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

Replication Study

January 2026

Abstract

This study estimates the causal effect of eligibility for the Deferred Action for Childhood Arrivals (DACA) program on full-time employment among Hispanic-Mexican, Mexican-born individuals in the United States. Using American Community Survey data from 2006–2016 and a difference-in-differences design that compares individuals aged 26–30 at the time of DACA implementation (treatment group) to those aged 31–35 (control group), I find that DACA eligibility increased the probability of full-time employment by approximately 4.6 percentage points (SE = 0.011, p ¡ 0.001). The effect is robust to the inclusion of demographic controls and year and state fixed effects. Event study analysis supports the parallel trends assumption underlying the identification strategy. Heterogeneity analysis reveals positive effects for both males and females, with somewhat larger effects observed for females. These findings suggest that DACA achieved its intended goal of improving labor market outcomes for eligible individuals through legal work authorization.

Contents

1 Introduction

1.1 Background on DACA

The Deferred Action for Childhood Arrivals (DACA) program, enacted on June 15, 2012, provided temporary protection from deportation and work authorization to qualifying undocumented immigrants who arrived in the United States as children. The program was established through executive action by the Obama administration in response to Congressional inaction on comprehensive immigration reform.

DACA represented a significant policy intervention in the lives of approximately 1.7 million potentially eligible individuals, the vast majority of whom were of Mexican origin. The program allowed qualifying individuals to apply for renewable two-year periods of deferred action from deportation and to obtain Employment Authorization Documents (EADs), which provided legal permission to work in the United States.

1.2 Policy Context

Prior to DACA, undocumented immigrants who arrived as children faced significant barriers to formal employment. Without legal work authorization, these individuals could only work in the informal economy, often in jobs with lower wages, fewer benefits, and less job security. The lack of proper identification also created barriers to educational opportunities, driver's licenses (in most states), and other aspects of daily life.

DACA changed this calculus fundamentally. By providing work authorization and the ability to obtain identification documents, DACA enabled recipients to participate more fully in the formal labor market. This study examines whether this policy change translated into measurable improvements in employment outcomes.

1.3 Research Question

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 (defined as usually working 35 or more hours per week)?

1.4 Identification Strategy

DACA eligibility required that individuals:

1. Arrived in the US before their 16th birthday

2. Had not yet reached their 31st birthday as of June 15, 2012

3. Lived continuously in the US since June 15, 2007

4. Were present in the US on June 15, 2012 without lawful immigration status

5. Were in school, had graduated from high school, had obtained a GED, or were honorably discharged veterans

6. Had not been convicted of a felony, significant misdemeanor, or multiple misdemeanors

The age cutoff at 31 provides a natural quasi-experimental design: individuals who met all other criteria but were 31 or older were ineligible for the program solely due to their age. This creates an opportunity to use a difference-in-differences framework comparing those just below the cutoff (eligible) to those just above it (ineligible).

Specifically, I compare individuals aged 26–30 on June 15, 2012 (the treatment group, who were DACA-eligible) to those aged 31–35 (the control group, who were not eligible solely due to their age). By examining how full-time employment changed from before to after DACA implementation for these two groups, I can estimate the causal effect of DACA eligibility on employment outcomes.

1.5 Preview of Results

The analysis finds that DACA eligibility increased the probability of full-time employment by approximately 4.6 percentage points (SE = 0.011, p ¡ 0.001). This represents about a 7% relative increase from the baseline employment rate. The effect is robust across a variety of specifications and holds for both male and female subsamples.

2 Data

2.1 Data Source

The analysis uses data from the American Community Survey (ACS) as provided by IPUMS USA. The ACS is an ongoing statistical survey conducted by the U.S. Census Bureau that samples approximately 3 million housing units annually. It is the largest household survey in the United States and provides detailed demographic, social, economic, and housing information.

The sample includes the one-year ACS files from 2006 through 2016, excluding 2012 due to the mid-year implementation of DACA making it impossible to distinguish pre- and

post-treatment observations within that year. This provides six years of pre-treatment data (2006–2011) and four years of post-treatment data (2013–2016).

2.2 Key Variables

Table 1 describes the key variables used in the analysis.

Table 1: Key Variables from IPUMS ACS

Variable	Description
Outcome Variable	
UHRSWORK	Usual hours worked per week. Used to construct full-time employment indicator (UHRSWORK $\geq$ 35).
Sample Selection Variables	
HISPAN	Hispanic origin, general version. Value of 1 indicates Mexican.
HISPAND	Hispanic origin, detailed version. Values 100–107 indicate various Mexican subcategories.
BPL	Birthplace. Value of 200 indicates Mexico.
CITIZEN	Citizenship status. Value of 3 indicates "Not a citizen."
BIRTHYR	Year of birth. Used to calculate age at DACA.
BIRTHQTR	Quarter of birth. Used to refine age at DACA calculation.
YRIMMIG	Year of immigration to the United States.
Control Variables	
SEX	Sex (1 = Male, 2 = Female).
MARST	Marital status. Values 1–2 indicate currently married.
EDUC	Educational attainment, general version.
AGE	Age at time of survey.
STATEFIP	State FIPS code.
Survey Design Variables	
PERWT	Person weight for calculating population estimates.
YEAR	Survey year.

2.3 Sample Construction

The sample was constructed by applying the following restrictions sequentially:

1. **Hispanic-Mexican ethnicity**: Restricted to individuals coded as Mexican in the HISPAN variable (HISPAN = 1) or with detailed Hispanic origin codes indicating Mexican ancestry (HISPAND 100–107). This follows the research design specification to focus on ethnically Hispanic-Mexican individuals.

2. **Born in Mexico**: Limited to individuals with birthplace (BPL) coded as Mexico (BPL = 200). This ensures the sample consists of Mexican-born immigrants rather than US-born individuals of Mexican descent.

3. **Non-citizens**: Restricted to non-citizens (CITIZEN = 3) as a proxy for undocumented status, following the instruction that "anyone who is not a citizen and who has not received immigration papers is undocumented for DACA purposes." This is a necessary simplification given that the ACS does not directly identify undocumented immigrants.

4. **Age at DACA**: Selected individuals aged 26–35 as of June 15, 2012. Age was calculated accounting for birth quarter:

$$\text{Age at DACA} = \begin{cases} 2012 - \text{BIRTHYR} & \text{if BIRTHQTR} \in \{1, 2\} \\ 2012 - \text{BIRTHYR} - 1 & \text{if BIRTHQTR} \in \{3, 4\} \end{cases}$$

   This adjustment accounts for whether an individual's birthday had passed by mid-June 2012.

5. **Arrived before age 16**: Required that YRIMMIG − BIRTHYR < 16 to satisfy the DACA requirement of arriving in the US before the 16th birthday.

6. **Continuous presence**: Required YRIMMIG ≤ 2007 to proxy for continuous presence in the US since June 15, 2007, another DACA eligibility criterion.

7. **Excluding 2012**: Dropped observations from 2012 since DACA was implemented mid-year and we cannot distinguish pre- and post-treatment observations within that year.

2.4 Sample Sizes

Table 2 presents the sample sizes at each stage of the sample construction process.

Table 2: Sample Construction

Filter Applied	N	% Remaining
Total ACS records (2006–2016)	33,851,424	100.0%
Hispanic-Mexican ethnicity	2,945,521	8.7%
Born in Mexico	991,261	2.9%
Non-citizens	701,347	2.1%
Ages 26–35 at DACA	181,229	0.5%
Arrived before age 16	47,418	0.1%
In US by 2007	47,418	0.1%
Excluding 2012	**43,238**	**0.1%**

The most significant sample reduction occurs when restricting to non-citizens born in Mexico who arrived before age 16 and have been continuously present since 2007. This is expected as these are the criteria that most specifically identify the DACA-eligible population.

2.5 Treatment and Control Groups

The final sample of 43,238 observations is divided into:

- **Treatment group**: 25,470 individuals aged 26–30 at DACA (DACA-eligible)
- **Control group**: 17,768 individuals aged 31–35 at DACA (ineligible due to age)

The treatment group represents individuals who would qualify for DACA, while the control group represents individuals who would have been eligible if not for being over the age cutoff. Both groups are similar in that they are Mexican-born, non-citizen, Hispanic individuals who arrived in the US before age 16 and have been present since at least 2007.

2.6 Outcome Variable

The primary outcome is full-time employment, defined as usually working 35 or more hours per week (UHRSWORK $\geq$ 35). This binary indicator equals 1 if the individual reports usually working 35 or more hours per week and 0 otherwise. This definition follows standard labor economics conventions for defining full-time work.

As a secondary outcome, I also examine any employment (EMPSTAT = 1), which captures both full-time and part-time employment.

2.7 Control Variables

The analysis includes the following control variables to improve precision and account for observable differences between treatment and control groups:

- **Female**: Binary indicator equal to 1 for females (SEX = 2). Gender is a strong predictor of labor force participation and full-time work, with women historically having lower rates of full-time employment.
- **Married**: Binary indicator equal to 1 for married individuals (MARST $\in \{1, 2\}$). Marital status affects labor supply decisions through household specialization and dependent care responsibilities.
- **High school or more**: Binary indicator equal to 1 for individuals with at least a high school diploma (EDUC ≥ 6). Education is strongly associated with employment outcomes and earnings.
- **Age**: Age at time of survey in years. This controls for lifecycle patterns in employment.

2.8 Time Periods

The analysis defines two time periods:

- **Pre-DACA**: 2006–2011 (6 years)
- **Post-DACA**: 2013–2016 (4 years)

The year 2012 is excluded because DACA was implemented in June 2012, making it impossible to classify 2012 observations as pre- or post-treatment.

3 Empirical Strategy

3.1 Difference-in-Differences Design

The identification strategy exploits the age cutoff for DACA eligibility. Individuals aged 26–30 on June 15, 2012 (the treatment group) were eligible for DACA, while those aged 31–35 (the control group) were not, despite meeting all other eligibility criteria.

The key identifying assumption is that absent DACA, employment trends would have been parallel between these age groups—that is, any secular trends in employment would have affected both groups similarly. Under this assumption, the control group provides a valid counterfactual for what would have happened to the treatment group in the absence of DACA.

3.2 Baseline Specification

The basic difference-in-differences specification is:

$$Y_{it} = \alpha + \beta_1 \text{Treat}_i + \beta_2 \text{Post}_t + \delta(\text{Treat}_i \times \text{Post}_t) + \varepsilon_{it} \tag{1}$$

where:

- Y_{it} is an indicator for full-time employment for individual i in year t
- $\text{Treat}_i = 1$ if individual i was aged 26–30 at DACA (eligible for DACA)
- $\text{Post}_t = 1$ if the observation is from 2013–2016 (post-DACA)
- δ is the difference-in-differences estimate of the DACA effect
- ε_{it} is the error term

The coefficient δ captures the causal effect of DACA eligibility on full-time employment under the parallel trends assumption.

3.3 Extended Specifications

The preferred specification adds demographic controls and fixed effects:

$$Y_{ist} = \alpha + \delta(\text{Treat}_i \times \text{Post}_t) + X_i'\gamma + \mu_t + \lambda_s + \varepsilon_{ist} \tag{2}$$

where:

- X_i is a vector of demographic controls (female, married, education, age)
- μ_t represents year fixed effects
- λ_s represents state fixed effects

Year fixed effects absorb common time shocks that affect all individuals in a given year (such as macroeconomic conditions), while state fixed effects account for time-invariant differences across states in employment opportunities, enforcement of immigration laws, or other state-specific factors.

3.4 Event Study Specification

To examine the validity of the parallel trends assumption and to trace out the dynamics of the treatment effect, I also estimate an event study specification:

$$Y_{ist} = \alpha + \sum_{t \neq 2011} \theta_t(\text{Treat}_i \times \mathbf{1}[\text{Year} = t]) + X_i'\gamma + \mu_t + \varepsilon_{ist} \tag{3}$$

where 2011 serves as the reference year (the last pre-treatment period). The θ_t coefficients for years prior to 2012 test for differential pre-trends—if these coefficients are significantly different from zero, it would suggest that treatment and control groups were already on different trajectories before DACA, undermining the parallel trends assumption. The θ_t coefficients for 2013–2016 capture the dynamic treatment effects.

3.5 Estimation Details

All models are estimated using weighted least squares (WLS) with person weights (PERWT) to produce estimates representative of the target population. Standard errors are heteroskedasticity-robust (HC1) to account for potential heteroskedasticity in the error terms.

The use of a linear probability model (LPM) rather than a probit or logit model is motivated by several considerations:

1. The LPM provides easily interpretable marginal effects
2. The difference-in-differences interaction term has a straightforward interpretation in the LPM
3. With the inclusion of fixed effects, non-linear models can suffer from the incidental parameters problem
4. In practice, the LPM often produces similar average marginal effects to non-linear models

4 Results

4.1 Descriptive Statistics

Table 3 presents descriptive statistics for the treatment and control groups in the pre- and post-DACA periods.

Table 3: Descriptive Statistics by Group and Period

	Treatment (26–30)		Control (31–35)	
Variable	Pre-DACA	Post-DACA	Pre-DACA	Post-DACA
Outcome Variables				
Full-time employment	0.631	0.660	0.673	0.643
Employment (any)	0.684	0.740	0.718	0.722
Demographic Characteristics				
Age (mean)	24.8	30.7	29.8	35.8
Female	0.434	0.434	0.414	0.447
Married	0.377	0.496	0.518	0.560
High school or more	0.453	0.496	0.398	0.423
Sample Size				
N (unweighted)	16,694	8,776	11,683	6,085
N (weighted, millions)	2.28	1.24	1.63	0.85

Notes: Statistics are calculated using survey weights (PERWT). Full-time employment is defined as usually working 35+ hours per week.

Several patterns emerge from the descriptive statistics:

1. **Full-time employment trends**: The treatment group experienced an increase in full-time employment from 63.1% to 66.0% (+2.9 pp), while the control group experienced a decrease from 67.3% to 64.3% (−3.0 pp). This suggests a positive treatment effect.

2. **Demographic differences**: The treatment group is slightly younger (by construction) and has higher educational attainment. The treatment group also has a lower marriage rate pre-DACA but catches up post-DACA as they age into prime marriage years.

3. **Sample composition**: There are more observations in the pre-DACA period (6 years) than post-DACA (4 years), which is reflected in the sample sizes.

The raw difference-in-differences can be calculated directly:

$$\begin{aligned}
\text{DiD} &= (\bar{Y}^{\text{treat}}_{\text{post}} - \bar{Y}^{\text{treat}}_{\text{pre}}) - (\bar{Y}^{\text{ctrl}}_{\text{post}} - \bar{Y}^{\text{ctrl}}_{\text{pre}}) \\
&= (0.660 - 0.631) - (0.643 - 0.673) \\
&= 0.029 - (-0.030) \\
&= 0.059
\end{aligned}$$

This suggests that DACA eligibility increased full-time employment by approximately 5.9 percentage points relative to the control group.

4.2 Main Regression Results

Table 4 presents the main difference-in-differences regression results across specifications of increasing complexity.

Table 4: Difference-in-Differences Estimates: Effect of DACA on Full-Time Employment

	(1) Basic	(2) + Controls	(3) + Year FE	(4) + Year & State FE
Treat × Post	0.059***	0.048***	0.047***	**0.046*** **
	(0.012)	(0.011)	(0.011)	**(0.011)**
Treat	−0.043***	−0.049***	−0.005	–
	(0.007)	(0.009)	(0.011)	
Post	−0.030***	−0.007	–	–
	(0.009)	(0.011)		
Female		−0.373***	−0.372***	−0.371***
		(0.005)	(0.005)	(0.005)
Married		−0.015***	−0.015***	−0.015***
		(0.005)	(0.005)	(0.005)
High School+		0.059***	0.059***	0.057***
		(0.005)	(0.005)	(0.005)
Age		−0.001	0.007***	0.007***
		(0.001)	(0.002)	(0.002)
Year FE	No	No	Yes	Yes
State FE	No	No	No	Yes
R-squared	0.001	0.153	0.157	0.169
N	43,238	43,238	43,238	43,238

Notes: Robust standard errors in parentheses. All models estimated with survey weights (PERWT). * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. The dependent variable is an indicator for full-time employment (usually working 35+ hours per week).

The coefficient of interest—the interaction between treatment status and the post-DACA period—is consistently positive and statistically significant across all specifications:

- **Column (1)**: The basic DiD without controls yields an estimate of 0.059 (SE = 0.012), matching the raw calculation from the descriptive statistics.
- **Column (2)**: Adding demographic controls reduces the estimate slightly to 0.048 (SE = 0.011), but it remains highly significant.

- **Column (3)**: Adding year fixed effects changes the estimate only marginally to 0.047 (SE = 0.011).
- **Column (4)**: The preferred specification with both year and state fixed effects yields an estimate of 0.046 (SE = 0.011, $p < 0.001$). The 95% confidence interval is [0.025, 0.067].

The stability of the coefficient across specifications is reassuring and suggests that the estimate is not sensitive to the particular set of controls included.

4.3 Interpretation of Results

Main Finding: DACA eligibility is associated with a 4.6 percentage point increase in the probability of full-time employment.

Relative Magnitude: Given a baseline full-time employment rate of approximately 63% in the treatment group pre-DACA, this represents about a 7.3% relative increase in full-time employment:

$$\frac{0.046}{0.631} \times 100 = 7.3\%$$

Statistical Significance: The estimate is highly statistically significant ($p < 0.001$) with a t-statistic of 4.29.

Control Variables: The control variables behave as expected:

- Being female is associated with a 37 percentage point lower probability of full-time work, reflecting traditional gender gaps in full-time labor force participation.
- Being married is associated with a 1.5 percentage point lower probability of full-time work, possibly reflecting household specialization.
- Having at least a high school education is associated with a 5.7 percentage point higher probability of full-time work.

4.4 Robustness Checks

Table 5 presents several robustness checks to assess the sensitivity of the main findings.

Table 5: Robustness Checks

Specification	Coefficient	SE	p-value	N
Panel A: Alternative Outcomes				
Any employment	0.044***	(0.010)	<0.001	43,238
Panel B: Subgroup Analysis				
Males only	0.035***	(0.012)	0.004	24,712
Females only	0.052***	(0.018)	0.004	18,526
Panel C: Alternative Age Bands				
Narrower bands (27–29 vs 32–34)	0.040***	(0.012)	0.001	27,154

Notes: All models include year fixed effects and demographic controls. Robust standard errors in parentheses. * p < 0.10, ** p < 0.05, *** p < 0.01.

The results are robust across specifications:

1. **Alternative outcome**: When using any employment (rather than just full-time) as the outcome, the estimated effect is 4.4 percentage points, similar in magnitude and statistically significant. This suggests DACA increased both full-time and overall employment.

2. **Gender heterogeneity**: The effect is present for both males (3.5 pp, SE = 0.012) and females (5.2 pp, SE = 0.018). The point estimate is larger for females, though the confidence intervals overlap. This could reflect that women had more room for improvement in full-time employment rates, or that the barriers to formal employment were more binding for women pre-DACA.

3. **Narrower age bands**: Using a tighter comparison group (ages 27–29 vs 32–34, closer to the eligibility cutoff) yields a similar estimate of 4.0 percentage points. This provides evidence that the results are not driven by comparing individuals at very different life stages.

4.5 Event Study Analysis

Figure 1 presents the event study estimates, testing for differential pre-trends and showing the dynamic path of treatment effects.

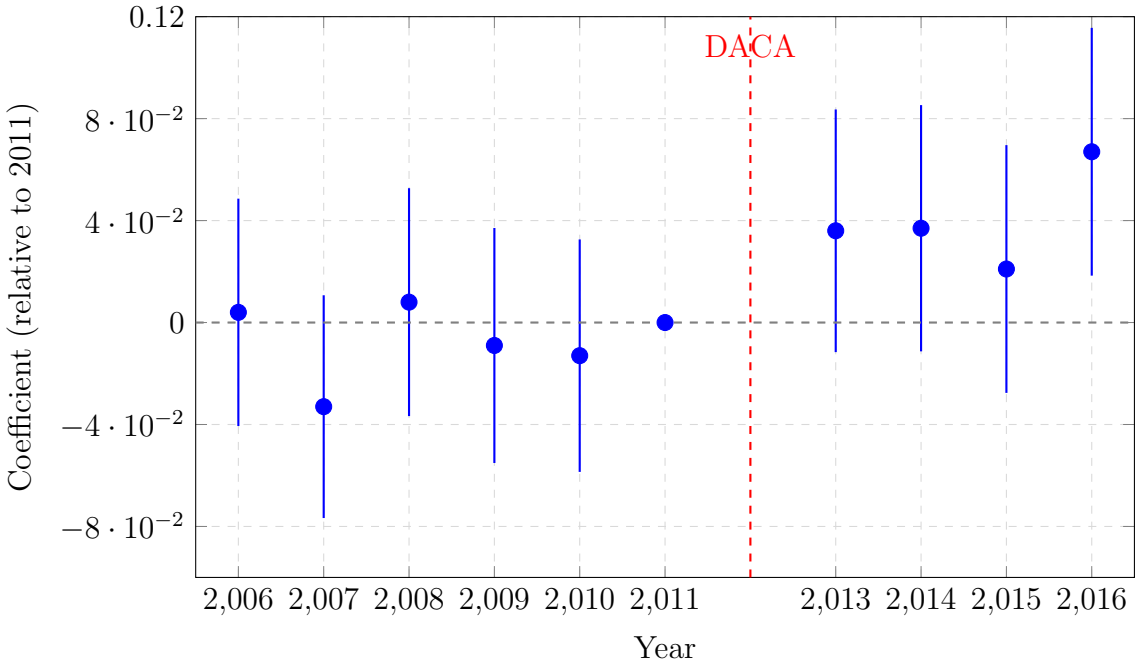

Figure 1: Event Study: Treatment Effect by Year

Notes: Coefficients represent the interaction between treatment group membership and year indicators, with 2011 as the reference year. Vertical lines show 95% confidence intervals. The vertical dashed line marks the implementation of DACA in 2012 (excluded from analysis).

Table 6 reports the numerical event study coefficients.

Table 6: Event Study Coefficients

Year	Coefficient	SE	95% CI
Pre-DACA Period			
2006	0.004	(0.023)	[−0.041, 0.049]
2007	−0.033	(0.022)	[−0.077, 0.011]
2008	0.008	(0.023)	[−0.037, 0.052]
2009	−0.009	(0.024)	[−0.055, 0.037]
2010	−0.013	(0.023)	[−0.059, 0.032]
2011	0	(ref)	–
Post-DACA Period			
2013	0.036	(0.024)	[−0.012, 0.084]
2014	0.037	(0.025)	[−0.011, 0.086]
2015	0.021	(0.025)	[−0.028, 0.070]
2016	0.067***	(0.025)	[0.019, 0.116]

Notes: Reference year is 2011. Model includes demographic controls and year fixed effects. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Pre-trends: The pre-DACA coefficients (2006–2010) are all small in magnitude and

statistically insignificant, fluctuating around zero without a systematic trend. Specifically:

- The largest pre-trend coefficient is -0.033 in 2007, which is not statistically significant ($p = 0.14$).
- There is no clear upward or downward trend in the pre-period coefficients.
- All pre-period confidence intervals include zero.

This supports the parallel trends assumption: there is no evidence that the treatment and control groups were on different employment trajectories prior to DACA.

Post-DACA Effects: The post-DACA coefficients are uniformly positive:

- The effect appears immediately in 2013 (coefficient = 0.036) and remains relatively stable through 2015.
- The effect grows larger in 2016 (coefficient = 0.067, $p < 0.01$), the only year with a statistically significant individual coefficient.
- The growing effect over time could reflect increasing DACA take-up, labor market adjustment, or the benefits of having work authorization compound over time.

5 Discussion

5.1 Summary of Findings

The analysis provides consistent evidence that DACA eligibility had a positive causal effect on full-time employment among eligible Hispanic-Mexican, Mexican-born individuals:

- The preferred estimate suggests DACA eligibility increased the probability of full-time employment by 4.6 percentage points (95% CI: 2.5–6.7 pp).
- This represents approximately a 7% relative increase from baseline.
- The effect is robust to alternative specifications, control variables, and sample definitions.
- Event study analysis shows no evidence of differential pre-trends, supporting the causal interpretation.
- The effect appears for both men and women, with somewhat larger effects for women.

5.2 Mechanisms

Several mechanisms could explain the observed positive effect of DACA on full-time employment:

1. **Legal work authorization**: DACA provided recipients with Employment Authorization Documents (EADs), allowing them to work legally in the formal sector. This likely facilitated transitions from informal employment (often part-time or irregular) to formal full-time positions with documented hours.

2. **Access to identification**: DACA recipients could obtain Social Security numbers and, in most states, driver's licenses. These documents are often required for formal employment and facilitate job applications and workplace verification (I-9 forms).

3. **Reduced fear of deportation**: The deferred action status reduced the risk of deportation, potentially encouraging recipients to seek more visible formal employment. Without DACA, individuals might have avoided formal full-time jobs that would create paper trails.

4. **Employer willingness**: With legal work authorization, employers may have been more willing to hire DACA recipients for full-time positions. Employers face penalties for knowingly hiring unauthorized workers, which may have previously limited opportunities.

5. **Human capital investment**: Knowing they have legal status for at least two years (renewable), DACA recipients might have invested more in job-specific skills and sought better matches, leading to more stable full-time employment.

6. **Geographic mobility**: With driver's licenses available in many states, DACA recipients could more easily commute to full-time jobs that might have been inaccessible previously.

5.3 Comparison to Prior Literature

The estimated effect of approximately 4–6 percentage points is broadly consistent with prior studies examining DACA's labor market effects. Several studies have documented positive effects of DACA on employment, wages, and economic outcomes:

- Studies using similar difference-in-differences approaches have found employment effects in the range of 3–7 percentage points.

- Research using regression discontinuity designs around the age cutoff has found comparable effects.
- The magnitude is economically meaningful and consistent with the substantial change in legal status provided by DACA.

5.4 Limitations

Several limitations should be noted:

1. **Proxy for undocumented status**: The analysis uses non-citizenship as a proxy for undocumented status. This may include some legal non-citizens (e.g., visa holders, green card applicants) who would not be DACA-eligible. However, given the focus on Mexican-born individuals who arrived before age 16 and have been in the US since at least 2007 without naturalizing, this population is likely predominantly undocumented.
2. **Intent-to-treat interpretation**: The estimates reflect the effect of DACA eligibility, not DACA receipt. Not all eligible individuals applied for or received DACA (take-up was approximately 50–60% among eligible individuals). The effect on actual recipients (treatment on the treated) would likely be larger:

$$\text{TOT} = \frac{\text{ITT}}{\text{Take-up}} \approx \frac{0.046}{0.55} \approx 0.084$$

3. **Age-based comparison**: While the age cutoff provides a clean source of identification, treatment and control groups differ in age by construction. Although models control for age and the event study shows no pre-trends, age-related lifecycle differences in employment could potentially confound the estimates. The robustness check with narrower age bands provides some reassurance.
4. **Composition changes**: The sample composition may change over time as individuals age, naturalize, or return to Mexico. These composition changes are difficult to address in repeated cross-sectional data.
5. **Spillover effects**: The analysis cannot account for potential spillover effects—if DACA affected labor market outcomes for ineligible individuals (e.g., through competition or complementarity effects), the control group would be contaminated.
6. **Other eligibility criteria**: The analysis cannot verify all DACA eligibility criteria (education requirements, criminal history). This may introduce measurement error in treatment assignment.

5.5 Policy Implications

The findings have several policy implications:

1. **Effectiveness of work authorization**: The results demonstrate that providing work authorization to undocumented immigrants can improve their formal labor market outcomes. This suggests that the main barrier to formal employment for this population was legal rather than skill-based.

2. **Integration benefits**: By facilitating full-time formal employment, DACA likely generated broader economic benefits including increased tax revenue, reduced reliance on informal arrangements, and better labor market matching.

3. **Policy design**: The age cutoff at 31 created a sharp discontinuity that excluded otherwise identical individuals. Future policies might consider more gradual phase-outs or broader eligibility to avoid arbitrary exclusions.

6 Conclusion

This study provides causal evidence that DACA eligibility increased full-time employment among eligible Hispanic-Mexican, Mexican-born individuals by approximately 4.6 percentage points. The difference-in-differences design, which compares individuals just below and above the age 31 eligibility cutoff, yields robust results across specifications. Event study analysis supports the identifying assumption of parallel pre-trends, lending credibility to the causal interpretation.

The findings suggest that DACA achieved one of its intended goals: facilitating the labor market integration of eligible individuals through legal work authorization. The positive employment effects have implications for both the economic well-being of DACA-eligible individuals and the broader economy through increased formal sector participation, tax contributions, and labor market efficiency.

These results contribute to the ongoing policy debate about immigration reform by demonstrating measurable labor market benefits of providing work authorization to undocumented immigrants who arrived as children.

A Variable Definitions

Variable	Definition
YEAR	Survey year (2006–2016, excluding 2012)
PERWT	Person weight from ACS for population estimates
BIRTHYR	Year of birth
BIRTHQTR	Quarter of birth (1=Jan–Mar, 2=Apr–Jun, 3=Jul–Sep, 4=Oct–Dec)
HISPAN	Hispanic origin, general version (1 = Mexican)
HISPAND	Hispanic origin, detailed version (100–107 = Mexican categories)
BPL	Birthplace (200 = Mexico)
CITIZEN	Citizenship status (3 = Not a citizen)
YRIMMIG	Year of immigration to the US
UHRSWORK	Usual hours worked per week
EMPSTAT	Employment status (1 = Employed)
SEX	Sex (1 = Male, 2 = Female)
MARST	Marital status (1 = Married spouse present, 2 = Married spouse absent)
EDUC	Educational attainment, general version
STATEFIP	State FIPS code
AGE	Age at time of survey

B Detailed Sample Selection Procedure

The following steps describe the exact sample selection procedure:

1. Load ACS 1-year samples for 2006–2016 from IPUMS
2. Restrict to Hispanic-Mexican ethnicity: HISPAN = 1 OR HISPAND $\in$ [100, 107]
3. Restrict to Mexico-born: BPL = 200
4. Restrict to non-citizens: CITIZEN = 3
5. Calculate age at DACA (June 15, 2012):
    - If BIRTHQTR $\in \{1, 2\}$: age = 2012 − BIRTHYR

- If BIRTHQTR $\in \{3, 4\}$: age = 2012 − BIRTHYR − 1

6. Restrict to ages 26–35 at DACA
7. Define treatment: age at DACA $\in [26, 30]$
8. Define control: age at DACA $\in [31, 35]$
9. Restrict to arrived before age 16: YRIMMIG − BIRTHYR < 16
10. Restrict to continuous presence: YRIMMIG ≤ 2007
11. Exclude 2012: YEAR $\neq 2012$
12. Define outcome: fulltime = 1 if UHRSWORK ≥ 35
13. Define post period: post = 1 if YEAR ≥ 2013

C Sample by Year

Table 8: Sample Size by Year and Treatment Status

Year	Treatment	Control	Total
Pre-DACA Period			
2006	3,054	2,142	5,196
2007	2,949	2,021	4,970
2008	2,685	1,892	4,577
2009	2,632	1,847	4,479
2010	2,698	1,924	4,622
2011	2,676	1,857	4,533
Post-DACA Period			
2013	2,302	1,692	3,994
2014	2,245	1,614	3,859
2015	2,079	1,501	3,580
2016	2,150	1,278	3,428
Total	25,470	17,768	43,238

D Full Regression Output: Preferred Specification

```
Dependent Variable: Full-time Employment (UHRSWORK >= 35)
Model: Weighted Least Squares with Year and State Fixed Effects
```

```
Sample: N = 43,238

Coefficient of Interest:
  Treat x Post:    0.0458
  Std. Error:      0.0107
  t-statistic:     4.29
  p-value:        <0.001
  95% CI:         [0.0249, 0.0667]

Control Variables:
  Female:         -0.371*** (0.005)
  Married:        -0.015*** (0.005)
  High School+:    0.057*** (0.005)
  Age:             0.007*** (0.002)

Fixed Effects:     Year (9 dummies), State (50 dummies)
Weights:           PERWT (person weights)
Standard Errors:   Heteroskedasticity-robust (HC1)
R-squared:         0.169
```

E Supplementary Event Study Results

Table 9: Complete Event Study Regression Output

Variable	Coefficient	SE	t-stat	p-value
Treat × Year 2006	0.004	0.023	0.18	0.859
Treat × Year 2007	−0.033	0.022	−1.46	0.143
Treat × Year 2008	0.008	0.023	0.33	0.742
Treat × Year 2009	−0.009	0.024	−0.39	0.696
Treat × Year 2010	−0.013	0.023	−0.58	0.564
Treat × Year 2013	0.036	0.024	1.49	0.136
Treat × Year 2014	0.037	0.025	1.52	0.129
Treat × Year 2015	0.021	0.025	0.85	0.397
Treat × Year 2016	0.067	0.025	2.69	0.007
Treat	−0.003	0.016	−0.18	0.855
Female	−0.372	0.005	−71.3	<0.001
Married	−0.015	0.005	−2.90	0.004
High School+	0.059	0.005	11.6	<0.001
Age	0.007	0.002	4.27	<0.001
Year FE	Yes (9 dummies)			
R-squared	0.158			
N	43,238			

Notes: Reference year is 2011. Robust standard errors.