparison between our empirical results and federal data on "removals" allows us to formulate a broad hypothesis about the relative importance of the mechanism of direct control versus the two other mechanisms discussed. The present analysis does not allow us to further disentangle the relative influence of deterrence versus the mechanism of legal authority or to specify the influence of various types of deterrence (reduced access to the labor market, reduced access to housing market, increased fear of deportation, and so forth).

For a combination of reasons, we hypothesize that interior control has a *limited* negative effect on levels of unauthorized residence. First, international wage differences will remain substantial in spite of internal border control. Second, many prospective migrants will not know, or believe, that settlement conditions have become less attractive. Third, part of the unauthorized population that already lives in the U.S. will be "target earners" who intend to return to the country of origin after a certain target income is earned (Massey, 1986); for them, decreases in expected earnings may actually extend the migration duration. Fourth, rejected asylum seekers and unauthorized migrants with family commitments in the USA may put up with difficult living conditions for non-economic reasons (Chaudry *et al.*, 2010; Yoshikawa, 2011). Four studies that have looked at aspects of interior control also found limited policy effects. Lofstrom, Bohn, and Raphael (2011), in their study on the 2007 Legal Arizona Workers Act, estimate that, compared to a synthetic control group, the non-citizen Hispanic population in Arizona had decreased by 1.5 percentage points in 2008/2009 compared to the 1998–2006 period. In another study, Parrado (2012:16) concludes that "outside of four

influential outliers (Dallas, Los Angeles, Riverside, and Phoenix; among the 20 areas studied), there is no evidence that the 287(g) program impacted the size of the Mexican immigrant population." Using data from ethnosurveys performed in four Latin American countries, Massey and Riosmena (2010) examined whether the level of deportations from the interior of the U.S. is associated with the likelihood of first and later trips to the U.S. They find that among potential first-time migrants from the Dominican Republic, Costa Rica and Nicaragua, the level of deportations had a limited deterrent effect. Among Mexicans, however, a rising number of deportations actually turned out to be associated with a somewhat greater likelihood of entering without inspection. Likewise, the level of deportations is reported to be associated with a somewhat greater likelihood of later trips to the U.S. when respondents from the four countries are pooled (for later trips, no separate analyses for individual countries of origin are shown, but the results are probably dominated by Mexican respondents, who are reported as having a higher migration prevalence). To explain the positive association between deportations and undocumented trips to the U.S., Massey and Riosmena (2010:311) speculate that a rising number of deportations "prompt Mexicans to migrate in anticipation that conditions for undocumented migrants will get even worse." An alternative possibility, not discussed by Massey and Riosmena, is that some of the respondents are in fact (immediate family members of) former deportees; such respondents are likely to be denied a tourist visa and have no choice but to migrate without inspection if they want to go or return to the U.S. Finally, Amuedo-Dorantes, Puttitanun, and Martinez-Donate (2013) find that deportees from relatively restrictive states (in their analysis: states that have adopted an E-verify mandate) are somewhat less likely to consider returning to the U.S. than deportees from relatively permissive states.

Labor Market Effects

Regional and temporal patterns of unauthorized migration are likely to vary according to labor market dynamics (Light, 2006). It has long been recognized that transnational migrants, especially the unauthorized, fill a position in the "secondary" labor market that cannot or will not be filled by the native-born labor force (Piore, 1979; Portes and Bach, 1985; Sassen, 1990). More recent research has linked the geographic mobility of low-skilled immigrants within the U.S. to regional developments in the growth of industries with large concentrations of unauthorized workers,

such as meat packing and construction (Parrado and Kandel, 2008; Fussell, 2009). This research implies that migration, at least prior to the recession, was driven in part by a regional shift in the demand for low-skilled labor as small-scale manufacturing production relocated to regions of the country with relatively low-wage rates and low union densities (Hernandez-Leon and Zuniga, 2005).

Given the concentration of unauthorized migrants in low-wage jobs, attention has to be paid to changes in labor market opportunities for *low-skilled workers* in particular. For example, the construction sector, which provides employment to many unauthorized workers, experienced a considerable slowdown in 2007 (Kochhar, 2008). Due to the fiscal crisis in 2008, which eventually led to the 2009 recession, employment also fell in other sectors.

Economic factors are unlikely to be completely independent from policy factors. If an economic slowdown fuels negative sentiments toward unauthorized immigrants, which in turn contributes to restrictive policies, economic factors may have an indirect effect on migration patterns via policy (*cf.* Hatton and Williamson, 2005). Similarly, if internal border control reduces labor market opportunities for unauthorized workers, it could have an indirect effect on migration patterns via economic factors. In other words, if fewer migrants are attracted to a restrictive destination, this may be because certain laws or policies have led to a reduction in the local employment rate for low-skilled immigrants, and not because of these laws or policies themselves. To examine whether the assumption of independence between internal border control and labor market opportunities holds, a series of explorative Granger (1969) causality tests were conducted. Results indicate that economic and policy factors are only interrelated to a small extent.[2] Therefore, we only present models where

[2]For each labor market variable in Model 2, the values in year t were regressed on both the values for that variable in t-1 and on internal border control in t-1. Likewise, internal border control in year t was regressed on both internal border control in t-1 and the labor market variables in t-1. Both CONSTRUCTION ($\beta = -0.068$) and EMPLOYTOT ($\beta = -0.031$) indeed had a modest negative effect on INTCONTROL, which suggests that a high demand for labor, both in general (EMPLOYTOT) and in sectors that provide employment to unauthorized migrants (CONSTRUCTION), is associated with lower levels of internal border control. INTCONTROL had a small negative effect on EMPLOYFBLOW ($\beta = -0.155$), suggesting that internal border control indeed makes it more difficult for the low-skilled foreign-born to be employed. Finally, internal border control Granger causes a lower employment rate among the general population to some extent ($\beta = -0.135$). Theoretically, it seems implausible that the latter relationship is causal.

policy and economic variables are assumed to be independent of each other. This confirms analyses by Ramakrishnan and Wong (2010), who report that the percentage of Republicans among local voters, and not economic factors or migration levels, is the strongest predictor of the local degree of internal control.

Internal Dynamics of Migration Processes

Transnational labor migration flows are driven in large part by migrant social networks (Massey, 1990, 1999). The theory of the cumulative causation of migration holds that newcomers, including unauthorized newcomers (Espenshade, 1995; Leerkes, Engbersen, and Van San, 2007), tend to be attracted to places where ethnic communities provide social support and relatively more protection against economic hardship and legal uncertainty (Portes and Bach, 1985). Indeed, prior to 1990, labor migrants with high rates of unauthorized status such as Mexicans largely concentrated in just a handful of southwestern states (Durand, Massey, and Capoferro, 2005), and inter-state migration was a relatively rare occurrence among them (Gurak and Kritz, 2000).

Eventually, however, a tipping point may be reached. Epstein (2008) and De Haas (2010) have discussed various mechanisms explaining why, at higher levels of immigrant population maturity, additional migration tends to diminish (Martin and Taylor, 1996). For example, as levels of immigration reach a certain point and mature over time, established migrants may stop being bridgeheads for newcomers and start to act as gatekeepers. They have increasingly less need of additional migrants to sustain collective institutions such as churches and ethnic shops and may begin to fear competition by newcomers in labor and housing markets (Heer, 2002; Light, 2006). Based on these insights, and assuming that unauthorized migrants tend to be relatively new arrivals, we hypothesize an inverse-U-shape relationship between the degree to which migrant communities have matured in a state and the relative size of the unauthorized population. Up to a certain point, there will be a positive relationship between maturity levels and the relative size of the unauthorized population in that state. Yet at higher levels of maturity, the positive relationship weakens and may eventually become negative, as newcomers will be inclined to explore residence opportunities elsewhere.

There is evidence that when internal border control began to expand most notably, that is, from 2005 onwards, saturation appears to have

occurred in the more traditional destinations (Bachmeier, 2013). At the very least, after 1990, immigrant communities grew rapidly in new destination regions throughout the Midwest and southeast which had not experienced immigration in many decades, if ever.[3] Foreign-born population growth in new destination regions was driven largely by new arrivals from Mexico and Central America and immigrants that had previously settled in traditional destinations (Lichter and Johnson, 2009). Some researchers have argued that the popularity of the new destinations was mostly caused by enhanced economic opportunities for low-skilled workers in new destinations (Parrado and Kandel, 2008). Such labor market effects should also be captured by the economic variables included in the analysis.

DATA, METHOD, AND DESCRIPTIVE STATISTICS

Dependent Variable

The dependent variable is the annual change in the percentage of unauthorized migrants in the total state population. The denominator to calculate the percentage of unauthorized immigrants in a state-year, that is, the total state population by year, was obtained from the U.S. Census Bureau's state population estimates. The numerator – that is, the estimated number of unauthorized migrants by state-year – was taken from publications of the Pew Hispanic Center and the Urban Institute, which publish estimates with some regularity. Available years are 1990, 2000 and 2004 (Fortuny, Capps, and Passel, 2007), 2008 (Passel and Cohn, 2009), 2005 and 2009 (Passel and Cohn, 2010), and 2007 and 2010 (Passel and Cohn, 2011). The estimates for 1990 and 2000 are based on the Census 1990 and 2000 5-Percent Public-Use Microdata Sample (PUMS), while the estimates for 2004, 2005, 2007, 2008, and 2009 are based on the March Current Population Survey (CPS). All estimates make use of the "residual method." For this method, a demographic estimate of the legal foreign-born population, based on legal entries tallied by the former Immigration and Naturalization Service and the Department

[3]To be sure, foreign-born population dispersal, especially of the Mexican-born population, did occur to some degree during earlier periods in conjunction with the expansion of the railroad system and during the Bracero program. But as Zuniga and Hernandez-Leon (2005) point out, "the nature of their jobs and the predominantly male composition of the flow made the Mexican presence [in new destinations] ephemeral, limited, and frequently almost invisible to residents in various parts of the country" (2005:*xiii*).

of Homeland Security, is subtracted from the total foreign-born population. The remainder, or residual, is used to estimate the unauthorized population.

This article uses the estimates for the period 2000–2010. Estimates for missing years were obtained by linear interpolation. For most years the Pew Hispanic Center did not publish separate figures for eight states: Too few unauthorized migrants live in Alaska, Maine, Montana, North Dakota, South Dakota, Vermont, West Virginia, and Wyoming to obtain reliable estimates. The empirical analyses pertain to the other 42 states. These contain over 99 percent of the estimated unauthorized population in the U.S. The present analyses focus on the unauthorized population as a whole because to date there are no systematic estimates of the unauthorized population specified by origin and state-year. Therefore, our findings will mostly be valid for Latin American immigrants, who are estimated to represent about 80 percent of the unauthorized population nationally (Passel and Cohn, 2009).

Independent Variables

It is useful to conceptualize the primary independent variable, "internal border control," as a latent variable, which needs to be measured indirectly on the basis of a number of manifest indicators using principal components analysis (PCA).[4] It should be emphasized that although we measure internal control at the state level, the measure does not only pertain to government policies at the state level. The following indicators were used.

1. The percentage of firms in a state that, in a given year, were enrolled in *E-verify,* a federal program that allows employers to electronically verify the work eligibility of new hires by checking identification credentials against databases at the Social Security Administration (SSA) and the Department of Homeland Security (DHS).[5] Measured years were 2003, when the program's pilot phase ended, up to and

[4]We do realize that "internal border control" is not a purely latent variable because some of the indicators of control are also *elements* of control; they not only "indicate" control, but they "are" control. This is especially true for the variables that come closest to measuring actual *practices* of control, such as the E-verify participation rates.

[5]We thank the U.S. Citizenship and Immigration Services, Department of Homeland Security, for sharing the annual state-level counts with us.

including 2010. As of September 2008, all federal agencies as well as their contractors and subcontractors are required to use E-verify for all new hires. In addition, since 2007, several states have mandated E-verify usage by state and local public agencies, and in a few cases, by all public and private employers. Information on the *total* number of firms by state by year, that is, the denominator that is necessary to calculate the percentage of firms enrolled in E-verify, was obtained from the U.S. Census Bureau, Statistics of U.S. Businesses.

2. Whether or not, in a given state-year, there were any state laws in force restricting unauthorized migrants' access to (2a) the labor market, (2b) driver's licenses, and/or (2c) public benefits, health care, or education. Measured years were 2005 up to and including 2010. Information about these state laws was obtained from the National Conference of State Legislatures (NSCL), which has published overviews of such laws since 2005 (NCSL, 2006, 2007, 2008, 2009, 2010, 2011). Examples of state laws are mentioned in Leerkes, Engbersen, and Van der Leun (2012).
3. In the *287g program*, the federal government enters into agreements with state and local law enforcement agencies, permitting the latter to contribute to the apprehension and identification of unauthorized migrants. For each state-year since 2002 (which is the year in which the first agreement was signed), we measured (3a) the percentage of counties in a state involved in this program and (3b) whether any state-level organizations or (3c) cities had signed such agreements.[6]
4. The rate of the estimated unauthorized population in a state-year that was arrested administratively or was booked into Aliens Custody through the federal program called *Secure Communities.* It is common practice that local jurisdictions share fingerprints of local crime suspects with the Federal Bureau of Intelligence (FBI). If a local jurisdiction participates in *Secure Communities*, the FBI sends these fingerprints to the Immigration and Custom Enforcement (ICE) to check against its immigration databases. If these checks reveal that an individual is unlawfully present in the U.S. or will become removable due to a criminal conviction, ICE will start an expulsion procedure. Measured years are 2008, the first year that the program was in operation, up to and including 2010.[7]

[6]Source: http://www.ice.gov/news/library/factsheets/287g.htm visited October 2010.

[7]Source: http://www.ice.gov/secure_communities, visited June 2011.

If a law or program did not exist in a given year, the relevant variable was set at zero. All indicators loaded on a single factor that had an eigenvalue of 3.6 and accounted for 44 percent of the total variation across the eight variables. Subsequent factors accounted for <15 percent of the total variance and have not been used in the analyses.[8] Factor loadings are shown in Table 1. Given positive loadings for all indicators, a larger factor score is interpreted as a more restrictive environment for unauthorized immigrants in a state in a particular year.

We do not claim that the measure of internal control is perfect or complete.[9] For example, although a systematic overview is currently lacking, there seems to be substantial variation in the degree to which local

TABLE 1
FACTOR LOADINGS "INTERNAL BORDER CONTROL" (2000–2010)

Social exclusion	
% Employers in E-verify (log)	0.89
Any state laws reducing access to the labor market?	0.71
Any state laws reducing access to public benefits, health care or education?	0.64
Any state laws reducing access to IDs?	0.59
Territorial exclusion	
% Counties in 287g (log)	0.69
Per 10,000 unauthorized population arrested or booked via secure communities (log)	0.69
Any cities in 287g?	0.55
Any state-level organizations in 287 g?	0.50

[8]Although the second factor had an eigenvalue that was slightly higher than 1 (1.14), we decided not to use it as a screening test indicated that the eigenvalues dropped considerably after the first factor and then declined much more gradually.

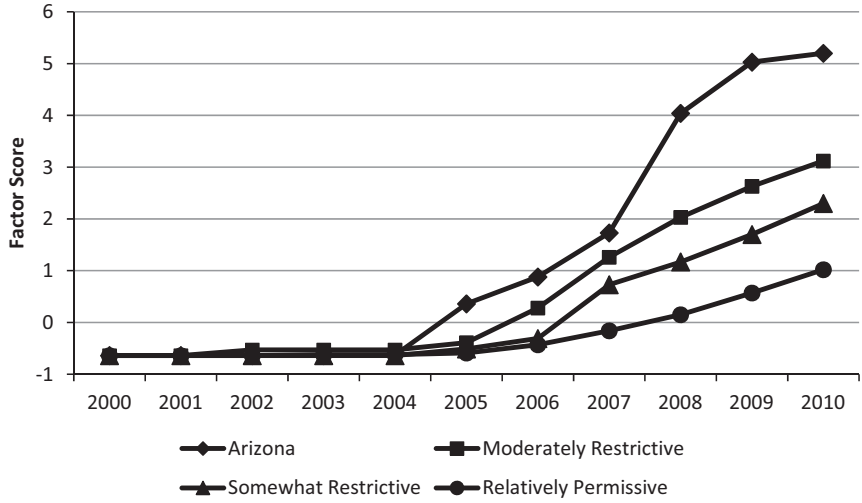
[9]A few relevant state laws were enacted before 2005, but these have been excluded here because there is no systematic overview of these "early" laws for all states. Arizona, for example, excluded unauthorized migrants from driver's licenses in 1996. California's Proposition 187, which intended to create a citizenship screening system in order to prohibit unauthorized migrants from using health care, public education, and other social services in the state of California, dates from 1994. However, the California law was largely found unconstitutional by a federal judge in 1997. Likewise, although a systematic overview is presently lacking, there seems to be substantial variation in the degree to which local police check immigration status and contact federal authorities when encountering possible unauthorized migrants. According to Decker *et al.* (2009), this variation is partly the result of local laws, which have also been omitted here, unless they are related to the 287g or E-verify program. Furthermore, state-level legislation with regard to migration control is legally controversial, and some state laws included here, or aspects of them, may eventually be blocked by federal courts. However, intervention by the courts is unlikely to have biased our results much. The court decisions that we are aware of mostly took place in 2011, that is, after the period of study. *See*, for example, *Washington Post*, May 26 2011, "Supreme Court upholds Ariz. law punishing companies that hire illegal immigrants."

police check immigration status and contact federal authorities when encountering possible unauthorized migrants. According to Decker *et al.* (2009), this variation is partly the result of local laws, which have also been omitted here unless they are related to the 287g, E-verify or Secure Communities programs. Similarly, interior control practices at the federal level are not limited to the three federal programs mentioned. For example, only part of the deportation activities by the U.S. Immigration and Customs Enforcement (ICE) are the result of apprehensions by state and local police. (Unfortunately, statistics on apprehensions by federal agencies are not made available at the state level.) Yet the omission of certain elements of internal border control does not necessarily bias our findings. This would mostly be the case if their inclusion had led to considerably different scores for state-years, which seems unlikely. For instance, if local police cooperate intensively with federal authorities, there will be a greater chance that their cities and counties will have signed a 287g agreement, and even if not, chances are that the factors contributing to such a restrictive stance will have led to other restrictive laws and policies included here. Likewise, it is not unlikely that federal agencies such as ICE have allocated a substantial part of their resources to relatively restrictive states – where it will have been easier to obtain cooperation and reach organizational goals – even in case of deportation activities that are not directly related to the 287g or Secure Communities Program. In other words, certain omitted aspects of interior control would probably load on the present factor.

For descriptive purposes, it is useful to cluster states in terms of their degree of internal control. This was done by calculating for each state the average score on internal border control for the period 2000–2010. Then, based on these average scores, four clusters were distinguished using a K-Means Cluster Analysis (*cf.* Lloyd, 1982): (1) states with relatively high levels of control (actually one state: Arizona); (2) four states with moderate levels of control (CO, FL, GA, VA); (3) 13 somewhat restrictive states; and (4) 24 relatively permissive, mostly Northern states. For a more detailed geographical description, *see* Leerkes, Leach, and Bachmeier (2012).

Interior control levels have increased substantially since 2005 in particular. This increase, although concentrated in Arizona and a limited number of other states, has occurred in the U.S. at large (Figure 1). Considerable policy efforts seem necessary for a one unit increase in control, for example, that the E-verify participation rate in the state of New York

Figure I. Development of Internal Border Control by Cluster

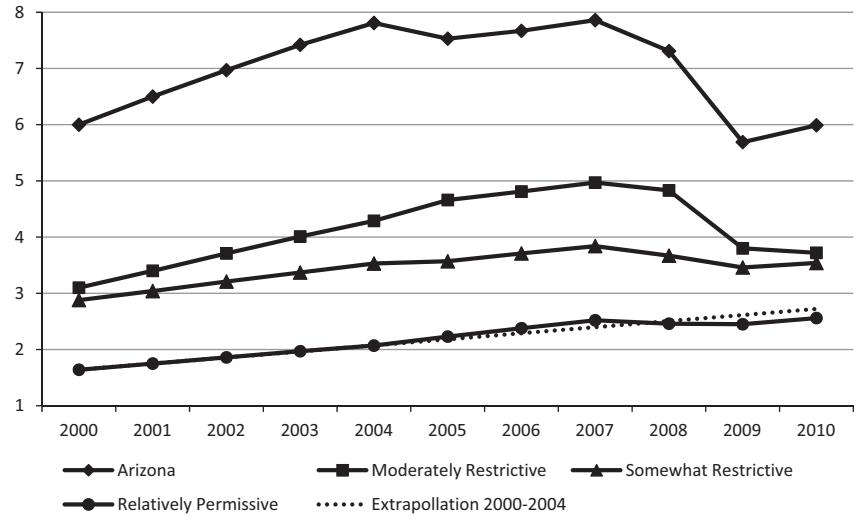


reach about 25 percent (now about 1.5 percent) or that about half of the Texan counties participate in "287g" (now <1 percent).

To explain the other independent variables and analytical method, it is useful to briefly describe the main developments in the relative size of the unauthorized population for Arizona and the three state-clusters. As Figure 2 shows, the proportion of unauthorized residents in the population increased substantially between 2000 and 2004, nationwide. Then, between 2005 and 2007, that is, when notable state-level differences in internal border control developed yet before the financial crisis, the unauthorized population stopped growing in Arizona, and growth rates began to slow down in the moderately restrictive cluster. In 2008, and even more so in 2009 when the global financial crisis peaked, the unauthorized population decreased in most states, but that decrease seems to have been steeper in restrictive states than in the more permissive states. Finally, in 2010, as the U.S. economy recovered, the unauthorized population again increased somewhat in most states, but tended to remain below 2008 levels.

Between 2004 and 2007, the growth of the estimated unauthorized population accelerated somewhat in the most permissive cluster, which contains the majority of the 42 states (*see* the dotted lines in Figure 2). This could mean that part of the unauthorized population that would otherwise have lived in relatively restrictive states has instead settled in, or moved to, the more permissive states. To capture this possible state-level

Figure II. **Development of the (Estimated) Percentage of Unauthorized Migrants in Arizona and Three Clusters (2000–2010)[a]**



Source: [a]The Percentages for Clusters are Unweighted Inter-state Averages.

displacement effect in the multivariate analyses, a dummy was calculated, indicating whether or not, in a given year, the degree of internal border control for a state had become lower than the average degree in the *other* 41 states. Under the assumption of a displacement effect, it would be expected that, all else being equal, this dummy would have a positive effect on the annual change in the percentage of unauthorized immigrants in a state-year.

Other Independent Variables

The other independent variables were derived from the March Supplement of the Current Population Survey for the years 2000–2010. Four variables were used to capture labor market effects. First, the *percentage of workers employed in construction* is defined as the proportion of workers in a state-year that work in the construction sector. Second, the *percentage of employment among the low-skilled foreign-born* is defined as the percentage of employed persons among persons aged 18–64 who are foreign-born and have less than a high school education. Third, *percentage of employment* is defined as the total number of employed persons of working age (25–64) as a percentage of the total working age population

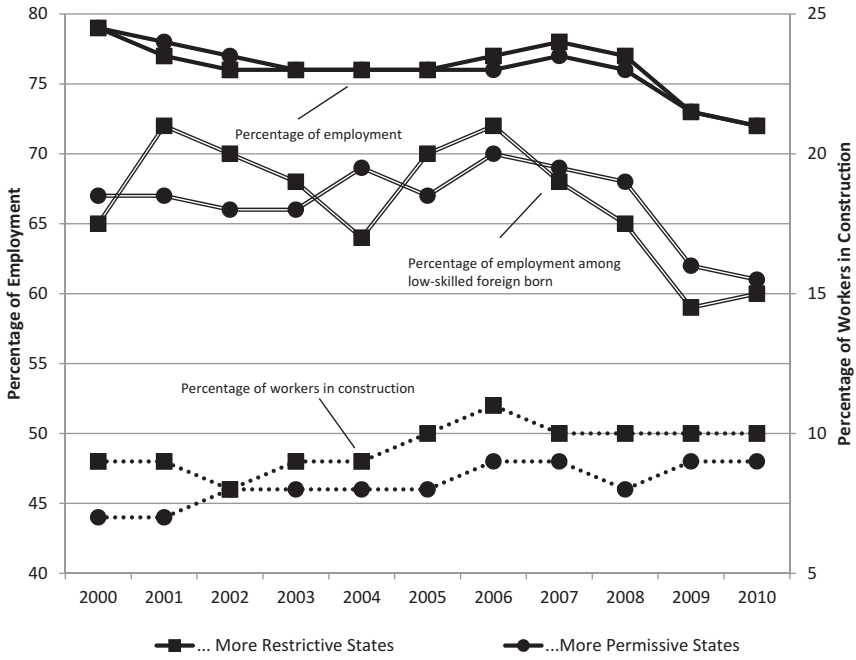
(ages 18–24 are excluded here as that age category includes many students). Fourth, *a dummy indicating the year 2009* was included in order to capture the effects of the financial crisis beyond the effects of employment opportunities. This was done to provide a conservative estimate of policy effects.

Each economic variable has certain theoretical and methodological strengths and weaknesses. Theoretically, the first two variables are preferable to the latter two variables, as they take into consideration unauthorized migrants' specific labor market position, which is imperfectly captured when general labor market indicators are used. At the same time, if general labor market variables are excluded from the analysis, labor market effects could be underestimated. Migrants may leave a state when labor market opportunities deteriorate. Thus, it is not only the numerator in the percentage of employment that may be affected by labor market conditions, but also the denominator; there are fewer migrants who are employed, but also fewer migrants altogether. By using a combination of variables, it is more likely that relevant labor market effects are captured optimally.

Figure 3 shows the development of the relative number of workers in construction (right axis, lines at the bottom of the figure), as well as the relative number of employed persons of working age, both in the total population (left axis, "highest" lines) and among the low-skilled foreign-born (left axis, lines in the middle). In this figure, Arizona and the states in the moderately restrictive cluster were merged to reduce the number of lines, as were the states in the somewhat restrictive and relatively permissive cluster. Labor market developments in the more restrictive states are highly correlated with the developments in more permissive states. Yet in recent years, labor market opportunities seem to have deteriorated in the more restrictive states in particular. While in 2006, employment rates were higher in the more restrictive states than in the more permissive states, by 2010 they were the same or lower. Furthermore, after years of steady growth, the percentage of workers in construction decreased in the more restrictive states between 2006 and 2007, well before the onset of the financial crisis in 2008.

Finally, as a rough measure to control for network effects, we constructed a variable named *immigrant population maturity*. Three indicators were used: (1) percentage of the adult population (18+) born after 1965 that, in a given state-year, is a first (foreign-born)- or second (U.S.-born to foreign-born parents)-generation immigrant; (2) percentage of the

Figure III. **General Employment (Left Axis), Employment Among Low-skilled Foreign-born (Left Axis, Double Line), and Percentage of Workers in Construction (Right Axis) (2000–2010)**



Source: Current Population Survey, March Supplement, Adapted by the Authors.

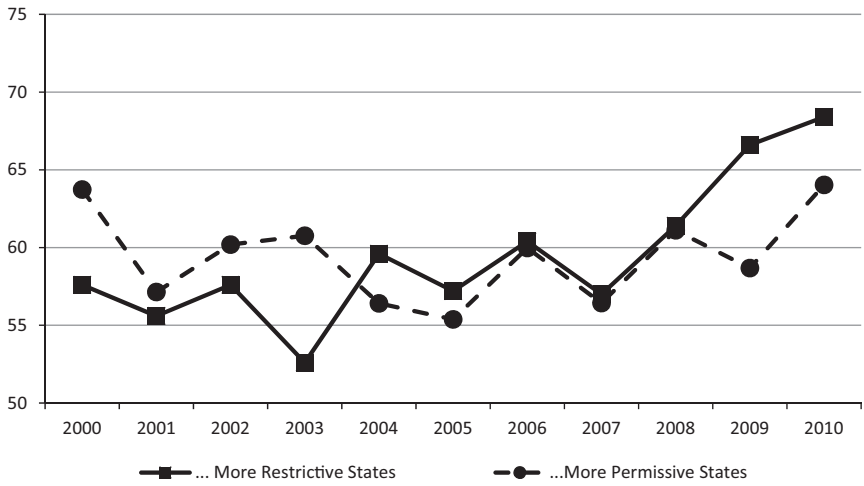
immigrant-origin adult post-1965 population that, in a state-year, is second generation (U.S.-born to foreign parentage); and (3) percentage of the post-1965 adult foreign-born population in a state-year that has lived in the U.S. for more than 10 years. Whereas the first variable indicates the relative size of the immigrant population and its offspring, the latter two measure the recency of previous immigration flows. We focused on post-1965 migration because earlier migration to the U.S. was mostly a European phenomenon, which is less relevant for understanding today's migration patterns. The three items were combined into a single factor score using principal components analysis, which had an eigenvalue of 1.87 and explained 62.3 percent of the variance in the three indicators described above (factor loadings were 0.70, 0.74 and 0.91, respectively). Because we hypothesize a curvilinear relationship between immigrant population maturity and the percentage of unauthorized migrants in a state, both the effects of "maturity" and "maturity squared" were esti-

mated. Because factor scores are both negative and positive, the scores indicating maturity were first recoded to a scale from 1 to 100, so that high values of maturity squared correspond to high maturity values. Figure 4 shows maturity levels by year, again specified for the more restrictive states (Arizona and the four states in the moderately restrictive cluster) and for the more permissive states (the states in the somewhat restrictive and relatively permissive cluster). It can be observed that maturity levels have been increasing in the more restrictive states in particular. In 2000–2003, maturity levels were, on average, somewhat lower in these states than in the more permissive states. Yet by 2010, they had become slightly higher than in the more permissive states.

Multivariate Analytical Method

A database with 462 state-years was obtained by pooling the data for the 42 states for the period 2000–2010. As shown in Figure 2, the estimated number of unauthorized migrants increased substantially between 2000 and 2010. Thus, to obtain valid estimates of the effects of internal border control, the data had to be "detrended" (*cf.* Asteriou and Hall, 2007). This was done by means of first differencing (Greene, 2003): Annual changes in the estimated percentage of unauthorized immigrants in the 42

Figure IV. Immigrant Population Maturity in Arizona and the Three Clusters (2000–2010)



Source: Current Population Survey, March Supplement, Adapted by the Authors.

states were regressed on annual changes in interior control, while controlling for annual changes in the other independent variables. As an alternative approach, a fixed effects model was estimated where a time-trend variable was added as an independent variable (*cf.* Crozet, 2004). Both approaches yielded substantively similar results, and only the results of the first differencing models are reported.

We experimented with specifications in which the independent variables were 1 year lagged. It turned out that a 1-year lagged annual change in interior policy was a slightly better predictor of the annual changes in the percentage of unauthorized migrants than the unlagged variable. (The unlagged policy variable was not significant when the 1-year lagged policy variable is included at the same time, but is kept in the models as it improved the model fit.) For the other independent variables, lagging did not improve the model fit, and only the unlagged variables were included.

In the most complex model (Model 4), the following equation is estimated:

$$\begin{aligned}\Delta\text{UNAUTHPERC}_{it} = {} & b_0 + b_1\Delta\text{INTCONTROL}_{it} \\ & + b_1\Delta\text{INTCONTROL}_{it-1} \\ & + b_2\text{BECAMEPERMISSIVE}_{it} \\ & + b_4\Delta\text{CONSTRUCTION}_{it} \\ & + b_5\Delta\text{EMPLOYFBLOW}_{it} + b_6\Delta\text{EMPLOYTOT}_{it} \\ & + b_7\text{CRISIS2009}_{t} + b_8\Delta\text{MATURITY}_{it} \\ & + b_9\Delta\text{MATSQUARE}/100_{it} + \epsilon_{it}\end{aligned}$$

Here, the dependent variable $\Delta\text{UNAUTHPERC}_{it}$ is the percentage point change in the percentage of unauthorized migrants in a state-year compared to the previous state-year. The independent variables are $\Delta\text{INTCONTROL}_{it}$, the annual change in the degree of internal border control; $\Delta\text{INTCONTROL}_{it-1,}$ the 1-year lagged annual change in the degree of internal border control; $\text{BECAMEPERMISSIVE}_{it}$, the dummy indicating whether or not the degree of interior control in a state was lower than the average level for the other states while it was equal or higher in the previous or subsequent year; $\Delta\text{CONSTRUCTION}_{it}$, the percentage point change in the percentage of workers employed in construction; $\Delta\text{EMPLOYFBLOW}_{it}$, the percentage point change in the percentage of employed persons among the low-skilled foreign-born; $\Delta\text{EMPLOYTOT}_{it}$,

the percent point change in the total percentage of employed persons; $CRISIS2009_t$, a dummy indicating whether it was 2009; $\Delta MATURITY_{it}$, the annual change in the (recoded) immigration population maturity variable; and $\Delta MATSQUARED/100_{it}$, the annual change in the squared MATURITY variable, divided by 100.

MULTIVARIATE RESULTS

Table 2 shows the multivariate results. In the first model, changes in the percentage of unauthorized migrants are regressed on the two policy variables without further controls. A change in internal border control turns out to be associated with a significant 0.191 percent point decrease a year later, as well as a non-significant decrease by 0.073 percent point in the same year.

In the second model, the labor market variables are added. Each variable has the expected sign, but only the effects of the total percentage of employment are significant. An increase in employment by one percentage point is associated with a 0.032 percentage point increase in the unauthorized population. The inclusion of the labor market variables decreases the effect of the 1-year lagged policy variable from −0.191 to −0.174.

Model 3 controls for network effects in addition to economic factors. The results indeed indicate a curvilinear relationship between immigrant population maturity and the level of unauthorized migration in a state. The coefficient of the lagged policy variable decreases further from −0.174 to −0.161, suggesting that the decrease in (the growth of) unauthorized residence in relatively restrictive states, and in recent years more generally, has been, to a limited extent, the result of internal dynamics of migration processes.

Finally, to present a conservative estimate of policy effects, we add the dummy for 2009 in Model 4 to capture eventual effects of the financial crisis beyond the effects of the employment rates. (The dummy probably also picks up some of the effects of the policy changes that occurred in 2008 and 2009.) As a result of this final control, the coefficients of both the lagged and unlagged interior control variables go down, from −0.161 to −0.131 and from −0.077 to −0.051, respectively.

Based on Model 3 and 4, it is possible to calculate the percentage of unauthorized migrants for each state-year under the assumption that internal border control would have remained at 2000 levels, while the other variables are allowed to develop as they did. These hypothetical per-

TABLE 2
Determinants of Changes in the Percentage of Unauthorized Migrants Between 2002 and 2010

	Model 1	Model 2	Model 3	Model 4
ΔINTCONTROL	−0.073 (−0.080)	−0.073 (−0.080)	−0.077 (−0.084)	−0.051 (−0.055)
$\Delta INTCONTROL_{t-1}$	−0.191** (−0.226)	−0.174** (−0.208)	−0.161** (−0.195)	−0.131** (−0.154)
BECAMEPERMISSIVE	0.056 (0.056)	0.074 (0.074)	0.077 (0.077)	0.053 (0.053)
ΔCONSTRUCTION		0.009 (0.032)	0.008 (0.028)	0.008 (0.026)
ΔEMPLOYFBLOW		0.000 (0.005)	0.000 (0.001)	−0.000 (−0.001)
ΔEMPLOYTOT		0.032** (0.167)	0.032** (0.167)	0.011 (0.058)
CRISIS2009				−0.256** (−0.225)
ΔMATURITY			0.008 (0.203)	0.009 (0.242)
ΔMATSQUARED/100			−0.011* (−0.314)	−0.013* (−0.381)
Constant	0.120**	0.134**	0.136**	0.143**
Variance explained	6.5%	9.3%	11.1%	14.5%

Standardized effects (betas) in parentheses.
*$p < 0.10$; **$p < 0.05$; ***$p < 0.01$.

centages can then be compared with the predicted percentages when the policy variables are allowed to vary as they did. This gives a good idea of the magnitude of the policy effects, which may be termed moderate. For example, in Arizona, the most restrictive state, the degree of internal control increased by 5.7 units between 2000 and 2010. We find that the percentage of unauthorized migrants in that state would have been 1.1 percentage point (Model 4) or 1.4 percentage point (Model 3) higher in 2010 had levels of interior control not increased since 2000.

National Outcomes

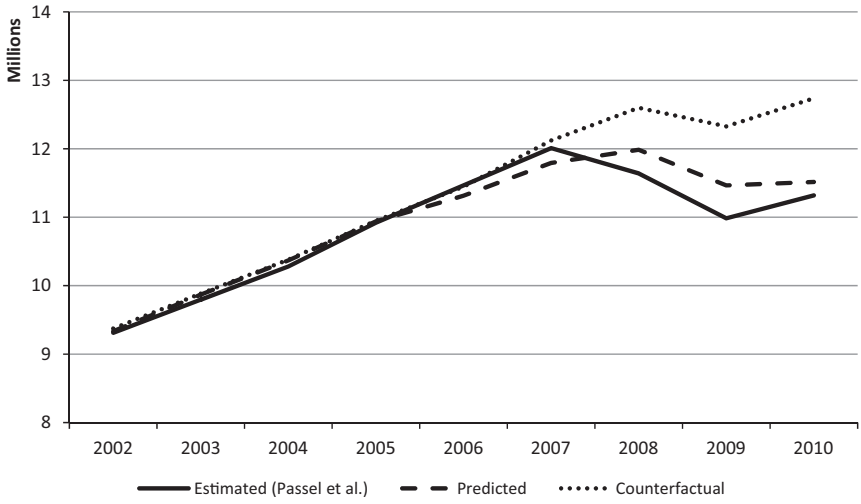
In all models, the coefficient of the dummy indicating whether a state became relatively permissive is positive, but it is small and does not significantly differ from zero. This suggests that the reduced level of unauthorized residence in relatively restrictive states has not been compensated by a strong displacement effect, of substantial numbers of migrants settling in states that have become relatively permissive.

Based on Models 3 and 4, it is possible to calculate for each year the hypothetical number of unauthorized migrants who would have resided in the U.S. – or to be precise: in the 42 states that contain more than 99 percent of that population – had interior control levels remained at 2000 levels. The results based on Model 4 are shown in Figure 5. We find that in 2010, the size of the national unauthorized population would have been (13.1–11.5=) 1.6 million (Model 3) or (12.7–11.5=) 1.2 million (Model 4) higher than predicted on the basis of these models if the effects of policy changes are *included* in the equations. In other words, by 2010, the buildup of internal control seemed to have reduced the unauthorized population in the U.S. as a whole by about 10 to 12 percent.[10]

Although these simulations should be viewed with great caution, the results give some idea of the magnitude of the policy effects observed, as well as the mechanisms underlying them. In the period 2005–2010, the cumulative number of additional removals, compared to the 2005 level, was about 500,000 (DHS, 2011). This suggests that the policy effects that

[10]Model 3 suggests that in the absence of increases in internal border control, the national size of unauthorized population would have been 13.1 million in 2010. It is 11.5 if the policy scores are allowed to develop as they in fact did (1.6*100/13.1 = 12.2). When Model 4 is used, these figures are 12.7 and 11.5 million, respectively (1.2*100/12.7 = 9.6).

Figure V. **Estimated, Predicted, and Counterfactual Number of Unauthorized Immigrants in the U.S. (2000–2010)**



we find are not completely due to increased deportation rates, that is, to the mechanism of direct control. This is even more so because deportations also depend on activities at the federal level, which may not have been fully captured by our measure of internal control. By implication, a substantial part of the observed policy effects must be related to the two other theoretical mechanisms that have been discussed, that is, deterrence and legal authority.

CONCLUSION AND DISCUSSION

This article explores whether increases in internal border control reduce levels of unauthorized residence, taking the U.S. as a strategic case. We estimate the effects of internal border control by holding constant the effects of labor markets and the internal dynamics of migration processes. Results suggest that although all of these factors are important, internal control still has an independent, moderate effect on the estimated levels of unauthorized residence. It appears to have decreased growth rates in relatively restrictive states to some extent, but also, on the aggregate level, in the U.S. as a whole. However, no evidence was found that the spatially concentrated increases in control in relatively restrictive states have, on a large scale, displaced unauthorized migration to more permissive states.

We argue that internal border control impacts unauthorized migration through three main mechanisms: direct control (expulsion), deterrence, and legal authority. A comparison between our results and national statistics on "removals" indicates that direct control has been influential, but that a substantial part of the policy effects seem to be the result of the other mechanisms, that is, deterrence and/or legal authority. We are unable to specify whether the latter effects have mostly expressed themselves in a lower number of new unauthorized arrivals or in higher levels of emigration among unauthorized immigrants already present in the U.S. Warren and Warren (2013) have recently published estimates of the various components of change in the unauthorized population, including the mode by which persons have departed this population in the period 1990–2010 (*i.e.*, through emigration, adjustment to legal status, or death). These estimates make possible future research that can examine the extent to which various form of internal and external migration control efforts are associated with the various components of change in the unauthorized population over time. For now, the central finding by Warren and Warren that the decline in the unauthorized population in recent years is mostly due to a lower number of new arrivals and forced removals rather than to higher levels of emigration suggests that the mechanisms of deterrence and/or legal authority have mostly been influential in decreasing the number of new arrivals rather than in bringing about higher levels of emigration.[11]

As mentioned in section 2, internal border control may have a legalization effect. Indeed, it turns out that the number of temporary work visas issued each year to Mexican seasonal workers, and their dependents, has increased by approximately 100,000 between 2005 and 2009 (DHS, 2006; DHS, 2010). Therefore, perhaps 10 percent of the total policy effects observed could be connected to a legalization effect. Such a modest

[11]The Warren and Warren analyses do not preclude that emigration did in fact increase because of the rise in internal control. Their analyses show (1) that the annual emigration rate has goes down in the period 1990–2010, as circular migration is gradually giving way to settlement migration; and (2) that this trend is not at all affected by the increased removal rate in recent years. Given this trend in emigration—each year unauthorized migrants become somewhat less inclined to return—we would actually expect that the emigration rate would have gone down more strongly in recent years as removals increased, for it is probable that part of those removed would otherwise have left on their own. In other words, the observation that the emigration rate has not gone down more rapidly in recent years in spite of the increase in removals could very well indicate that more people emigrated than what would otherwise have been the case.

legalization effect is also in line with the analysis by Warren and Warren (2013:315) who estimate that the annual number of unauthorized migrants who obtain legal status has gone up somewhat from about 80,000–100,000 in the period 2005–2010.

This line of discussion opens up various additional avenues for future research. First, research could study whether the developments in *external border control* have confounded the effects of internal control as reported here. During the research period, the number of border patrol agents increased substantially, especially between 2005 and 2009. We did not include that aspect in the present analyses for methodological reasons[12], and because it is unclear whether and how developments in external control are related to the size of the unauthorized population in states. One study by Amuedo-Dorantes *et al.*, (2013) found that external border control decreased the willingness of migrants who had been in the U.S. to cross again, but their study pertained to migration intentions rather than behavior. Various other studies indicate that increases in external border control have been unsuccessful in deterring departures from source countries and therefore seem to be unrelated to levels of unauthorized immigration (Espenshade, 1994; Dávila, Pagan, and Soydemir, 2002; Cornelius and Salehyan, 2007; Gathmann, 2008). Massey, Durand, and Malone (2002), in their turn, argue that the intensified patrolling of the Southern Border increased levels of net (unauthorized) migration nationwide, because it changed Mexican migration from seasonal to permanent and contributed to a spreading of Mexican migration from a few Border States to the entire country. Unfortunately, they offer little data beyond descriptive trends to support the argument that increases in external border control actually caused such demographic changes. In any event, if their

[12]Data on border patrol agent staffing by year, specified for three sections ("Coastal Border Sections," "Northern Border Sections" and "Southwest Border Sections"), are publicly available via http://www.cbp.gov. If a variable is included in the models that measure annual changes in the number of border patrol agents nationwide, there are only ten independent observations (one for each year, with the same value for all states). If we measure annual changes in border patrolling specified by sector, the number of observations increases somewhat, but then it is unclear how the three sectors should be allocated to individual states. It would be a strong assumption, for example, to relate the data on the southwest border section to Southern Border States only; that would imply that the other states are not influenced by patrolling at the Southern border. We did include the variable on annual changes in border patrol staffing nationwide in the models and found that it did not have a significant effect on changes in the unauthorized population in states (results available on request).

argument is valid, the exclusion of the effects of external border control has probably led to an underestimation rather than an overestimation of the effects of internal border control: It would mean that the decreases in the level of unauthorized residence in states after 2007 have occurred in spite of a tendency toward increased settlement in response to the continuing increases in external border control.

Second, future research could examine whether interior control affects migration patterns for specific origin groups in specific ways. Research on apprehension patterns indicates that police tend to focus on the "stereotypical" unauthorized immigrant (Wishnie, 2004; Decker *et al.*, 2009; Leerkes, Engbersen, and Van der Leun, 2012). This would imply that Mexicans have been more vulnerable to the increase in immigration enforcement action than Europeans and Asians. At the same time, unauthorized Mexicans – especially those living in cities with a history of Mexican settlement – could be relatively *unaffected* by policies that reduce unauthorized immigrants' access to the formal labor market and other formal institutions. This would be due to the fact that, as a result of their incorporation in Mexican communities, unauthorized Mexicans have more access to relevant informal institutions – such as the informal labor market and familial support arrangements during times of unemployment – than origin groups with less social capital. Indeed, social capital tends to mitigate the effects of internal control (*cf.* Engbersen, Van San, and Leerkes, 2006). In other words, it can be hypothesized that aspects of internal control affect different origin groups differentially, but that such interaction effects may cancel each other out. All in all, explorative analyses based on the data used here do not indicate that Mexican migration patterns have been affected differentially by the buildup of internal control.[13]

Third, more research needs to be done on whether the increases in internal border control have impacted the validity of population estimates.

[13]According to Passel and Cohn (2009:22), 14 of the 42 states included in our analyses had a percentage of Mexicans among the unauthorized population that was below the U.S. average for 2008 (*i.e.*, lower than 43 percent). For these 14 states combined (*i.e.*, when the other 28 states are excluded from the analysis), the correlation between the percentage point annual change in the estimated unauthorized population between 2000–2010 and the annual change in internal control is $r = -0.275$, while the correlation with the 1-year lagged policy variable is $r = -0.151$. For the other 28 states combined, the first correlation is somewhat lower ($r = -0.115$), while the second correlation is slightly higher ($r = -0.283$). Regression models show similar results (available from the authors on request).

There is a possibility that the observed decreases in the estimated unauthorized population in restrictive states, and in recent years more generally, can be attributed to greater survey non-response among unauthorized immigrants under restrictive policy conditions.[14]

Fourth, future research should explore more direct ways of examining displacement effects, both inter- and intra-state displacement. The present analysis is limited to using aggregate data, precluding strong conclusions about more direct effects of policy on individual behavior. In principle, an individual-level analysis of migration behavior would be possible using data from the American Community Survey and the Current Population Survey. Survey data, of course, do not provide direct information on legal status, but it may be possible to use a proxy measure or probability estimate of "being unauthorized" based on characteristics that have been measured in the survey. We suspect that there is not a lot of intra-state displacement, given place-specific economic opportunities and the dynamics of network migration in which unauthorized immigrants are reliant on established immigrant communities. Large-scale country-level displacement seems unlikely in this case. Canada has certainly witnessed an increase in the number of temporary workers and permanent residents from Mexico, but numbers remain relatively low (Massey and Brown, 2011).[15]

Finally, future research should analyze financial and human costs. How many dollars were spent to reduce unauthorized residence by 10–12 percent? How many jobs, if any, did the efforts to exclude unauthorized migrants from labor markets create for U.S. citizens? What human and social costs arise in case of "marginalization without deterrence"? (*cf.* Castañeda, 2009; Chaudry *et al.*, 2010; Leerkes, Engbersen, and Van der Leun, 2012). In other words: What do the increasingly restrictive condi-

[14]The Pew Hispanic Center does take into account a certain amount of undercount of unauthorized migrants in surveys, but does not seem to correct for local and temporal variation in the degree to which unauthorized migrants may be undercounted depending on local levels of migration control. Qualitative research should be conducted on how migrants perceive population surveys in restrictive policy conditions. It may be that unauthorized migrants increasingly go "underground" and become more reluctant to participate in the surveys that underlie the estimates. An alternative possibility is that, if approached, unauthorized migrants actually become more likely to participate in population surveys, because they do not want to raise suspicion.

[15]Between 2002 and 2010, the number of foreign workers from Mexico present in Canada increased from 11,195 to 21,101, and the number of permanent residents from Mexico increased from 1,918 to 3,866. Source: Statistics Canada, http://www.cic.gc.ca/english/resources/statistics/facts2011/

tions mean for the lives of the more than 11 million unauthorized migrants who have remained in the U.S.?

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