The Causal Impact of DACA Eligibility on Full-Time Employment: A Difference-in-Differences Analysis

Replication Study 66

January 2026

Abstract

This study examines the causal impact of eligibility for the Deferred Action for Childhood Arrivals (DACA) program on full-time employment among Hispanic-Mexican, Mexican-born non-citizens in the United States. Using data from the American Community Survey (2006-2016) and a difference-in-differences identification strategy, I find that DACA eligibility increased the probability of full-time employment by approximately 3.0 percentage points (SE = 0.004, p ¡ 0.001). This effect is robust to the inclusion of demographic controls, state fixed effects, and year fixed effects. The results suggest that providing work authorization to undocumented immigrants who arrived as children has meaningful positive effects on their labor market outcomes.

Contents

1 Introduction

The Deferred Action for Childhood Arrivals (DACA) program, implemented on June 15, 2012, represented a significant shift in U.S. immigration policy. The program allowed certain undocumented immigrants who arrived in the United States as children to apply for temporary relief from deportation and obtain work authorization for renewable two-year periods. Understanding the labor market effects of this policy is crucial for evaluating immigration reform proposals and their potential economic impacts.

This study addresses the following research question: **Among ethnically Hispanic-Mexican, Mexican-born people living in the United States, what was the causal impact of eligibility for DACA on the probability of full-time employment?**

Full-time employment is defined as usually working 35 hours per week or more, consistent with standard labor force definitions. I examine the effects on full-time employment in the years 2013-2016, following the program's implementation in 2012.

The identification strategy exploits the age-based eligibility criteria for DACA. The program required that applicants:

1. Arrived in the U.S. before their 16th birthday
2. Had not yet turned 31 as of June 15, 2012 (born after June 15, 1981)
3. Lived continuously in the U.S. since June 15, 2007
4. Were present in the U.S. on June 15, 2012 without lawful status

These criteria create variation in eligibility among otherwise similar Hispanic-Mexican, Mexican-born non-citizens, enabling a difference-in-differences approach that compares outcomes between eligible and ineligible individuals before and after DACA implementation.

2 Background

2.1 The DACA Program

DACA was announced by the Obama administration on June 15, 2012, with applications beginning to be received on August 15, 2012. In the first four years, nearly 900,000 initial applications were received, with approximately 90% approved. The program provided two key benefits to eligible individuals:

1. **Deferred action**: A two-year period of protection from deportation, renewable upon reapplication

2. **Work authorization**: The ability to legally work in the United States

While the program was not specific to immigrants from any particular country, the structure of undocumented immigration to the United States meant that the great majority of eligible individuals were from Mexico. This makes the Hispanic-Mexican, Mexican-born population a natural focus for studying DACA's effects.

2.2 Theoretical Mechanisms

Several mechanisms suggest DACA eligibility could increase full-time employment:

Direct employment authorization effect: DACA recipients can legally work, eliminating the need to work in the informal economy or accept exploitative working conditions. This may allow recipients to seek better jobs with more hours.

Documentation for formal employment: Work authorization allows individuals to provide required documentation (Social Security numbers, I-9 forms) for formal sector employment, which typically offers more stable, full-time positions.

Reduced deportation risk: The security provided by deferred action may encourage recipients to invest in longer-term employment relationships and full-time work rather than maintaining flexibility for potential migration.

Access to complementary benefits: DACA recipients can obtain driver's licenses in most states, facilitating commuting to jobs that might otherwise be inaccessible.

2.3 Related Literature

Previous research has examined various effects of DACA and similar immigration reforms on labor market outcomes. Studies have generally found positive effects of legal work authorization on employment and earnings among undocumented immigrants. The present study contributes to this literature by focusing specifically on full-time employment using a well-defined comparison group within the Hispanic-Mexican, Mexican-born population.

2.4 Policy Context and Timeline

Understanding the timeline of DACA implementation is crucial for interpreting the empirical results:

- **June 15, 2012**: Secretary of Homeland Security Janet Napolitano announces the DACA program through a memorandum directing U.S. Citizenship and Immigration Services (USCIS) to defer deportation action.

- **August 15, 2012**: USCIS begins accepting DACA applications. Applicants must submit Form I-821D (Consideration of Deferred Action for Childhood Arrivals) along with supporting documentation.
- **2012-2013**: Initial wave of applications processed. By June 2013, over 550,000 initial applications had been submitted.
- **2014**: First cohort of DACA recipients becomes eligible for renewal. The program stabilizes with a regular cycle of renewals.
- **2014-2016**: Period of stable program operation, with continued new applications and renewals. By the end of 2016, approximately 800,000 individuals had received DACA status at some point.

This timeline explains why we might expect effects to grow over time—as more individuals receive DACA status and have time to adjust their employment situations, the measurable impact should increase.

2.5 State-Level Policy Variation

While DACA is a federal program, state policies create important variation in how beneficial DACA status is for recipients. Several state-level policies interact with DACA:

Driver's Licenses: Some states allowed DACA recipients to obtain standard driver's licenses, while others issued restricted licenses or denied them entirely. Access to driver's licenses can substantially affect employment opportunities, particularly in areas with limited public transportation.

In-State Tuition: Many states allow DACA recipients to pay in-state tuition rates at public colleges and universities. While not directly related to current employment, this affects human capital investment decisions.

E-Verify Requirements: States vary in their requirements for employers to use E-Verify to check work authorization. In states with strict E-Verify mandates, DACA recipients benefit more from having work authorization since informal employment is more difficult.

Immigration Enforcement: States vary in their cooperation with federal immigration enforcement (287(g) agreements, Secure Communities participation). In states with stricter enforcement, the protection from deportation offered by DACA may be particularly valuable.

The inclusion of state fixed effects in our preferred specification absorbs time-invariant differences across states, while the DiD design controls for trends that are common to both treatment and control groups within each state.

3 Data

3.1 Data Source

The primary data source is the American Community Survey (ACS) from IPUMS USA, covering the years 2006-2016. The ACS is an annual survey conducted by the U.S. Census Bureau that collects detailed demographic, economic, and housing information from approximately 3 million households per year. The survey provides person-level weights (PERWT) that allow for population-representative estimates.

3.2 Sample Construction

The analysis sample is constructed through the following restrictions:

1. **Ethnicity**: Hispanic-Mexican (HISPAN = 1)
2. **Birthplace**: Born in Mexico (BPL = 200)
3. **Citizenship**: Not a citizen (CITIZEN = 3), which proxies for potentially undocumented status
4. **Immigration year**: Valid immigration year recorded (YRIMMIG ¿ 0)
5. **Age**: Working-age population (16-64 years old)
6. **Survey year**: Excluding 2012 due to timing ambiguity (DACA announced mid-year)

Table 1 details the sample construction process.

Table 1: Sample Construction

Step	Observations	Percent of Previous
Initial ACS sample (2006-2016)	33,851,424	–
Hispanic-Mexican (HISPAN = 1)	2,945,521	8.7%
Born in Mexico (BPL = 200)	991,261	33.7%
Not a citizen (CITIZEN = 3)	701,347	70.8%
Valid immigration year	701,347	100.0%
Working age (16-64)	618,640	88.2%
Exclude 2012	561,470	90.8%
Final analytic sample	**561,470**	–

3.3 Variable Definitions

3.3.1 Outcome Variable

The primary outcome is **full-time employment**, defined as usually working 35 or more hours per week. This is constructed from the UHRSWORK variable:

$$\text{FullTime}_i = \mathbf{1}[\text{UHRSWORK}_i \geq 35]$$

In the analysis sample, 57.4% of individuals report full-time employment.

3.3.2 Treatment Variable: DACA Eligibility

DACA eligibility is constructed based on the program's criteria:

1. **Arrived before age 16**: Age at arrival = YRIMMIG - BIRTHYR < 16
2. **Born after June 15, 1981**: BIRTHYR > 1981 OR (BIRTHYR $= 1981$ AND BIRTHQTR ≥ 3)
3. **Present in U.S. since 2007**: YRIMMIG ≤ 2007

An individual is classified as DACA-eligible if all three criteria are satisfied. In the sample, 14.9% of individuals meet all eligibility criteria.

3.3.3 Control Variables

The analysis includes the following control variables:

- Age and age squared (AGE, AGE^2)
- Female indicator (SEX $= 2$)
- Married indicator (MARST $\in \{1, 2\}$)
- High school education or more (EDUC ≥ 6)
- Some college or more (EDUC ≥ 10)
- Years in United States (YEAR - YRIMMIG)

3.4 Descriptive Statistics

Table 2 presents descriptive statistics by DACA eligibility status and time period.

Table 2: Descriptive Statistics by Eligibility Status and Period

	Pre-DACA (2006-2011)		Post-DACA (2013-2016)	
	Not Eligible	Eligible	Not Eligible	Eligible
Full-time employment (%)	62.76	45.22	60.13	52.14
Employment (%)	67.65	52.77	67.93	63.70
Labor force participation (%)	74.12	61.33	72.42	69.66
Mean age	38.7	25.1	41.2	28.5
Female (%)	46.0	46.2	47.0	45.1
Married (%)	64.5	39.7	61.5	48.9
High school+ (%)	40.4	49.0	44.9	61.3
Observations (unweighted)	298,978	46,814	178,881	36,797
Population (weighted)	40.5M	6.2M	24.4M	5.2M

Notes: Statistics are weighted using ACS person weights (PERWT). Pre-DACA period includes 2006-2011; Post-DACA period includes 2013-2016. The year 2012 is excluded due to timing ambiguity.

Several patterns emerge from Table 2. First, DACA-eligible individuals have lower baseline full-time employment rates than non-eligible individuals, reflecting their younger age (25.1 vs. 38.7 years in the pre-period). Second, both groups show changes over time, but the increase in full-time employment is notably larger for eligible individuals (+6.92 percentage points) compared to the decrease for non-eligible individuals (-2.63 percentage points).

4 Empirical Strategy

4.1 Identification Strategy

I employ a difference-in-differences (DiD) design to estimate the causal effect of DACA eligibility on full-time employment. The key identifying assumption is that, absent DACA, trends in full-time employment would have been parallel between eligible and non-eligible individuals.

The treatment group consists of Hispanic-Mexican, Mexican-born non-citizens who meet all DACA eligibility criteria. The control group consists of Hispanic-Mexican, Mexican-born non-citizens who do not meet the eligibility criteria—primarily those who were too old (born before June 1981) or arrived after age 16 or after 2007.

4.2 Econometric Specification

The baseline DiD specification is:

$$Y_{ist} = \alpha + \beta_1 \text{Eligible}_i + \beta_2 \text{Post}_t + \beta_3 (\text{Eligible}_i \times \text{Post}_t) + \varepsilon_{ist} \tag{1}$$

where Y_{ist} is a binary indicator for full-time employment for individual i in state s and year t; Eligible_i indicates DACA eligibility; Post_t indicates the post-DACA period (2013-2016); and β_3 is the coefficient of interest—the DiD estimator.

The preferred specification adds demographic controls and fixed effects:

$$Y_{ist} = \alpha + \beta_1 \text{Eligible}_i + \beta_3 (\text{Eligible}_i \times \text{Post}_t) + X_i' \gamma + \delta_s + \theta_t + \varepsilon_{ist} \tag{2}$$

where X_i is a vector of demographic controls (age, age squared, female, married, education indicators, years in U.S.); δ_s represents state fixed effects; and θ_t represents year fixed effects.

All regressions are estimated using weighted least squares with person weights (PERWT) and standard errors clustered at the state level to account for within-state correlation in outcomes.

4.3 Parallel Trends Assumption

The validity of the DiD design requires that, absent DACA, employment trends would have been parallel between eligible and non-eligible groups. I test this assumption using an event study specification:

$$Y_{ist} = \alpha + \sum_{k \neq 2011} \gamma_k (\text{Eligible}_i \times \mathbf{1}[t = k]) + X_i' \beta + \delta_s + \theta_t + \varepsilon_{ist} \tag{3}$$

where γ_k captures the differential full-time employment rate between eligible and non-eligible individuals in year k, relative to the reference year 2011 (the last pre-DACA year). If the parallel trends assumption holds, we should observe $\gamma_k \approx 0$ for pre-DACA years ($k < 2012$) and positive effects emerging in post-DACA years.

5 Results

5.1 Simple Difference-in-Differences

Before turning to regression results, Table 3 presents the simple 2x2 DiD calculation using weighted means.

Table 3: Simple Difference-in-Differences Calculation

	Pre-DACA	Post-DACA	Difference
DACA Eligible	45.22%	52.14%	+6.92 pp
Not Eligible	62.76%	60.13%	-2.63 pp
Difference	-17.54 pp	-7.99 pp	
DiD Estimate			**+9.56 pp**

The simple DiD estimate suggests DACA eligibility increased full-time employment by 9.56 percentage points. However, this estimate does not account for compositional differences between groups or secular trends.

5.2 Main Regression Results

Table 4 presents the main regression results across four specifications.

Table 4: Effect of DACA Eligibility on Full-Time Employment

	(1) Basic DiD	(2) + Controls	(3) + Year FE	(4) + State FE
DACA Eligible × Post	0.0956***	0.0381***	0.0309***	0.0301***
	(0.0041)	(0.0043)	(0.0039)	(0.0039)
DACA Eligible	-0.1754***	-0.0514***	-0.0396***	-0.0375***
	(0.0049)	(0.0029)	(0.0026)	(0.0025)
Post	-0.0263***	-0.0214***	–	–
	(0.0025)	(0.0019)		
Demographic Controls	No	Yes	Yes	Yes
Year Fixed Effects	No	No	Yes	Yes
State Fixed Effects	No	No	No	Yes
Observations	561,470	561,470	561,470	561,470

Notes: Dependent variable is full-time employment (UHRSWORK $\geq$ 35). All regressions use ACS person weights. Standard errors clustered at state level in parentheses. Demographic controls include age, age squared, female, married, high school+, some college+, and years in U.S. *** p<0.01, ** p<0.05, * p<0.1.

The coefficient of interest, β_3 (DACA Eligible × Post), is positive and statistically significant across all specifications. In the basic DiD (Column 1), the estimate is 9.56 percentage points, reflecting the simple calculation in Table 3.

Adding demographic controls (Column 2) substantially reduces the estimate to 3.81 percentage points, indicating that compositional differences between eligible and non-eligible groups explain much of the raw difference. Adding year fixed effects (Column 3) further reduces the estimate to 3.09 percentage points, and the full specification with state fixed effects (Column 4) yields the preferred estimate of **3.01 percentage points** (SE = 0.0039, $p < 0.001$).

The 95% confidence interval for the preferred estimate is [2.24, 3.78] percentage points.

5.3 Event Study Analysis

Figure **??** and Table 5 present the event study results, which test the parallel trends assumption and show the dynamic evolution of the treatment effect.

Table 5: Event Study Coefficients

Year	Coefficient	Std. Error	95% CI	
Pre-DACA Period				
2006	-0.0155	0.0135	[-0.042, 0.011]	
2007	-0.0142	0.0077	[-0.029, 0.001]	*
2008	-0.0012	0.0129	[-0.027, 0.024]	
2009	0.0052	0.0117	[-0.018, 0.028]	
2010	0.0076	0.0156	[-0.023, 0.038]	
2011	0.0000	–	–	(Reference)
Post-DACA Period				
2013	0.0122	0.0108	[-0.009, 0.033]	
2014	0.0223	0.0145	[-0.006, 0.051]	
2015	0.0381	0.0133	[0.012, 0.064]	***
2016	0.0398	0.0117	[0.017, 0.063]	***

Notes: Coefficients represent the differential full-time employment rate between DACA-eligible and non-eligible individuals relative to 2011. All specifications include demographic controls, state fixed effects, and year fixed effects. Standard errors clustered at state level. *** p<0.01, ** p<0.05, * p<0.1.

The event study results support the parallel trends assumption. Pre-DACA coefficients (2006-2010) are small in magnitude and not significantly different from zero (except for 2007, which is only marginally significant). This suggests that prior to DACA, employment trends were similar between eligible and non-eligible groups.

Following DACA implementation, the coefficients show a pattern of increasing treatment effects. The effect is small and insignificant in 2013 (coefficient = 0.012), grows in 2014

(coefficient = 0.022), and becomes statistically significant in 2015 (coefficient = 0.038, p < 0.01) and 2016 (coefficient = 0.040, p < 0.01). This pattern is consistent with a gradual rollout of DACA benefits—applicants needed time to apply, be approved, and find new employment opportunities.

5.4 Robustness Checks

Table 6 presents results from several robustness checks.

Table 6: Robustness Checks

Specification	Coefficient	Std. Error	95% CI
Main Result			
Full-time employment (preferred)	0.0301***	0.0039	[0.022, 0.038]
Alternative Outcomes			
Employment (any)	0.0409***	0.0070	[0.027, 0.055]
Labor force participation	0.0431***	0.0074	[0.029, 0.058]
Subgroup Analysis			
Males only	0.0262***	0.0057	[0.015, 0.037]
Females only	0.0264***	0.0060	[0.015, 0.038]

Notes: All specifications include demographic controls, state fixed effects, and year fixed effects. Standard errors clustered at state level. *** p<0.01, ** p<0.05, * p<0.1.

5.4.1 Alternative Outcomes

I examine two alternative labor market outcomes. First, the effect on **any employment** (EMPSTAT = 1) is 4.09 percentage points (SE = 0.007, p < 0.001), larger than the effect on full-time employment. Second, the effect on **labor force participation** (LABFORCE = 2) is 4.31 percentage points (SE = 0.007, p < 0.001).

These results suggest that DACA not only increased full-time employment but also drew previously non-participating individuals into the labor force. The effect on labor force participation is slightly larger than the effect on employment, consistent with some newly participating individuals remaining unemployed while searching for work.

5.4.2 Gender Subgroups

The effects are similar for males (2.62 percentage points) and females (2.64 percentage points), suggesting that DACA's impact on full-time employment was not concentrated in one gender group.

6 Discussion

6.1 Interpretation of Results

The preferred estimate indicates that DACA eligibility increased full-time employment by approximately 3.0 percentage points among Hispanic-Mexican, Mexican-born non-citizens. Given a baseline full-time employment rate of 45.2% for eligible individuals in the pre-DACA period, this represents approximately a 6.6% relative increase.

This effect is economically meaningful. With approximately 5.2 million eligible individuals (weighted) in the post-DACA period, a 3.0 percentage point increase in full-time employment translates to roughly 156,000 additional individuals working full-time.

Several factors may explain why the regression-adjusted estimate (3.0 percentage points) is substantially smaller than the simple DiD (9.56 percentage points):

1. **Age differences**: DACA-eligible individuals are younger on average, and younger workers generally have lower full-time employment rates. Controlling for age absorbs much of the raw difference.

2. **Secular trends**: The overall economy improved during this period, with the control group potentially experiencing faster employment growth as older workers benefited from experience-based recovery patterns.

3. **Geographic composition**: Eligible individuals may be concentrated in states with different labor market trends, which state fixed effects account for.

6.2 Mechanisms

The findings are consistent with several mechanisms through which DACA could increase full-time employment:

Direct work authorization: DACA recipients can work legally, allowing them to access formal employment opportunities that typically offer full-time positions. Prior to DACA, eligible individuals may have been restricted to informal employment with irregular hours.

Employer willingness: With work authorization, employers are more willing to hire DACA recipients for permanent, full-time positions rather than temporary or part-time arrangements.

Reduced labor market frictions: Work authorization reduces search frictions by expanding the set of jobs for which individuals can apply and be considered.

The event study results—showing increasing effects over time—support the view that adjustment to DACA was gradual, as individuals needed time to apply, receive approval, and find appropriate employment.

6.3 Limitations

Several limitations should be noted:

Control group validity: The control group (older Mexican-born non-citizens who arrived as children) may not be a perfect counterfactual for DACA-eligible individuals. Older cohorts may face different labor market conditions due to their experience levels and life-cycle stage.

Eligibility vs. receipt: I estimate the effect of DACA *eligibility*, not actual DACA *receipt*. Not all eligible individuals applied for or received DACA. The intent-to-treat estimate may understate the effect of actually receiving DACA benefits.

Proxy for undocumented status: Using non-citizenship as a proxy for undocumented status is imperfect. The sample may include some legal permanent residents who have not naturalized, which would attenuate the estimated effect.

Self-reporting: Employment outcomes are self-reported and may be subject to measurement error. However, there is no obvious reason why such error would differentially affect eligible and non-eligible individuals after DACA.

7 Heterogeneity Analysis

Beyond the main results and robustness checks, it is instructive to examine whether the effect of DACA eligibility varies across different subpopulations.

7.1 Age Heterogeneity

The DACA-eligible population spans a wide age range, from teenagers to individuals in their early thirties. Younger eligible individuals may benefit more from DACA because they have more years of potential labor force participation ahead of them and may be more able to pursue educational opportunities that complement employment. However, older eligible individuals may benefit more immediately because they are more likely to be in the labor force and seeking full-time work.

The data show that the average age of eligible individuals is 25.1 years in the pre-period and 28.5 years in the post-period. The age controls in our regression specifications absorb

level differences in employment by age, but the DiD coefficient represents an average effect across all ages.

7.2 Education Heterogeneity

DACA eligibility may have different effects depending on education level. More educated individuals may have access to better job opportunities that require work authorization, while less educated individuals may be more likely to work in informal sectors where work authorization matters less.

In our sample, 49.0% of eligible individuals had at least a high school education in the pre-period, compared to 40.4% of non-eligible individuals. By the post-period, these shares had increased to 61.3% and 44.9%, respectively. The larger increase for eligible individuals may partially reflect DACA recipients investing more in education once they had legal status, though this could also reflect compositional changes.

7.3 State-Level Heterogeneity

The effect of DACA may vary by state due to differences in:

- Local labor market conditions
- State policies toward immigrants (driver's licenses, tuition, enforcement)
- Size and composition of the immigrant population
- Industry mix (some industries rely more heavily on immigrant labor)

The inclusion of state fixed effects controls for time-invariant state characteristics. A fuller exploration of state-level heterogeneity would require state-specific treatment effects, which is beyond the scope of this analysis but represents an important avenue for future research.

7.4 Marital Status and Family Structure

Family responsibilities may mediate the effect of DACA on employment. Married individuals, particularly those with children, may have stronger incentives to seek stable, full-time employment. The security provided by DACA—both work authorization and deportation relief—may be particularly valuable for individuals supporting families.

In our sample, 39.7% of eligible individuals were married in the pre-period, compared to 64.5% of non-eligible individuals, reflecting the younger age of the eligible population. The

married indicator is included as a control variable, and the main effect represents the average across marital status groups.

8 Threats to Identification

While the difference-in-differences design addresses many confounds, several potential threats to identification warrant discussion.

8.1 Compositional Changes

The treatment and control groups may have experienced different compositional changes over time. For example:

Selective migration: If DACA induced changes in migration patterns (either encouraging DACA-eligible individuals to stay in the U.S. or discouraging non-eligible individuals from staying), the composition of both groups could change in ways that affect the estimate.

Survey response: DACA recipients may become more willing to respond to government surveys after receiving protected status, potentially changing the composition of respondents in the treatment group.

Naturalization: Some non-eligible individuals may have naturalized during the sample period and would no longer appear in our sample of non-citizens. If those who naturalize are systematically different in terms of employment, this could bias the control group trends.

8.2 Spillover Effects

DACA could affect non-eligible individuals through several channels:

Labor market competition: If DACA recipients compete with non-eligible non-citizens for jobs, increased employment among recipients could reduce employment among non-recipients. This would cause us to overestimate the effect of DACA by comparing to a control group whose outcomes were depressed by the policy.

Household spillovers: DACA recipients often live with non-eligible family members. If DACA status affects household-level decisions (e.g., who works, who provides childcare), this could affect both treatment and control group outcomes within households.

Community effects: DACA may have broader effects on immigrant communities that extend to non-eligible individuals, such as changes in employer attitudes toward hiring immigrants or changes in community-level enforcement.

8.3 Anticipation Effects

If individuals anticipated DACA before its announcement and adjusted their behavior accordingly, the parallel trends assumption could be violated. However, DACA was announced relatively suddenly, with limited advance notice, making significant anticipation effects unlikely.

8.4 Concurrent Policies and Economic Conditions

The post-DACA period (2013-2016) coincided with economic recovery from the Great Recession. If this recovery differentially affected the treatment and control groups, it could confound the DACA effect. The year fixed effects control for national economic trends, and the DiD design differences out trends common to both groups. However, if the recovery had differential effects by age (and the treatment group is younger), this could bias the results. The inclusion of age controls helps mitigate this concern.

9 Conclusion

This study provides evidence that DACA eligibility had a positive causal effect on full-time employment among Hispanic-Mexican, Mexican-born non-citizens. Using a difference-in-differences design with American Community Survey data from 2006-2016, I estimate that DACA eligibility increased the probability of full-time employment by approximately 3.0 percentage points.

The effect is robust to the inclusion of demographic controls and state and year fixed effects. Event study analysis supports the parallel trends assumption, with no significant pre-trends and effects that grow over time following DACA implementation. The effects are similar for males and females and are accompanied by increases in overall employment and labor force participation.

9.1 Policy Implications

The findings have several implications for immigration policy:

Work authorization matters: The positive effect on employment suggests that legal work authorization has real effects on labor market outcomes. Policies that provide work authorization to undocumented immigrants can improve their employment situations.

Age of arrival matters: The DACA eligibility criteria target individuals who arrived as children. These individuals have spent formative years in the United States and may

be well-integrated into the U.S. labor market, suggesting that policies targeting childhood arrivals may be particularly effective.

Gradual effects: The event study results showing effects that grow over time suggest that the benefits of work authorization accumulate as individuals have time to find better employment opportunities. This argues for stable, long-term policies rather than temporary measures with uncertain renewal.

9.2 Limitations and Future Research

Several limitations of this study suggest avenues for future research:

- The analysis estimates intent-to-treat effects of eligibility rather than treatment-on-treated effects of actually receiving DACA. Administrative data on DACA recipients could enable more precise estimates.
- The control group of older, non-citizen immigrants may not be a perfect counterfactual. Alternative identification strategies, such as regression discontinuity designs around age cutoffs, could provide complementary evidence.
- The analysis focuses on full-time employment as the outcome. DACA may have effects on other important outcomes, including wages, job quality, industry of employment, and geographic mobility.
- State-level heterogeneity in the effects of DACA deserves further investigation, particularly with respect to how state policies interact with federal immigration policy.

9.3 Concluding Remarks

These findings contribute to our understanding of how immigration policies affect labor market outcomes. The results suggest that providing work authorization to undocumented immigrants who arrived as children generates meaningful improvements in their employment outcomes, which may have broader implications for economic productivity and tax revenues. As debates over immigration policy continue, evidence on the effects of programs like DACA can help inform the design of effective and humane policies.

Appendix

A. Variable Definitions

Table 7: IPUMS Variable Definitions

Variable	IPUMS Name	Definition
Year	YEAR	Census/survey year
State	STATEFIP	State FIPS code
Person weight	PERWT	Person-level survey weight
Age	AGE	Age in years
Birth year	BIRTHYR	Year of birth
Birth quarter	BIRTHQTR	Quarter of birth (1=Jan-Mar, 2=Apr-Jun, 3=Jul-Sep, 4=Oct-Dec)
Sex	SEX	Sex (1=Male, 2=Female)
Hispanic origin	HISPAN	Hispanic origin (1=Mexican)
Birthplace	BPL	Birthplace (200=Mexico)
Citizenship	CITIZEN	Citizenship status (3=Not a citizen)
Year of immigration	YRIMMIG	Year of immigration to US
Marital status	MARST	Marital status (1-2=Married)
Education	EDUC	Educational attainment
Employment status	EMPSTAT	Employment status (1=Employed)
Labor force status	LABFORCE	Labor force status (2=In labor force)
Usual hours worked	UHRSWORK	Usual hours worked per week

B. DACA Eligibility Criteria Operationalization

The DACA eligibility indicator is constructed as follows:

1. **Arrived before age 16**:

$$\text{age\_at\_arrival} = \text{YRIMMIG} - \text{BIRTHYR}$$
$$\text{arrived\_before\_16} = \mathbf{1}[\text{age\_at\_arrival} < 16]$$

2. **Born after June 15, 1981**:

$$\text{born\_after\_june1981} = \mathbf{1}[\text{BIRTHYR} > 1981 \text{ OR } (\text{BIRTHYR} = 1981 \text{ AND BIRTHQTR} \geq 3)]$$

3. **Present in US since 2007**:

$$\text{in\_us\_since\_2007} = \mathbf{1}[\text{YRIMMIG} \leq 2007]$$

4. **DACA Eligible**:

$$\begin{aligned}\text{daca\_eligible} = &\text{arrived\_before\_16} \times \\ &\text{born\_after\_june1981} \times \\ &\text{in\_us\_since\_2007}\end{aligned}$$

Note: The sample is already restricted to non-citizens (CITIZEN = 3), satisfying the requirement that individuals not have lawful status.

C. Full Regression Output

Table 8: Full Model Coefficients (Model 4)

Variable	Coefficient	Std. Error
DACA Eligible × Post	0.0301***	(0.0039)
DACA Eligible	-0.0375***	(0.0025)
Age	0.0418***	(0.0010)
Age^2	-0.0005***	(0.0000)
Female	-0.4302***	(0.0152)
Married	-0.0340***	(0.0054)
High School+	0.0475***	(0.0040)
Some College+	0.0271***	(0.0048)
Years in US	0.0010***	(0.0003)
Year Fixed Effects	Yes	
State Fixed Effects	Yes	
Observations	561,470	

D. Sample Characteristics by Year

Table 9: Sample Size by Year

Year	Total N	DACA Eligible	% Eligible
2006	62,814	8,547	13.6%
2007	60,481	8,449	14.0%
2008	58,610	8,287	14.1%
2009	56,598	7,881	13.9%
2010	54,998	7,499	13.6%
2011	52,291	6,151	11.8%
2012	*Excluded*		
2013	55,193	9,371	17.0%
2014	54,104	9,288	17.2%
2015	53,528	9,152	17.1%
2016	52,853	8,986	17.0%
Total	561,470	83,611	14.9%