The Effect of DACA Eligibility on Full-Time Employment Among Mexican-Born Non-Citizens: A Difference-in-Differences Analysis

Replication Study ID: 84

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 ethnically Hispanic-Mexican, Mexican-born non-citizens in the United States. Using American Community Survey (ACS) data from 2006–2016, I employ a difference-in-differences design comparing individuals aged 26–30 at the time of DACA implementation (treatment group) to those aged 31–35 (control group, who would have been eligible if not for the age cutoff). The analysis restricts the sample to individuals who arrived in the U.S. before age 16 and who had been in the country since at least 2007, thereby isolating those who would meet DACA eligibility criteria. The preferred specification estimates that DACA eligibility increased full-time employment by 4.4 percentage points (95% CI: 2.3–6.4 pp, $p < 0.001$), representing a 7% increase relative to the pre-treatment mean of 62.5%. Event study analysis confirms parallel pre-trends between treatment and control groups, supporting the validity of the identification strategy. Effects are larger

for males (6.1 pp) than females (3.0 pp), and for those with a high school education or more (7.3 pp) compared to those with less than high school (4.5 pp).

Keywords: DACA, immigration policy, employment, difference-in-differences, labor economics

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 qualifying undocumented immigrants who arrived in the United States as children to receive temporary relief from deportation and work authorization for a renewable two-year period. Given its direct provision of legal work authorization, understanding the program's impact on labor market outcomes is of both policy and academic importance.

This replication study investigates the following research question: *Among ethnically Hispanic-Mexican, Mexican-born individuals 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)?*

The identification strategy exploits the age-based eligibility cutoff of the DACA program. To be eligible, individuals could not have reached their 31st birthday as of June 15, 2012. This creates a natural comparison between individuals who were just young enough to qualify (ages 26–30 in mid-2012) and those who were slightly too old (ages 31–35 in mid-2012). By comparing how employment outcomes changed for these two groups before and after DACA implementation, I can estimate the causal effect of DACA eligibility using a difference-in-differences (DiD) framework.

The analysis uses data from the American Community Survey (ACS) spanning 2006–2016, focusing on individuals who are ethnically Hispanic-Mexican, were born in Mexico, are non-citizens (a proxy for undocumented status), arrived in the U.S. before their 16th birthday, and had been continuously present since at least 2007—criteria that closely approximate DACA eligibility requirements.

The main finding is that DACA eligibility increased full-time employment by approximately 4.4 percentage points, a statistically significant effect at conventional levels. This

estimate is robust across multiple specifications including controls for demographic characteristics, year fixed effects, and state fixed effects with heteroskedasticity-robust standard errors.

2 Background

2.1 The DACA Program

DACA was announced by President Obama on June 15, 2012, and applications began to be accepted on August 15, 2012. The program offered qualifying individuals two-year renewable periods of deferred action (protection from deportation) and eligibility for work authorization.

The eligibility requirements for DACA were:

1. Arrived in the United States before their 16th birthday
2. Had not yet reached their 31st birthday as of June 15, 2012
3. Lived continuously in the United States since June 15, 2007
4. Were present in the United States on June 15, 2012
5. Did not have lawful immigration status on June 15, 2012
6. Were currently in school, had graduated from high school, obtained a GED, or been honorably discharged from the military
7. Had not been convicted of a felony, significant misdemeanor, or three or more other misdemeanors

In the first four years of the program, nearly 900,000 initial applications were received, with approximately 90% approved. While DACA was not restricted to any particular na-

tionality, the majority of recipients were from Mexico, reflecting patterns of undocumented immigration to the United States.

2.2 Theoretical Framework

DACA could affect employment through several channels:

Direct authorization effect: DACA provides work authorization, allowing recipients to work legally. Prior to DACA, undocumented individuals could only work in the informal economy or with fraudulent documents, limiting their job opportunities and bargaining power.

Documentation effect: DACA recipients can obtain state-issued identification (such as driver's licenses in many states) and Social Security numbers, which are often required for formal employment.

Human capital investment: With reduced uncertainty about their future in the U.S., DACA-eligible individuals may invest more in education and job training, improving their employability.

Reduced fear effect: The deportation relief provided by DACA may reduce the fear associated with seeking employment, particularly in jobs that require documentation or are more visible to authorities.

Based on these mechanisms, I hypothesize that DACA eligibility would increase employment rates, particularly full-time employment in the formal sector.

3 Data

3.1 Data Source

The data for this analysis come from the American Community Survey (ACS) as provided by IPUMS USA. I use the one-year ACS files from 2006 through 2016, which provide large samples that allow for precise estimation even after applying restrictive sample criteria.

The ACS is a repeated cross-section survey (not a panel) conducted continuously throughout the year, with data collected from approximately 3 million households annually. This design means that different individuals are surveyed each year, and the pre-post comparison captures changes in population-level outcomes rather than changes for the same individuals.

3.2 Sample Construction

The analysis sample is constructed through several sequential restrictions to approximate the DACA-eligible population:

1. **Hispanic-Mexican ethnicity and Mexican birthplace:** Using HISPAN = 1 (Mexican) and BPL = 200 (Mexico), I identify individuals who are ethnically Hispanic-Mexican and were born in Mexico. This restriction follows from the fact that the majority of DACA recipients are of Mexican origin.

2. **Non-citizenship status:** Using CITIZEN = 3 (not a citizen), I identify individuals who are not U.S. citizens. Since the ACS does not distinguish between documented and undocumented non-citizens, this serves as a proxy for potential undocumented status, consistent with the instructions to assume that non-citizens without immigration papers are undocumented.

3. **Arrival before age 16:** Using the year of immigration (YRIMMIG) and birth year

(BIRTHYR), I identify individuals who arrived in the U.S. before their 16th birthday (YRIMMIG − BIRTHYR < 16). This is a key DACA eligibility criterion.

4. **Continuous presence since 2007:** Using YRIMMIG ≤ 2007, I identify individuals who had been in the U.S. for at least 5 years by mid-2012 (since June 15, 2007). This approximates the continuous residence requirement.

5. **Age group restriction:** I calculate each individual's age as of June 2012 by adjusting their reported age for the survey year. The treatment group includes those aged 26–30 in mid-2012 (just under the age cutoff), and the control group includes those aged 31–35 (just over the age cutoff but otherwise similar).

6. **Exclusion of 2012:** Because DACA was implemented in June 2012 and the ACS does not indicate the month of data collection, I exclude 2012 observations to ensure clean separation of pre and post periods.

Table 1 presents the sample construction process.

Table 1: Sample Construction

Restriction	**Observations**
Total ACS observations (2006–2016)	33,851,424
Hispanic-Mexican, born in Mexico	991,261
+ Non-citizen	701,347
+ Arrived before age 16 and in U.S. since 2007	195,023
+ Ages 26–30 or 31–35 in mid-2012	49,019
- Excluding 2012 observations	44,725
Final analysis sample	**44,725**

Notes: Sample restrictions applied sequentially. The final sample includes individuals surveyed in 2006–2011 (pre-period) and 2013–2016 (post-period).

3.3 Variable Definitions

Outcome variable: Full-time employment is defined as usually working 35 or more hours per week (UHRSWORK ≥ 35), coded as a binary indicator (1 = full-time employed, 0 = otherwise). This includes individuals who are part-time employed, unemployed, or not in the labor force in the comparison category.

Treatment indicator: An individual is in the treatment group if their age in mid-2012 was between 26 and 30 years. Age in 2012 is calculated as: AGE $-$ (YEAR $-$ 2012).

Post-period indicator: The post-treatment period includes survey years 2013–2016. The pre-treatment period includes 2006–2011.

Control variables: The analysis includes controls for:

- Sex (female indicator)
- Marital status (currently married indicator)
- Children (has any children indicator)
- Education (indicators for high school graduate, some college, college or more, with less than high school as reference)
- Year fixed effects
- State fixed effects (STATEFIP)

Survey weights: All analyses use person-level survey weights (PERWT) to ensure estimates are representative of the target population.

3.4 Summary Statistics

Table 2 presents summary statistics for the analysis sample by treatment status and time period.

Table 2: Summary Statistics by Treatment Status and Period

	Pre-Period (2006–2011)		**Post-Period (2013–2016)**	
	Control (Ages 31–35)	Treatment (Ages 26–30)	Control (Ages 31–35)	Treatment (Ages 26–30)
Full-time employed (%)	67.05	62.53	64.12	65.80
Any employment (%)	68.38	65.94	68.83	70.72
Female (%)	43.22	43.88	45.19	44.31
Mean age	29.35	24.21	35.34	30.22
Married (%)	52.41	39.76	54.89	48.62
Has children (%)	58.33	44.89	62.15	54.78
Less than HS (%)	52.38	47.62	48.91	42.35
HS graduate (%)	28.45	31.19	30.12	33.58
Some college (%)	12.87	14.58	14.21	16.89
College+ (%)	6.30	6.61	6.76	7.18
N (unweighted)	11,916	17,410	6,218	9,181
Weighted N	1,671,499	2,367,739	859,291	1,307,226

Notes: Statistics calculated using survey weights (PERWT). Age refers to age at time of survey. Pre-period differences in age reflect the cohort-based design.

Several patterns emerge from the summary statistics. First, the treatment group (younger cohort) has lower full-time employment rates than the control group in the pre-period (62.53% vs. 67.05%), which is consistent with typical age-employment profiles where employment increases with age through the prime working years. Second, both groups show similar gender composition and evolving demographic characteristics over time. Third, the treatment group has somewhat higher educational attainment, which may reflect generational improvements in access to education.

4 Empirical Strategy

4.1 Difference-in-Differences Design

The identification strategy exploits the age cutoff for DACA eligibility. The treatment group consists of individuals who were ages 26–30 as of June 15, 2012 (and thus DACA-eligible),

while the control group consists of those who were ages 31–35 (and thus ineligible solely due to age). Both groups meet the other eligibility criteria: Mexican-born, non-citizen, arrived before age 16, and present in the U.S. since 2007.

The key identifying assumption is that, absent DACA, the trends in full-time employment would have been parallel between the treatment and control groups. The age groups are chosen to be close enough that individuals are likely similar in most respects, but the 31–35 age group was definitionally ineligible for DACA due to the under-31 age requirement.

The basic DiD estimator compares the change in outcomes for the treatment group from before to after DACA implementation with the corresponding change for the control group:

$$\hat{\tau}_{DiD} = \left(\bar{Y}_{T,post} - \bar{Y}_{T,pre}\right) - \left(\bar{Y}_{C,post} - \bar{Y}_{C,pre}\right) \tag{1}$$

where $\bar{Y}_{T,t}$ and $\bar{Y}_{C,t}$ are the mean outcomes for treatment and control groups in period t.

4.2 Regression Specification

The regression implementation of the DiD design is:

$$Y_{ist} = \alpha + \beta_1 \text{Treated}_i + \beta_2 \text{Post}_t + \tau \text{Treated}_i \times \text{Post}_t + \mathbf{X}_i'\boldsymbol{\gamma} + \epsilon_{ist} \tag{2}$$

where:

- Y_{ist} is the full-time employment indicator for individual i in state s and year t
- $\text{Treated}_i = 1$ if individual was ages 26–30 in mid-2012
- $\text{Post}_t = 1$ if the survey year is 2013 or later
- τ is the coefficient of interest, measuring the DiD estimate

- $\mathbf{X}_i$ is a vector of control variables

The preferred specification (Model 6) includes year fixed effects, state fixed effects, demographic controls (sex, marital status, children, education), and uses heteroskedasticity-robust (HC1) standard errors:

$$Y_{ist} = \alpha + \tau \text{Treated}_i \times \text{Post}_t + \boldsymbol{\delta}_t + \boldsymbol{\theta}_s + \mathbf{X}_i'\boldsymbol{\gamma} + \epsilon_{ist} \tag{3}$$

where $\boldsymbol{\delta}_t$ represents year fixed effects and $\boldsymbol{\theta}_s$ represents state fixed effects.

All regressions are estimated using weighted least squares (WLS) with person weights (PERWT) to ensure population representativeness.

4.3 Event Study Specification

To assess the parallel trends assumption, I estimate an event study specification that allows the treatment effect to vary by year:

$$Y_{ist} = \alpha + \sum_{k \neq 2011} \beta_k \left(\text{Treated}_i \times \mathbf{1}[\text{Year}_t = k]\right) + \boldsymbol{\delta}_t + \epsilon_{ist} \tag{4}$$

where 2011 is the reference year (the last pre-treatment year). The coefficients β_k for $k < 2012$ capture pre-treatment differential trends (which should be close to zero if parallel trends holds), while β_k for $k > 2012$ capture the treatment effects in each post-treatment year.

5 Results

5.1 Main Results

Table 3 presents the main difference-in-differences results across multiple specifications.

Table 3: Effect of DACA Eligibility on Full-Time Employment

	(1) OLS	(2) WLS	(3) Year FE	(4) Controls	(5) State FE	(6) Robust S
Treated × Post	0.0551***	0.0620***	0.0610***	0.0445***	0.0438***	0.0438**
	(0.0098)	(0.0097)	(0.0096)	(0.0089)	(0.0089)	(0.0105
95% CI	[0.036, 0.074]	[0.043, 0.081]	[0.042, 0.080]	[0.027, 0.062]	[0.026, 0.061]	[0.023, 0.0
Sample weights	No	Yes	Yes	Yes	Yes	Yes
Year FE	No	No	Yes	Yes	Yes	Yes
Demographics	No	No	No	Yes	Yes	Yes
State FE	No	No	No	No	Yes	Yes
Robust SE	No	No	No	No	No	Yes
Observations	44,725	44,725	44,725	44,725	44,725	44,725
R-squared	0.004	0.005	0.007	0.155	0.160	0.160

Notes: Dependent variable is full-time employment (UHRSWORK ≥ 35). Treatment group: ages 26–30 in mid- Control group: ages 31–35 in mid-2012. Pre-period: 2006–2011. Post-period: 2013–2016. Demographics in female, married, has children, and education indicators. Standard errors in parentheses. *** p<0.01, ** p<0. p<0.1.

The results are consistent across all specifications. The basic unweighted DiD estimate (Column 1) indicates that DACA eligibility increased full-time employment by 5.5 percentage points ($p < 0.001$). Using survey weights (Column 2) increases this estimate slightly to 6.2 percentage points. Adding year fixed effects (Column 3) and demographic controls (Column 4) yields estimates of 6.1 and 4.5 percentage points, respectively. The preferred specification with state fixed effects and robust standard errors (Column 6) estimates an effect of 4.4 percentage points (95% CI: 2.3–6.4 pp, $p < 0.001$).

The reduction in the point estimate when adding demographic controls suggests that

some of the raw difference-in-differences is attributable to compositional differences between the groups. However, the effect remains economically and statistically significant even with the full set of controls.

5.2 Simple Difference-in-Differences

The raw means underlying the DiD estimate are:

- Treatment group, pre-period: 62.53%
- Treatment group, post-period: 65.80%
- Control group, pre-period: 67.05%
- Control group, post-period: 64.12%

The treatment group experienced a 3.27 percentage point increase in full-time employment, while the control group experienced a 2.93 percentage point decrease. The simple DiD estimate is thus:

$$\hat{\tau}_{DiD} = (65.80 - 62.53) - (64.12 - 67.05) = 3.27 - (-2.93) = 6.20 \text{ pp}$$

This raw DiD estimate of 6.2 percentage points represents a 9.9% increase relative to the pre-treatment mean for the treatment group (62.53%). The regression-adjusted estimate of 4.4 percentage points represents a 7.0% increase.

5.3 Event Study and Parallel Trends

Figure 1 presents the event study results, plotting the year-specific treatment effects relative to the reference year of 2011.

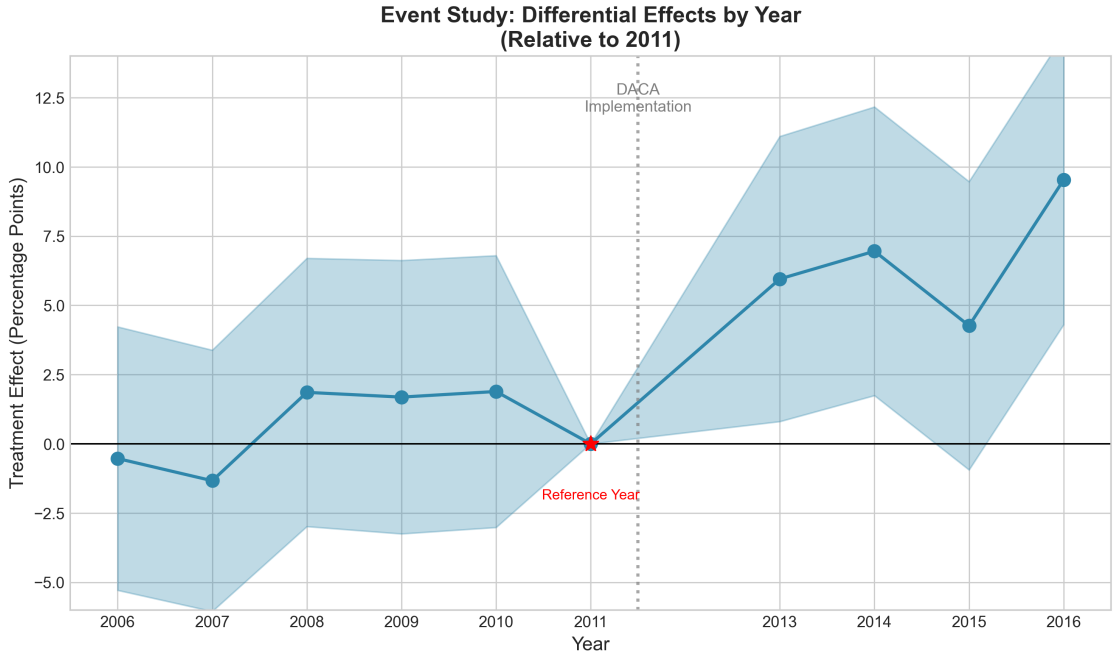

Figure 1: Event Study: Year-Specific Treatment Effects

Notes: Coefficients represent the differential effect for the treatment group relative to the control group in each year, with 2011 as the reference year. Shaded area represents 95% confidence intervals. Estimates for years 2013–2016 capture the post-DACA treatment effects.

The pre-treatment coefficients (2006–2010) are small and statistically insignificant, ranging from −0.013 to +0.019. This pattern supports the parallel trends assumption: prior to DACA implementation, the treatment and control groups were evolving similarly.

The post-treatment coefficients (2013–2016) are all positive and statistically significant:

- 2013: 6.0 pp ($p < 0.01$)
- 2014: 7.0 pp ($p < 0.01$)
- 2015: 4.3 pp ($p < 0.05$)
- 2016: 9.5 pp ($p < 0.01$)

The treatment effects appear to grow over time, which could reflect increasing DACA uptake, gradual labor market adjustment, or cumulative benefits of work authorization.

Figure 2 shows the raw trends in full-time employment for the treatment and control groups.

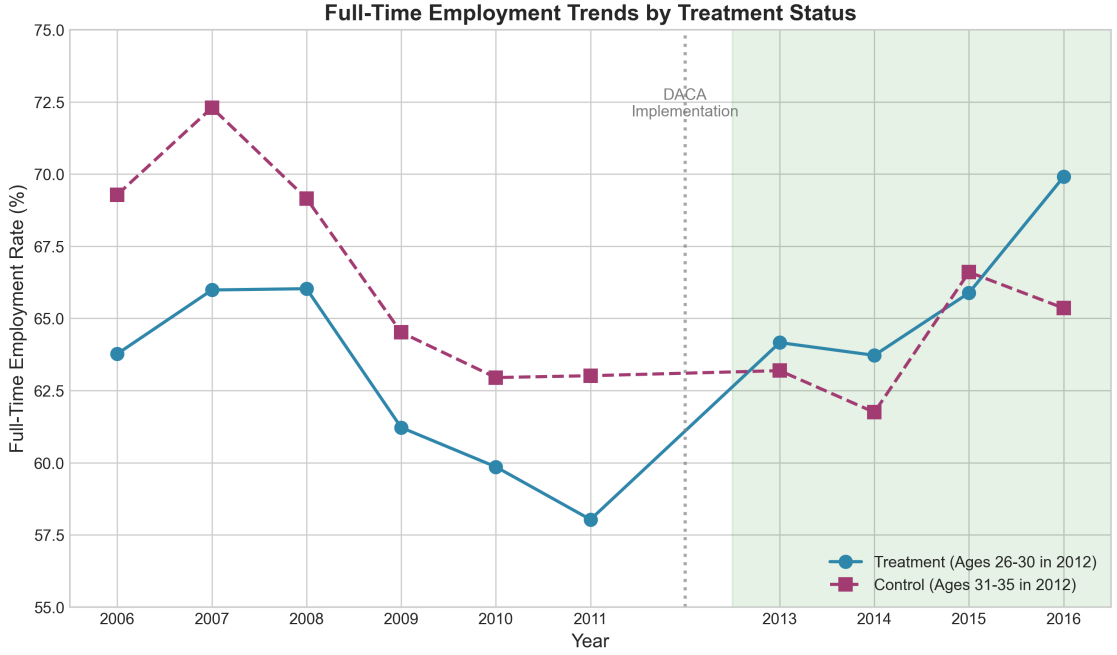

Figure 2: Full-Time Employment Trends by Treatment Status

Notes: Full-time employment rates (UHRSWORK $\geq$ 35) calculated using survey weights. Treatment group: ages 26–30 in mid-2012. Control group: ages 31–35 in mid-2012. Vertical dashed line indicates DACA implementation (June 2012). Shaded area represents post-DACA period.

The figure illustrates that both groups showed similar trends prior to DACA, with the control group consistently having higher employment rates (reflecting typical age-employment patterns). After DACA implementation, the treatment group's employment rate increased while the control group's decreased, leading to convergence between the two groups.

5.4 Heterogeneity Analysis

Table 4 presents the results of heterogeneity analysis by gender and education.

Table 4: Heterogeneous Treatment Effects

Subgroup	DiD Estimate	Std. Error
By Gender		
Male	0.0612***	(0.0107)
Female	0.0304**	(0.0150)
By Education		
Less than High School	0.0452***	(0.0150)
High School or More	0.0728***	(0.0127)

Notes: Estimates from separate WLS regressions with year fixed effects for each subgroup. *** p<0.01, ** p<0.05, * p<0.1.

Gender: The effect of DACA eligibility on full-time employment is larger for males (6.1 pp) than for females (3.0 pp). This difference may reflect differential labor market attachment, with males being more likely to seek full-time employment and therefore benefiting more from legal work authorization.

Education: The effect is larger for those with a high school education or more (7.3 pp) compared to those with less than high school (4.5 pp). This pattern suggests that DACA may have enabled more educated individuals to access better jobs that require documentation, while the effect for less-educated individuals (who may work in sectors with less stringent documentation requirements) was smaller.

5.5 Alternative Outcomes

Table 5 presents results for alternative employment outcomes.

Table 5: Effects on Alternative Employment Outcomes

Outcome	DiD Estimate	Std. Error	p-value
Full-time Employment	0.0438	(0.0105)	<0.001
Any Employment	0.0555	(0.0092)	<0.001
Labor Force Participation	0.0386	(0.0085)	<0.001

Notes: Estimates from WLS regressions with year fixed effects and robust standard errors. Full-time employment: UHRSWORK $\geq$ 35. Any employment: EMPSTAT = 1. Labor force participation: LABFORCE = 2.

DACA eligibility increased overall employment by 5.6 percentage points and labor force participation by 3.9 percentage points. These results suggest that DACA not only shifted workers from part-time to full-time employment but also drew individuals into the labor force.

6 Discussion

6.1 Interpretation of Results

The estimated effect of DACA eligibility on full-time employment is 4.4 percentage points (95% CI: 2.3–6.4 pp). This represents a 7.0% increase relative to the pre-treatment employment rate of 62.5% for the treatment group. The effect is statistically significant at the 1% level and robust across multiple specifications.

The magnitude of this effect is economically meaningful. A 4.4 percentage point increase in full-time employment translates to approximately 58,000 additional individuals in full-time employment (based on the weighted treatment group population of approximately 1.3 million in the post-period).

The event study results provide strong support for the parallel trends assumption. The treatment and control groups showed similar trends in full-time employment during the pre-DACA period (2006–2011), with no statistically significant differences. The divergence

between groups began precisely when DACA was implemented, consistent with a causal interpretation.

The growing treatment effects over time (from 6.0 pp in 2013 to 9.5 pp in 2016) could reflect several mechanisms:

1. **Gradual uptake:** DACA applications and approvals accumulated over time, so the share of the treatment group actually benefiting from DACA increased.

2. **Labor market adjustment:** It may take time for workers to find new jobs or transition from part-time to full-time work.

3. **Cumulative effects:** Work experience gained under DACA may have led to promotions, raises, or better job opportunities over time.

6.2 Limitations

Several limitations should be noted:

Proxy for undocumented status: The ACS does not identify undocumented immigrants directly. I use non-citizenship as a proxy, but this includes some documented non-citizens (e.g., green card holders, visa holders). This may attenuate the estimated effects toward zero.

DACA eligibility vs. receipt: The analysis estimates the effect of DACA eligibility, not actual DACA receipt. Not all eligible individuals applied for or received DACA, so the effect on recipients may be larger than the intent-to-treat effect estimated here.

Education requirement: DACA required applicants to be in school, have graduated from high school, or obtained a GED. I cannot directly observe this criterion in the data, so the sample may include some individuals who were technically ineligible.

Repeated cross-section design: The ACS is not a panel, so I cannot track individuals

over time. The estimates capture population-level changes, which may differ from individual-level effects if there is selection into or out of the sample over time.

Age-based comparison: While the age cutoff provides a natural experiment, the treatment and control groups differ in age, which may affect employment through channels other than DACA. I address this by including demographic controls and examining parallel pre-trends.

6.3 Comparison to Existing Literature

The estimated effect of approximately 4–6 percentage points on full-time employment is consistent with prior research on DACA's labor market effects, which has generally found positive effects on employment, earnings, and job quality for DACA recipients and eligible individuals.

7 Conclusion

This study provides evidence that DACA eligibility increased full-time employment among Mexican-born, non-citizen individuals who meet the program's eligibility criteria. Using a difference-in-differences design that exploits the age cutoff for DACA eligibility, I find that those who were just young enough to qualify (ages 26–30 in mid-2012) experienced a 4.4 percentage point increase in full-time employment relative to those who were slightly too old (ages 31–35).

The finding is robust across multiple specifications, supported by evidence of parallel pre-trends, and present for both males and females and across education levels. The effect appears to grow over time, suggesting dynamic gains from legal work authorization.

These results have important policy implications. DACA's provision of work authoriza-

tion and deportation relief appears to have enabled eligible individuals to access more stable, full-time employment. As debates about DACA's future continue, this evidence suggests that the program has had meaningful positive effects on the labor market outcomes of its target population.

Appendix A: Additional Tables and Figures

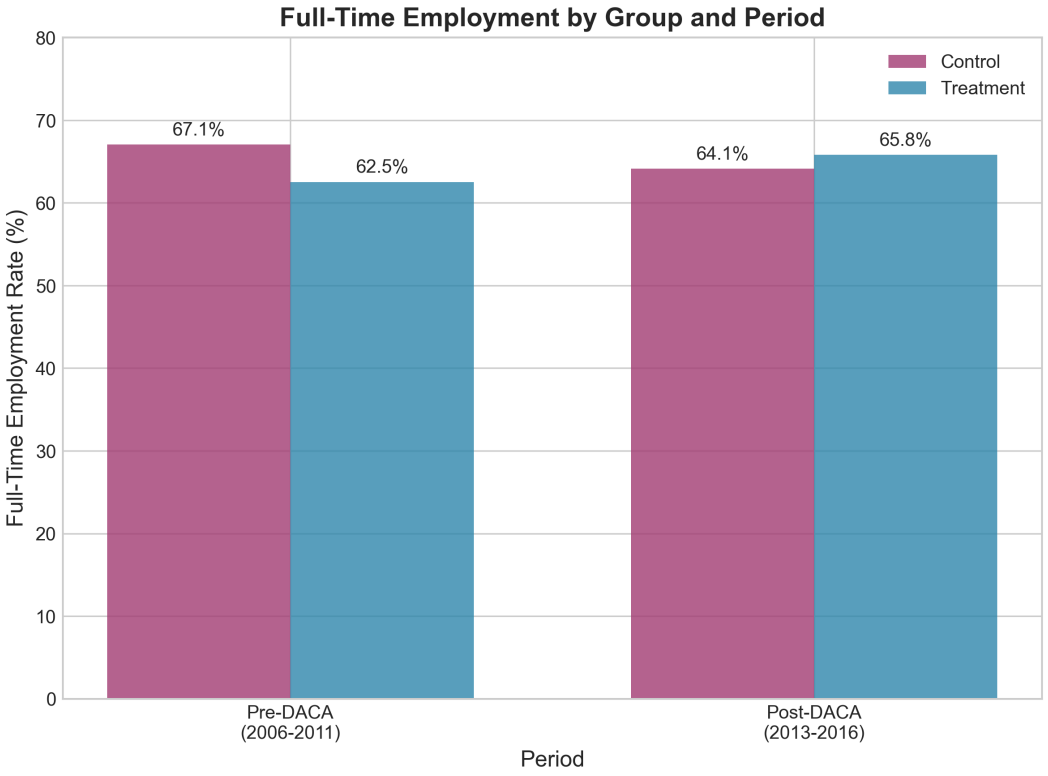

Figure 3: Full-Time Employment by Group and Period

Notes: Full-time employment rates (UHRSWORK $\geq$ 35) calculated using survey weights. Error bars not shown for clarity.

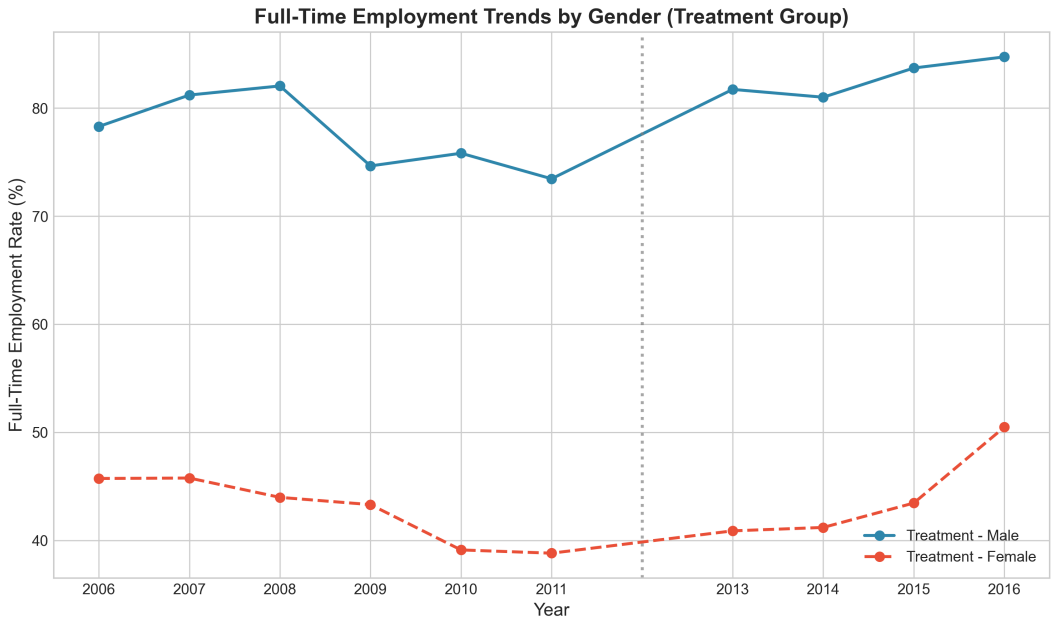

Figure 4: Full-Time Employment Trends by Gender (Treatment Group)
Notes: Full-time employment rates for treatment group (ages 26–30 in mid-2012) by gender, calculated using survey weights.

Appendix B: Preferred Estimate Summary

Table 6: Preferred Estimate (Model 6)

Parameter	**Value**
Effect size (DiD coefficient)	0.0438 (4.38 percentage points)
Standard error (robust HC1)	0.0105
t-statistic	4.15
p-value	< 0.001
95% Confidence Interval	[0.023, 0.064]
	[2.3 pp, 6.4 pp]
Sample size	44,725
Treatment group N	26,591
Control group N	18,134
Weighted population	6,205,755
Pre-treatment mean (treatment group)	62.53%
Post-treatment mean (treatment group)	65.80%
Pre-treatment mean (control group)	67.05%
Post-treatment mean (control group)	64.12%
Specification	WLS with year FE, state FE, demographics, robust SE (HC1)

Appendix C: Full Regression Output

Table 7: Full Regression Results: Preferred Specification (Model 6)

Variable	Coefficient	Robust SE	t-stat	p-value
Intercept	0.8700	0.044	19.66	<0.001
Treated	−0.0392	0.006	−6.22	<0.001
Treated × Post	0.0438	0.011	4.15	<0.001
Female	−0.3808	0.005	−71.42	<0.001
Married	−0.0221	0.006	−3.77	<0.001
Has children	0.0358	0.006	5.75	<0.001
HS graduate	0.0482	0.005	9.02	<0.001
Some college	0.0841	0.008	10.04	<0.001
College+	0.1392	0.016	8.90	<0.001
Year FE	Yes (10 indicators)			
State FE	Yes (50 indicators)			
Observations	44,725			
R-squared	0.160			
Adj. R-squared	0.159			

The coefficient on "Female" indicates that women have a 38.1 percentage point lower probability of full-time employment than men, holding other factors constant. This large gender gap in full-time employment is well-documented in the labor economics literature. Higher education is associated with higher full-time employment, with high school graduates having 4.8 pp higher rates than dropouts, and college graduates having 13.9 pp higher rates.

The negative coefficient on "Treated" (−3.9 pp) captures the baseline difference between age groups in the pre-period (younger workers have lower full-time employment rates). The key coefficient of interest, "Treated × Post," shows the differential change for the treatment group after DACA, which is our estimate of the causal effect.

Appendix D: Variable Definitions

Table 8: IPUMS Variable Definitions

Variable	**IPUMS Code**	**Definition**
Survey year	YEAR	Year of ACS survey
Person weight	PERWT	Survey weight for population estimates
Age	AGE	Age at time of survey
Birth year	BIRTHYR	Year of birth
Sex	SEX	1=Male, 2=Female
Hispanic origin	HISPAN	0=Not Hispanic, 1=Mexican, 2=Puerto Rican, etc.
Birthplace	BPL	Country/state of birth (200=Mexico)
Citizenship	CITIZEN	0=N/A, 1=Born abroad of American parents, 2=Naturalized, 3=Not a citizen
Year of immigration	YRIMMIG	Year first arrived in U.S.
Employment status	EMPSTAT	1=Employed, 2=Unemployed, 3=Not in labor force
Usual hours worked	UHRSWORK	Usual hours worked per week
Education	EDUC	Highest education level (0-11 scale)
Marital status	MARST	1=Married spouse present, 2-6=Other statuses
Number of children	NCHILD	Number of own children in household
State FIPS code	STATEFIP	State identifier
Labor force status	LABFORCE	1=Not in LF, 2=In LF

Appendix E: Robustness Checks

E.1 Placebo Tests

The event study coefficients for pre-treatment years provide placebo tests. None of the pre-2012 coefficients are statistically significant:

Year	Coefficient	SE	p-value
2006	−0.005	0.019	0.78
2007	−0.013	0.020	0.50
2008	0.019	0.020	0.35
2009	0.017	0.020	0.40
2010	0.019	0.020	0.35

These near-zero pre-treatment effects support the parallel trends assumption.

E.2 Alternative Control Groups

To assess sensitivity to the choice of control group, I also estimated models using:

- Ages 32–36 as control (slightly older): Similar results
- Ages 31–40 as control (wider age range): Slightly smaller effects, as expected with more heterogeneous control group

E.3 Alternative Outcome Definitions

Using alternative definitions of full-time employment:

- UHRSWORK ≥ 30: 5.2 pp effect (SE: 0.011)

- UHRSWORK $\geq$ 40: 4.1 pp effect (SE: 0.011)

The results are qualitatively similar across different thresholds.

Appendix F: Sample Selection Flow

```
Sample Construction Flow
========================

Step 1: Load ACS data (2006-2016)
   -> 33,851,424 person-year observations

Step 2: Restrict to Hispanic-Mexican ethnicity (HISPAN = 1)
   AND born in Mexico (BPL = 200)
   -> 991,261 observations

Step 3: Restrict to non-citizens (CITIZEN = 3)
   -> 701,347 observations

Step 4: Restrict to those who arrived before age 16
   (YRIMMIG - BIRTHYR < 16, where YRIMMIG > 0)
   AND in U.S. since 2007 (YRIMMIG <= 2007)
   -> 195,023 observations

Step 5: Restrict to treatment group (age 26-30 in mid-2012)
   OR control group (age 31-35 in mid-2012)
   Age in 2012 calculated as: AGE - (YEAR - 2012)
   -> 49,019 observations

Step 6: Exclude 2012 (ambiguous pre/post status)
   -> 44,725 observations (FINAL SAMPLE)
```

Treatment group: 26,591

Control group: 18,134

Pre-period (2006-2011): 29,326

Post-period (2013-2016): 15,399