EXAMINING THE EFFECT OF STATE-ISSUED DRIVER’S LICENSES TO UNDOCUMENTED IMMIGRANTS ON LABOR FORCE PARTICIPATION

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By

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ABSTRACT
This study examines the relationship between state legislation allowing undocumented immigrants to acquire driver’s licenses and subsequent immigrant labor force participation. The research uses a fixed effects linear probability model analysis on a panel dataset, drawing on data from the Current Population Survey (CPS) and the National Conference of State Legislatures (NCSL). It investigates whether states that issue driver’s licenses for undocumented immigrants foster improved economic outcomes for immigrant communities by way of an increased likelihood of labor force participation the year after enactment of the policy. The study finds that driver’s license policies do not significantly increase labor force participation, particularly among men already disengaged from the workforce. I suggest that while these policies enhance mobility and autonomy, they may not fully address structural barriers that trap undocumented immigrants in poverty. The research underscores the need for targeted policy interventions to support immigrants facing persistent obstacles in accessing and participating in society, aiming to dismantle systemic inequities.

Keywords: immigrant integration, undocumented status, driver’s license policy, U.S. immigration, labor force participation
ACKNOWLEDGEMENTS

This research would not have been possible without my support system.

To my mother, father, and sister – thank you for instilling in me a commitment to protecting the unprotected. To my classmates Sneha Choudhary and Emma Hussey, your friendship and encouragement have been indispensable parts of this journey.

I humbly dedicate this research to immigrants and displaced peoples everywhere, struggling to rebuild their lives amidst a political landscape that is increasingly hostile towards them. I am in awe of diasporic communities whose resolve never wavers in the face of injustice.

In Solidarity,
Jad Jawad Maayah
Washington, D.C.
April 15, 2024
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INTRODUCTION

New arrivals to the United States face a host of obstacles in their journey to full integration, partly due to legal restrictions and partly due to the specific state policies that define immigrants’ access to benefits, healthcare, and education. Refugees, for instance, receive temporary assistance from resettlement agencies, after which many are left to fend for themselves by finding survival jobs, securing housing, and assimilating within their communities (United States Department of State, 2021). Likewise, undocumented immigrants possess very limited resources towards economic self-sufficiency, many of whom live under the radar to avoid legal consequences (Peri & Zaiour, 2021). Certain states have sought to uplift immigrants with inclusive integration policies, such as mandates to provide in-state tuition for undocumented immigrant students and sanctuary policies limiting cooperation between local law enforcement and federal immigration authorities (Williams et al., 2019). This paper surveys the effect of state legislation that permits undocumented immigrants to obtain driver’s licenses on the likelihood of joining the labor force among immigrants.

The presence of undocumented immigrants in the United States raises a host of economic questions and considerations, including labor market dynamics, wage disparities, tax contributions, and access to social services (Rouse et al., 2021). Understanding their economic outcomes and mobility is not only vital for assessing the overall health of the U.S. economy, but also for crafting humane and equitable immigration policies. Undocumented immigrants play a significant role in various sectors of the U.S. economy. They often take on low-skilled, physically demanding, and low-paying jobs that are essential to the functioning of sectors such as agriculture, construction, and hospitality (Enchautegui, 2015; Steven, 2013). These labor market dynamics ensnare undocumented communities in cycles of poverty where finding
survival jobs takes precedence over long-term financial self-sustenance. At the same time, enhancing undocumented immigrants’ access to the labor force not only expands their own financial wellbeing but also fosters a greater economic contribution, evidenced by their employment rates surpassing those of the native-born population and their tax contributions rivalling those of the nation’s wealthiest earners (Figueroa, 2017; Zong & Gelatt, 2018).

At the heart of this study lies the question of whether inclusive integration-related policies at the state level, in particular driver’s license laws, influence the labor market participation of undocumented immigrants. Inclusive integration policies encompass a range of measures that aim to facilitate the integration of immigrants into the fabric of American society. These may include policies related to education, healthcare, access to driver’s licenses, and protection against discrimination (Figueroa & Hinh, 2022). The underlying rationale is that states with more inclusive integration policies may foster labor force mobility for undocumented immigrants. More specifically, this study hypothesizes that state-level policies allowing undocumented immigrants to obtain driver’s licenses increase labor force participation among immigrants due to improved mobility and accessibility to job opportunities.

This research is motivated by the need for evidence-based policymaking in the realm of immigration. Immigrant integration has been a persistent policy issue in the United States for several decades. As individuals from various parts of the world seek opportunities and refuge within U.S. borders, policymakers must assess different methods to manage their presence effectively and equitably.
BACKGROUND

In recent years, states have taken dramatic and proactive steps to address the integration of undocumented immigrants into their communities. These inclusive integration-related policies encompass a wide range of measures designed to improve the wellbeing of immigrants and foster their inclusion in society, with the underlying philosophy that there must be paths to prosperity for immigrants lacking documented status given their critical role in local and state economies (Figueroa & Hinh, 2022). Key state-level integration policies include licensure and in-state tuition for undocumented immigrants, language access policies, and protective services like legal aid and sanctuary policies.

An Overview of Integration Policies

Driver’s Licenses for Undocumented Immigrants. Twenty-one states have introduced and enacted policies to provide undocumented immigrants access to driver's licenses. (National Conference of State Legislatures, 2023). One year after Virginia lawmakers enacted their driver’s license policy, the state passed a law to safeguard drivers’ private information from being used by immigration authorities (HB 2163, 2021). Some states have passed legislation allowing undocumented immigrants to obtain professional licensure, such as Illinois and South Dakota (Catholic Legal Immigration Network, 2019).

In-State Tuition for Undocumented Students. Twenty-two states, including California, Michigan, and Kansas, have enacted laws allowing undocumented students who meet certain

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criteria, such as having attended high school in the state, to pay in-state tuition rates at public colleges and universities (Urban Institute, 2022).

**Language Access Policies.** Some states have implemented language access policies that require state agencies to provide public services and information in multiple languages to accommodate non-English-speaking immigrants. Massachusetts’ Language Access Guidelines, for instance, are designed to a) improve access to state services, b) reduce disparities and delays, and c) increase agency for limited English proficient (LEP) individuals (Valliant, 2015).

**Legal Aid and Support Services.** States have allocated funding to provide support to immigrants facing deportation or other legal challenges. California established a legal defense fund to assist immigrants facing removal proceedings, and Colorado established a program to provide legal representation to immigrants who face deportation (Figueroa & Hinh, 2022).

**Sanctuary Policies.** Several cities and counties within states, such as California and Illinois, have adopted sanctuary policies that restrict collaboration between federal immigration authorities and local law enforcement (Immigrant Legal Resource Center, 2023).

The policies are overall aimed at bridging gaps created by an immigrant’s lack of documentation through protections against legal punishment and the removal of daily barriers that might prevent immigrants from participating freely in American life. Undocumented immigrants’ ability to get driver’s licenses without fear of deportation is a key policy for
integrating this demographic into American public life and is therefore used as a proxy in this study’s assessment of integration policy’s general effects.

The current debate over integration policies for undocumented immigrants is marked by a fundamental tension between those advocating for inclusive measures to uplift and integrate these communities and those emphasizing concerns related to security, legality, and costs. Proponents of integration policies argue that they are essential for improving the economic, educational, and social prospects of undocumented individuals, fostering community trust, and ultimately benefiting the nation's economy and social fabric (Williams et al., 2019). They contend that such policies, including access to driver's licenses, in-state tuition, and safeguards against discrimination, are humane and practical steps toward the inclusion of a community that has been and always will be present in the United States. Opponents raise apprehensions about the potential misuse of these policies, claiming that they might incentivize undocumented immigration or pose security risks (Bernal, 2023). Despite the agendas being represented on the political stage, policies can employ an evidence-based approach to the inevitability and necessity of immigrant integration.

With these considerations, this study addresses the following question: Do integration policies contribute to better labor force outcomes for immigrants? To answer this question, this paper examines state-level data on driver’s license policies as a proxy for integration policy and surveys their effects on the likelihood of labor force participation among immigrants. State-level policy data is collected from the NCSL (National Conference of State Legislatures, 2023) and paired with data on an individual’s labor force participation using cross-sectional data from the Current Population Survey (CPS) conducted by the United States Census Bureau (Sarah Flood et al., 2023).
LITERATURE REVIEW

Successful integration of immigrants and refugees is a priority for many policymakers in the United States, yet an analysis of the policies designed to achieve that integration is sparse (Papademetriou, 2003). Existing scholarship on the economic outcomes of integration policies possesses several defining characteristics. First, it lays important groundwork upon which economic integration can be analyzed and studied through proxy indicators (Harder et al., 2018). Established frameworks for analyzing integration initiatives place importance on the notion of reciprocity, such that immigrants and their host societies exist in a symbiotic relationship (Lester & Nguyen, 2016). Second, the literature on integration policy is primarily Eurocentric due to the vastness of the West European welfare state and the unprecedented migrant flows to Europe in the past several decades (Dahlberg et al., 2022; De Coninck & Solano, 2023; Qi et al., 2021). Third, state integration policies in the United States have been primarily studied through health, social, and political perspectives, leaving ample room for assessing economic and labor force impacts (Filindra & Manatschal, 2020; Kiehne & Hafen, 2022; Koball et al., 2022; Potochnick, 2014).

The United States in the past century has become a popular destination for global migrants, and the need for effective integration policy is increasingly necessary as communities nationwide begin to accept newcomers (OECD & European Commission, 2023). State integration policies do not exist in a vacuum; rather, they are products of demographic shifts and well-documented integration policy frameworks. This thesis seeks to advance the literature on integration policy by understanding how American states have improved or delayed labor force participation for immigrants contextualized within greater trends of social and political integration.
Historic Trends and Policy Considerations

In the debate over U.S. immigration policy, there is a paramount concern about the assimilation prospects of immigrants. The post-1965 era witnessed a deterioration in the economic performance of immigrants compared to their earlier counterparts (Borjas, 2005; Papademetriou, 2003). Economists measure economic assimilation among immigrants by calculating the gap in wages between natives and immigrants from historic waves. For instance, a group of young immigrant men in the late 1960s earned approximately 13 percent less than their native counterparts – a gap that narrowed to about 3 percent by 1998 when the men had become older, a phenomenon reflecting the effort by immigrants to “catch up” with native earnings (Borjas, 2005). Challenges arise when immigration is irregular and disorderly or when host communities fail to engage in effective integration efforts. These challenges manifest as concerns over job competition, social and cultural fears, and resistance to change (Papademetriou, 2003).

However, Papademetriou cites labor market incorporation as a critical and key component for addressing integration issues. Integration is presented not just as a one-way process but as a dynamic relationship between newcomers and host communities. A successful integration model emphasizes mutual adjustments and accommodations grounded in equity and mutuality (Papademetriou, 2003). The debate around integration policies can benefit from the acknowledgement that a state’s efforts to include immigrants in their communities allow those immigrants to, in turn, contribute meaningfully to society. Jiménez argues that comprehensive integration policies “must place mutual responsibility for integration on both immigrant newcomers and their receiving communities” (Jiménez, 2017).
The stakes for successful economic integration of immigrants are high not only because it benefits them individually but also due to the economic resilience it embeds within the larger community. One study has shown that immigrants in regions that have more broadly integrated immigrants showed more economic resilience during the Great Recession (Lester & Nguyen, 2016).

**Integration Policies: Proxies and Measurement Tools**

Policymakers are increasingly concerned with the successful integration of immigrants into the economy of their host country. However, empirically-based developments in this field have been delayed by the absence of a common integration measurement, which is a crucial component for cross-study, cross-country, and temporal comparisons (Harder et al., 2018).

Harder et al. (2018) developed a measure called the Immigration Policy Lab Integration Index, wherein integration is defined as “the degree to which immigrants have the knowledge and capacity to build a successful, fulfilling life in the host society” (Harder et al., 2018). This framework is important as it distinguishes between integration and assimilation, the latter of which implies homogenizing oneself to fit the host country’s dominant cultural practices. Integration, on the other hand, measures the degree to which immigrants can build successful lives and can be analyzed along various dimensions. IPL’s Integration Index measures economic integration through the following indicators: income, employment, satisfaction with employment, and the ability to meet unexpected expenses (Harder et al., 2018).

This study is primarily concerned with policy effects on labor force participation, or employment. By employing Harder et al.’s framework, this paper’s findings on the immigrant labor force help inform greater policy insights about the economic integration of immigrants.
which, among other dimensions, is a crucial contributor to their ability to lead successful lives.

Labor Market Integration in Europe

Integration policy scholarship has benefited from the vast documentation of European integrationist policies that span decades (Dahlberg et al., 2022; De Coninck & Solano, 2023; Qi et al., 2021). An international perspective is important in understanding how similar American policies shape economic sufficiency for migrants in the United States, as many of the provisions in their European counterparts reflect recent efforts by American states.

In a randomized controlled trial, Dahlberg et al. (2022) evaluated a program designed to increase labor market integration among low-skilled refugees by introducing intensive assistance immediately after they obtain Swedish residency. Participation in the program was found to increase the probability of labor market integration by 15 percentage points, echoing predominant labor market analyses in the literature (Dahlberg et al., 2022).

De Coninck & Solano (2023) interrogate the relationship between national-level policy in the European Union and corresponding labor market inclusion for migrants. Their results present important qualifications for the underlying assumption that integration policies consistently improve labor market gaps between migrants and nationals. They find that the gap responds to integration policies in different ways depending on the local context (culturally homogenous vs. diverse; rural vs. urban). Most notably, as policies incorporate more inclusive provisions, this gap starts to shrink, suggesting that “inclusive policies may be a response to a widening divide between nationals and migrants” (De Coninck & Solano, 2023, p. 1).

It is true that economic integration is a multifaceted phenomenon, likely influenced by other determinants of host country adjustment. Integration policy reform packages, which
combine economic and social policy measures, improve employment likelihood, income levels, language skills, and feelings of belongingness (Pecoraro et al., 2022). Pecoraro et al. underscore the importance of a holistic assessment of reform packages when assessing the efficacy of integration policies.

State-level Integration Policies in the United States

During the 2023 state legislative sessions, various U.S. states have taken proactive steps to lead in welcoming immigrants and refugees. The American Immigration Council observed over 1,000 immigration-related bills, with many successful proposals aimed at fostering inclusivity for immigrant populations, often with bipartisan support (Avilez, 2023).

The existing literature assesses the effect of US state integration policies on various determinants of immigrant success and wellbeing, including psychological and physical health outcomes, educational prospects, and political engagement (Amuedo-Dorantes et al., 2020; Cho, 2022; Filindra & Manatschal, 2020; Kiehne & Hafen, 2022; Potochnick, 2014). A holistic understanding of immigrant integration necessitates a grasp of how policies shape all dimensions of immigrant life. The remainder of this chapter provides an overview of empirical studies that have evaluated the various impacts of integration policy.

Driver’s License Policy and Labor Force Outcomes. Certain states have expanded access to driver's licenses for all residents, irrespective of immigration status, to promote mobility. Studies have shown that allowing undocumented immigrants to acquire driver’s licenses increases vehicle ownership and job accessibility while improving labor market outcomes particularly in vehicle-dependent occupations (Cho, 2022). Amuedo-Dorantes et al.’s study reveals that the
availability of licenses to undocumented men causes them to increase their working hours and commute times (Amuedo-Dorantes et al., 2020). Past integration policy studies therefore suggest that permissive driver’s license laws can create better economic conditions for immigrants, providing the motivation for this paper’s focus on labor force changes more broadly.

**Psychological and Physical Health Outcomes.** A persistent focus on the federal immigration enforcement framework, coupled with restrictive policies and confrontational rhetoric, exacts a significant toll on the mental and physical well-being of undocumented immigrants. Recent advancements in research indicate that subnational policies related to healthcare access, sanctuary status, and identification facilitate increased access to healthcare and related resources while reducing stress (Kiehne & Hafen, 2022). Furthermore, driver’s licenses for undocumented immigrants and sanctuary policies resulted in improved health outcomes among children of immigrants by decreasing their unmet needs (Koball et al., 2022).

**Educational Outcomes.** Twenty-two states have implemented in-state resident tuition policies, which grant undocumented immigrants the privilege of paying in-state tuition fees; several other states are considering following suit. In a 2014 study, IRT policies were found to be associated with an 8% decrease in the number of Mexican non-citizens who do not complete high school (Potochnick, 2014).

**Civic Outcomes.** During the past twenty years, various U.S. states have enacted integration measures that range from welcoming to restrictive, allowing for a systematic comparative examination of how such policies influence the political attitudes and behaviors of immigrants.
One study revealed that incremental policy changes at the regional level alter the political attitudes and behaviors of first- and second-generation immigrants, when compared with native or white respondents respectively (Filindra & Manatschal, 2020). The findings from this study provide empirical confirmation that regional integration policies possess the capacity to stimulate and facilitate the integration of immigrant voters into the electoral process, thereby contributing to the emergence of a new cohort of regional citizens (Filindra & Manatschal, 2020).

This paper contributes to a growing body of integration policy analysis by seeking to understand labor force changes within the immigrant community. By borrowing insights from past studies that suggest driver’s license policies improve labor market outcomes, this study presents an overview of these policies’ impact on the likelihood of participating in the labor force (Amuedo-Dorantes et al., 2020; Cho, 2022). Restrictive policies can often trap disempowered populations in vicious cycles of poverty, and this study uncovers the degree to which integrative laws, particularly driver’s license policies, can break those cycles and recruit immigrants into the labor force. Additionally, this study deviates from the conventional literature by assessing labor force changes for the entire working-age immigrant population and by including trends from the COVID-19 pandemic.
CONCEPTUAL FRAMEWORK

This study investigates the impact of state driver’s license policies on the likelihood of immigrants joining the labor force, utilizing a linear probability model analysis on individual-level data from the Current Population Survey conducted by the U.S. Census Bureau. The framework outlined below later informs the empirical model in the Data & Methods chapter.

Figure 1. Conceptual Framework

The population under investigation is made up of immigrants in the United States. The analysis focuses on a specific subpopulation within this dataset, namely individuals aged 16-65, as this age range represents the prime working-age demographic as well as those who would have been affected by driver’s license policies. The decision to exclude observations outside this age range is motivated by the aim of concentrating on the demographic group most directly
affected by labor market dynamics and driver’s license policies. As such, this analysis is likely to produce local average treatment effects.

The primary relationship under investigation is the impact of policies allowing states to issue driver’s licenses to undocumented immigrants on the probability that an immigrant will join the labor force in the following year. Studies find that inching closer to legal status significantly influences economic outcomes for undocumented immigrants, providing the motivation for this dimension of analysis (Gonzales, 2011). This study explores the probability of an immigrant joining the labor force one year after their state enacted permissive driver’s license policies. The underlying assumption is that the availability of driver’s licenses encourages immigrants to seek out job opportunities once inaccessible to them, such as jobs that require longer travel or jobs that involve driving. In other words, this paper assesses whether state-level driver’s license policies are effective means towards labor market integration.
DATA AND METHODS

The study utilizes a panel dataset that spans multiple years (2004 through 2021) and covers all American states. All the relevant variables in the model are outlined below.

Table 1. Variables and Descriptions

<table>
<thead>
<tr>
<th>Category</th>
<th>Variable Name</th>
<th>Description</th>
<th>Parameter or Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcome Variable</td>
<td>Labor Force Participation Rate</td>
<td>Probability of participating in the labor force in time period ( t )</td>
<td>( LFP_{i,t} )</td>
</tr>
<tr>
<td>Key Policy Variable</td>
<td>Driver’s License Policy</td>
<td>Dummy for state-level policy permitting undocumented immigrants to acquire a driver’s license, lagged by 1 year</td>
<td>( DriversLicense_{i,t-1} )</td>
</tr>
<tr>
<td>Controls: Demographic Characteristics</td>
<td>Age</td>
<td>Age of the respondent (minimum of 16, maximum of 65)</td>
<td>( Age_{i,t} )</td>
</tr>
<tr>
<td></td>
<td>Age(^2)</td>
<td>Included to account for potential non-linear relationships between age and labor force participation</td>
<td>( Age^2_{i,t} )</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>Dummy variable where 0 = female and 1 = male for each respondent</td>
<td>( Male_{i,t} )</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>Dummy variable where 0 = nonwhite and 1 = white for each respondent</td>
<td>( White_{i,t} )</td>
</tr>
<tr>
<td></td>
<td>Married</td>
<td>Dummy variable where 0 = single and 1 = married for each respondent</td>
<td>( Married_{i,t} )</td>
</tr>
<tr>
<td></td>
<td>Worked Last Year</td>
<td>Dummy variable where 0 = did not work last year and 1 = worked last year for each respondent</td>
<td>( WorkLY_{i,t} )</td>
</tr>
<tr>
<td></td>
<td>Education level</td>
<td>Total number of years of education received by respondent at time of survey</td>
<td>( Education_{i,t} )</td>
</tr>
<tr>
<td>Fixed Effects</td>
<td>Time Fixed Effects</td>
<td>Categorical variable indicating the specific year for each observation, controlling for unobserved factors that vary over time but are constant across all individuals (e.g. federal laws)</td>
<td>( \gamma_t )</td>
</tr>
<tr>
<td></td>
<td>Individual Fixed Effects</td>
<td>Categorical variable indicating the specific sample member for each observation, capturing unique, time-</td>
<td>( \alpha_i )</td>
</tr>
</tbody>
</table>
Using the specified variables, the model takes the following functional form:

\[
LFP_{i,t} = \beta_0 + \beta_1 \text{DriversLicense}_{i,t-1} + \beta_2 \text{Male}_{i,t} + \beta_3 \text{Age}_{i,t} + \beta_4 \text{Age}^2_{i,t} + \beta_5 \text{White}_{i,t} + \beta_6 \text{Married}_{i,t} + \beta_7 \text{WorkLY}_{i,t} + \beta_8 \text{Education}_{i,t} + \alpha_i + \gamma_t + \epsilon_{i,t}
\]

Where \( LFP_{i,t} \) represents the likelihood of being in the labor force for immigrant \( i \) in year \( t \), \( \text{DriversLicense}_{i,t-1} \) is a dummy variable signifying whether immigrant \( i \)'s state of residence had a driver’s license policy in place in year \( t-1 \). The remaining variables on the right side of the functional form are individual-level demographic characteristics, which are used to correct for the omission of variables that may influence labor force participation.

**Model Justification**

The empirical analysis uses a fixed effects linear probability model to estimate the causal relationship between driver’s license policy and the probability of joining the labor force among immigrants in the following year. Individual- and time-fixed effects are utilized to control for unobserved predictors of joining the labor force. The choice of this model is justified by its capacity to control for time-invariant individual characteristics and unobserved time-varying factors, providing a robust framework for isolating the impact of a driver’s license policy on person-year probability of joining the labor force.
The fixed effects regression model helps mitigate concerns related to omitted variable bias, endogeneity, and unobserved heterogeneity. Time fixed effects play a crucial role by controlling for unobserved characteristics that persist across the entire panel of respondents but may exhibit variation over time. This encompasses temporal factors such as federal restrictions on undocumented labor or nationwide labor market dynamics. Simultaneously, individual fixed effects are important in accounting for the idiosyncratic and enduring features of sample members that, although stable over time, may significantly impact the outcomes of interest. These include cultural upbringing, educational attainment during childhood, and other unobserved characteristics not necessarily related to driver’s license obtainment but with the potential to influence labor force participation. The inclusion of both time- and individual-fixed effects enhances the robustness of the analysis by controlling for unobserved, time-dependent, and individual-specific factors.

To isolate the effect of state immigrant integration policies on income, several control variables that influence labor force participation must be included in the empirical model. Variables such as gender, age, age squared, marital status, labor force status last year, and education level are included to control for the demographic composition of the individuals in the data. Marital status and labor force attachment are well-researched determinants of labor force status (Abraham & Shimer, 2001; Donato et al., 2014). Educational attainment is also a crucial determinant of economic success and the ability to obtain a job. Undocumented immigrants with higher education levels may have enhanced skills and qualifications, potentially affecting their labor force participation levels independently of increased accessibility to jobs through driver’s license policies (Chiswick & Miller, 2009). Other research also confirms that educational
opportunities significantly impact integration outcomes (Guzi et al., 2022; Lutz, 2017). Age and gender are widely accepted determinants of employment and income.
DESCRIPTIVE STATISTICS

Table 2. Summary Statistics for Dependent, Key Independent, and Control Variables

### Continuous Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Median</th>
<th>Standard Deviation</th>
<th>Range</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>36.8</td>
<td>36</td>
<td>11.8</td>
<td>16 to 65</td>
<td>173,396</td>
</tr>
<tr>
<td>Education Years</td>
<td>13.11</td>
<td>12</td>
<td>3.34</td>
<td>0 to 21</td>
<td>173,396</td>
</tr>
</tbody>
</table>

### Categorical Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Count</th>
<th>Percentage of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residence in State with Driver’s License Policy</td>
<td>Yes</td>
<td>33,114</td>
<td>19.1</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>140,282</td>
<td>80.9</td>
</tr>
<tr>
<td>Current Labor Force Status</td>
<td>In Labor Force</td>
<td>124,112</td>
<td>71.58</td>
</tr>
<tr>
<td></td>
<td>Employed</td>
<td>115,823</td>
<td>66.80</td>
</tr>
<tr>
<td></td>
<td>Unemployed</td>
<td>8,289</td>
<td>4.78</td>
</tr>
<tr>
<td></td>
<td>Not in Labor Force</td>
<td>49,284</td>
<td>28.42</td>
</tr>
<tr>
<td>Sex</td>
<td>Male</td>
<td>86,134</td>
<td>49.70</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>87,262</td>
<td>50.30</td>
</tr>
<tr>
<td>Race</td>
<td>White</td>
<td>114,438</td>
<td>66.00</td>
</tr>
<tr>
<td></td>
<td>Non-white</td>
<td>58,958</td>
<td>34.00</td>
</tr>
<tr>
<td>Worked Last Year</td>
<td>Yes</td>
<td>123,553</td>
<td>71.25</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>49,843</td>
<td>28.75</td>
</tr>
<tr>
<td>Marital Status</td>
<td>Married</td>
<td>105,484</td>
<td>60.83</td>
</tr>
<tr>
<td></td>
<td>Single (separated, divorced, widowed, never married)</td>
<td>67,912</td>
<td>39.17</td>
</tr>
</tbody>
</table>

Years: 2004-2021  
Observations: 173,396  
Correlation(Labor Force Status, Driver’s License Policy) = 0.005
RESULTS

I examine whether immigrants living in states that have enacted driver’s license policies experience a higher likelihood of joining the labor force the following year. I find that while the policy itself does not meaningfully contribute to an increased probability of labor force participation, it interacts with individual-level traits to reveal a complex relationship between employment, race, and gender.

Table 3. Driver’s License Policy on Likelihood of Participating in Labor Force

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Model 1 (Fixed)</th>
<th>Model 2 (Random)</th>
<th>Model 3 (Fixed)</th>
<th>Model 4 (Fixed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Driver’s License Policy</td>
<td>-0.002 (0.002)</td>
<td>-0.003 (0.002)</td>
<td>0.006 (0.005)</td>
<td>0.005 (0.006)</td>
</tr>
<tr>
<td>Male</td>
<td>0.083 *** (0.002)</td>
<td>0.074 *** (0.001)</td>
<td>0.303 *** (0.002)</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>0.015 *** (0.000)</td>
<td>0.014 *** (0.000)</td>
<td>0.054 *** (0.001)</td>
<td>0.052 *** (0.001)</td>
</tr>
<tr>
<td>Age squared</td>
<td>-0.0002 *** (0.000)</td>
<td>-0.0002 *** (0.000)</td>
<td>-0.001 *** (0.000)</td>
<td>-0.001 *** (0.000)</td>
</tr>
<tr>
<td>White</td>
<td>0.008 *** (0.002)</td>
<td>0.007 *** (0.001)</td>
<td>0.042 *** (0.004)</td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>-0.030 *** (0.002)</td>
<td>-0.027 *** (0.001)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Worked Last Year</td>
<td>0.746 *** (0.002)</td>
<td>0.763 *** (0.002)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Years of Education</td>
<td>0.003 *** (0.000)</td>
<td>0.002 *** (0.000)</td>
<td>0.010 *** (0.000)</td>
<td>0.011 *** (0.000)</td>
</tr>
<tr>
<td>Male &amp; Driver’s License Interaction</td>
<td>-0.010 * (0.005)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White &amp; Driver’s License Interaction</td>
<td>-0.002 (0.007)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-0.166 *** (0.009)</td>
<td>-0.141 *** (0.007)</td>
<td>-0.591 *** (0.012)</td>
<td>-0.300 *** (0.010)</td>
</tr>
</tbody>
</table>
Model 1  (Fixed)  Model 2  (Random)  Model 3  (Fixed)  Model 4  (Fixed)

<table>
<thead>
<tr>
<th>Sample Size</th>
<th>173,396</th>
<th>173,396</th>
<th>173,396</th>
<th>173,396</th>
</tr>
</thead>
<tbody>
<tr>
<td>$R^2$</td>
<td>Within: 0.648  Within: 0.648  Within: 0.186  Within: 0.070</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Between: 0.673 Between: 0.674 Between: 0.113 Between: 0.055</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Overall: 0.66  Overall: 0.662 Overall: 0.159 Overall: 0.065</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: The Current Population Survey, National Conference of State Legislatures. Robust standard errors are reported in parentheses. *** p < 0.01, ** p < 0.05, * p < 0.1. A robustness check was conducted using a logit regression on the panel data. The results did not yield any statistical or qualitative differences from the fixed effects linear probability models displayed in this table.

The study employs a linear probability model with time and individual fixed effects to isolate the impact of stable individual traits in the assessment of driver’s license policy impacts on labor force participation. The descriptive statistics in the preceding chapter reveal substantial variability among survey respondents in their likelihood of participating in the labor force. By incorporating fixed effects, the study effectively accounts for a substantial portion of this variability, providing insights into the factors influencing or failing to influence labor force participation. Overall, this model offers significant explanatory power.

The coefficients in the analysis represent how much the likelihood of someone joining the labor force changes when we look at different determinants. Living in a state with a driver's license policy is linked to a small decrease in the chance of someone participating in the labor force the following year, though these findings are statistically insignificant. This finding may raise questions about the potential impact of driver's license policies on workforce participation and whether the desired labor force outcomes of such a policy are indeed being realized.

The fixed effects linear probability model sheds light on how likely different groups of immigrants are to join the labor force. For example, men are 8.3% more likely to join the labor
force compared to women. White immigrants also seem slightly more likely to join the labor force, at 0.8%, compared to non-white immigrants in similar situations. However, marital status makes it less likely for someone to start working compared to being single. On the other hand, having worked last year makes it 75% more likely for someone to be in the labor force the next year, suggesting that labor force decisions exhibit continuity. In other words, those in the labor force will likely remain in the labor force, while those outside the labor force continue to face barriers to fuller labor force integration. When it comes to education, each additional year of schooling makes it 0.3% more likely for immigrants to join the labor force. A discussion of subgroups appears later in this chapter. Additionally, the results indicate that age plays a significant role in labor force participation, with each incremental year in age associated with a 1.5% increased likelihood of joining the labor force, though this effect diminishes as individuals age.

This study also shows that about two-thirds of the difference in how likely immigrants are to start working can be explained by looking at their individual situations over time. This means that the factors affecting whether someone starts working or not are mostly consistent within each person.

The random-effects linear probability model in the second specification demonstrates significant variation in the likelihood of individuals being in the labor force, like its fixed effects counterpart. The fixed effects model focuses on within-individual variations over time, whereas the random effects model considers both within- and between-individual variations. The statistically insignificant policy coefficient is consistent in both the fixed effects and random effects models, suggesting a limited role for driver’s license policy in labor force empowerment for immigrants.
The inclusion of interaction models provides a focused subgroup examination of key variables with plausible connections to the question of whether a state’s adoption of driver’s license policy impacts an immigrant’s likelihood of joining the labor force a year later. When interacting our policy with an individual’s gender, results point to an interesting wrinkle. The negative sign of the interaction term implies that the joint impact of being male and living in a state with an adopted driver's license policy is less than the sum of their individual effects. In other words, while being male individually contributes positively to the likelihood of joining the labor force, the interaction between being male and living in a state with the policy has a negative influence, suggesting an offsetting effect of approximately 1%. This interaction highlights that the relationship between gender, driver's license policy, and labor force participation is not merely additive. Policymakers must routinely consider the implications of these state policies for immigrant labor force participation, and they must understand potential barriers faced by immigrant subgroups, to ensure that the overall impact is positive and inclusive.

The results from interaction model specifications reveal intriguing differences. In the male subgroup analysis, the negative joint impact of being male and living in a state that has enacted a permissive driver's license policy is less than the sum of their individual effects. Similarly, the subgroup analysis of white immigrants demonstrates that being white has a moderating effect on the likelihood of participating in the labor force, though it is not statistically significant. These interactions highlight the need for tailored policy considerations that address the specific challenges faced by different demographic groups. Policymakers may explore targeted interventions to ensure that the benefits of driver's license policies are equitably distributed across diverse populations who exhibit diverse needs.
Limitations

While the model specifications in this study provide valuable insights into the relationships between various variables and the likelihood of joining the labor force, the absence of some individual-level characteristics presents limitations. The models, as presented, do not account for specific individual attributes that could significantly impact one’s decision or ability to participate in the labor force, such as personal skills, health status, and language proficiency. Omitting these individual-level characteristics introduces omitted variable bias and limits the comprehensiveness of the findings. However, the models employ a fixed effects analysis using unique IDs for respondents in the survey to control for the bias that may result from the variables’ omission and thus isolating the effects of fixed individual characteristics.

Furthermore, this study surveys labor force participation outcomes among all immigrants regardless of their documentation status. While driver’s license policies are explicitly tailored for undocumented immigrants, the sensitivity of revealing one’s documentation status requires a broader analysis of labor market dynamics to draw conclusions about the undocumented community.
CONCLUSION

Recent years have demonstrated a proliferation of sentiment demonizing immigrants, particularly those in the United States without proper documentation, and subsequent policy efforts to criminalize, punish, and deport them. But state efforts to empower local immigrant communities have also materialized, both in reaction to and as a precaution against xenophobic policy agendas. Beginning in 2013, a wave of states implemented zero-cost policies that remove legal obstacles to acquiring driver’s licenses for undocumented immigrants.² While access to a driver’s license cannot alleviate all the burdens of immigration, it does signal a larger effort by the state to improve the overall conditions that trap immigrants in cycles of poverty and survival. Prior research demonstrates that the implementation of policies permitting undocumented immigrants to acquire driver’s licenses correlates with heightened vehicle ownership, enhanced job accessibility, and improved labor market outcomes such as increased hours worked and commuting times (Amuedo-Dorantes et al., 2020; Cho, 2022). In this study, I examine data leading up to 2022 and contextualize labor force changes within an overarching discussion of intersectionality and immigration justice.

The results of my primary specifications suggest that driver’s licenses do not increase labor force participation in a significant way among immigrants of working age. This does not necessarily dispute findings from previous research. In my extension of this analysis to pandemic years and a larger subset of the immigrant population that includes women and children above the working age, results suggest a nuanced phenomenon.

A notable insight derived from the findings concerns the gender-based subgroup analysis of labor force participation. It is important to note again that labor force participation is measured

² Seventeen out of the twenty-one states with this policy enacted it after 2013. The four exceptions are Washington (1993), New Mexico (2004), Utah (2005), and Illinois (2012).
one year after the enactment of the state’s driver’s license policy. Being male individually increases the likelihood of joining the workforce, but the combined effect of being male and living in a state with an active driver’s license policy does not boost workforce participation as much as past research suggests. This holds several implications for the role of gender and family structure in motivating immigrants to join the labor force. Driver’s license policies might prompt general labor force participation due to an increased degree of mobility, but they do not achieve much in terms of recruiting men who are already outside the labor force. This is further supported by the data showing that being in the labor force last year increases the probability that an immigrant is in the labor force the next year, signifying a role for labor market attachment. Patriarchal family structures in immigrant households suggest that men, absent any permissive policies, are more likely to seek out survival jobs to provide for their families upon arriving in the United States. Policies that make it easier to join and participate in the labor force do not do much for immigrant men who tend to already be in the labor force, although the positive effects can be felt by the immigrant community more generally. Further analysis of racial groups reveals that being white in a state enacting this policy does not explicitly account for changes in labor force participation.

Although my models control for age, gender, race, marital status, labor force participation last year, and years of education, results are likely to suffer from omitted variable bias. Time- and individual-varying factors that difficult to measure are likely to influence labor force participation, such as the health of the local job market, proximity to ethnic enclaves where employment is more accessible, or proficiency in the English language. Furthermore, there are prominent state and federal policies designed to spur labor force participation for immigrants, but
they are not explicitly measured or accounted for in this study. The results in this study may have differed had there been a more optimal measure of states’ openness to undocumented immigrants, including an analysis of the integration policies outlined in the background chapter. The use of driver’s license policy as a proxy does not capture all the dynamics of integration, but it does preview economic self-sufficiency and geographic mobility that avail immigrants of more opportunities in the labor force.

Additional limitations include the immeasurability of undocumented status in the Current Population Survey. The sensitive nature of revealing one’s undocumented status restricts the availability of specific data on undocumented communities, and as such, the model investigates labor force trends among both documented and undocumented immigrants to extrapolate general insights. Future research in the field of integration policy should prioritize ethical data collection on undocumented immigrants specifically while accounting for evolving policy landscapes and socioeconomic conditions. Exploring longitudinal data beyond the scope of this study could provide valuable insights into the long-term effects of driver's license policies, and researchers can further the literature by measuring labor force effects two to five years after the policy was enacted.

Bearing in mind these findings, policymakers should consider several important implications. While these policies may contribute to increased mobility and autonomy for undocumented immigrants, they may not significantly enhance labor force participation, particularly among men already engaged in the workforce. This suggests that additional efforts may be needed to address structural barriers beyond transportation access to fully integrate immigrant communities into the labor market. Policymakers can benefit from emulating Western

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3 Examples include E-Verify, a mandatory system used by employers to verify employment eligibility, and occupational licensing or certification requirements which vary by state.
European models that address the issue of immigrant labor force participation through far-reaching integration packages. Additionally, recognizing the dynamics within immigrant households highlights the importance of implementing policies that support family cohesion while promoting economic empowerment for all family members. Once we consider more recent data from the Current Population Survey that captures pandemic-era trends, it is evident that labor force participation is not responding to these policies. Driver’s license policies do a good job of empowering existing workers to work longer hours and drive further distances to make a living, but policymakers can and should focus on policies that recruit immigrants who demonstrate a persistent inability to join the labor force.

While state-level policies like permissive driver's license laws signify steps towards greater mobility and autonomy for one of society’s most marginalized and demonized groups, they alone may not sufficiently break down the systemic barriers that trap undocumented immigrants in destitution. As policymakers strive for inclusive and equitable societies, it's crucial to acknowledge and address the intersecting factors of gender, family dynamics, and racial disparities within immigrant and non-immigrant communities alike. This research not only challenges conventional rhetoric about immigrants but also calls for bold and targeted policy interventions that actively recruit and support immigrants who face persistent obstacles to accessing and participating in society. By harnessing the power of policy to dismantle structural inequities, policymakers stand to empower undocumented immigrants to thrive, leaving behind a legacy of justice and opportunity for generations of Americans to come.
REFERENCES


