What Drives Undocumented Immigration? Policy, economic, and social factors in the US and Mexico

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Abstract

The political discourse on undocumented immigration to the United States often centers on place-specific policies, such as those that create "sanctuary" on the one hand, or that promote "self-deportation" on the other. How much do these policies actually affect migration flows? This paper uses administrative data on migration from the Mexican Consulate to estimate the impact of state-level immigration policy on migration decisions while also accounting for networks, economic, and societal factors a potential migrant considers when deciding to move. Using a fixed effects model that controls for Mexican state to US state pairs, I do not find evidence that immigrant friendly laws are associated with higher migration in the immediate term. I find limited evidence of an impact of particular laws and over a longer time horizon. I support this analysis with an instrumental variable approach and continue to find no evidence that more generous immigration policy environments attract more new immigrants.

Keywords: Immigration, Immigration Policy, Mexico, the United States
JEL Codes: J11, R23, F22

1 Introduction

In 2017, more than 40 million immigrants lived in the United States, making it home to more immigrants than any other country in the world (Pew Research Center, 2019). This includes around 10 million undocumented immigrants. Americans and policymakers are starkly divided over how to address undocumented immigration. Although the federal government dictates national immigration policy, state governments have broad scope to pass laws that affect both the likelihood of deportation and the attractiveness of the state to immigrants. For example, states can require employers to use an electronic employment verification program which is intended to reduce demand for undocumented workers. In contrast, a state may decide to allow undocumented immigrants to obtain a driver's license, or allocate state resources to migrant health centers, which may make the state more attractive to undocumented immigrants.

The decision about whether and where to immigrate is a complex one, influenced by a variety of economic and social factors in both the sending and receiving destinations. It is an open question whether state-level policy changes are substantial enough, or salient enough, to influence the location choices of those immigrating to the US without authorization. This paper uses administrative data on undocumented immigrants from Mexico to evaluate diverse push and pull factors of such migration, with particular attention to the role of US state-level immigration policy in the migration decision.

The goals of this paper are (i) to test the effect of state-level immigration policies on the settlement patterns of undocumented immigrants from Mexico in the US, and (ii) to assess the relative importance of these state-level policies alongside other exogenous economic and social factors in the US and Mexico that have been shown to affect migration, including wages and other labor market conditions, and homicide rates.

Using administrative data from 2006 to 2013[1], I run a matched pairs fixed effect model that controls for time-invariant source and destination characteristics such as distance and network effects. Network effects are often a confounding factor when trying to understand the determinants

[1] released by the Mexican Consulate, analyzed and validated by Caballero et al. (2018)

of migration[2]. Garip and Asad (2016) find that these networks are important drivers of location choice so, this research can more cleanly assess the role of the other determinants.

I use two policy indices[3] to account for the entire slate of state-level immigration laws, which can expand or restrict the rights of undocumented and other immigrants. To address potential endogeneity, I include an instrumental variable analysis that uses US prison rates unrelated to immigration detentions. Similar instruments have precedence in the literature and first stage tests suggest the instrument is strong.

I do not find evidence that a more generous policy environment attracts additional undocumented immigrants. The impact of the policy index is insignificant, small, and has an inconsistent sign across OLS and IV analysis. These findings remain the same for specifications that allow for asymmetric responses to expansive (generous) and restrictive laws. This pattern holds when using different configurations of the index and policy data from different sources. Essentially, I do not find convincing evidence that passing more laws that expand the rights of existing immigrants increases migration for new, undocumented immigrants. This finding is in line with observations made in a 2007 policy brief speculating on the magnet effect of policies on undocumented immigration (Yang and Wallace, 2007), which notes the scarcity of research on the topic of more liberal laws and settlement patterns.

Second, I evaluate the relative importance of policy on immigration decisions, compared to other push and pull factors. I find that a one standard deviation change in US lagged unemployment rate has the largest impact on immigration flows compared to violence and other economic variables, while policy is negligible. Also, changes in US economic factors generally have a larger effect than factors in Mexico. I find that migration responds quickly to changes in economic conditions and violence, which reinforces the notion that cross-country networks are strong and facilitate the quick flow of information (Dolfin and Genicot, 2010; Garip and Asad, 2016).

As an extension, I investigate the role of ICE enforcement among changes in immigration policy, the relationship between the timing of a law change and any impact on migration, whether

[2]A selection on the migration networks literature include Massey (1988); Massey et al. (1994); Mahajan and Yang (2020); Orrenius and Zavodny (2009); Beaman (2012); Munshi (2003); Dolfin and Genicot (2010); Amuedo-Dorantes and Mundra (2007); Garip and Asad (2015)

[3]Monogan III (2013) and Bernstein et al. (2022)

certain categories of laws have a different impact on migration, and whether certain Mexico-US networks respond differently to new immigration laws. Overall, I find violence and poor economic conditions at home play a more important role in the decision to migrate and immigrants move towards states with strong economies, with state-level immigration policy playing, at most, a small role.

The paper expands on our existing understanding of the push and pull factors of migration to the US, adding a specific focus on the potential for state-level policy to influence migration decisions. Broad papers in this field include Card and Lewis (2007) discussing the diffusion of Mexican immigrants in the 1990s, and Clark et al. (2007) discussing the explanations for U.S. migration in the latter half of the 20th century.

A number of papers focus on how conditions at the origin impact migration, such as low wages (Lessem, 2018), local crime (Parkins, 2010), violence (Clemens, 2017; Rios Contreras, 2014; Chort and de la Rupelle, 2016), state GDP per capita (Chort and de la Rupelle, 2016), or natural disasters (Mahajan and Yang, 2020). Prior work has also shown how conditions in the US impact immigration; strict border enforcement reduces immigration (Lessem, 2018), while large populations of prior Mexican immigrants, proximity to the border, and higher wages or strong business conditions increase immigration (Ashby et al., 2013; Mendoza and Ashby, 2019). Karemera et al. (2000) show the income of the destination country is an important factor determining international migration. First person accounts and detailed qualitative data (Courteau (2019); Garip (2016); Urrea (2004, ch.2), among many others) show that economic conditions, as well as family reunification are common motivations for migration, while immigration policy can affect how one migrates and the likelihood of success, but, overall that there are many complex factors that influence the individual decision to migrate. I contribute to the existing literature on push and pull factors of Mexican immigration by comparing the relative impact of policy, labor market conditions, and violence on migration decisions using administrative data that covers both the Great Recession and the post-2007 increase in homicides in Mexico.

Further, as a novel contribution, I address a gap in the literature by focusing on the full spectrum of state-level immigration policies, most importantly, including those laws that are generous

towards immigrants. Prior literature has focused on the impact of laws designed to deter immigrants but has largely disregarded the role pro-immigrant policies may play. Allen et al. (2018) show that increased border wall construction impacted migration and harmed Mexican workers, while Hoekstra and Orozco-Aleman (2017) show that the very strict SB 1070 immigration law in Arizona reduced the flow of migration into Arizona. Orrenius and Zavodny (2015) find that E-verify mandates reduce wages for likely undocumented Mexican men but increase labor force participation among similar women and Ayromloo et al. (2020) find that E-Verify reduces formal sector employment but that there may be some spillover into smaller firms. Amuedo-Dorantes and Bansak (2012) and East et al. (2023) find that employment verification programs and the Secure Communities program, respectively, decrease the likelihood of employment for unauthorized workers. Policies may also be designed to attract immigrants (see Czaika and Parsons (2017)) though these policies are typically aimed at high-earning immigrants and are unlikely to impact undocumented immigration This work adds to the existing literature by also considering the role of laws that expand the rights of migrants, and looking at a variety of immigration-related laws, rather than one.

The policy indices captures multiple laws an immigrant may consider and are similar to the policy index created by Pham and Van (2014). They have also used this index to estimate the impact of the immigration policy climate on economic outcomes but do not study how the policy climate could impact new arrivals (Pham and Van, 2010).

Other work in this vein has focused on the relationship between the welfare state and immigration. Razin et al. (2011) provides theoretical analysis of immigration and the welfare states while others have investigated whether generous welfare states increase immigration empirically but Pena (2014), Giuletti (2014), and Ferwerda et al. (2023) do not find evidence that broader and more expansive welfare policies drive substantial migration, particularly undocumented migration within the US or immigration between OECD countries. To my knowledge, this is one of the first papers examining the impact of generous, state-level, immigration policy on migration flows by looking specifically at undocumented immigration to the US from Mexico.

The rest of the paper proceeds as follows: section 2 covers the data I will use. Section 3 dis-

cusses the empirical model and identification, while Section 4 presents the results and discussion including robustness checks. Section 5 concludes. A more detailed discussion of the data is found in Appendix A and various robustness checks are presented in Appendices B through D..

2 Data

2.1 Undocumented Immigration

Undocumented immigration flows can be particularly difficult to measure. I use data released by the Mexican Consulate on Matrículas Consulares de Alta Seguridad, covering 2006 to 2013. This data is available from the Mexican Consulate and compiled and validated in Caballero et al. (2018). Caballero et al. (2018) verify the quality and representativeness of this data by comparing it closely with other, better-known surveys from Mexico and the US, including household surveys in the US and Mexico, the Mexican Migration Project, and migration specific surveys such as the Encuesta sobre Migracíon en la Frontera Norte (EMIF) and Encuesta Nacional de la Dinámica Demografía (ENADID). They find the Matrículas Consulares data set to be highly consistent with other information on undocumented migration between Mexico and the US. Following Caballero et al. (2018) Figure 2 closely, I calculate the share of undocumented Mexicans in each US state for 2006 to 2013 and compare that to the same estimates using ACS data and find that they are very highly correlated suggesting that the Matrículas data picks up more immigrants but matches the immigrant settlement patterns other surveys show (Figure A8).

The card is an important form of identification available to Mexicans living abroad. It is especially key for undocumented immigrants who may lack other valid identification or are unwilling to use a passport which, lacking a visa stamp, may make their status obvious. It is accepted by a number of states for official purposes, such as establishing identity to receive a driver's license, open a bank account, or prove your age. The cards are issued by local consulate offices in the U.S., and cost $30. Besides the paperwork and small fee, there is little downside to obtaining an card, and the card is widely promoted by the Mexican government. Applicants do not need to pro-

vide information on their immigration status but they are not issued to individuals with criminal records or who are facing prosecution in Mexico (National Immigration Law Center, 2015).

The available data contains information on Mexican state of origin and U.S. state of destination and primarily reflects new card issues rather than renewals Caballero et al. (2018). According to Massey et al. (2010), it is generally accepted that most of these cards are issued to undocumented immigrants (about 80% of cardholders) and about 38% of Mexicans in the US hold a card (Caballero et al., 2018). Mexican immigrants make up 51% of all undocumented immigrants in the US so this is a meaningful population to study (Capps et al., 2020). The data on Matrículas Consulares that I use covers the whole universe of cards issued but to protect the privacy of immigrants, the data is not available at an individual level.

This data was previously used to study migration flows of undocumented immigrants in Allen et al. (2018) who use it to assess the impact of border wall construction, a federal immigration policy, and in Bhandari et al. (2021) who use it to estimate the undocumented population in the US and find it is useful to measure immigrants from Mexico but not other Latin American countries. Bhandari et al. (2021) find estimates using the Matrículas are higher than estimates provided by the Pew Research Center and similarly I find the population according to the cards is higher than what is recorded in the ACS but this is not surprising as the cards are administrative rather than survey data and that undocumented immigrants may be particularly difficult to survey.

There are some important limitations of the data to discuss. First, Allen et al. (2018) have access to a confidential version of the data that separates with certainty new applications from renewals, something I am unable to do, though the majority are new issues. Therefore, I interpret my results as reflecting settlement decisions and we can similarly expect to see an increase in new arrivals and renewals when the policy environment becomes more generous towards immigrants, whether that's because people migrate there or choose to remain. If the data did not pick up migration flows at all then I would not find the strong results related to economic and violence conditions in Mexico that other work has already shown influence migration decisions.

Second, Bhandari et al. (2021) uses the data to estimate the stock of undocumented immigrants in a state, rather than the flow of new immigrants, since the data reveals the year the card was

issued but that is not necessarily the year the individual migrated. This presents a problem if the decision to obtain a card is endogenous to the local policy environment, which is plausible. Some laws allowing undocumented immigrants to obtain drivers' licenses explicitly state a Matrícula is an acceptable point of identification and conversely, increasing immigration enforcement may influence people to want an ID as recommended recently by the Mexican government (Consulado de México, 2023). I address this in a few ways. First, I use an instrumental variable strategy to separate the impact of the harshness of the immigration policy environment from the text of the laws themselves. Second, I include results that directly control for interior immigration enforcement at the state level to separate the impact of laws on the books and ICE activity which may be more salient and likely to lead to obtaining a card. If ICE activity influences card applications then this could bias the results if ICE is more active in states with stricter state laws. ICE is a federal agency operating across the US and the data I use is almost entirely within the Obama administration where ICE removals prioritized convicted felons. I find that . Again, the strong results for the other determinants of migration support the notion that the cards at least reflect a substantial portion of migration flows.

The data is aggregated to state to state pairs so each observation is the number of cards issued to people from Mexican state i living in U.S. state j in each year of the sample period, 2006-2013. The data is available at the Mexican municipality to US state level but I aggregate to the state-to-state level as most of the push factor data I will use is only available at the municipality level during Census years, which given the period of my study would only be 2010. I am sacrificing more spatial variation for more temporal variation, especially since estimating the empirical model with only one year of data would be impossible. On the US side, I cannot study a very local policy such as a city ordinance because the immigration data does not include where, within a state, the person lives.

Other data, such as the American Community Survey, contains individual-level data on immigrants and more details on where in the US the person lives. I chose not to use this data though because it does not specify where in Mexico the person came from, completely eliminating the ability to control for state-pair specific network effects and to address any state level push factors

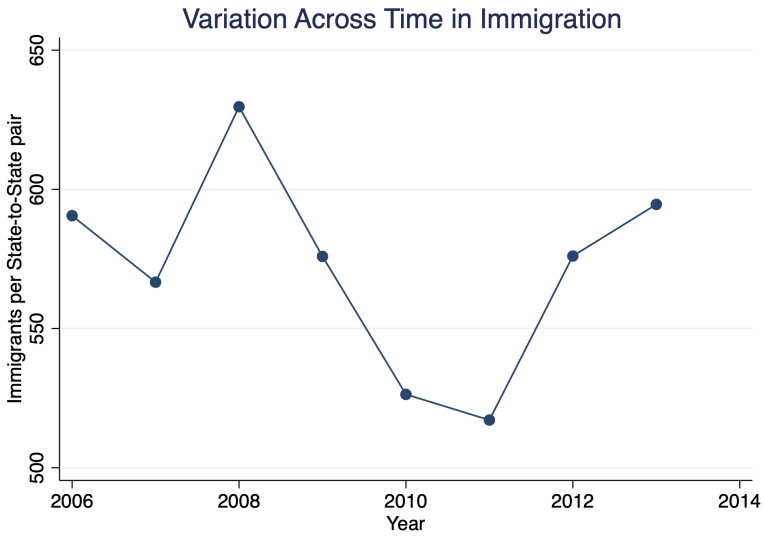
in Mexico. The EMIF Norte surveys Mexican immigrants at the border and asks their origin and intended destination but this survey also has a few key limitations. The data can only capture intended immigrants and their intended destination and the survey is run only on a sample of migrants at major land crossings and some airports. This may miss undocumented immigrants traveling along less-popular routes and less able to travel via plane. Similarly, the Mexican Migration Project data is very detailed but is focused on a few, high-migration communities in Mexico so the sample is not representative of the entire country and can only capture immigrants who have family still in Mexico or who have themselves returned to Mexico. While the Matrículas Consulares data has drawbacks, namely the lack of individual data and sub-state destination, it is the best option as it is administrative data that contains the best information on sub-national location for both the origin and destination of migrants.

There are 32 Mexican states and 50 U.S. states so overall there are 1600 observations in each year. Zeroes are included for pairs that have no migrants in a particular year to get a balanced annual data set. Of 12,800 yearly state-to-state pairs, 1,320, or about 10 percent, have no migrants in a particular year. This is primarily due to small states that are far from the border such as Vermont, Alaska, North Dakota and Rhode Island. This is a quite small number of observations with zero flows and all results will present effects on the intensive margin.

To show the variation of migration across time, Figure 1 presents the average size of the state-to-state migration flows in each year over the period of interest. Approximately 7 million cards were issued between 2006 and 2013. There is a clear drop in new cards after 2008, reflecting the impacts of the global recession and perhaps the Secure Fence Act (2006).

Most migrants in the sample originated from Michoacán, a state in southwest Mexico. Primary destinations are in the US southwest, with California as the most popular destination by far. Other states such as North Carolina, Georgia, and Florida possibly attract migrants because of their large agricultural sectors. Data Appendix Table A2, Figure A5 and Figure A6 in Appendix A present the number of cards issued across US and Mexican states.

Figure 1:



The number of Matrículas Consulares issued to people from Mexican state i to US state j is the measure of undocumented immigration used in this research. These counts by state to state pair are averaged across pairs in each year and plotted on the graph above. The left axis indicates the number of immigrants per pair.

2.2 Policy Index

In the U.S., the immigration policy environment varies substantially by state. Each year of the sample, over one hundred different new laws related to immigration are enacted in various states. I use two policy indices to measure all the *new* laws added in a state and year, in contrast to prior research that has often considered one national law or particularly strict state law. I also construct these indices to capture the cumulative policy environment as laws are added each year of the study.

First, following Monogan III (2013) I create an index based on all, new state laws pertaining to immigrants or immigration, as reported by the National Conference of State Legislators (NCSL). Sub-state level policies, such as 287(g) are included only if the policy is enacted statewide. Otherwise, the focus is on policy-making in the state legislature, not municipal laws, as I cannot see where the immigrants in the data live within each US state to assign them to any index based on

sub-state policy.

All immigration-related laws and resolutions passed by state governments from 2005 to 2011 are included in the original data set. These are then coded as being either pro-immigrant or anti-immigrant based on the language and intention of the laws. Next, with the help of "legal scholars and members of immigration policy think tanks" the laws are coded by scope on a four-point scale (Monogan III, 2013, p. 45). Laws receiving a scope score of 1 are "symbolic", 2 are "affecting a small group of immigrants, 3 are "affecting many immigrants in a substantial way", or 4 "directly affecting immigrants' ability to reside in a state" (Monogan III, 2013, p. 45). I extend this data set to include laws from 2012 and 2013, gathering them from the same NCSL publications and replicating Monogan's scoring methods to the best of my ability.

Examples of a symbolic law that would be scored a 1 may be the Florida 2010 law that "honors Edith Lowngard Loebenberg, a Holocaust survivor who fled Germany for New York City" (NCSL). An example of a law scored a 2 is Wyoming 2006, "allows a permanent resident card or internationally accepted passport to be used to rent a keg" (NCSL). Colorado 2006 "restricts public benefits from those who are not citizens or permanent residents; applicants must show a valid ID before receiving benefits, and the penalty for fraud could be 1.5 years jail and $5000 fine" is scored a 3, and Oklahoma 2007 "requires the verification of employment eligibility using the electronic employment verfications system (EEVS) and provides for a discrimination cause of action for the discharge of a US citizen while retaining an unauthorized immigrant on payroll" is given a 4 (NCSL). Pro-immigrant laws in the sample include, for example, provisions for driver's licenses for immigrants unable to prove lawful status or appropriations for migrant health centers.

I then create three main indices, one that summarizes all immigration-related laws in a state and year, one for pro-immigration laws (positive) in a state and year, and one for anti-immigration laws (negative). For all main specifications, I include only laws with a scope of 3 or 4 in the main specification since these are most likely to be widely known and have actual impacts on immigration decisions. I give these laws equal weight in the index though; essentially, I drop laws with scope 1 or 2 and then the remaining laws are each counted as one relevant law. To calculate the overall index, anti-immigrant laws are assigned the value -1 and pro-immigrant laws, 1. The

overall index is then the sum of all pro- and anti- immigrant laws in a state and year that were originally assigned a scope of 3 or 4. Other research often uses counts like these to quantify a policy (Goodman, 2019). Appendix A discusses the method for assigning scope in more detail and presents the spread of index values across all US states.

I supplement the main index with a number of alternate configurations. First, I recreate the indices described above but including laws with scope 2 and then with all laws recorded. I also create a cumulative index that accounts for policies enacted from 2006 to the year in question that are still in effect ($\sum_{p=2006}^{t} I_{jp}$, where I_{jp} is the index in state j and year p).

Another set of results will take a different approach. Instead of assigning states an index that is equal to the count of all positive (or negative) laws in a year, I determine whether the net index is positive or negative and then assign states a "pro-foreign worker" index equal to the magnitude of the main index if the main index is net positive, and the same for "anti-foreign worker" states. Net zero states make up the third category. I also include results that differentiate between states that score a 0 because they have no immigration laws that year and states that have an equal number of positive and negative laws that then cancel out.

The original Monogan III (2013) study created an index using a ratio of pro-immigrant to anti-immigrant laws, accounting for scope within the measure, specifically $ln(\frac{\sum pro-immgrantlaws*scope+1}{\sum anti-immgrantlaws*scope+1})$. In robustness check I use this "ratio" method for the index as well.

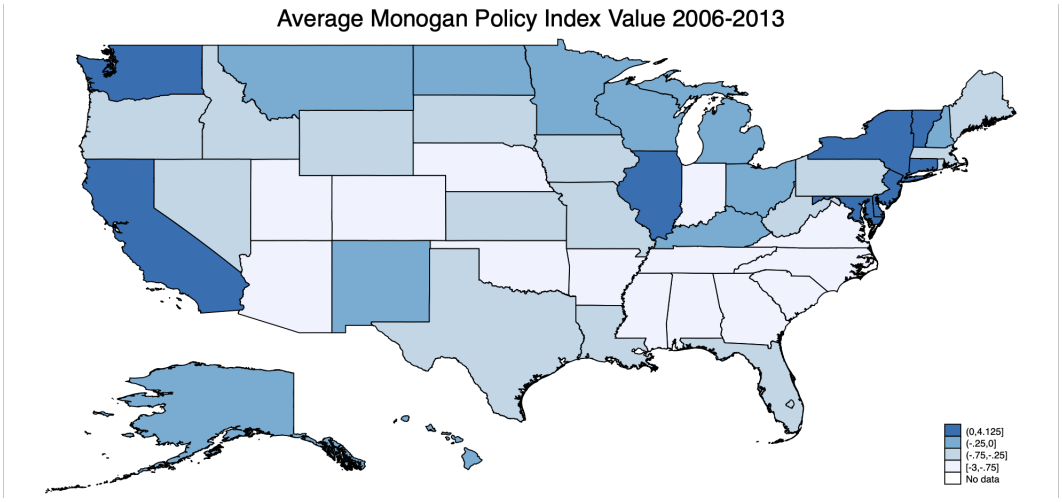
Next, I supplement this data with data from the Urban Institute on local immigration policy (Bernstein et al., 2022). This data does not include "symbolic" laws and is focused on the real impact of policy on immigrants in the US so I do not need to use any measure of scope. I recreate the main indices and the cumulative indices using this data. While this data largely captures the same laws (and collects them from the same NCSL website), they focus on major laws in three key areas, enforcement, benefits, and integration, streamlining the laws in the index to just those that really impact immigrants lives. This data will also capture sub-state policies such as Secure Communities and 287(g), assigning them to the whole state if the policy exists is the majority of counties or if it exists in counties that cover more than 50% of the state's immigrant population.

Next, I consider the possibility that certain types of laws, such as those that impact education or

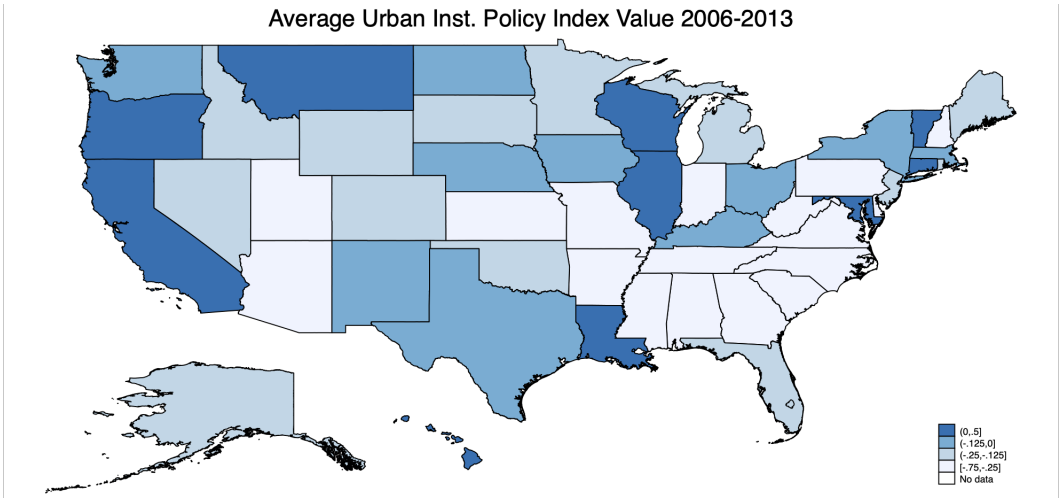
identification cards, impact immigrants differently. The NCSL categorizes laws into about sixteen categories (with some inconsistency as some years a law about dentist licensing might fall into License-other and in a different year License-healthcare) and I choose six categories that are either most common or most likely to have an impact on undocumented immigrants (related to benefits, education, employment, health, identification, and law enforcement). I exclude categories that almost never appear in the data on immigration laws, including legal services, trafficking, voting, handgun and other licenses[4], and resolutions. I also combine the driver's license category with laws related to identification since these are often very similar laws. I create separate indices per US state per year, summarizing the laws in each of these categories. The indices are constructed similarly to the main index, for example, all education related laws in a state and year are scored -1 or 1 depending on their impact on immigrants' lives, and then these values are summed to create an index. I lose variation as the number of laws in a particular category is always lower than the total number of immigration laws in that state and year and many states may not have any law of a particular category in a given year. These results are available in Appendix C.

Figures **??** and **??** below show the spatial variation in the "Monogan" and Urban Institute policy indices. Averaged across all years of the data, California has the most liberal policy environment, while Arizona has the strictest. The index varies across time as well; Figure A2 demonstrates the variation in policy over time and the similarities between the two data sets. Finally, **??** shows numerically the average index in each state for the two indices. Because the Urban Institute intentionally captures fewer laws, the range of the index is smaller but in almost every case it is in the same direction as the other index. Summary statistics regarding the policy environment are presented Appendix A.

[4]These types of laws for the most part only appear in this data because the text of the law uses the word migrant or immigrant- for example "this law requires a valid license to own a dental practice, including those that provide dental services to medically underserved populations of migrant rural communities or homeless individuals." Trafficking laws are all listed as immigration policy even though they typically deal with just the penalties associated with trafficking someone against their will, which is illegal everywhere. While these laws definitely impact some migrants, such as the coyotes, this is a small portion of the immigrant population and there isn't much variation in these laws especially trafficking can be charged at the federal level.



The policy index summarizes relevant immigration laws in a state for each state in each year. Here, the policy index is averaged across years for each state. See the data appendix for details on the variation in policy index across time. Darker shading reflects a more generous average policy environment over the time period.



The policy index summarizes relevant immigration laws in a state for each state in each year. Here, the policy index is averaged across years for each state. Darker shading reflects a more generous average policy environment over the time period.

2.3 Economic and Social Factors in the US and Mexico

Economic conditions and homicide rates in Mexico serve as additional control variables in some models and also allow me to compare the relative importance of these common causes of migration to the role state level policy may play.

I collect data on US state economic conditions from the Bureau of Labor Statistics (BLS) from the Quarterly Census of Employment and Wages[5] (QCEW). This includes average, state-level unemployment rate, minimum wage, state GDP, total average wages, construction wages, agricultural wages, and retail sector wages since these are common sectors for unauthorized workers. Immigrant employment in the agricultural sector is over seventy percent immigrant (USDA ERS, 2020), so I include two more measures of farm wages: the Adverse Effect Wage Rate, which is the minimum farm wage for documented temporary workers who may compete with undocumented immigrants, and the average wages in crop production. The AEWR data comes from the USDA[6] while the average crop wages are from the QCEW. All wages from the QCEW are reported as seasonally adjusted, average weekly wages while the AEWR is an hourly wage rate. More information on the variation of US economic variables is available in Appendix A.

I use the American Community Survey and available survey weights to calculate average annual income and unemployment rates for Mexican immigrants, and specifically non-citizen immigrants from Mexico, in each US state as a more specific measurement of the economic opportunities for Mexican immigrants (Ruggles et al., 2020).

I gather economic data for Mexican states from the Instituto Nacional de Estadística y Geografía (INEGI) and Secretaría del Trabajo y Provisión Social (STPS). For Mexico I use the state GDP as a proxy for wages, similar to Chort and de la Rupelle (2016), as there is very little variation in Mexican legal minimum wage during the period and the average wage data available only includes formal sector workers in the social security system, which is fewer than half of all workers (ILO FORLAC, 2014). I also collect unemployment rates[7] for each Mexican state and year. I

[5] See U.S. Bureau of Labor Statistics (n.d.) for publicly available data `https://data.bls.gov/cew/apps/data\_views/data\_views.htm#tab=Tables`

[6] Available at `https://www.usda.gov/oce/labor/data.htm` as of June 2020, (USDA, 2020)

[7] Unemployment rate data are from the STPS-INEGI and are available online at http://www.stps.gob.mx/gobmx/estadisticas/enoe_men.htm as of June 2020

include data on crime rates[8], and homicides[9]. Figure A7 shows the average variation in homicide rate (homicides per 1000 people) across Mexican states.

I use state population in Mexico[10] and the US[11], as well as the percentage of immigrants living in a US state[12], as further controls. More populous states may send or attract more migrants and controlling for the immigrant population can further account for the network effects impacting migration. I drop Washington D.C. as well as any US territories since state level annual immigration policy is not available for these areas. Table 1 presents summary statistics for key variables by year.

Table A2 and Table A5 present the summary statistics for all main dependent and independent variables in each state. Overall, there is significant variation across time and space.

3 Empirical Specification and Identification

3.1 Empirical Specification

The main empirical specification is:

$$log(Matr_{ijt}) = \alpha_0 + \beta_0 P_{jt} \beta_1 X_{it} + \beta_2 X_{jt} + \delta_t + \gamma_{ij} + \phi_{ij} Zero + + \beta_3 Pop_{it} + \beta_4 Pop_{jt} + \epsilon_{ijt} \quad (1)$$

Where $Matr_{ijt}$ is the number of cards in year t from Mexican state i who immigrated to US State j. P_{jt} is the measure of US policy and β_0 is the main coefficient of interest. X_{it} and X_{jt} are the push and pull factors for Mexican and US states, respectively. Thus, I compare β_1 and β_2 to β_0 to understand the importance of state policy relative to other factors of migration. The specification includes the fixed effects for time (δ_t) and state-to-state pair (γ_{ij}). Each specification uses the nat-

[8]Crime statistics available from the Mexican Government at https://www.gob.mx/sesnsp/acciones-y-programas/datos-abiertos-de-incidencia-delictiva?state=published as of June 2020

[9]Homicides are counted as the number of deaths by homicide, available from INEGI at https://www.inegi.org.mx/sistemas/olap/proyectos/bd/continuas/mortalidad/defuncioneshom.asp?s=est as of June 2020

[10]Annual projections available from the Mexican Government at https://datos.gob.mx/busca/dataset/proyecciones-de-la-poblacion-de-mexico-y-de-las-entidades-federativas-2016-2050 as of June 2020.

[11]From the BLS

[12]Author's calculations using the Current Population Survey

Table 1: **Summary Statistics**

Year	Matrículas Consulares (total)	US State Minimum Wage (mean)	US State Unemployment Rate (mean)	MX State Unemployment Rate (mean)	US State GDP per capita (mean)	
2006	944674	5.684	4.426	3.311	47161	
2007	906442	6.125	4.348	3.351	47445	
2008	1.007e+06	6.593	5.334	3.683	47076	
2009	921286	7.031	8.478	5.307	45707	
2010	842011	7.413	8.748	5.197	46246	
2011	827244	7.447	8.122	5.153	46664	
2012	921526	7.498	7.336	4.818	47039	
2013	951208	7.530	6.730	4.838	47084	
Year	MX State GDP per capita (mean)	AEWR (mean)	Policy Index (mean)	Homicides per 1000 (mean)	Crimes per 1000 (mean)	Violent Crimes per 1000 (mean)
2006	159275	8.777	-0.480	0.0896	14.53	2.841
2007	158508	9.134	-0.260	0.0806	15.50	3.040
2008	155263	9.429	-0.420	0.132	15.54	3.099
2009	143688	9.857	-0.460	0.187	15.30	3.215
2010	146578	10.06	-0.240	0.251	15.43	3.387
2011	148061	10.22	-1.220	0.253	15.51	3.424
2012	149639	10.39	-0.200	0.234	15.33	3.190
2013	149068	10.72	0.320	0.198	14.89	2.933

The first column of the top panel shows the total number of immigrants as measured by Matrículas Consulares, in each year of the sample. The rest of the columns in the top and bottom panels show variables measured at the US or Mexican state level, averaged across all states. US Minimum wage and Adverse Effect Wage Rate (AEWR) are measured in dollars per hour, US GDP is measured in dollars per year. MX State GDP is measured in pesos per year. There is substantial variation in most variables across time. See the data appendix for the spread across space, and time and space.

ural log of the number of Matrículas Consulares issued in each year to individuals from Mexican state i to US state j. The specifications also include controls for state population and percentage of foreign born residents as additional controls ($\beta_4 Pop_{jt}$ reflects the vector containing US state total population and the proportion of immigrants to that state, on the origin side Pop_{it} is predicted Mexican state population).

Fixed state characteristics, such as the distance between two locations but also the existence of prior migration networks, can influence the decision to migration. Immigrants are more likely to move to areas where many other migrants, especially those from the same area, have settled (Docquier et al., 2014). The success of earlier migrants is a signal to potential migrants that they may succeed in that destination. Networks also provide support and can help new immigrants get settled and find jobs (Munshi, 2003). People may also be moving towards family and friends who went earlier (Orrenius and Zavodny, 2009). These network effects may have the largest influ-

ence on immigration decisions and thus in naive analysis could be a serious confounding element to understanding how economics and politics influence migration decisions (Massey et al., 1994; Garip and Asad, 2015).

The timing of the policy change may also influence migration patterns. The main specifications focus on contemporaneous laws but I also investigate the impact of a new policy in the previous year ($t-1$) on destination decisions.

Research from the gravity model literature highlights the use of state populations as "mass" variables which influence migration decisions (Karemera et al., 2000; Anderson, 2011; Borjas, 1989; Greenwood, 1975). Following Karemera et al. (2000), origin and destination economic and political factors impact migration flows between origin-destination pairs, while other factors can impact this migration in general such as transportation costs, often proxied by distance and in my empirical model captured by the pairwise fixed effect. For simplicity, the main results here are similar to a gravity model but the fixed effect controls and other key determinants are included in their standard form, rather than a log transformed form. Appendix D discusses the gravity model and Table D7 presents results from a gravity model estimation where log-transformed variables are used on both sides of the regression equation. These results confirm all main results.

Given the adjustment (natural log) to the dependent variable, all specifications account for zeroes in the outcome variable by filling these observations with a positive value artificially and then using a dummy to control for these manual changes and thus capture the impact on the intensive margin. Fewer than ten percent of all observations (state-to-state by year pairs) have zero migrants and the results are robust to dropping the zero observations (Appendix D), assuaging concerns about using a log-linear model with a small number of zeroes. The log-linear model will help mitigate the overly influential effects of a few states as the data is right-skewed (see Figure A5).

Following the literature on pair-structured analysis, standard errors are clustered at the state-to-state pair. I also include specifications with no independent variables besides the policy index to address concerns about relationship between economic conditions, policy, and migration as well as specifications that only include push or pull factors separately.

The analysis examines how differences across Mexican and US states impact where undocumented immigrants settle but I do not identify whether a particular US state law, for example, impacted overall immigration from Mexico to the US, as these national level changes are absorbed the year fixed effect. To assuage concerns that changes in just one state are driving overall results, robustness checks excluding the US states with the largest Mexican populations (Appendix D) are consistent with the main findings.

Finally, within many states there can be substantial variation in sub-state level immigration policy, for example sanctuary cities or 287(g) and Secure Communities policies that facilitated coordination between local law enforcement officers and ICE. If the whole state uniformly adopted 287(g) through state-level legislative action, that would be included in the Monogan III (2013) policy index. In the data from the Urban Institute, both 287(g) and Secure Communities are assigned as operating in a state if either the state adopts the policy statewide or if the policy is active in counties that cover more than fifty percent of the state's immigrant population. The data for this study does not identify destination at the sub-state level so while I can measure migration from Mexico into a particular US state, I cannot see whether they are moving towards particular cities within each state. While the impact of city-level immigration policy and within-state migration is interesting, data limitations require that I leave studying the impact of these policies for future work.

3.2 Identification

The two-way fixed effect specification addresses fixed characteristics along state-pairs and time and exploits the remaining spatial and temporal variation to identify the results. Another potential concern is that unemployment rates, which can indicate job availability, could be endogenous if included contemporaneously (Harris and Todaro, 1970). Therefore, I use lagged state unemployment rates.

Another potential concern is the time between arrival and actually receiving an card as well as the potential for an immigrant to continue moving within the US after first arrival and receipt of

the card, which I discuss also in the data section. As Cadena and Kovak (2016) note, immigrants are more mobile than native-born populations and move away from areas with poor job market outcomes more frequently during the Great Recession. Internal movement is an important aspect of immigrant settlement patterns but further work on this is beyond the scope of this analysis. I focus on moves from Mexico to the US, which relies on a few key assumptions. First, that immigrants apply for a card in the place they actually settle, which seems reasonable given previously discussed details of the card, and while they may move again years later due to changes in economic conditions, this analysis focuses on first move to the US and the potential determinants of the decision at that time. Second, they reach this location the same year they leave Mexico since I am associating current year political, social and economic factors with migration choices. The cards in the data set are mostly new issues so it is unlikely many people in this data have been in the US for years and Caballero et al. (2018) confirm the patterns in this data are similar to those in other data sources.

The card is issued by the nearest consulate to an individual living in the US. Though internal migration within the US is of course possible, migratory work is declining (USDA ERS, 2020), and the amount of moving between states after coming to the US is likely minimal compared to the size of the data set. Additionally, using the American Community Survey, I show that of all Mexican immigrants living in the US, less than two percent moved between states in a given year (Table D1) and this increases only slightly when considering immigrants who have arrived since 2002 (Table D2, 2%) and who arrived within four years of when they were surveyed (Table D3, 2.4%). It is therefore likely the cards accurately reflect a Mexican immigrant's location.

This research focuses on laws on the books not the impact of changes in law enforcement behavior and deportations but both state a federal law may be easier to carry out in certain states, such as those with statewide 287(g) policies. It is possible that deportations increase alongside more generous new policies, for example if a state offsets strict enforcement with more generous laws for documented immigrants. Recently, the Mexican government also specifically encouraged acquiring an card in states where ICE raids were becoming common so it is possible that this advice also applied in the past during the period of study (Consulado de México, 2023). To address

this potential confounding influence, I use the TRAC database of ICE removals (Syracuse University, n.d.) to assess the relationship between the policy index and removals from all states and years. If a higher index (more generous environment) is associated with more deportations then this could potential confound results as immigrants may react to ICE enforcement but appear to be reacting to the policy environment. First, I find an unconditional correlation of just 0.0533 between deportations and the policy index (Table D5) and I find no statistically significant or meaningful relationship between the index value and ICE removals (Table D6). I also show that the results are robust to controlling for deportations and ICE detentions directly (Table 6).

Immigration policy environment may be endogenous in this setting if laws are passed precisely because of the undocumented immigration flows and since the measure of undocumented immigrants is the number of Matrículas Consulares issued. Some laws covered by the policy index specifically reference such cards, such as laws that allow cards to be used to obtain a driver's license. Thus some states may have more card holders because of laws that reference the cards and application behavior may change over the course of the period due to new laws which change the incentive to apply for a card, which would bias results towards finding a positive relationship between pro-immigrant policy and migration. Still, undocumented immigrants are present in every US state and cards are consistently issued all throughout the country, whether or not a state recognizes them as valid identification, because of the other benefits these cards offer and their promotion by the Mexican government.

To further address these issues of endogeneity, I use an instrumental variable strategy. The instrument is the state prison population per 100,000 people[13] as states with stricter law enforcement in general are likely to have strict immigration policy. Though different from my instrument, Ifft and Jodlowski (2022) also use local law enforcement data to instrument for immigration policy was previously used in. First stage results and F-statistics (typically over 200) show this is a strong instrument for the policy index.

To address the exclusion restriction, first note that the state prison population per 100,000 state

[13]Data from Aiken, Joshua. Era of Mass Expansion: Why State Officials Should Fight Jail Growth. Table 4. Prison Policy Initiative. 2017. Available at https://www.prisonpolicy.org/reports/jailsovertime_table_4.html

residents itself is unlikely to directly affect the measure of immigration flows as most people are unaware of the specific number of incarcerated people in a state and are instead much more familiar with the relevant legal environment. One concern may be that the prison population reflects high US crimes rates which may impact immigration flows. First, I argue that, especially in the US with its severe sentencing procedures, the size of the prison population is heavily dependent on crimes that happened decades ago and large prison populations reflect the harshness of the legal environment, which is what I need to capture, because at any given moment the prison population will be larger if convicted individuals were given long sentences. Additionally, it is unlikely that immigrants are motivated to move towards states with higher crime as more immigration is associated with lowering crime rates and those with criminal records cannot obtain an card (Adelman et al. (2017); Flagg (2019) for summary of various empirical reports). Immigrants may be deterred by higher crime rates in US states as well though the relevant crime rate for an immigration decision is likely more local rather than in the overall state. If anything, this would bias results upwards as people may move towards states that have low crime rates. Reassuringly, Foote (2015) finds only very small impacts of crime rates on net-migration in the US, with small and insignificant results regarding a decrease in in-migration to US metropolitan statistical areas in response to crime rates. Still, I include some specifications that control for US state crime rates as well; results are qualitatively unchanged. More intense police enforcement could lead to a higher prison rate and could be related to immigration enforcement though these are separate proceedings carried out by ICE. Undocumented immigrants may therefore be deterred from places with high prison rates if this is related to ICE activity. This would bias the results upwards. The size of a state's prison population per 100,000 residents likely only affects undocumented immigration, as measured by cards issued, through its relationship with stricter immigration policy.

4 Results and Discussion

4.1 Main Results

I find a limited and inconsistent impact of state-level policy on undocumented immigration from Mexico, especially when considering other common determinants of migration. Table 2 shows the results of the main specification using two-stage least squares analysis. Table 3 presents the first stage results which show that a large prison population is associated with a significantly lower policy index value, as we would expect and the other control variables do not seem to impact the index. The Kleibergen-Paap Wald F statistics are well over typical benchmarks, and over 200 for most models, reducing any concern about a weak instrument. The instrument performs slightly less well for the data from the Urban Institute. The Urban Institute data captures certain enforcement-related laws, such as Secure Communities, in more detail than the original data and since many of these policies are enacted at a sub-state level, this may explain why the state-level instrument does not capture this Index as well. This data also focuses on a number of particularly common immigration related laws while the Monogan III (2013) data can also pick up a rare or unique state policy related to immigration.

I find that, when controlling for economic conditions in both states and homicide rates in Mexico, there is no significant impact of more generous policy on migration flows and the coefficient is negative. In column 3, I remove the economic and homicide controls to isolate the policy impact and remove any concerns about the relationship between US economic and policy conditions. I find a somewhat significant, but negative impact of policy on migration, indicating that one additional law that is "generous" towards immigrants (or one fewer "restrictive" law) reduces migration to that state by about 6%. For most models I will now drop Mexican state GDP per capita as the impact on migration is consistently zero.

Column 4 uses standardized values of all the independent variables to show that US conditions have a greater impact on migration decisions with a one standard deviation increase in the US state unemployment rate and minimum wage associated with a 12% decrease in migration and 8% increase in migration respectively. A one standard deviation increase in unemployment on the

Mexican state side increases migration flows by about 5% while the impact of homicides is about 2%.

I also run OLS models assessing the relationship between state-level policy and undocumented immigration flows, presented in Tables 4 and 5. Though the coefficient on policy is now positive, I again find no significant relationship between new state-level policies in the current year and migration flows when using the Monogan III (2013) data. The impact is negative and significant when using data from the Urban Institute as well. This again suggests that enacting more generous policies does not create a magnet effect for new undocumented immigrants.

Table 5 includes the same standardized results as in Table 2 but now estimated using OLS and still finds no significant impact of policy on migration. Columns 1 and 2 include the results using indices constructed of only pro-immigrant legislation (positive) and only anti-immigrant legislation (negative). Using the Monogan III (2013) data, I find a marginally significant, positive impact of pro-immigrant legislation on migration and no impact of anti-immigrant legislation but this pattern flips completely when using the Urban Institute data where now anti-immigrant policy seems to increase immigration actually.

One explanation for the positive coefficients in OLS regression is the possibility that certain, pro-immigrant laws may impact card take up rather than actual migration and without an instrument that could bias coefficients upwards.

Overall, I find that undocumented immigrants head to areas where more, better, jobs are available. As predicted, higher wages and lower unemployment attract potential migrants. In Appendix B I consider different measures of employment and wages in the US since many immigrants may earn above minimum wage, including sector-specific wages for jobs immigrants typically work, unemployment rates by race and gender, median income and cost of living measures, and I use the ACS to calculate actual unemployment and earnings data for Mexican immigrants living in each US state. Those results are discussed in detail in the appendix but largely confirm the main findings that strong economic conditions in US states increase undocumented migration to those states while policy does not.

Undocumented immigrants are not just economically motivated. I find that homicide rates in

Mexico consistently lead to an increase in out-migration. Areas of high crime may have weaker local economies but the homicide results are consistent when controlling for economic conditions in Mexico. These findings can suggest that violence has a direct impact as well, complicating the narrative that undocumented immigrants are just moving for jobs and are a wholly separate group than asylum seekers. Table B3 shows that crime rates in the US decrease immigration to that state as well. Violent crime in Mexico also increases migration out of those areas but the result is not statistically significant.

Whether including economic and violence factors or not, I do not find consistent evidence that more generous, state immigration policies increase undocumented migration. In Table B3 I also show results considering just push factors (Column 5) and just other pull factors (Column 4) with the variable of interest, US State immigration policy. The main results all still hold with more generous policy having an insignificant impact on migration while strong economic conditions in the US pull new immigrants to those states and high violence and low employment push immigrants out of Mexican states.

Previous research (Allen et al., 2018; Caballero et al., 2018; Lessem, 2018) has shown that specific laws designed to deter immigration or more serious enforcement have the expected negative impacts on immigration flows, but this research shows that the general hostility or generosity towards immigrants of a state's policies has little relationship with migration decisions.

One explanation for the negative coefficient in some results may be residual endogeneity if states that have declining immigration rates and are intentionally trying to attract migrants with certain policies. Appendix D Table D8 includes specifications that exclude states with typically low undocumented immigration flows like Vermont and the results are highly consistent with the findings here.

Another explanation may be that potential migrants may be more aware of extremely harsh laws since some of these are widely published (Hoekstra and Orozco-Aleman, 2017), or know of family's and friend's experiences with ICE raids. Thus, people may react to anti-immigrant legislation more than the less tangible pro-immigration legislation so a state with two pro-immigrant laws but one anti-immigrant law would have a positive index but declining migration. Addition-

ally, the Mexican government released a notice to Mexicans living abroad in states where enforcement was increasing advising them to get a Matrícula Consular to help verify their identity should they be subject to a raid (Consulado de México, 2023). Therefore, states with very harsh policy environments may not be associated with more migration but rather with more Matrículas and this residual correlation may not be entirely captured by the instrument.

I would not interpret the occasional negative coefficients as proof that more generous immigration environments deter new immigrants but rather that the inconsistency of the sign and the general insignificance suggest that laws designed to protect existing immigrants do not attract new immigrants.

I run a series of robustness checks using different configurations of the index such as including laws with lower scope, using the policy ratio measure initially used by Monogan III (2013) ($ln(\frac{\sum pro-immgrantlaws*scope+1}{\sum anti-immgrantlaws*scope+1})$), and excluding states that had no new immigration laws in a particular year rather than assigning them an index value of zero (C3). I also include additional cumulative indices using the Urban Institute data (C2) and show results using net positive/net negative index values (C4). The results are again consistently inconsistent, with varying signs and rare statistical significance. I only find a strongly significant, positive relationship when including laws of all scopes but the size of this impact is less than a quarter of one percent increase in migration.

Finally, I consider whether certain types of laws may have a stronger impact on immigration perhaps because they are more relevant or salient. In Table C5 I create indices that just use laws of a particular category, as defined by the NCSL. These categories are benefits, education, employment, healthcare, identification (i.e. driver's licenses), and law-enforcement related. I find generally that more generous laws related to education and healthcare may increase immigration while more generous laws related to identification are associated with less immigration, while employment, benefits, and law enforcement related laws do not impact immigration in either direction.

I interpret these results with caution for a few reasons. First, the identification related result could reflect that people are less likely to get a Matrícula if they have access to other forms of ID, not a decline in actual immigration. I do not instrument for these category-specific laws as I only have one instrument available and it may be quite weak when considering just a narrow group of

laws, confounding any findings. Meanwhile, the positive impact of laws related to education and healthcare may be driven by just a few laws in a few states. In fact, across all fifty states and eight years of data only fifty-eight laws (positive or negative) were passed related to immigrants and education and only thirty-six related to immigrant healthcare. This does open up some interesting questions for future work to understand if there are specific types of laws or perhaps specific language within laws that is more salient or relevant to potential immigrants and may actually move a marginal person to migrate.

4.2 Policy and ICE Enforcement

If harsher laws make ICE enforcement (deportations and detentions) higher in a particular community and that leads to lower immigration rather than the laws themselves, then the results would be biased towards finding a positive impact of the policy index on migration. It could instead be that more expansive immigration policies are tied to stricter enforcement of the existing restrictive laws or anti-immigrant sentiments in the community, which could mask possible, positive results. In addition to checking the relationship between deportations, detentions, and the policy index (Tables D6 and D5), the main results all hold when controlling directly for enforcement by controlling for total deportations from a state and year as well as ICE detention orders[14] (Table 6).

Similar to the other OLS models, I find a small, positive, but insignificant impact of more generous policy on migration. The result becomes somewhat significant when I drop observations that had no deportations so it may be that in states that at least have a certain level of ICE presence, more generous policy may encourage a few new immigrants, about half a percent increase, to take a risk in that state. Without an instrument, policy may be mechanically related to Matrículas rather than migration.

I do not have a causal design regarding ICE enforcement so these control variables just reflect correlations but, interestingly, while detentions reduce immigration, as expected, deportations are

[14] recall all specifications already control for population and immigrant population so I am not seeing more detentions/deportations just because a state has more people or immigrants

	(1) Ln(Matriculas Consulares)	(2) Ln(Matriculas Consulares)	(3) Ln(Matriculas Consulares)	(4) Ln(Matriculas Consulares)
US State Policy Index	-0.0162		-0.0616**	
	(0.0183)		(0.0194)	
MX State Homicide Rate	0.108**	0.108**		
(homicides/thousand)	(0.0372)	(0.0370)		
US State Minimum Wage	0.0908***	0.0900***		
	(0.0135)	(0.0133)		
US State Unemp. Rate (t-1)	-0.0514***	-0.0504***		
	(0.00576)	(0.00601)		
MX State Unemp. Rate (t-1)	0.0293***	0.0293***		
	(0.00806)	(0.00800)		
Mexican State GDP per capita	-4.05e-08	-4.07e-08		
(pesos)	(0.000000217)	(0.000000216)		
US State Policy Index		-0.0622		
(Urban Institute Data)		(0.0690)		
US State Policy Index				-0.0324
(Standardized)				(0.0366)
MX state Homicide Rate				0.0229**
(homicides/thousand)(Standardized)				(0.00789)
US State Unemp. Rate (t-1)				-0.121***
(Standardized)				(0.0135)
US State Minimum Wage				0.0818***
(Standardized)				(0.0122)
MX State Unemp. Rate (t-1)				0.0476***
(Standardized)				(0.0133)
Observations	12800	12800	12800	12800
Pair FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Population Controls	Yes	Yes	Yes	Yes
Dummy for Zeroes	Yes	Yes	Yes	Yes

Standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
All models control for state-to-state pair fixed effects and year fixed effects, as well as population, and foreign born population. The dependent variable in all specifications is the natural log of the number of new immigrants registered in the state pair and year. Columns present the second stage results of 2SLS IV regression. Column 4 uses standardized values of the explanatory variables thus the coefficient represent the impact of a one standard deviation change in the independent variable. All models are estimated on a balanced panel of 12800 state-state pairs, covering 32 Mexican States to 50 US States from 2006 to 2013. Standard errors are clustered at the pair level.

Table 2: Determinants of Undocumented Immigration (2SLS)

	(1) US State Policy Index	(2) US State Policy Index (Urban Institute Data)	(3) US State Policy Index	(4) US State Policy Index (Standardized)
Prison occupants per 100,000 residents	-0.0158***	-0.00410***	-0.0152***	
	(0.00106)	(0.000301)	(0.00102)	
MX State Homicide Rate (homicides/thousand)	0.000519	-0.00108		
	(0.137)	(0.0502)		
US State Minimum Wage	0.0911*	0.0120		
	(0.0421)	(0.0178)		
US State Unemp. Rate (t-1)	-0.0324	0.00696		
	(0.0183)	(0.00659)		
MX State Unemp. Rate (t-1)	-0.000258	0.000537		
	(0.0267)	(0.00958)		
Mexican State GDP per capita (pesos)	1.14e-09	-2.38e-09		
	(0.000000461)	(0.000000171)		
Prison occupants per 100,000 residents (Standardized)				-1.158***
				(0.0776)
MX state Homicide Rate (homicides/thousand)(Standardized)				0.0000562
				(0.0145)
US State Unemp. Rate (t-1) (Standardized)				-0.0380
				(0.0214)
US State Minimum Wage (Standardized)				0.0410*
				(0.0189)
MX State Unemp. Rate (t-1) (Standardized)				-0.000205
				(0.0216)
Observations	12800	12800	12800	12800
F	222.9	185.4	221.0	222.9
Pair FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Population Controls	Yes	Yes	Yes	Yes
Dummy for Zeroes	Yes	Yes	Yes	Yes

Standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
All models control for state-to-state pair fixed effects and year fixed effects, as well as population, and foreign born population. First stage Kleibergen-Paap Wald F statistics are included for the weak identification test. The dependent variable in all specifications is the policy index in the state and year. Columns present the first stage results of 2SLS IV regression. Column 4 uses standardized values of the explanatory variables thus the coefficient represent the impact of a one standard deviation change in the independent variable. All models are estimated on a balanced panel of 12800 state-state pairs, covering 32 Mexican States to 50 US States from 2006 to 2013. Standard errors are clustered at the pair level.

Table 3: Determinants of Undocumented Immigration: First Stage

	(1) Ln(Matriculas Consulares)	(2) Ln(Matriculas Consulares)	(3) Ln(Matriculas Consulares)
US State Policy Index	0.00209		0.00161
	(0.00187)		(0.00189)
MX State Homicide Rate (homicides/thousand)	0.108**	0.108**	
	(0.0395)	(0.0395)	
US State Minimum Wage	0.0920***	0.0913***	
	(0.0146)	(0.0145)	
US State Unemp. Rate (t-1)	-0.0517***	-0.0513***	
	(0.00605)	(0.00601)	
MX State Unemp. Rate (t-1)	0.0293***	0.0293***	
	(0.00858)	(0.00856)	
Mexican State GDP per capita (pesos)	-4.05e-08	-4.06e-08	
	(0.000000233)	(0.000000232)	
US State Policy Index (Urban Institute Data)		-0.0195***	
		(0.00561)	
Observations	12800	12800	12800
Pair FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Population Controls	Yes	Yes	Yes
Dummy for Zeroes	Yes	Yes	Yes

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

All models control for state-to-state pair fixed effects and year fixed effects, as well as population, and foreign born population. The dependent variable in all specifications is the natural log of the number of new immigrants registered in the state pair and year. Columns present the results of Ordinary Least Squares regression. All models are estimated on a balanced panel of 12800 state-state pairs, covering 32 Mexican States to 50 US States from 2006 to 2013. Standard errors are clustered at the pair level.

Table 4: Determinants of Undocumented Immigration: OLS

actually associated with a small but statistically significant increase in migration. This may be an artifact of people seeking out Matrículas following increased deportations, rather than an increase in migration, or it may be that an influx in migration increases deportations, rather than the other way around. The affect is still positive when considering deportations from last year though and ICE detentions do not have the same impact. Detention orders are much more common than deportation and may reflect large, well-publicized ICE raids and thus may feel more pressing to a potential new immigrant than a change in the number of deportations.

	(1) Ln(Matriculas Consulares)	(2) Ln(Matriculas Consulares)	(3) Ln(Matriculas Consulares)
US State Policy Index (positive only)	0.0101**		
	(0.00315)		
US State Policy Index (negative only)	0.00195		
	(0.00232)		
MX State Homicide Rate (homicides/thousand)	0.108**	0.108**	
	(0.0395)	(0.0395)	
US State Minimum Wage	0.0943***	0.0923***	
	(0.0146)	(0.0145)	
US State Unemp. Rate (t-1)	-0.0524***	-0.0515***	
	(0.00609)	(0.00602)	
MX State Unemp. Rate (t-1)	0.0293***	0.0293***	
	(0.00858)	(0.00857)	
Mexican State GDP per capita (pesos)	-4.05e-08	-4.06e-08	
	(0.000000233)	(0.000000232)	
US State Policy Index (Urban Institute Data, positive only)		-0.0117	
		(0.00820)	
US State Policy Index (Urban Institute Data, negative only)		0.0252**	
		(0.00764)	
US State Policy Index (Standardized)			0.00419
			(0.00375)
MX state Homicide Rate (homicides/thousand) (Standardized)			0.0229**
			(0.00839)
US State Unemp. Rate (t-1) (Standardized)			-0.121***
			(0.0142)
US State Minimum Wage (Standardized)			0.0830***
			(0.0132)
MX State Unemp. Rate (t-1) (Standardized)			0.0476***
			(0.0141)
Observations	12800	12800	12800
Pair FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Population Controls	Yes	Yes	Yes
Dummy for Zeroes	Yes	Yes	Yes

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

All models control for state-to-state pair fixed effects and year fixed effects, as well as population, and foreign born population. The dependent variable in all specifications is the natural log of the number of new immigrants registered in the state pair and year. Columns present the results of Ordinary Least Squares regression. Columns 1 and 2 create separate indices for laws that expand the rights of immigrants (positive) and those that restrict the rights of immigrants (negative). Column 3 uses standardized values of the explanatory variables thus the coefficient represent the impact of a one standard deviation change in the independent variable. All models are estimated on a balanced panel of 12800 state-state pairs, covering 32 Mexican States to 50 US States from 2006 to 2013. Standard errors are clustered at the pair level.

Table 5: Determinants of Undocumented Immigration: OLS

	(1) Ln(Matrículas Consulares)	(2) Ln(Matrículas Consulares)	(3) Ln(Matrículas Consulares)	(4) Ln(Matrículas Consulares)	(5) Ln(Matrículas Consulares)
US State Policy Index	0.00271	0.00125			0.00565**
	(0.00187)	(0.00189)			(0.00187)
MX State Homicide Rate (homicides/thousand)	0.108**	0.108**			0.117**
	(0.0393)	(0.0395)			(0.0434)
US State Unemp. Rate (t-1)	-0.0509***	-0.0493***	-0.0553***	-0.0457***	-0.0582***
	(0.00607)	(0.00614)	(0.00619)	(0.00619)	(0.00615)
Ln(US State Deportation)	0.0354***				0.0304**
	(0.00948)				(0.0111)
US State Minimum Wage	0.0905***	0.103***			0.0823***
	(0.0146)	(0.0150)			(0.0157)
MX State Unemp. Rate (t-1)	0.0290***	0.0290***	0.0251**	0.0252**	0.0323***
	(0.00859)	(0.00859)	(0.00849)	(0.00834)	(0.00934)
Ln(US State ICE Detentions)		-0.0447***			
		(0.00901)			
MX State Homicide Rate (homicides/thousand) (t-1)			0.155***	0.155***	
			(0.0422)	(0.0417)	
Ln(US State Deportation), t-1			0.0279***		
			(0.00761)		
US State Minimum Wage (t-1)			0.0895***	0.120***	
			(0.0121)	(0.0121)	
Ln(US State ICE Detentions), t-1				-0.0775***	
				(0.00664)	
Observations	12800	12800	12800	12800	10720
Pair FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Population Controls	Yes	Yes	Yes	Yes	Yes
Dummy for Zeroes	Yes	Yes	Yes	Yes	Yes

Standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
All models control for state-to-state pair fixed effects and year fixed effects, as well as population, and foreign born population. The dependent variable in all specifications is the natural log of the number of new immigrants registered in the state pair and year. Columns present the results of Ordinary Least Squares regression. Column 5 excludes observations from states that had no deportations in a particular year. Models in columns 1-4 are estimated on a balanced panel of 12800 state-state pairs, covering 32 Mexican States to 50 US States from 2006 to 2013. Standard errors are clustered at the pair level.

Table 6: Determinants of Undocumented Immigration: Control for ICE Enforcement (OLS)

4.3 Timing of Law Change and Migration

Another question is whether it takes time for a new law to impact migration decisions. Given the short time window of the entire study, I focus on the impact of economic and policy changes in the previous year on migration this year. Tables 7 and 8 report these results using OLS while C1 uses 2SLS models.

In OLS models, I find a significant, small, positive impact of policy when using the index based on Monogan III (2013). This suggests that one additional "pro-immigrant" law in the year prior will increase migration by about one percent in this year. This result holds when I consider two separate indices capturing just positive and negative laws in the year prior (Column 3). Interestingly, this results does not hold for the index using the data from the Urban Institute where results are in line with earlier findings that more generous legislation is associated with a decline in immigration. I find weakly significant evidence of a positive impact when instrumenting for the policy index using the prison population in Table C1. These results are similar when removing other economic and violence controls and interestingly, I find a very small and only marginally significant but negative affect of a more pro-immigrant policy environment in the future on migration today, suggesting immigrants are also not forward looking and reacting ahead of time to policy campaigns or announcements (Table 5).

Overall, while these results do not convincingly show that more generous laws can have an impact on migration in the years after migration, they raise interesting questions about the potential for the impact of a law to develop over time.

One possibility is that it may take longer than a year to transmit information to friends and family in Mexico. In Column 5 I consider the cumulative impact of policy over the eight years of the data where pro-immigrant laws continue to contribute +1 to the index every year starting from when they are enacted and anti-immigrant laws contribute -1. This result is insignificant (but but is very sensitive to other controls, becoming marginally significant if I change the wage and homicide controls to the present year as in Table C2. Using the Urban Institute data (Table C2) a more generous cumulative policy environment has a significant, negative impact on migration so

again this is not in line with the idea that past pro-immigrant laws may eventually increase new immigration. The Urban Institute reports the data in this cumulative format, maintaining an indicator value for every year the law remains in effect so I also split this index into pro-immigration legislation and anti-immigration legislation only. I now do find that accumulated pro-immigrant legislation has a marginally significant positive impact but accumulated anti-immigrant legislation has an even larger, positive impact. Considering the environment as a whole, which typically includes both types of laws, the results are in line with all the main findings of no clear impact of state policy on immigration decisions.

4.4 Impact of New Laws on Specific Migration Networks

Certain networks may transmit information about laws faster or differently than others, potentially leading to different impacts based on the strength of the network. Network strength itself would be largely colinear with the pair fixed effect, especially since networks are not likely to change much in the relatively short study window. Another way to test this is to interact the policy index with each pair and see if the coefficient is radically different for some pairs than others.

Figure 2 shows a heat map of these 1600 pairs. A few things stand out. First, the network-specific impact is largely consistent across US state rather than Mexican state. For example law changes in New Jersey tend to have a more negative impact on migration across every Mexican state of origin while law changes in Alabama have less of an impact across all of Alabama's ties to Mexican states. Another interesting feature is that the states that tend to have the strongest positive relationship between generous immigration policy and actual migration are states with relatively small immigrant populations and smaller networks, such as New Hampshire and Rhode Island. The last question would be whether the very dark blue data point along the Mexico (state) - Rhode Island network is related to the relative strength of that network compared to that of other origin states to Rhode Island. There are two ways to think about this: 1) how popular is Rhode Island as a destination for people from the state of Mexico compared to all other US states and 2) of all Mexican immigrants to Rhode Island, how many came from the state of Mexico.

	(1) Ln(Matrículas Consulares)	(2) Ln(Matrículas Consulares)	(3) Ln(Matrículas Consulares)	(4) Ln(Matrículas Consulares)	(5) Ln(Matrículas Consulares)
US State Policy Index (t-1)	0.0125***				
	(0.00280)				
MX State Homicide Rate	0.155***	0.155***	0.155***	0.155***	0.155***
(homicides/thousand) (t-1)	(0.0422)	(0.0422)	(0.0422)	(0.0421)	(0.0423)
US State Minimum Wage (t-1)	0.0907***	0.0891***	0.0915***	0.0907***	0.102***
	(0.0119)	(0.0119)	(0.0120)	(0.0119)	(0.0129)
US State Unemp. Rate (t-1)	-0.0566***	-0.0542***	-0.0569***	-0.0545***	-0.0567***
	(0.00617)	(0.00607)	(0.00614)	(0.00610)	(0.00648)
MX State Unemp. Rate (t-1)	0.0251**	0.0251**	0.0251**	0.0251**	0.0251**
	(0.00848)	(0.00850)	(0.00849)	(0.00849)	(0.00852)
US State Policy Index		-0.0220***			
(Urban Institute Data, t-1)		(0.00660)			
US State Policy Index (t-1),			0.0172***		
positive only			(0.00360)		
US State Policy Index (t-1),			-0.0108**		
negative only			(0.00332)		
US State Policy Index				-0.00629	
(Urban Institute Data, positive only t-1)				(0.0110)	
US State Policy Index				0.0308***	
(Urban Institute Data, negative only t-1)				(0.00860)	
Cumulative Policy Index					0.00613
					(0.00313)
Observations	12800	12800	12800	12800	12800
Pair FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Population Controls	Yes	Yes	Yes	Yes	Yes
Dummy for Zeroes	Yes	Yes	Yes	Yes	Yes

Standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
All models control for state-to-state pair fixed effects and year fixed effects, as well as population, and foreign born population. The dependent variable in all specifications is the natural log of the number of new immigrants registered in the state pair and year. Columns present the results of Ordinary Least Squares regression, using a one year lagged value of each independent determinant. All models are estimated on a balanced panel of 12800 state-state pairs, covering 32 Mexican States to 50 US States from 2006 to 2013, with independent variables ranging from 2005 to 2012. Standard errors are clustered at the pair level.

Table 7: Determinants of Undocumented Immigration (t-1): OLS

	(1) Ln(Matrículas Consulares)	(2) Ln(Matrículas Consulares)	(3) Ln(Matrículas Consulares)	(4) Ln(Matrículas Consulares)	(5) Ln(Matrículas Consulares)
US State Policy Index (t+1)	-0.00486*				
	(0.00242)				
US State Policy Index		-0.0163**			
(Urban Institute Data, t+1)		(0.00549)			
US State Policy Index (t-1)			0.00985***		
			(0.00282)		
US State Policy Index				-0.0240***	
(Urban Institute Data, t-1)				(0.00667)	
US State Policy Index					0.0225***
(Standardized)					(0.00504)
MX state Homicide Rate					0.0323***
(homicides/thousand)(Standardized)					(0.00878)
US State Minimum Wage					0.0895***
(Standardized)					(0.0118)
US State Unemp. Rate (t-1)					-0.133***
(Standardized)					(0.0145)
MX State Unemp. Rate (t-1)					0.0412**
(Standardized)					(0.0139)
Observations	11200	12800	12800	12800	12800
Pair FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Population Controls	Yes	Yes	Yes	Yes	Yes
Dummy for Zeroes	Yes	Yes	Yes	Yes	Yes

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

All models control for state-to-state pair fixed effects and year fixed effects, as well as population, and foreign born population. The dependent variable in all specifications is the natural log of the number of new immigrants registered in the state pair and year. Columns 1 and 2 present the results of Ordinary Least Squares regression, using a one year forward looking value of the policy index alone and Columns 3 and 4 present similar results using a one year lagged value. Column 5 uses standardized values of each independent variable. All models are estimated on a balanced panel of 12800 state-state pairs, covering 32 Mexican States to 50 US States from 2006 to 2013, with independent variables ranging from 2005 to 2012. Standard errors are clustered at the pair level.

Table 8: Determinants of Undocumented Immigration (t-1): OLS

Relative to other origins, the state of Mexico is well-represented in Rhode Island. Only sixty-nine people recorded in Rhode Island were from the state of Mexico but only six of the other thirty-one Mexican states were better represented, with Hidalgo (1649) as the most common origin for Rhode Island. Hidalgo, and other common origins like Guerrero, do not demonstrate the same strong, positive, network specific impacts of Rhode Island policy on immigration. Rhode Island ranks 42nd out of 50 possible US destinations for the 379,087 people who immigrated from the state of Mexico during this window, so it is not a very popular destination.

Comparing the coefficients themselves, the coefficient for pairs including Rhode Island is weakest for states that generally send very few migrants, including very few to Rhode Island, such as Baja California Sur and Campeche, and stronger for states like Mexico, Zacatecas, and San Luis Potosí, all of which are in the middle of the pack in terms of immigrants to the US in general and to Rhode Island specifically. It may be that for states that are relatively unattractive to immigrants, like Rhode Island which is far from the border and very small, changes in laws can influence a few more people to find that state attractive, but only if a decently strong migration network exists perhaps to spread the information about the new laws. There may be just some threshold migration network size that is necessary to facilitate this migration it does not seem that stronger networks are consistently associated with a stronger response to policy and Hidalgo, despite being the most common origin for immigrants in Rhode Island, has one of the weakest responses to new, pro-immigrant laws in Rhode Island.

Another note about Rhode Island is that while there is variation in policy over time, Figure A4 shows that Rhode Island passes relatively little state-level immigration policy and it typically leans towards anti-immigrant legislation so it may be in that years where Rhode Island does not pass anti-immigrant legislation, a few more additional people immigrate and given how low immigration to Rhode Island is typically, this may appear like a strong pull affect.

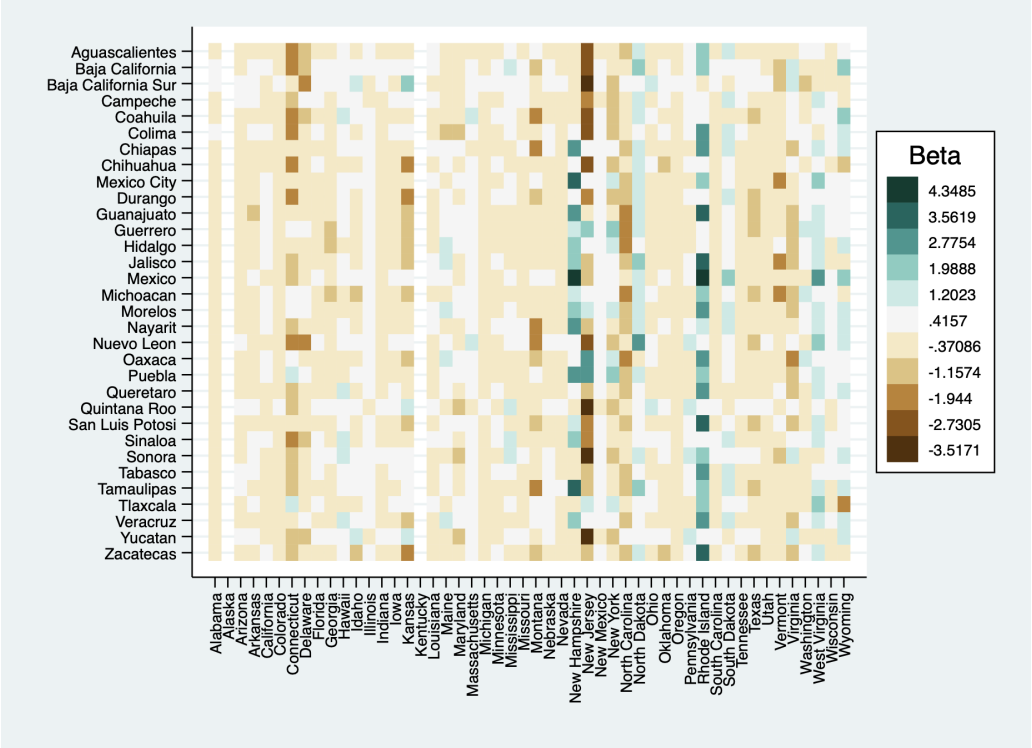


Figure presents the value of the coefficient on the interaction between the state-pair network and the policy index value, capturing how changes in policy may have different impacts for different networks. Darker, blue squares represent networks where a positive change in state level immigration policy were associated with larger increases in migration within those channels. Darker, brown squares represent networks where positive changes in immigration policy decrease migration flows. Results are not available for Kentucky and Alaska because a lack of variation in policy and migration from Mexico made it impossible to identify network-specific effects, though these states do contribute to the overall variation and results in the main analysis.

Figure 2: Interaction Between Policy Index and State-Pair Network

4.5 Additional Robustness Checks

In addition to adjusting the policy index, wage, and employment measures, I run a series of standard robustness checks to support the main findings. Table D7 presents a log-log model, or gravity model of migration, for the main results, using an inverse hyperbolic sine transformation for the policy index (and prison rate for consistency) to account for negative and zero values. The results are consistent with the main findings but can be interpreted as elasticities demonstrating how re-

sponsive migration is to economic conditions in the US and Mexico but not US policy conditions.

Table D8 (and first stage results in Table D9) show that the results are consistent with dropping potentially influential states such as those that receive many immigrants (like California) and send many immigrants (like Michoacán) or those that receive/send very few (i.e. Vermont and Quintana Roo). These results are also consistent with dropping any flows that were below six people in a given year which also removes the zeroes, demonstrating that the main results are not driven by zero flows or the extensive rather than intensive margin. As another check that the results are not driven by the log transformation of the dependent variable and the adjustment made to account for zero observations, I run specifications that include the unadjusted zeroes and use an inverse hyperbolic sine transformation that allows for them. Table D10 shows the results are entirely consistent with using this transformation rather than the more common natural log.

Finally, Table D11 removes the state pair fixed effect in favor of singular state fixed effects for both the US state and the Mexican state. As expected, the results regarding independent variables does not change but what is more interesting is how much less overall variation in the model is explained when I remove the pair fixed effect (which would account for distance between an origin and destination as well as networks). The adjusted R^2 for Column 1 of Table 4 is about 97% while it is about 85% for Column 3 of Table D11, which is the same model just without the pair fixed effect, demonstrating how much variation is explained by pair specific rather than just origin-specific and destination-specific characteristics.

5 Conclusion

This paper summarizes the key push and pull factors influencing undocumented immigration to the United States in the 21st Century and specifically considers the whole slate of policies that could impact undocumented immigrants in the US rather than examining the impact of just one particular law or ICE enforcement as many previous studies have done. Overall, the results suggest that undocumented immigrants are not more likely to migrate towards states that enact laws to expand the rights of existing immigrants in those states, even after accounting for changes in

enforcement, the timing of laws, specific categories of laws, or differences across networks, though these extensions provide some interesting cases.

I situate the effect of policy among other determinants of migration including economic and violence factors in the US and Mexico. I use a unique, administrative data set that includes information on both state of origin and state of destination, to control for the important network effects determining immigration decisions. I find economic conditions in both the US and Mexico, and violence in Mexico have a greater impact on the decision to migrate, especially relative to pro-immigrant policy, which does not have a consistent, positive relationship with migration as some may fear when enacting such laws.

This is relevant for policymakers who may be considering the potential influx of new unauthorized immigrants when drafting policy to help current immigrant residents. I do not find convincing evidence that a more pro-immigrant policy environment will increase inflows of new unauthorized immigrants in most US states. Across many specifications I find insignificant or weakly significant relationships between a more generous policy environment and immigration and the direction of the coefficient changes frequently, suggesting no particularly strong pattern. I do find some evidence that it may take time for a policy to impact immigration decisions and certain categories of laws may have different impacts, though these results are not always consistent and may be driven by unique cases. One question to consider is whether the policy index can be combined with other measures of immigrant acceptance into a state such as local attitudes towards immigrants or bilingual education for all children, as it is perhaps not specific laws people respond to but rather the ways these laws may be a proxy for inclusion and immigrant integration.

These results paint a more detailed picture of the factors that affect undocumented immigration from Mexico and highlight how demographics may change as economic and social conditions change, but not necessarily policy conditions. Future work could test if the impact of policy develops over a longer time-horizon or whether major legislation such as passing a federal DREAM Act would affect immigration, even if the law only applied retroactively.

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Appendix A: Data Appendix

The data covers all fifty US states and thirty-two Mexican states, from years 2006 to 2013. US economic data includes the state annual average unemployment, state median annual income, and state minimum wage, as reported by FRED. The unemployment rate is the average over the year and is not seasonally adjusted. Where the state minimum wage is below the federal minimum wage, I replace the state wage with the federal wage. Other data gathered from the Quarterly Census of Employment and Wages includes state total employment level for all sectors, agriculture, construction, and retail separately as well as the respective average weekly wages. No adjustments are made, except to drop observations from Washington D.C. and US territories as the policy data is not available for these areas from the NCSL. Data from the American Community Survey provides average annual income and unemployment data for Mexican immigrants in each US state calculated using the survey weights provided in the data.

Economic data from Mexico includes state, annual unemployment rate from STPS-INEGI, Encuesta Nacional de Ocupación y Empleo, and GDP per capita.

US policy index data is initially gathered from the National Conference of State Legislatures (NCSL) and then coded via Monogan's (2013) system.

> "(4) Impacts residence: Laws designed to directly affect the number of foreign-born residents in a state, typically illegal immigrants. This category includes laws that either commission state and local authorities to enforce federal immigration law or specifically snub federal law by refusing to report immigration status to federal authorities. Also, laws that open or close a choke point, such as eligibility for driving licences or employability. Should driving licences be granted regardless of immigration status or should these be restricted? Can a worker or employer be severely punished, via jail or revocation of business licence, if an illegal immigrant is hired? Is the state recruiting outside workers? (3) Large-scale effect: Laws that create general incentives or disincentives for any immigrant who may enter a state. These include providing or restricting benefits for legal or illegal immigrants, including legislation regarding naturalisation

programmes, worker's compensation coverage, retirement, higher education funding or bilingual provisions. This also includes smaller provisions in deportation, employment or licensing laws. Such smaller provisions may include requiring or restricting immigration status verification by employers, making small changes in ease of getting a driving licence, and screening arrested persons for immigration status. (2) Small-scale effect: Laws that create incentives or disincentives, but which are likely to apply only to a small subgroup of potential immigrants, such as professionals from a specific field, those who may work for a public contractor, asylees or trafficking victims. These laws might speak to job eligibility or benefit eligibility for the people in these small groups, or may penalise non-immigrants whose behaviour on behalf of these groups is outlawed (i.e. employers of illegal immigrants, traffickers or smugglers). Also, laws related to matters less central to immigrants' lives, such as voting, professional licences, gun licences, property rights and specified immigrant protection (such as regulating matchmaking services or notarios) fit here. Implementing laws also belong here (i.e. delivering federal funds or developing protocols to deliver services). (1) Symbolic: Symbolic laws that make an issue statement to Congress, request another branch of government to take action, launch a study or task force, or affirm a principle (such as a commitment to cultural heritage, requesting that employers hire legal persons or declaring English as a state's official language). Many of these symbolic measures are joint resolutions." (Monogan III, 2013)

The main policy index I create is a simple sum of all laws coded a 3 or a 4, where laws deemed "welcoming" or pro-immigrant, are assigned value "1" and "hostile" laws are assigned "-1". The other two main indices are again a sum of all laws coded 3 or 4 but the positive only index just counts those listed as pro-immigrant and the negative only counts the hostile laws (in this case even the negative laws are coded as "1" rather than "-1" as in the main index). Additional indices used are constructed identically but include laws coded 2 and laws coded 2 and 1, respectively. Data Appendix Table 1 below shows the average annual main policy indices for each state.

Immigration policy data from the Urban Institute is included to supplement the main policy

data. The Urban Institute's Immigration Policy resource is well-regarded and contains much of the same information as the main data but serves as a secondary check of the results in this paper. Details on the Urban Institute's methodology is available at `https://www.urban.org/data-tools/state-immigration-policy-resource`.

Data on crime rates and homicide rates in Mexico gathered from INEGI. Violent crime includes any crime listed with typo or subtype "with violence," sexual crimes, and any crime listed as involving a weapon.

Table A1: **Mean Annual Policy Indices**

	Policy Index	Policy Index (positive only)	Policy Index (negative only-abs. value)
ALABAMA	-1.125	0.125	1.250
ALASKA	0	0.125	0.125
ARIZONA	-3	0.875	3.875
ARKANSAS	-1.375	0	1.375
CALIFORNIA	4.125	4.625	0.500
COLORADO	-1.375	1	2.375
CONNECTICUT	0.875	1	0.125
DELAWARE	0.250	0.375	0.125
FLORIDA	-0.375	0.500	0.875
GEORGIA	-2.625	0.625	3.250
HAWAII	0	0.500	0.500
IDAHO	-0.500	0.375	0.875
ILLINOIS	0.750	2	1.250
INDIANA	-0.750	0.500	1.250
IOWA	-0.250	0.500	0.750
KANSAS	-0.625	0.125	0.750
KENTUCKY	0	0.125	0.125
LOUISIANA	-0.625	0.250	0.875
MAINE	-0.250	0.500	0.750
MARYLAND	0.625	0.875	0.250
MASSACHUSETTS	-0.250	0.250	0.500
MICHIGAN	0	1.125	1.125
MINNESOTA	0	0.625	0.625
MISSISSIPPI	-1	0	1
MISSOURI	-0.625	0.875	1.500
MONTANA	0	0.250	0.250
NEBRASKA	-1	0.375	1.375
NEVADA	-0.250	0.125	0.375
NEW HAMPSHIRE	-0.125	0	0.125
NEW JERSEY	0.375	0.500	0.125
NEW MEXICO	0	0.375	0.375
NEW YORK	0.250	0.500	0.250
NORTH CAROLINA	-0.750	0.125	0.875
NORTH DAKOTA	-0.125	0.250	0.375
OHIO	0	0.125	0.125
OKLAHOMA	-1.500	0.250	1.750
OREGON	-0.250	0.750	1
PENNSYLVANIA	-0.375	0.250	0.625
RHODE ISLAND	-0.250	0	0.250
SOUTH CAROLINA	-2.750	0.125	2.875
SOUTH DAKOTA	-0.250	0.125	0.375
TENNESSEE	-1.250	0.750	2
TEXAS	-0.375	0.375	0.750
UTAH	-1	1.625	2.625
VERMONT	0.125	0.625	0.500
VIRGINIA	-0.875	1.125	2
WASHINGTON	1	1.500	0.500
WEST VIRGINIA	-0.625	0	0.625
WISCONSIN	0	0.125	0.125
WYOMING	-0.375	0	0.375

Table shows average value of main policy index (Monogan III, 2013), policy index counting only pro-immigration laws, and the policy index showing only anti-immigrant laws across all years in sample for each state.

Table A2: **Mean Annual Summary Statistics by US States**

State	Matrículas Consulares (total)	Minimum Wage (mean)	Unemployment Rate (mean)	AEWR (mean)	Policy Index (mean)
ALABAMA	48688	6.463	7.500	8.947	-1.125
ALASKA	739	7.450	7.112	.	0
ARIZONA	214337	7.013	7.513	9.221	-3
ARKANSAS	34888	6.650	6.888	8.724	-1.375
CALIFORNIA	2.607e+06	7.781	9	9.953	4.125
COLORADO	162274	7.041	6.500	9.670	-1.375
CONNECTICUT	15766	7.963	7.050	10.05	0.875
DELAWARE	11300	7.013	6.250	9.899	0.250
FLORIDA	213667	7.129	7.588	9.154	-0.375
GEORGIA	227204	6.463	7.925	8.947	-2.625
HAWAII	1502	7.188	5.188	11.33	0
IDAHO	26083	6.463	6.388	9.449	-0.500
ILLINOIS	586582	7.625	8.012	10.45	0.750
INDIANA	104202	6.463	7.662	10.45	-0.750
IOWA	25308	6.725	4.900	10.68	-0.250
KANSAS	45299	6.463	5.588	10.65	-0.625
KENTUCKY	23784	6.463	7.950	9.225	0
LOUISIANA	16309	6.463	6.263	8.724	-0.625
MAINE	465	7.188	6.625	10.05	-0.250
MARYLAND	27770	6.625	5.888	9.899	0.625
MASSACHUSETTS	4144	7.781	6.513	10.05	-0.250
MICHIGAN	38278	7.031	9.575	10.37	0
MINNESOTA	57193	6.753	5.787	10.37	0
MISSISSIPPI	11766	6.463	8.325	8.724	-1
MISSOURI	30029	6.806	7.125	10.68	-0.625
MONTANA	430	6.812	5.575	9.449	0
NEBRASKA	35053	6.463	3.850	10.65	-1
NEVADA	160786	7.098	9.225	9.670	-0.250
NEW HAMPSHIRE	1390	6.631	4.850	10.05	-0.125
NEW JERSEY	107897	7.075	7.463	9.899	0.375
NEW MEXICO	76758	6.787	6.200	9.221	0
NEW YORK	196597	7.150	6.987	10.05	0.250
NORTH CAROLINA	225189	6.625	8.075	9.249	-0.750
NORTH DAKOTA	355	6.463	3.362	10.65	-0.125
OHIO	29231	7.069	7.713	10.45	0
OKLAHOMA	42482	6.463	5.175	9.345	-1.500
OREGON	100819	8.287	8.137	10.40	-0.250
PENNSYLVANIA	36600	6.838	6.737	9.899	-0.375
RHODE ISLAND	1649	7.362	8.850	10.05	-0.250
SOUTH CAROLINA	62645	6.463	8.588	8.947	-2.750
SOUTH DAKOTA	1442	6.463	3.962	10.65	-0.250
TENNESSEE	62454	6.463	7.662	9.225	-1.250
TEXAS	1.351e+06	6.463	6.312	9.345	-0.375
UTAH	97147	6.463	5.125	9.670	-1
VERMONT	767	7.974	5	10.05	0.125
VIRGINIA	40476	6.463	5.275	9.249	-0.875
WASHINGTON	83381	8.454	7.338	10.40	1
WEST VIRGINIA	1161	6.725	6.575	9.225	-0.625
WISCONSIN	66696	6.781	6.662	10.37	0
WYOMING	5929	6.463	4.700	9.449	-0.375

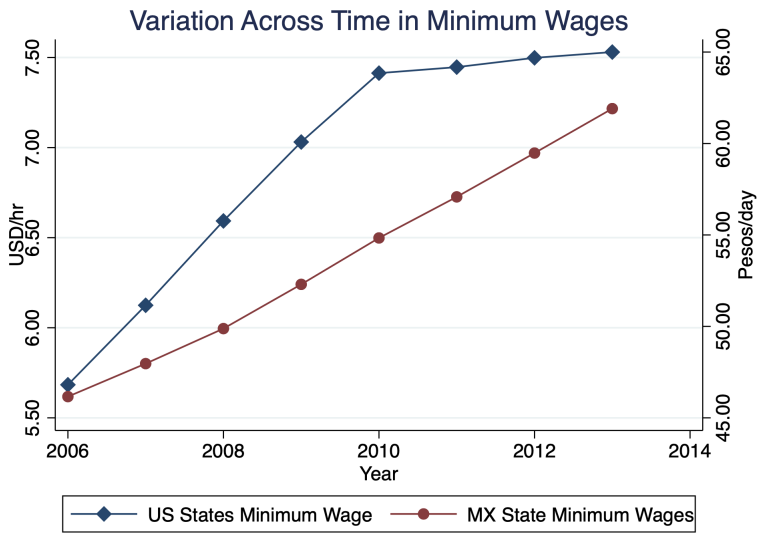
Column 1 shows the number of immigrants to each US state over the eight years of data, as measured by cards. Subsequent columns show the mean across years for other relevant US variables to show the substantial variation across space.

Table A3: **Mean Annual Summary Statistics by Mexican State**

State	Matrículas Consulares (total)	GDP Per Capita (pesos) (mean)	Unemp. Rate (mean)	Homicide Rate (mean)	Total Crime Rate (mean)	Violent Crime Rate (mean)
AGUASCALIENTES	67769	130841	6.005	0.0500	16.61	2.720
BAJA CALIFORNIA	76021	143803	4.617	0.284	37.77	6.474
BAJA CALIFORNIA SUR	4551	180279	4.423	0.0661	31.14	3.105
CAMPECHE	11316	995611	2.582	0.0672	2.165	0.532
CHIAPAS	106003	55995	2.356	0.0707	5.328	1.274
CHIHUAHUA	197888	126559	5.705	0.843	18.74	3.251
CIUDAD DE MEXICO	464546	276764	6.342	0.111	19.63	6.427
COAHUILA	100868	182573	6.200	0.168	15.91	3.032
COLIMA	50314	128603	4.023	0.189	15.65	2.927
DURANGO	203006	104515	5.264	0.404	12.29	2.346
GUANAJUATO	601148	96292	5.084	0.0833	15.02	2.232
GUERRERO	592787	62095	1.858	0.487	9.065	2.346
HIDALGO	208281	79868	4.332	0.0467	13.06	2.868
JALISCO	654485	127248	4.538	0.131	11.06	2.125
MEXICO	379087	81531	5.877	0.142	17.23	6.446
MICHOACAN	821709	77597	3.309	0.186	8.188	1.390
MORELOS	164811	98072	3.578	0.207	25.44	6.565
NAYARIT	111611	91188	4.140	0.253	9.792	1.944
NUEVO LEON	133405	222722	5.802	0.181	12.50	2.833
OAXACA	452200	60547	2.315	0.170	11.62	2.491
PUEBLA	480283	82205	3.853	0.0681	11.89	2.868
QUERETARO	77427	160640	5.303	0.0477	11.37	1.884
QUINTANA ROO	5806	155155	3.997	0.106	25.20	4.352
SAN LUIS POTOSI	260269	106356	3.497	0.105	14.88	2.618
SINALOA	136855	112878	4.289	0.447	10.60	3.001
SONORA	70678	171660	5.296	0.190	13.00	2.576
TABASCO	24815	229765	5.546	0.0836	27.29	6.791
TAMAULIPAS	179982	141078	6.096	0.212	15.03	3.453
TLAXCALA	54210	72091	5.928	0.0556	5.420	1.160
VERACRUZ	332812	94695	3.057	0.0810	9.126	2.009
YUCATAN	27020	101303	2.731	0.0227	26.79	4.223
ZACATECAS	271126	89794	4.685	0.140	9.345	2.257

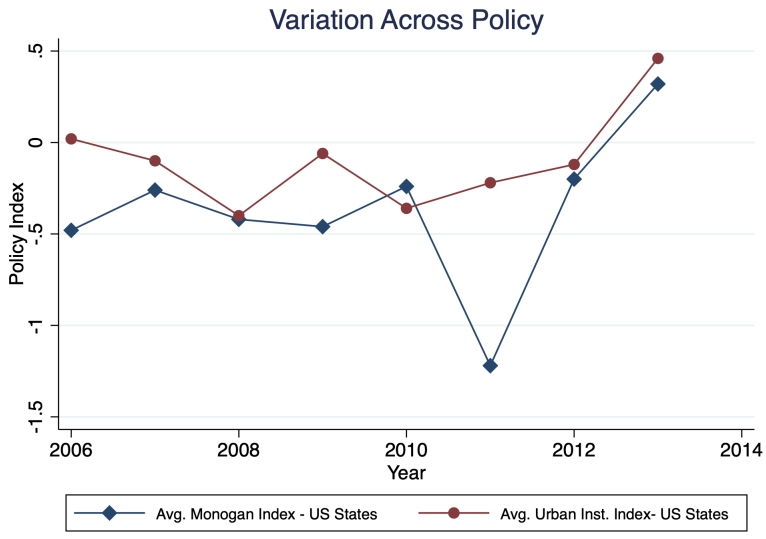
Column 1 shows the number of immigrants from each Mexican state over the eight years of data, as measured by cards. Subsequent columns show the mean across years for other relevant MX variables to show the substantial variation across space. Homicide and crime rates are measured per 1,000 people.

Figure A1: **Average Minimum Wages over Times**



Plot shows average state minimum wages as they vary across time. US hourly minimum wage rate is on the left axis in USD, Mexican daily minimum wage rate is on the right axis in pesos.

Figure A2: **Average Policy Index Over Time**



Plot shows average US state Policy Index measured two ways as it varies across time.

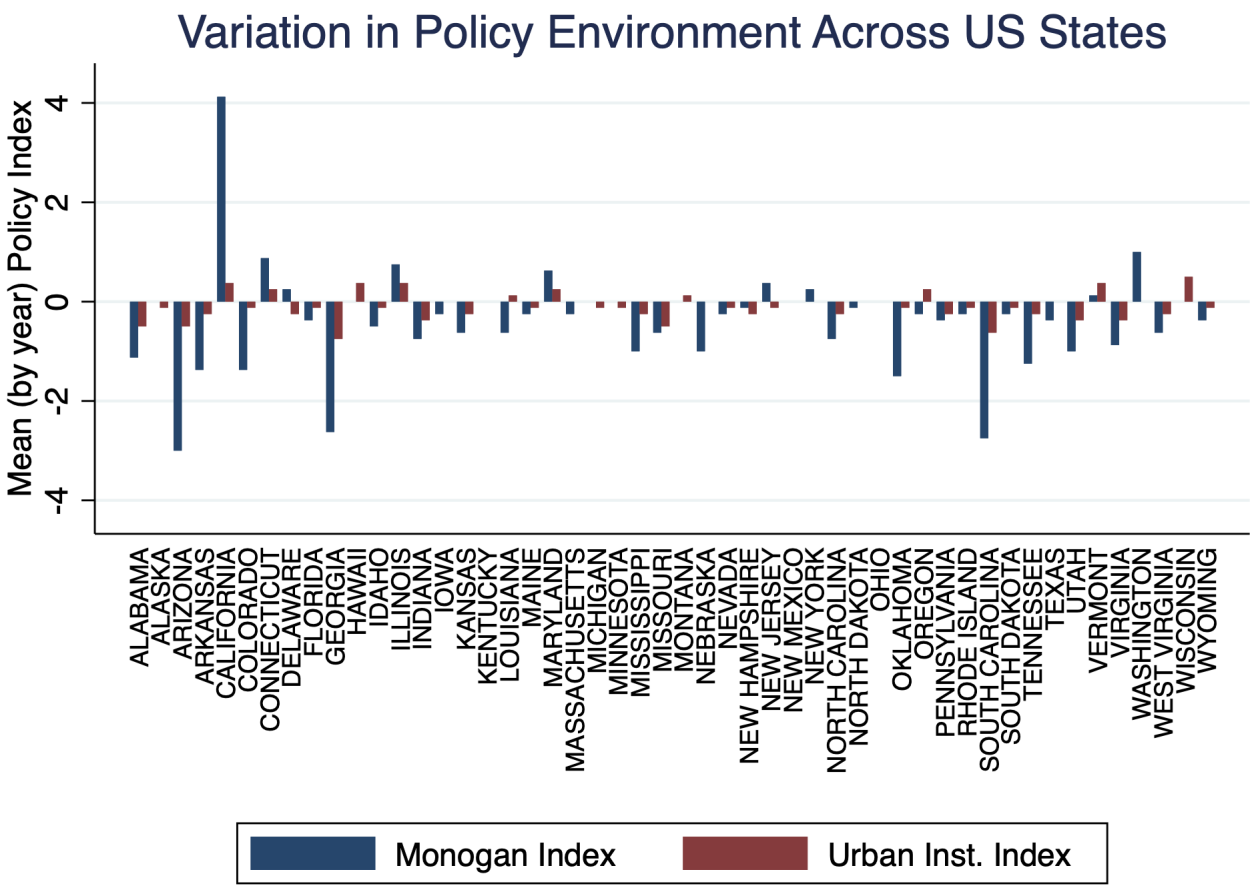


Figure A3: Policy Index by State and Year

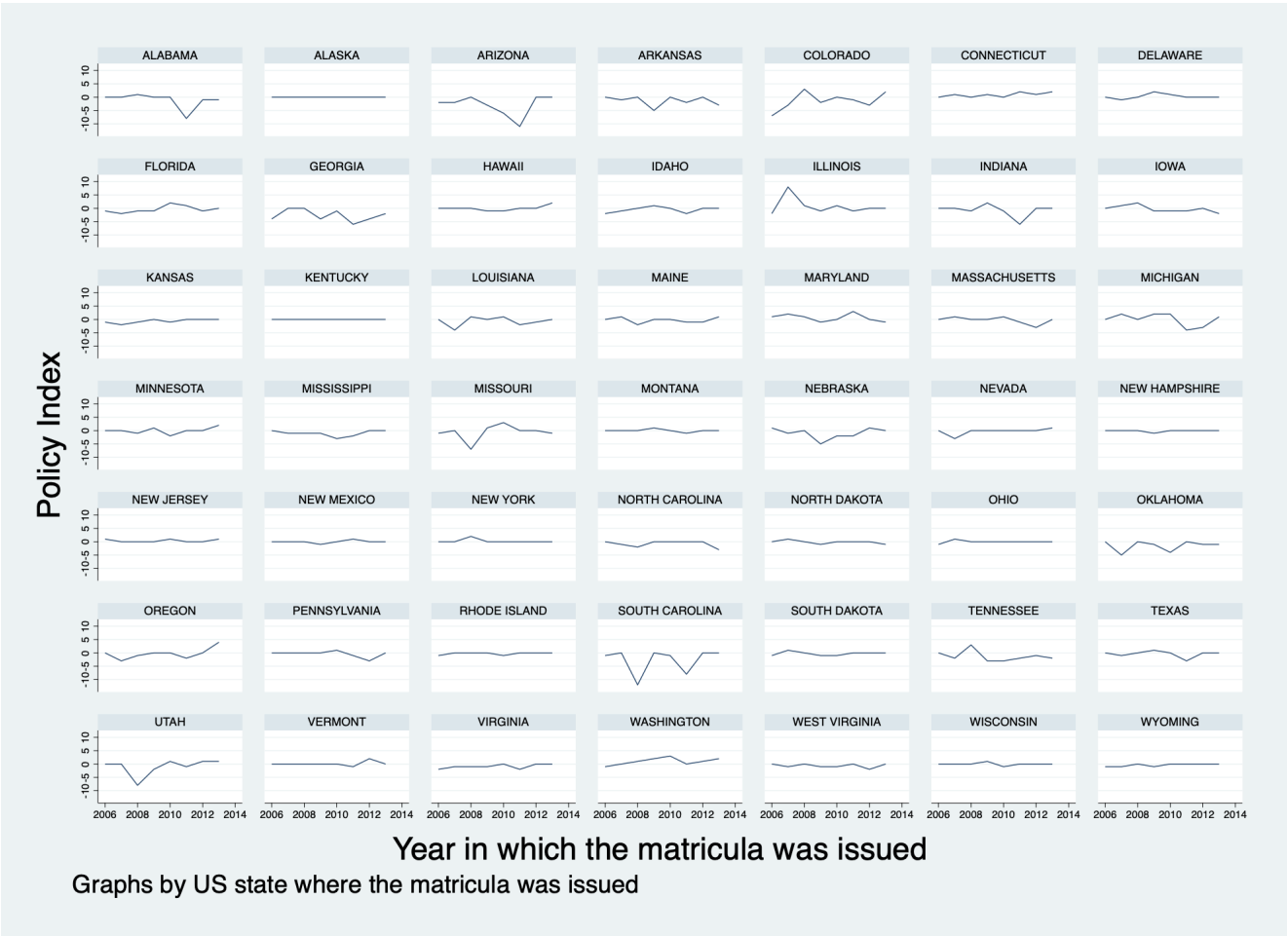
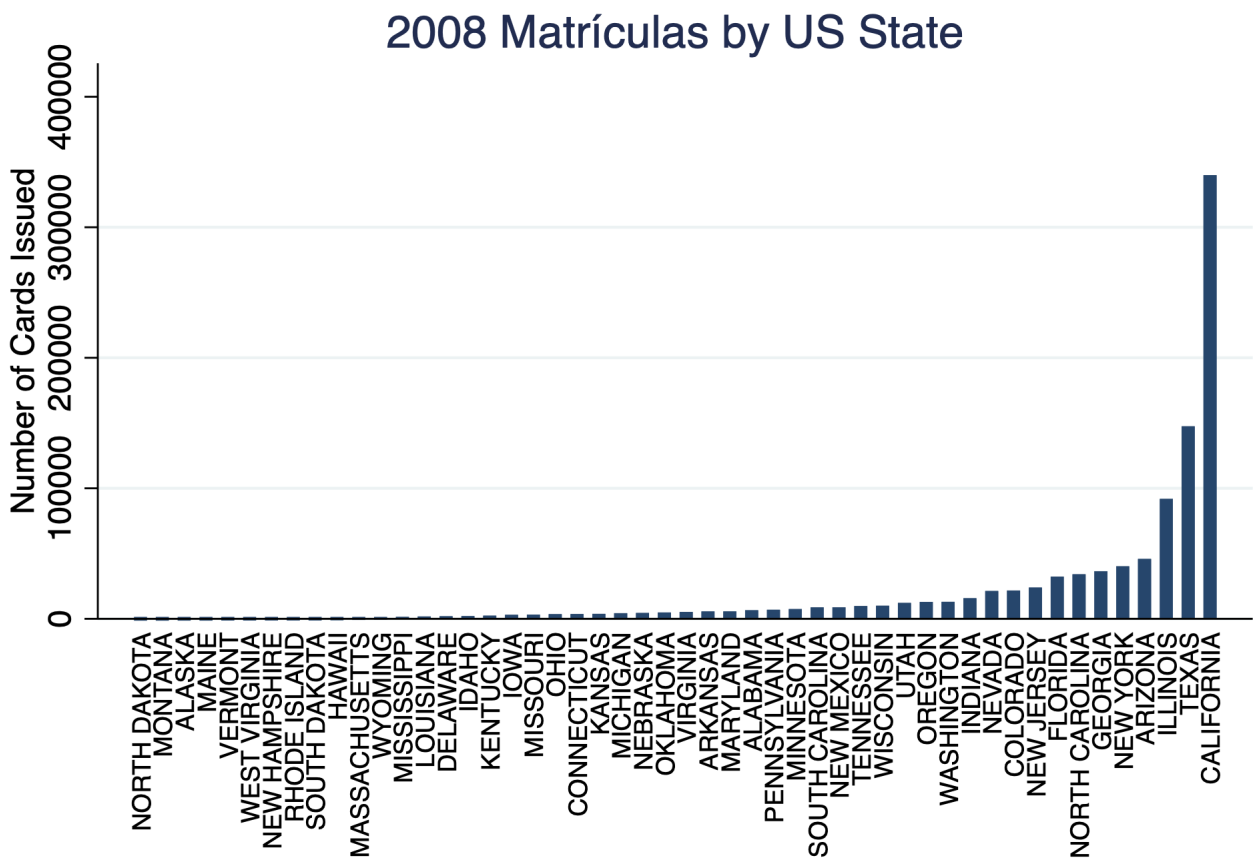


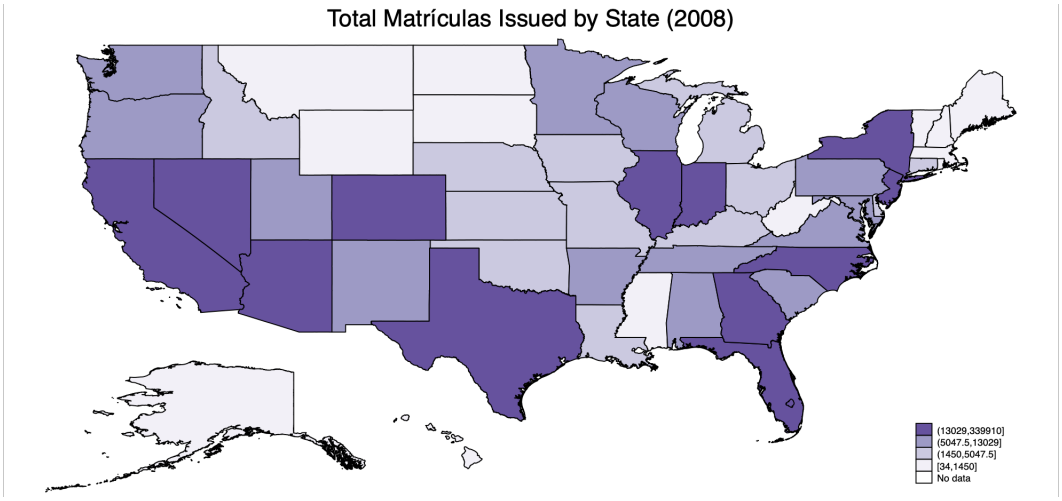
Figure A4: Policy Index by State and Year

Figure A5: **Distribution of Immigrants Across US States in 2008**



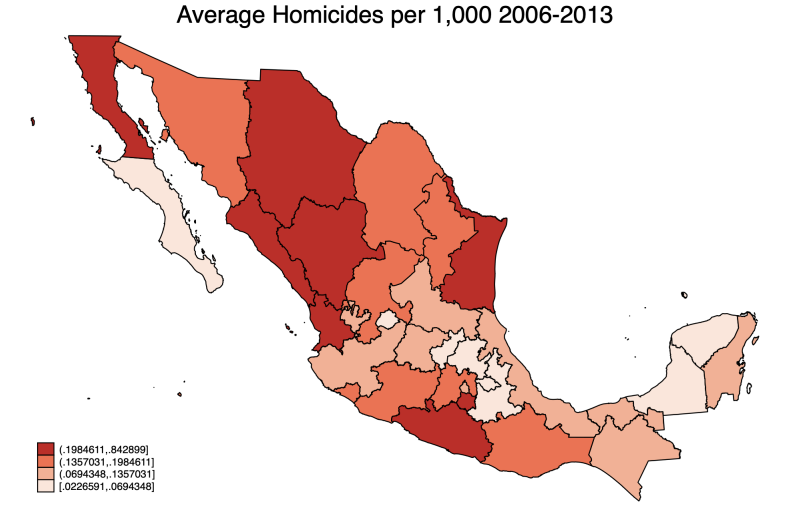
Plot shows the number of cards issued in each US state in the year 2008, the peak of undocumented immigration in this time frame. The skewness of the distribution is reflected in all years and evident in other measures of the US undocumented immigration population. Almost every state has at least a few new undocumented immigrants a year.

Figure A6: **Distribution of Immigrants Across US States in 2008**



Map shows same data as above.

Figure A7: **Variation in Homicides Across MX States**



Data on number of homicide per year in each Mexican state are transformed into a rate of homicides per 1000 people. This is then averaged across years of the sample and plotted for each state. There is substantial variation across states. See the data appendix for variation in the homicide rate across time.

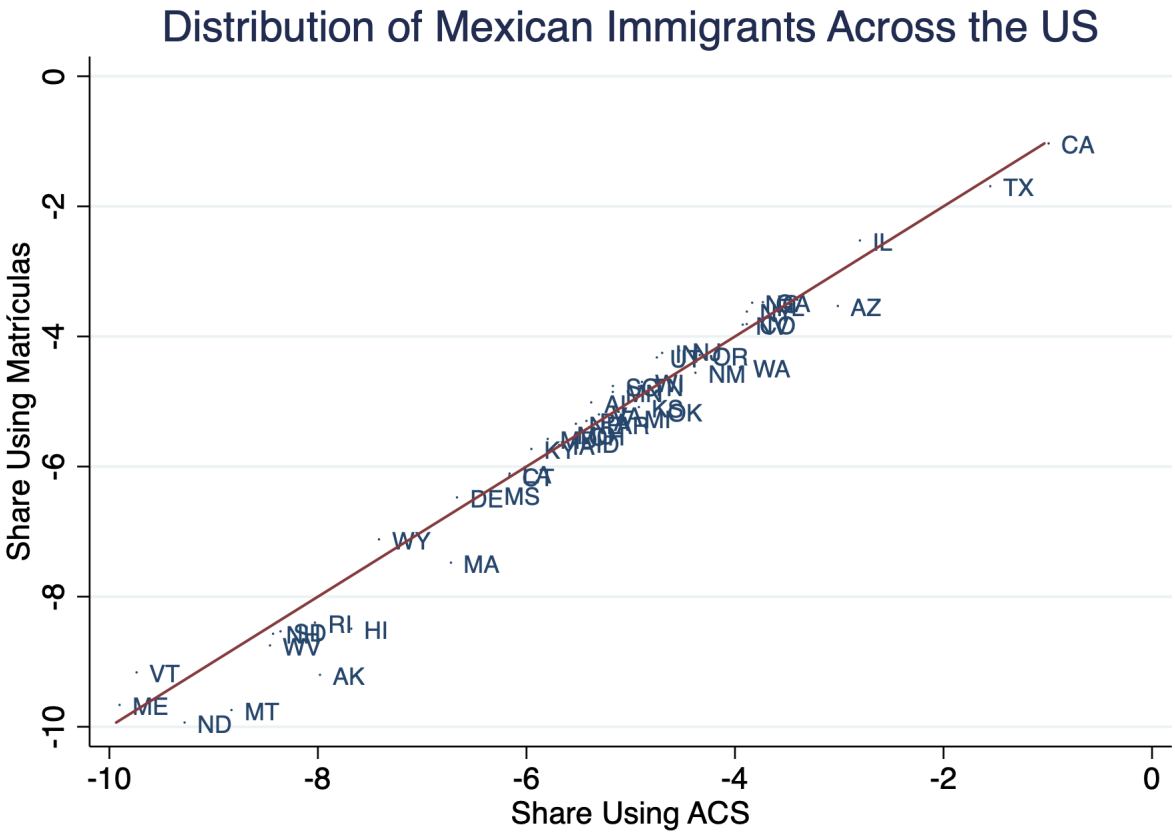


Figure A8: Distribution of Mexican Immigrants: ACS and Matrículas

Appendix B: Additional Specifications: Economic Controls and One Country Analysis

Table B1 shows that using total employment rather than unemployment leads to similar findings, high employment levels attract immigrants and this is particularly true in construction, a sector that employs a number of immigrants. I do not find significant impacts of higher wages by sector impacting migration flows but it may be that new immigrants are likely to earn less than average wages even in agriculture or construction, or that true immigrant earnings are not captured well by this data if immigrants are paid under the table or unlikely to respond to surveys.

Table B2 shows that high unemployment for women and Hispanics is also associated with less migration, similar to using overall state unemployment. Conversely, I do not find that measures that capture regional price differences reduce immigration. Instead a higher state price index and a higher rent price index are associated with more immigration. High cost of living states typically have better amenities and may be politically liberal so that may confound the results. Additionally, this positive coefficient may reflect a strong influence from California, where prices and rent are very high but it is also by far the most popular destination for Mexican immigrants. I do find that for OLS regressions, the policy index has a stronger positive impact on migration flows in California than the index in all other states (Table D4).

Table B4 shows that median and average income for Mexican immigrants and specifically non-citizen Mexican immigrants has a positive impact on immigration flows. I use the American Community Survey to calculate actual earnings for Mexicans living in the US as a different benchmark than minimum wage for likely earnings for a new immigrant. Similarly, I find that higher unemployment rates for these groups significantly reduce migration, as we would expect. Family income for families with at least one Mexican immigrant does not impact migration but this data may be skewed by high earnings by American partners of immigrants and does not reflect the ”likely wage” of a new immigrant so this is not surprising.

	(1) Ln(Matrículas Consulares)	(2) Ln(Matrículas Consulares)	(3) Ln(Matrículas Consulares)	(4) Ln(Matrículas Consulares)	(5) Ln(Matrículas Consulares)
US State Policy Index	0.000453	0.00277	0.00249	0.00184	0.00214
	(0.00184)	(0.00200)	(0.00199)	(0.00183)	(0.00191)
MX State Homicide Rate (homicides/thousand)	0.108**	0.108**	0.105**	0.108**	0.108**
	(0.0396)	(0.0404)	(0.0404)	(0.0392)	(0.0405)
Total Level of Employment (US state)	0.000442***				
	(0.0000305)				
Average Weekly Wage, all sectors (US state, thousands $)	-0.732				
	(0.449)				
MX State Unemp. Rate (t-1)	0.0289***	0.0289**	0.0286**	0.0290***	0.0289**
	(0.00873)	(0.00883)	(0.00896)	(0.00866)	(0.00881)
Level of Agricultural Employment (US state)		-0.00374	-0.00367		
		(0.00206)	(0.00198)		
Average Weekly Wage, agriculture (US state, thousands $)		0.0495			
		(0.0720)			
Adverse Effect Wage Rate (H2A) (US State)			0.0143		
			(0.0199)		
Level of Construction Employment (US state)				0.00285***	
				(0.000216)	
Average Weekly Wage, construction (US state, $)				-0.0544	
				(0.203)	
Total Level of crop agriculture employment (US State)					-0.0123
					(0.00862)
Average Weekly Wage, crop agriculture (US State, thousands $)					0.145
					(0.0969)
Observations	12800	12800	12544	12800	12800
Pair FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Population Controls	Yes	Yes	Yes	Yes	Yes
Dummy for Zeroes	Yes	Yes	Yes	Yes	Yes

Standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
All models control for state-to-state pair fixed effects and year fixed effects, as well as population, and foreign born population. The dependent variable in all specifications is the natural log of the number of new immigrants registered in the state pair and year. Columns present the results of Ordinary Least Squares regression. All models are estimated on a balanced panel of 12800 state-state pairs, covering 32 Mexican States to 50 US States from 2006 to 2013. Standard errors are clustered at the pair level.

Table B1: Determinants of Undocumented Immigration: Sector Wage and Employment

	(1) Ln(Matrículas Consulares)	(2) Ln(Matrículas Consulares)	(3) Ln(Matrículas Consulares)	(4) Ln(Matrículas Consulares)	(5) Ln(Matrículas Consulares)
US State Policy Index	0.00185	0.00245	0.00482*	0.00201	0.00220
	(0.00188)	(0.00196)	(0.00196)	(0.00186)	(0.00189)
MX State Homicide Rate (homicides/thousand)	0.108**	0.0401	0.0401	0.108**	0.114**
	(0.0399)	(0.0435)	(0.0438)	(0.0398)	(0.0426)
US State Unemp. Rate (t-1)	-0.0556***	-0.0322***	-0.0213***		
	(0.00681)	(0.00672)	(0.00645)		
US State Median Income (thousands $)	-0.000282	-0.00551**			
	(0.00191)	(0.00201)			
MX State Unemp. Rate (t-1)	0.0290***	0.0320***	0.0320***	0.0290***	0.0315***
	(0.00874)	(0.00815)	(0.00832)	(0.00864)	(0.00935)
US State Regional Price Index		0.0446***			
		(0.00608)			
US State Rent Price Index			0.0123***		
			(0.00251)		
US State Unemp. Rate, men				-0.00144	
				(0.00569)	
US State Unemp. Rate, women				-0.0348***	
				(0.00785)	
US State Minimum Wage				0.0987***	0.102***
				(0.0151)	(0.0158)
US State Unemployment Rate, Hispanic/Latino/a/x men and women					-0.0114***
					(0.00226)
Observations	12800	9600	9600	12800	11680
Pair FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Population Controls	Yes	Yes	Yes	Yes	Yes
Dummy for Zeroes	Yes	Yes	Yes	Yes	Yes

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

All models control for state-to-state pair fixed effects and year fixed effects, as well as population, and foreign born population. The dependent variable in all specifications is the natural log of the number of new immigrants registered in the state pair and year. Columns present the results of Ordinary Least Squares regression. Columns 1 and 4 are estimated on a balanced panel of 12800 state-state pairs, covering 32 Mexican States to 50 US States from 2006 to 2013 while 2 and 3 lack data for 2006 and 2007 and column 5 is missing observations in South Dakota for 2011 through 2013 due to lack of data. Standard errors are clustered at the pair level.

Table B2: Determinants of Undocumented Immigration: Cost of Living and Unemployment by Group

	(1) Ln(Matrículas Consulares)	(2) Ln(Matrículas Consulares)	(3) Ln(Matrículas Consulares)	(4) Ln(Matrículas Consulares)	(5) Ln(Matrículas Consulares)
US State Policy Index	0.00186	0.00209	0.00147	0.00209	0.00161
	(0.00189)	(0.00187)	(0.00190)	(0.00188)	(0.00189)
MX State Violent Crime Rate	0.00428				
(per 100,000 residents)	(0.00713)				
US State Violent Crime Rate	-0.00115***		-0.000649***		
(per 100,000 residents)	(0.000195)		(0.000190)		
US State Unemp. Rate (t-1)	-0.0681***	-0.0517***		-0.0517***	
	(0.00676)	(0.00605)		(0.00609)	
US State Minimum Wage	0.0753***	0.0920***		0.0920***	
	(0.0148)	(0.0147)		(0.0148)	
MX State Unemp. Rate (t-1)	0.0335***	0.0337***			0.0289**
	(0.00842)	(0.00846)			(0.00884)
MX State Homicide Rate			0.142***		0.108**
(homicides/thousand)			(0.0396)		(0.0404)
Observations	12800	12800	12800	12800	12800
Pair FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Population Controls	Yes	Yes	Yes	Yes	Yes
Dummy for Zeroes	Yes	Yes	Yes	Yes	Yes

Standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
All models control for state-to-state pair fixed effects and year fixed effects, as well as population, and foreign born population. The dependent variable in all specifications is the natural log of the number of new immigrants registered in the state pair and year. Columns present the results of Ordinary Least Squares regression. Column 3 includes no economic controls, only factors related to violence in addition to the policy index. Column 4 presents the main results focusing only on the US side (pull factors) while Column 5 presents the main results but only considering the push factors. All models are estimated on a balanced panel of 12800 state-state pairs, covering 32 Mexican States to 50 US States from 2006 to 2013. Standard errors are clustered at the pair level.

Table B3: Determinants of Undocumented Immigration: Violent Crime and One Country Analysis

	(1) Ln(Matrículas Consulares)	(2) Ln(Matrículas Consulares)	(3) Ln(Matrículas Consulares)	(4) Ln(Matrículas Consulares)	(5) Ln(Matrículas Consulares)
US State Policy Index	0.00173	0.00184	0.00202	0.00191	0.00187
	(0.00189)	(0.00190)	(0.00190)	(0.00191)	(0.00190)
MX State Homicide Rate	0.106**	0.106**	0.109**	0.109**	0.109**
(homicides/thousand)	(0.0411)	(0.0412)	(0.0405)	(0.0405)	(0.0404)
US State Median Annual Wage	0.00000595***				
Mex-born Non-citizens	(0.00000113)				
US State Mean Annual Unemp. Rate	-0.0714	-0.204*			
Mex-born Non-citizens, t-1	(0.0779)	(0.0799)			
MX State Unemp. Rate (t-1)	0.0289**	0.0289**	0.0292***	0.0292***	0.0292***
	(0.00898)	(0.00900)	(0.00884)	(0.00885)	(0.00885)
US State Mean Annual Wage		0.00000244**			
Mex-born Non-citizens		(0.000000946)			
US State Median Annual Wage			0.00000237*		
Mex-born			(0.00000106)		
US State Mean Annual Unemp.			-0.268**	-0.273**	-0.288***
Rate Mex-born, t-1			(0.0846)	(0.0858)	(0.0872)
US State Mean Annual Wage				-0.000000697	
Mex-born				(0.00000116)	
US State Median Annual					-0.000000461
Family Income Mex-born					(0.000000467)
Observations	12512	12512	12736	12736	12736
Pair FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Population Controls	Yes	Yes	Yes	Yes	Yes
Dummy for Zeroes	Yes	Yes	Yes	Yes	Yes

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

All models control for state-to-state pair fixed effects and year fixed effects, as well as population, and foreign born population. The dependent variable in all specifications is the natural log of the number of new immigrants registered in the state pair and year. Columns present the results of Ordinary Least Squares regression and economic controls are specific to Mexican immigrants living in the United States, calculated using the American Community Survey. All models are based on a balanced panel of 12800 state-state pairs, covering 32 Mexican States to 50 US States from 2006 to 2013, with some data lost due to states that did not survey any Mexican Americans in that year in the ACS sample available. Standard errors are clustered at the pair level.

Table B4: Determinants of Undocumented Immigration: Economic Conditions for Mexican Immigrants to the United States

Appendix C: Additional Specifications: Alternate Policy Indices

	(1) Ln(Matrículas Consulares)	(2) US State Policy Index	(3) Ln(Matrículas Consulares)	(4) US State Policy Index (Urban)
US State Policy Index (t-1)	0.0879**			
	(0.0315)			
MX State Homicide Rate	0.155***	0.00227	0.151	0.00127
(homicides/thousand) (t-1)	(0.0391)	(0.117)	(0.135)	(0.0469)
US State Minimum Wage (t-1)	0.0957***	0.0194	0.453	-0.121***
	(0.0114)	(0.0350)	(0.356)	(0.0144)
US State Unemp. Rate (t-1)	-0.0693***	0.153***	-0.115	0.0200**
	(0.00831)	(0.0178)	(0.0614)	(0.00628)
MX State Unemp. Rate (t-1)	0.0252**	-0.000825	0.0265	-0.000460
	(0.00795)	(0.0228)	(0.0289)	(0.00967)
Prison Population per		-0.00963***		-0.00165***
100,000 residents (t-1)		(0.000883)		(0.000323)
US State Policy Index			0.514*	
(Urban Institute Data, t-1)			(0.248)	
Observations	12800	12800	12800	12800
F		118.9		26.06
Pair FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Population Controls	Yes	Yes	Yes	Yes
Dummy for Zeroes	Yes	Yes	Yes	Yes

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

All models control for state-to-state pair fixed effects and year fixed effects, as well as population, and foreign born population. The dependent variable in all specifications is the natural log of the number of new immigrants registered in the state pair and year. Columns 1 and 3 present the second stage results of 2SLS IV regression, using a one year lagged value of each independent determinant. Columns 2 and 4 are the first stage results, including the Kleibergen-Paap Wald F statistic. All models are estimated on a balanced panel of 12800 state-state pairs, covering 32 Mexican States to 50 US States from 2006 to 2013, with independent variables ranging from 2005 to 2012. Standard errors are clustered at the pair level.

Table C1: Determinants of Undocumented Immigration (t-1): Two-Stage Least Squares

	(1) Ln(Matrículas Consulares)	(2) Ln(Matrículas Consulares)	(3) Ln(Matrículas Consulares)	(4) Ln(Matrículas Consulares)
Cumulative Policy Index	0.00645*			
	(0.00313)			
MX State Homicide Rate	0.108**	0.108**	0.108**	0.108**
(homicides/thousand)	(0.0396)	(0.0397)	(0.0394)	(0.0395)
US State Minimum Wage	0.107***	0.0848***	0.0906***	0.0609***
	(0.0155)	(0.0146)	(0.0146)	(0.0147)
US State Unemp. Rate (t-1)	-0.0536***	-0.0533***	-0.0521***	-0.0593***
	(0.00636)	(0.00613)	(0.00601)	(0.00615)
MX State Unemp. Rate (t-1)	0.0290***	0.0290***	0.0290***	0.0290***
	(0.00857)	(0.00857)	(0.00858)	(0.00847)
US State Cumulative Policy		-0.0184***		
Index (Urban Institute Data)		(0.00493)		
US State Cumulative Policy Index			0.0201**	
(Urban Institute Data, positive only)			(0.00717)	
US State Cumulative Policy Index				0.0692***
(Urban Institute Data, negative only)				(0.00788)
Observations	12800	12800	12800	12800
Pair FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Population Controls	Yes	Yes	Yes	Yes
Dummy for Zeroes	Yes	Yes	Yes	Yes

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

All models control for state-to-state pair fixed effects and year fixed effects, as well as population, and foreign born population. The dependent variable in all specifications is the natural log of the number of new immigrants registered in the state pair and year. Columns present the results of Ordinary Least Squares regression. All models are estimated on a balanced panel of 12800 state-state pairs, covering 32 Mexican States to 50 US States from 2006 to 2013. Standard errors are clustered at the pair level.

Table C2: Determinants of Undocumented Immigration: Cumulative Policy Indices

	(1) Ln(Matrículas Consulares)	(2) Ln(Matrículas Consulares)	(3) Ln(Matrículas Consulares)	(4) Ln(Matrículas Consulares)
US State Policy Index	0.00404*			
	(0.00187)			
MX State Homicide Rate	0.101*	0.108**	0.108**	0.108**
(homicides/thousand)	(0.0418)	(0.0396)	(0.0396)	(0.0396)
US State Minimum Wage	0.116***	0.0924***	0.0912***	0.0919***
	(0.0163)	(0.0146)	(0.0146)	(0.0146)
US State Unemp. Rate (t-1)	-0.0535***	-0.0516***	-0.0521***	-0.0522***
	(0.00695)	(0.00604)	(0.00605)	(0.00609)
MX State Unemp. Rate (t-1)	0.0267**	0.0290***	0.0290***	0.0290***
	(0.00951)	(0.00859)	(0.00859)	(0.00859)
Policy Index, includes scope = 2		0.00392**		
		(0.00148)		
Policy Index, includes all scope			0.00217***	
			(0.000534)	
US State Policy Index (ratio method)				0.00628
				(0.00377)
Observations	10912	12800	12800	12800
Pair FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Population Controls	Yes	Yes	Yes	Yes
Dummy for Zeroes	Yes	Yes	Yes	Yes

Standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
All models control for state-to-state pair fixed effects and year fixed effects, as well as population, and foreign born population. The dependent variable in all specifications is the natural log of the number of new immigrants registered in the state pair and year. Columns present the results of Ordinary Least Squares regression. Column 1 excludes states where there were no new policies issued that year, Columns 2 and 3 include laws of lesser scope respectively, and Column 4 calculates the index as $ln(\frac{\sum pro-immgrantlaws*scope+1}{\sum anti-immgrantlaws*scope+1})$. All models are estimated on a balanced panel of 12800 state-state pairs, covering 32 Mexican States to 50 US States from 2006 to 2013. Standard errors are clustered at the pair level.

Table C3: Determinants of Undocumented Immigration: Laws of Additional Scope

	(1) Ln(Matriculas Consulares)	(2) Ln(Matriculas Consulares)	(3) Ln(Matriculas Consulares)
Policy Index (positive only), includes scope = 2	0.0101***		
	(0.00193)		
Policy Index (negative only), includes scope = 2	0.000153		
	(0.00179)		
MX State Homicide Rate (homicides/thousand)	0.108**	0.108**	0.108**
	(0.0397)	(0.0395)	(0.0396)
US State Minimum Wage	0.0913***	0.0933***	0.0917***
	(0.0146)	(0.0147)	(0.0146)
US State Unemp. Rate (t-1)	-0.0523***	-0.0520***	-0.0517***
	(0.00606)	(0.00605)	(0.00604)
MX State Unemp. Rate (t-1)	0.0290***	0.0290***	0.0290***
	(0.00860)	(0.00859)	(0.00859)
Value of Policy Index if Net Positive		0.00595*	
		(0.00266)	
Absolute Value of Policy Index if Net Negative			-0.000808
			(0.00240)
Observations	12800	12800	12800
Pair FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Population Controls	Yes	Yes	Yes
Dummy for Zeroes	Yes	Yes	Yes

Standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
All models control for state-to-state pair fixed effects and year fixed effects, as well as population, and foreign born population. The dependent variable in all specifications is the natural log of the number of new immigrants registered in the state pair and year. Columns present the results of Ordinary Least Squares regression. All models are estimated on a balanced panel of 12800 state-state pairs, covering 32 Mexican States to 50 US States from 2006 to 2013. Standard errors are clustered at the pair level.

Table C4: Determinants of Undocumented Immigration: Only Generous or Only Restrictive Laws

Some NCSL categories of laws were excluded because there were very few in the whole sample (for example only three laws related to ”legal services”). I again include only laws with a scope score of 3 or 4 as the other laws are mostly symbolic.

An example of a law related to benefits is: a law prohibiting an immigrant who cannot verify their legal status from receiving temporary homeless shelter relief.

An example of a law related to education is: a law allowing undocumented students to qualify for

in-state tuition.

An example of a law related to employment is: a law forbidding employers from knowingly hiring undocumented immigrants.

An example of a law related to health is: a law appropriating significant funds for migrant health clinics.

An example of a law related to law enforcement is: a law requiring jail administrators to determine legal residency of anyone confined for a felony or impaired driving.

An example of a law related to identification is: a law adopting REAL ID standards, thus requiring proof of citizenship for a driver's license.

	(1) Ln(Matrículas Consulares)	(2) Ln(Matrículas Consulares)	(3) Ln(Matrículas Consulares)	(4) Ln(Matrículas Consulares)	(5) Ln(Matrículas Consulares)	(6) Ln(Matrículas Consulares)
US State Policy Index Benefits-related	-0.0158	-0.00766				
	(0.00846)	(0.00863)				
US State Policy Index Education-related	0.0816***	0.0675***	0.0596***			
	(0.0108)	(0.0110)	(0.0102)			
US State Policy Index Employment-related	-0.0147*	-0.0121				
	(0.00690)	(0.00683)				
US State Policy Index Healthcare-related	0.0501***	0.0432***		0.0493***		
	(0.0103)	(0.0104)		(0.00998)		
US State Policy Index Identification-related	-0.0206**	-0.0319***			-0.0209**	
	(0.00697)	(0.00683)			(0.00750)	
US State Policy Index Law Enforcement-related	0.0151*	0.0149*				0.0139
	(0.00642)	(0.00722)				(0.00743)
MX State Homicide Rate (homicides/thousand)	0.108**					
	(0.0390)					
US State Minimum Wage	0.0972***					
	(0.0145)					
US State Unemp. Rate (t-1)	-0.0551***					
	(0.00625)					
MX State Unemp. Rate (t-1)	0.0290***					
	(0.00847)					
Observations	12800	12800	12800	12800	12800	12800
Pair FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Population Controls	Yes	Yes	Yes	Yes	Yes	Yes
Dummy for Zeroes	Yes	Yes	Yes	Yes	Yes	Yes

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

All models control for state-to-state pair fixed effects and year fixed effects, as well as population, and foreign born population. The dependent variable in all specifications is the natural log of the number of new immigrants registered in the state pair and year. Columns present the results of Ordinary Least Squares regression. All models are estimated on a balanced panel of 12800 state-state pairs, covering 32 Mexican States to 50 US States from 2006 to 2013. Standard errors are clustered at the pair level.

Table C5: Determinants of Undocumented Immigration: Laws by Category

Appendix D: Additional Specifications: Robustness Checks

Internal Movers	New Arrivals
0.0138	0.0189

Table presents data on all current Mexican immigrants living in the US. Column 1 presents the percentage who moved internally (from one state to another) within the last year. Column 2 reports the percentage who arrived from Mexico in the last year. Authors calculations using the American Community Survey data and survey weights (Ruggles et al., 2020).

Table D1: Internal Migration of Mexican Immigrants

Internal Movers	New Arrivals
0.0197	0.0726

Table presents data on all current Mexican immigrants living in the US who have arrived since 2002. Column 1 presents the percentage who moved internally (from one state to another) within the last year. Column 2 reports the percentage who arrived from Mexico in the last year.Authors calculations using the American Community Survey data and survey weights (Ruggles et al., 2020).

Table D2: Internal Migration of Mexican Immigrants: Immigrated After 2002

Internal Movers	New Arrivals
0.0236	0.125

Table presents data on all current Mexican immigrants living in the US who arrived within four years prior to when they were surveyed. Column 1 presents the percentage who moved internally (from one state to another) within the last year. Column 2 reports the percentage who arrived from Mexico in the last year. Authors calculations using the American Community Survey data and survey weights (Ruggles et al., 2020).

Table D3: Internal Migration of Mexican Immigrants: Immigrated in Last Four Years

	(1) Ln(Matrículas Consulares)	(2) US State Policy Index	(3) CA x Policy Index	(4) Ln(Matrículas Consulares)	(5) Ln(Matrículas Consulares)
US State Policy Index	-0.0310			0.000599	
	(0.0295)			(0.00204)	
CA x Policy Index	0.0379			0.0132***	
	(0.0292)			(0.00307)	
MX State Homicide Rate (homicides/thousand)	0.108**	0.000280	-0.000117	0.108**	
	(0.0373)	(0.133)	(0.0526)	(0.0395)	
US State Minimum Wage	0.0951***	0.224***	0.0639***	0.0938***	
	(0.0145)	(0.0442)	(0.0113)	(0.0147)	
US State Unemp. Rate (t-1)	-0.0529***	-0.101***	-0.0470***	-0.0523***	-0.0564***
	(0.00574)	(0.0219)	(0.00821)	(0.00606)	(0.00616)
MX State Unemp. Rate (t-1)	0.0290***	-0.000132	0.0000553	0.0290***	0.0251**
	(0.00810)	(0.0251)	(0.00608)	(0.00859)	(0.00848)
Prison occupants per 100,000 residents		-0.0108***	-0.000782***		
		(0.000823)	(0.000142)		
CA x prison rate		-0.0649***	-0.0703***		
		(0.00107)	(0.000488)		
US State Policy Index (t-1)					0.0134***
					(0.00293)
CA x Policy Index, t-1					-0.0176***
					(0.00422)
MX State Homicide Rate (homicides/thousand) (t-1)					0.155***
					(0.0422)
US State Minimum Wage (t-1)					0.0899***
					(0.0120)
Observations	12800	12800	12800	12800	12800
F		77.26	77.26		
Pair FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Population Controls	Yes	Yes	Yes	Yes	Yes
Dummy for Zeroes	Yes	Yes	Yes	Yes	Yes

Standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
All models control for state-to-state pair fixed effects and year fixed effects, as well as population, and foreign born population. The dependent variable in all specifications is the natural log of the number of new immigrants registered in the state pair and year or the policy index for first stage results. Column 1 presents the results of a 2SLS regression where a dummy for California is interacted with the policy index to highlight the California specific case. Columns 2 and 3 present the first stage results including K-P wald F statistics. Columns 4 and 5 are OLS models and all independent variables are lagged one year for Column 5. All models are estimated on a balanced panel of 12800 state-state pairs, covering 32 Mexican States to 50 US States from 2006 to 2013. Standard errors are clustered at the pair level.

Table D4: Determinants of Undocumented Migration: California Specific Impacts

	(1) US State Policy Index
US State Deportations	0.0533
US State ICE Detention Orders	0.168
N	400

Table presents the correlation between deportations and ICE detention orders and the policy index value in each US state and year.

Table D5: Correlation Between ICE Enforcement and Policy Index

	(1) Deportations	(2) Deportations	(3) ICE Detention Orders
US State Policy Index	71.19	715.1	-102.5
	(148.4)	(1627.8)	(73.10)
Observations	400	400	400
Year FE	Yes		Yes
State FE	Yes		Yes

Standard errors in parentheses

Table presents a simple regression of the policy index on measures of immigration enforcement in each state and year. Column 1 includes state and year fixed effects and show the relationship between the policy index and the number of deportations out of each state in each year. Column 2 is the same but without the fixed effects. Column 3 shows the relationship between policy and the number of ICE detention orders issued in that state and year. Standard errors are clustered at the state level.

Table D6: Relationship Between US State Immigration Policy and ICE Enforcement

	(1) Ln(Matrículas Consulares)	(2) asinh(Policy Index)	(3) Ln(Matrículas Consulares)	(4) Ln(Matrículas Consulares)
asinh(Policy Index)	-0.0611		-0.00165	-0.00701
	(0.0448)		(0.00422)	(0.00426)
Ln(MX Homicide Rate)	0.0235	-0.0000120	0.0235	
	(0.0135)	(0.0219)	(0.0143)	
Ln(US State Minimum Wage)	0.618***	0.00803	0.641***	
	(0.0897)	(0.128)	(0.0969)	
Ln(MX State Unemployment Rate, t-1)	0.164***	-0.000852	0.164***	
	(0.0363)	(0.0547)	(0.0386)	
Ln(US State Unemployment Rate, t-1)	-0.381***	0.534***	-0.417***	
	(0.0595)	(0.0832)	(0.0517)	
asinh(Prison Occupants/100,000)		-2.009***		
		(0.156)		
Observations	12800	12800	12800	12800
F		166.1		
Pair FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Population Controls	Yes	Yes	Yes	Yes
Dummy for Zeroes	Yes	Yes	Yes	Yes

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

All models control for state-to-state pair fixed effects and year fixed effects, as well as population, and foreign born population. The dependent variable in all specifications is the natural log of the number of new immigrants registered in the state pair and year. Column 1 presents the second stage of 2SLS IV regression results and column 2 is the first stage of that model. Columns 3 and 4 present the results of Ordinary Least Squares regression. The independent variables are converted into their natural log form so the coefficients can be interpreted as quasi-elasticities. I use the inverse hyperbolic sine transformation for the policy index (and the instrument) to account for negative and zero values while maintaining the percentage change interpretation of the coefficient. All models are estimated on a balanced panel of 12800 state-state pairs, covering 32 Mexican States to 50 US States from 2006 to 2013. Standard errors are clustered at the pair level.

Table D7: Determinants of Undocumented Immigration: Gravity Model

	(1) Ln(Matrículas Consulares)	(2) Ln(Matrículas Consulares)	(3) Ln(Matrículas Consulares)	(4) Ln(Matrículas Consulares)	(5) Ln(Matrículas Consulares)	(6) Ln(Matrículas Consulares)	(7) Ln(Matrículas Consulares)	(8) Ln(Matrículas Consulares)
US State Policy Index	-0.0669*	0.000525	-0.0217	0.00208	-0.0164	0.00307	-0.0159	0.00146
	(0.0327)	(0.00219)	(0.0188)	(0.00188)	(0.0194)	(0.00188)	(0.0178)	(0.00167)
MX State Homicide Rate (homicides/thousand)	0.117**	0.117**	0.114**	0.113**	0.100**	0.100*	0.0801*	0.0794
	(0.0399)	(0.0415)	(0.0379)	(0.0402)	(0.0378)	(0.0401)	(0.0396)	(0.0422)
US State Minimum Wage	0.103***	0.0922***	0.0899***	0.0911***	0.0839***	0.0853***	0.0881***	0.0895***
	(0.0160)	(0.0153)	(0.0141)	(0.0153)	(0.0144)	(0.0156)	(0.0135)	(0.0147)
US State Unemp. Rate (t-1)	-0.0492***	-0.0493***	-0.0629***	-0.0633***	-0.0522***	-0.0525***	-0.0706***	-0.0708***
	(0.00622)	(0.00634)	(0.00632)	(0.00660)	(0.00610)	(0.00640)	(0.00602)	(0.00635)
MX State Unemp. Rate (t-1)	0.0292***	0.0292**	0.0289***	0.0289**	0.0310***	0.0310***	0.0308***	0.0310***
	(0.00873)	(0.00908)	(0.00843)	(0.00896)	(0.00846)	(0.00900)	(0.00854)	(0.00913)
Observations	12032	12032	12032	12032	11200	11200	9547	9608
Pair FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Population Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Dummy for Zeroes	Yes	Yes	Yes	Yes	Yes	Yes	No	No

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

All models control for state-to-state pair fixed effects and year fixed effects, as well as population, and foreign born population. The dependent variable in all specifications is the natural log of the number of new immigrants registered in the state pair and year. Odd numbered columns present the second stage of 2SLS IV regression results. Even numbered columns present the results of Ordinary Least Squares regression. Columns 1 and 2 exclude California, Texas, and Illinois from the sample as these states receive the highest number of Mexican immigrants. Columns 3 and 4 exclude North Dakota, Alaska, and Vermont, the states the receive the fewest Mexican immigrants. Columns 5 and 6 exclude Baja California Sur, Quintana Roo, Campeche, and Michoacán, the three states that send the fewest and the state with the most immigrants respectively. Columns 7 and 8 exclude any network flow that had fewer than 6 immigrants in that pair and year, which also will remove all zero flows. All models are estimated on a balanced panel of 12800 state-state pairs, covering 32 Mexican States to 50 US States from 2006 to 2013. Standard errors are clustered at the pair level.

Table D8: Determinants of Undocumented Immigration: Drop Influential Observations

	(1) US State Policy Index	(2) US State Policy Index	(3) US State Policy Index	(4) US State Policy Index
Prison occupants per 100,000 residents	-0.00996***	-0.0169***	-0.0158***	-0.0182***
	(0.000821)	(0.00115)	(0.00113)	(0.00138)
MX State Homicide Rate (homicides/thousand)	0.000346	0.00123	0.000510	0.0330
	(0.130)	(0.145)	(0.141)	(0.180)
US State Minimum Wage	0.239***	0.0765	0.0911*	0.0362
	(0.0411)	(0.0451)	(0.0450)	(0.0581)
US State Unemp. Rate (t-1)	-0.0263	-0.0575**	-0.0324	-0.0572*
	(0.0194)	(0.0219)	(0.0195)	(0.0238)
MX State Unemp. Rate (t-1)	-0.000163	-0.000507	-0.000230	-0.00725
	(0.0255)	(0.0279)	(0.0281)	(0.0358)
Observations	12032	12032	11200	9547
F	147.0	216.6	194.9	173.3
Pair FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Population Controls	Yes	Yes	Yes	Yes
Dummy for Zeroes	Yes	Yes	Yes	Yes

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

All models control for state-to-state pair fixed effects and year fixed effects, as well as population, and foreign born population. The dependent variable in all specifications is the natural log of the number of new immigrants registered in the state pair and year. Columns present the first stage of 2SLS IV regression results from the previous table. Column 1 excludes California, Texas, and Illinois from the sample as these states receive the highest number of Mexican immigrants. Column 2 excludes North Dakota, Alaska, and Vermont, the states the receive the fewest Mexican immigrants. Column 3 excludes Baja California Sur, Quintana Roo, Campeche, and Michoacán, the three states that send the fewest and the state with the most immigrants respectively. Column 4 excludes any network flow that had fewer than 6 immigrants in that pair and year, which also will remove all zero flows. All models are estimated on a balanced panel of 12800 state-state pairs, covering 32 Mexican States to 50 US States from 2006 to 2013. Standard errors are clustered at the pair level.

Table D9: Drop Influential Observations First Stage

	(1) asinh(Matrículas Consulatres)	(2) US State Policy Index	(3) asinh(Matrículas Consulatres)
US State Policy Index	-0.0145		0.00240
	(0.0181)		(0.00185)
MX State Homicide Rate (homicides/thousand)	0.0988**	-2.09e-16	0.0988*
	(0.0363)	(0.137)	(0.0386)
US State Minimum Wage	0.0931***	0.0914*	0.0943***
	(0.0133)	(0.0420)	(0.0144)
US State Unemp. Rate (t-1)	-0.0542***	-0.0327	-0.0545***
	(0.00558)	(0.0182)	(0.00586)
MX State Unemp. Rate (t-1)	0.0318***	-1.59e-17	0.0318***
	(0.00784)	(0.0263)	(0.00835)
Prison occupants per 100,000 residents		-0.0158***	
		(0.00106)	
Observations	12800	12800	12800
F		223.0	
Pair FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Population Controls	Yes	Yes	Yes
Dummy for Zeroes	No	No	No

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

All models control for state-to-state pair fixed effects and year fixed effects, as well as population, and foreign born population. The dependent variable in all specifications is the inverse hyperbolic sine transformation of the number of new immigrants registered in the state pair and year, which allows for zero observations while maintaining the percentage change interpretation. Column 1 presents the second stage of 2SLS IV regression results and column 2 is the first stage of that model. Column 3 presents the results of Ordinary Least Squares regression. All models are estimated on a balanced panel of 12800 state-state pairs, covering 32 Mexican States to 50 US States from 2006 to 2013. Standard errors are clustered at the pair level.

Table D10: Determinants of Undocumented Immigration: Inverse Hyperbolic Sine

	(1) Ln(Matrículas Consulares)	(2) US State Policy Index	(3) Ln(Matrículas Consulares)
US State Policy Index	-0.0145		0.00228
	(0.0185)		(0.00178)
MX State Homicide Rate (homicides/thousand)	0.102**	0.000305	0.102**
	(0.0375)	(0.137)	(0.0373)
US State Minimum Wage	0.0939***	0.0912*	0.0950***
	(0.0138)	(0.0422)	(0.0140)
US State Unemp. Rate (t-1)	-0.0542***	-0.0325	-0.0545***
	(0.00575)	(0.0183)	(0.00566)
MX State Unemp. Rate (t-1)	0.0320***	-0.000144	0.0320***
	(0.00810)	(0.0264)	(0.00807)
Prison occupants per 100,000 residents		-0.0158***	
		(0.00106)	
Observations	12800	12800	12800
F	83.61	221.6	83.93
Pair FE	No	No	No
Year FE	Yes	Yes	Yes
Population Controls	Yes	Yes	Yes
Dummy for Zeroes	Yes	Yes	Yes
MX State FE	Yes	Yes	Yes
US State FE	Yes	Yes	Yes

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

All models control for US state and Mexican state fixed effects and year fixed effects, as well as population, and foreign born population. The dependent variable in all specifications is the natural log of the number of new immigrants registered in the state pair and year. Column 1 presents the second stage of 2SLS IV regression results and column 2 is the first stage of that model. Column 3 presents the results of Ordinary Least Squares regression. All models are estimated on a balanced panel of 12800 state-state pairs, covering 32 Mexican States to 50 US States from 2006 to 2013. Standard errors are clustered at the pair level.

Table D11: Determinants of Undocumented Immigration: No Pair Fixed Effect

Online Appendix: Background and Setting

In the US, the federal government grants visas and citizenship, polices the national borders, and sets a variety of laws related to immigration. In recent years, federal immigration law has included policies such as Deferred Action for Childhood Arrivals, which granted a form of valid status to certain undocumented immigrants, and the Secure Fence Act 0f 2006 which expanded the fencing at the US-Mexico border. While unable to violate federal law, state governments retain substantial power to set their own immigrant-related laws. These state laws can impact the day-to-day lives of immigrants, included undocumented individuals, living and working in different states. State-level policies can range from relatively symbolic resolutions, such as declaring March Irish-American History Month (e.g. Louisiana SR 353), to significant laws such as those that deny (e.g Idaho's SB 538) or grant (e.g. California's AB 60) driver's licenses to people without formal immigration status. The policy differences across states may make it harder (or easier) to live as an immigrant in a particular state.

It is also not the case that a few, very active states are the only ones forming immigration related policies. Between 2006 and 2013 state governments passed over 2,290 immigrant-related policies, according to the National Council of State Legislatures. Every state enacted at least five policies during this period, with Washington state passing the fewest (5) and Texas passing the most (201).

Many of these laws aim to expand the rights of immigrants, while other laws restrict the rights of immigrants. While state policies can follow a particular pattern, like in California where the vast majority of state-level immigration-related laws seek to expand the rights of immigrants, many states have a variety of different types of laws on the books. For example, in 2006 Colorado enacted two new immigration related laws: the first provided that unauthorized immigrants should receive testing and treatment for communicable diseases or in the event of a pandemic but the second restricted eligibility for public benefits, requiring applicants to provide valid US ID and created new penalties for fraud. Not every law is as expansive as California's SB 75, which expanded Medi-Cal coverage to all eligible children, regardless of immigration status, or as harsh as Arizona's SB 1070, which would have enabled law enforcement officers to require people to

provide proof of immigration status where there is "reasonable suspicion" the individual may be undocumented[15].

Additionally, the 2006 to 2013 period covers the Great Recession and the beginning of the recovery period, which affected employment and earnings in the US and Mexico (Villareal, 2010; Freije, 2014). States in both countries were impacted quite differently (Hacker et al., 2012; Cypher, 2010; Villareal, 2010; Mejía-Reyes and Díaz-Carreño, 2014), meaning US states had not only different policy environments but varying economic conditions as well. Similarly, varying economic conditions across Mexico could impact potential migrants in different states.

Finally, in 2006, Mexican President Felipe Calderón authorized the "decapitation strategy" that targeted the heads of large drug cartels in Mexico (Guerrero, 2013; Calderón et al., 2015). Calderón et al. (2015) find that this aggressive strategy led to increased violence among those involved in drug trafficking and an increase in homicides in the general population. The authors argue this trend could be due to within-cartel struggles for leadership, increased inter-cartel violence, upsetting the chain of command and reducing the control leaders had over subordinates, and/or attacks on the government officials themselves (Calderón et al., 2015). The majority of the federal government's operations look place in just nine states: Michoacán, Baja California, Guerrero, Nuevo León, Tamaulipas, Chihuahua, Durango, Sinaloa and Veracruz (Guerrero, 2013). Calderón et al. (2015) note that operations often targeted states that were along the trafficking corridor and violence escalated most in these areas. This has lead to varying levels of homicides across time and space in Mexico during the period of study. The paper assesses the potential role of violence as a push factor of immigration.

[15]SB 75 is not included in the analysis here as is was passed after 2013. SB 1070 is included although various provisions were never fully implemented due to court challenges and some provisions were eventually struck down by the Supreme Court.