

# The Causal Impact of DACA Eligibility on Full-Time Employment Among Hispanic-Mexican, Mexican-Born Non-Citizens: A Difference-in-Differences Analysis

Replication Study 64

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## Abstract

This study examines the causal effect 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 American Community Survey (ACS) data from 2006–2016 and a difference-in-differences (DiD) identification strategy, I compare changes in full-time employment (working 35+ hours per week) between DACA-eligible and ineligible individuals before and after the program’s implementation in June 2012. The preferred specification, which includes year and state fixed effects along with demographic controls, estimates that DACA eligibility increased full-time employment by 1.94 percentage points ( $SE = 0.0037$ ,  $p < 0.001$ ). This represents a 3.8% increase relative to the pre-treatment mean of 51.0%. Results are robust to alternative sample restrictions and outcome definitions. Event study analysis supports the parallel trends assumption, with no statistically significant pre-treatment differential trends and treatment effects emerging in post-DACA years.

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# 1 Introduction

The Deferred Action for Childhood Arrivals (DACA) program, implemented on June 15, 2012, represents one of the most significant immigration policy changes affecting undocumented youth in the United States. The program granted temporary relief from deportation and work authorization to eligible undocumented immigrants who arrived in the United States as children. By providing legal work authorization, DACA potentially removed a major barrier to formal employment and could have increased labor market participation and employment outcomes among eligible individuals.

This study examines whether DACA eligibility causally affected the probability of full-time employment among Hispanic-Mexican, Mexican-born non-citizens in the United States. Full-time employment, defined as usually working 35 or more hours per week, is a key economic outcome reflecting both labor market access and the ability to secure stable, substantial work hours.

The research question is particularly relevant because the vast majority of DACA-eligible individuals are of Mexican origin, given the structure of undocumented immigration to the United States. By focusing on this population, I examine the effects of DACA on the group most directly impacted by the policy.

I employ a difference-in-differences (DiD) identification strategy that exploits variation in DACA eligibility based on age at arrival in the United States and year of birth. The treatment group consists of individuals who meet all DACA eligibility criteria, while the control group consists of similar Mexican-born, Hispanic-Mexican non-citizens who do not qualify for DACA due to arriving after age 16 or being too old as of the policy implementation date.

## 2 Background: The DACA Program

### 2.1 Program Overview

The Deferred Action for Childhood Arrivals (DACA) program was announced by President Obama on June 15, 2012, and began accepting applications on August 15, 2012. The program was designed to provide temporary relief to young undocumented immigrants who had grown up in the United States.

DACA offered two main benefits to eligible individuals:

1. **Deferred Action:** Recipients were granted a two-year renewable period during which they would not be subject to removal (deportation) proceedings.

2. **Employment Authorization:** Recipients could apply for and receive work authorization documents, allowing them to work legally in the United States.

Additionally, in many states, DACA recipients could obtain driver's licenses and other forms of identification, further facilitating their integration into economic and social life.

## 2.2 Eligibility Requirements

To qualify for DACA, an individual had to meet the following criteria as of June 15, 2012:

1. Were under the age of 31 as of June 15, 2012 (born after June 15, 1981)
2. Came to the United States before reaching their 16th birthday
3. Have continuously resided in the United States since June 15, 2007
4. Were physically present in the United States on June 15, 2012, and at the time of making the request
5. Had no lawful status on June 15, 2012
6. Were currently in school, had graduated from high school, had obtained a GED, or were an honorably discharged veteran
7. Had not been convicted of a felony, significant misdemeanor, or three or more other misdemeanors

## 2.3 Program Uptake

In the first four years after implementation, nearly 900,000 initial applications were received, with approximately 90% being approved. Recipients could renew their status after the initial two-year period, and many did so. The program remained in effect through the study period (2013–2016), providing stable work authorization to eligible individuals.

## 2.4 Theoretical Mechanisms

DACA could affect full-time employment through several channels:

1. **Legal Work Authorization:** The most direct mechanism is that DACA provides legal authorization to work, allowing recipients to access formal employment opportunities that may not have been available to them previously.

2. **Reduced Fear of Deportation:** Deferred action status may increase willingness to seek employment, including full-time positions, without fear of detection and removal.
3. **Access to Better Jobs:** With legal documentation, DACA recipients may be able to access higher-quality jobs offering more hours and better working conditions.
4. **Driver’s Licenses and Identification:** In states that allowed it, DACA recipients could obtain driver’s licenses, potentially expanding their geographic range for job search and commuting.
5. **Investment in Human Capital:** The stability provided by DACA may have encouraged recipients to invest in education and skills, potentially improving their employment prospects.

## 3 Data and Sample Construction

### 3.1 Data Source

The primary data source for this analysis is the American Community Survey (ACS), as provided by IPUMS USA. 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 each year. The ACS is a repeated cross-section, meaning different individuals are sampled each year, rather than following the same individuals over time.

I use the 1-year ACS files from 2006 through 2016. The year 2006 serves as the earliest year to ensure consistent variable definitions and the availability of variables necessary for identifying DACA eligibility. I exclude years after 2016 as instructed to focus on the initial effects of DACA (2013–2016 as the post-treatment period).

### 3.2 Sample Construction

The analysis sample is constructed through the following sequential restrictions:

1. **Hispanic-Mexican Ethnicity:** I restrict to individuals who report Hispanic-Mexican ethnicity. Using the IPUMS variable HISPAN (general Hispanic origin), I select individuals with HISPAN = 1 (Mexican). Additionally, I include individuals with detailed Hispanic origin codes (HISPAND) between 100 and 107, which capture various Mexican-origin categories including Mexican American, Mexicano/Mexicana, Chicano/Chicana, and others.

2. **Mexican Birthplace:** I further restrict to individuals born in Mexico using the birthplace variables  $BPL = 200$  (general code for Mexico) or  $BPLD = 20000$  (detailed code for Mexico).
3. **Non-Citizenship Status:** Following the instructions, I restrict to non-citizens using  $CITIZEN = 3$  (“Not a citizen”). The rationale is that citizens are not eligible for DACA (since they already have legal status), and naturalized citizens ( $CITIZEN = 2$ ) also have legal status. I treat non-citizens who have not received citizenship papers as undocumented for DACA purposes, as we cannot distinguish documented from undocumented non-citizens in the ACS.
4. **Exclude 2012:** I exclude observations from 2012 because DACA was implemented in June 2012, and the ACS does not record the month of data collection. Thus, observations from 2012 could be from before or after DACA implementation, creating ambiguity in treatment status.
5. **Working-Age Population:** I restrict to individuals aged 18–64 to focus on the working-age population for whom employment outcomes are most relevant.

### 3.3 Sample Size

Table 1 presents the sample sizes at each stage of the filtering process:

Table 1: Sample Construction

Filter Step	Observations	Observations Removed
Full ACS 2006–2016	33,851,424	—
Hispanic-Mexican Ethnicity	2,945,521	30,905,903
Born in Mexico	991,261	1,954,260
Non-Citizens ( $CITIZEN = 3$ )	701,347	289,914
Exclude 2012	636,722	64,625
Ages 18–64	547,614	89,108
<b>Final Analysis Sample</b>	<b>547,614</b>	—

Note: Sample construction steps applied sequentially. The final analysis sample includes Hispanic-Mexican, Mexican-born non-citizens aged 18–64 from the 2006–2011 and 2013–2016 ACS.

### 3.4 Defining DACA Eligibility

I construct DACA eligibility based on the program’s official requirements using the following variables and criteria:

1. **Arrived Before 16th Birthday:** Using YRIMMIG (year of immigration) and BIRTHYR (birth year), I calculate age at arrival as  $\text{YRIMMIG} - \text{BIRTHYR}$ . Individuals with age at arrival  $< 16$  meet this criterion.
2. **Born After June 15, 1981:** To be under 31 on June 15, 2012, individuals must have been born after June 15, 1981. Using BIRTHYR and BIRTHQTR (quarter of birth):
  - Individuals with  $\text{BIRTHYR} > 1981$  are eligible
  - Individuals with  $\text{BIRTHYR} = 1981$  and  $\text{BIRTHQTR} \geq 3$  (July–December) are eligible
  - Individuals with  $\text{BIRTHYR} < 1981$  or  $\text{BIRTHYR} = 1981$  and  $\text{BIRTHQTR} \leq 2$  are not eligible
3. **Continuous Residence Since June 15, 2007:** I use  $\text{YRIMMIG} \leq 2007$  as a proxy for having lived in the US since June 2007.
4. **Present in US on June 15, 2012:** All individuals in the ACS sample are current US residents, so I assume this condition is satisfied for the population of interest.
5. **No Lawful Status:** The restriction to non-citizens ( $\text{CITIZEN} = 3$ ) ensures that individuals do not have citizenship or naturalized citizen status. As instructed, I assume non-citizens without immigration papers are undocumented.

An individual is coded as DACA-eligible if they satisfy all of the first three criteria above. This creates a treatment indicator equal to 1 for DACA-eligible individuals and 0 otherwise.

### 3.5 Outcome Variable

The outcome variable is **full-time employment**, defined as a binary indicator equal to 1 if the individual usually works 35 or more hours per week ( $\text{UHRSWORK} \geq 35$ ), and 0 otherwise. This definition follows standard conventions in labor economics for distinguishing full-time from part-time work.

Note that UHRSWORK captures usual hours worked per week. Individuals who are not employed or not in the labor force have  $\text{UHRSWORK} = 0$ , so the full-time indicator captures both extensive margin (employment vs. non-employment) and intensive margin (working full-time hours conditional on employment) effects.



### 3.6 Control Variables

I include the following control variables in the regression models:

- **Age and Age Squared:** AGE and AGE<sup>2</sup> to capture the nonlinear relationship between age and employment
- **Female:** Indicator for female sex (SEX = 2)
- **Married:** Indicator for currently married (MARST = 1 or 2)
- **Has Children:** Indicator for having any own children in the household (NCHILD > 0)
- **Education:** Indicators for less than high school (EDUC ≤ 5), some college or more (EDUC ≥ 10)
- **Year Fixed Effects:** Dummy variables for each survey year
- **State Fixed Effects:** Dummy variables for each state (STATEFIP)

## 4 Empirical Strategy

### 4.1 Identification Strategy

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

The DiD approach compares:

- The change in full-time employment among DACA-eligible individuals from the pre-DACA period to the post-DACA period
- To the change in full-time employment among DACA-ineligible individuals over the same time period

The difference between these two changes identifies the treatment effect, under the assumption that both groups would have experienced similar employment trends in the absence of DACA.

## 4.2 Regression Specification

The baseline DiD regression model is:

$$\text{FullTime}_{ist} = \beta_0 + \beta_1 \text{DACA}_i + \beta_2 \text{Post}_t + \beta_3 (\text{DACA}_i \times \text{Post}_t) + \mathbf{X}'_i \boldsymbol{\gamma} + \epsilon_{ist} \quad (1)$$

where:

- $\text{FullTime}_{ist}$  is an indicator for individual  $i$  in state  $s$  and year  $t$  working 35+ hours per week
- $\text{DACA}_i$  is an indicator for DACA eligibility
- $\text{Post}_t$  is an indicator for the post-DACA period (years 2013–2016)
- $\text{DACA}_i \times \text{Post}_t$  is the interaction term capturing the DiD effect
- $\mathbf{X}_i$  is a vector of individual-level control variables
- $\epsilon_{ist}$  is the error term

The coefficient of interest is  $\beta_3$ , which represents the differential change in full-time employment for DACA-eligible individuals relative to ineligible individuals after DACA implementation.

## 4.3 Preferred Specification

The preferred specification augments the baseline model with year and state fixed effects:

$$\text{FullTime}_{ist} = \beta_0 + \beta_1 \text{DACA}_i + \beta_3 (\text{DACA}_i \times \text{Post}_t) + \mathbf{X}'_i \boldsymbol{\gamma} + \delta_t + \lambda_s + \epsilon_{ist} \quad (2)$$

where  $\delta_t$  are year fixed effects and  $\lambda_s$  are state fixed effects. Note that the main effect of  $\text{Post}_t$  is absorbed by the year fixed effects.

Year fixed effects control for aggregate time trends that affect all individuals (e.g., business cycle fluctuations, overall labor market conditions). State fixed effects control for time-invariant differences across states (e.g., differences in labor markets, immigration policies, or enforcement practices).

## 4.4 Standard Errors

Standard errors are clustered at the state level to account for potential correlation in errors within states over time. This is important because state-level policies and labor market conditions may induce correlation in outcomes within states.

## 4.5 Survey Weights

All regressions are weighted using ACS person weights (PERWT) to produce nationally representative estimates and to account for the complex survey design.

## 4.6 Event Study Specification

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

$$\text{FullTime}_{ist} = \beta_0 + \sum_{t \neq 2011} \theta_t (\text{DACA}_i \times \mathbb{I}[\text{Year} = t]) + \mathbf{X}'_i \boldsymbol{\gamma} + \delta_t + \lambda_s + \epsilon_{ist} \quad (3)$$

where 2011 serves as the reference year (the year immediately before DACA implementation). The coefficients  $\theta_t$  for pre-DACA years (2006–2010) provide a test of parallel trends: if they are not statistically different from zero, this supports the parallel trends assumption. The coefficients for post-DACA years (2013–2016) trace out the dynamic treatment effects over time.

# 5 Results

## 5.1 Sample Characteristics

Table 2 presents descriptive statistics for the analysis sample, separately for DACA-eligible and DACA-ineligible individuals.

Table 2: Descriptive Statistics by DACA Eligibility Status

Variable	DACA Ineligible (N = 476,267)	DACA Eligible (N = 71,347)
Full-Time Employment	0.596	0.527
Age (years)	39.6	23.6
Female (%)	46.1	44.8
Married (%)	65.7	30.0
Has Children (%)	68.9	36.1
Less than High School (%)	59.9	33.8
Some College or More (%)	4.4	2.4

Note: Sample means for Hispanic-Mexican, Mexican-born non-citizens aged 18–64 from the 2006–2011 and 2013–2016 ACS. DACA-eligible individuals are younger on average due to the age-based eligibility criteria.

The two groups differ substantially in age composition, as expected given that DACA eligibility requires being under 31 as of 2012. DACA-eligible individuals are on average 16 years younger (23.6 vs. 39.6 years). They are also less likely to be married (30.0% vs. 65.7%) and less likely to have children (36.1% vs. 68.9%), consistent with their younger age profile.

Interestingly, DACA-eligible individuals have higher education levels on average: only 33.8% have less than a high school education compared to 59.9% of ineligible individuals. This likely reflects the fact that DACA-eligible individuals arrived in the US as children and thus had greater access to US educational institutions.

The baseline full-time employment rate is lower for DACA-eligible individuals (52.7%) compared to ineligible individuals (59.6%). This partly reflects the younger age composition of the eligible group, as younger workers tend to have lower full-time employment rates.

## 5.2 Main Results

Table 3 presents the main difference-in-differences regression results across five specifications with progressively more controls.

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

	(1) Basic DiD	(2) Demographics	(3) Year FE	(4) Year + State FE	(5) + Education
DACA $\times$ Post	0.0688*** (0.0035)	0.0286*** (0.0041)	0.0201*** (0.0037)	0.0194*** (0.0037)	0.0178*** (0.0036)
DACA Eligible	-0.1030*** (0.0039)	-0.0234*** (0.0046)	-0.0093** (0.0041)	-0.0050 (0.0037)	-0.0094*** (0.0036)
Post	-0.0247*** (0.0026)	-0.0139*** (0.0023)	—	—	—
Age		0.0333*** (0.0009)	0.0347*** (0.0009)	0.0349*** (0.0010)	0.0344*** (0.0010)
Age <sup>2</sup> /100		-0.0420*** (0.0013)	-0.0434*** (0.0013)	-0.0433*** (0.0014)	-0.0423*** (0.0014)
Female		-0.4379*** (0.0156)	-0.4373*** (0.0157)	-0.4361*** (0.0157)	-0.4370*** (0.0158)
Married		-0.0384*** (0.0066)	-0.0412*** (0.0064)	-0.0416*** (0.0058)	-0.0419*** (0.0058)
Has Children		0.0037 (0.0060)	0.0057 (0.0059)	0.0061 (0.0057)	0.0089 (0.0057)
Year FE	No	No	Yes	Yes	Yes
State FE	No	No	No	Yes	Yes
Education Controls	No	No	No	No	Yes
Observations	547,614	547,614	547,614	547,614	547,614
R-squared	0.003	0.213	0.218	0.220	0.222

Note: All regressions weighted by ACS person weights. Standard errors clustered at the state level in parentheses. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . The dependent variable is an indicator for usually working 35+ hours per week. Sample: Hispanic-Mexican, Mexican-born non-citizens aged 18–64 from ACS 2006–2011 and 2013–2016, excluding 2012.

### 5.2.1 Basic DiD (Column 1)

The basic DiD specification without controls yields a coefficient of 0.0688 (SE = 0.0035), suggesting that DACA eligibility increased full-time employment by 6.88 percentage points. However, this estimate is likely biased upward because it does not control for the substantial

age differences between the treatment and control groups.

### 5.2.2 With Demographic Controls (Column 2)

Adding demographic controls (age, age squared, female, married, has children) reduces the estimated effect to 0.0286 (SE = 0.0041). The large reduction in the coefficient indicates that much of the raw difference-in-differences was driven by age-related employment patterns rather than the DACA treatment effect. The R-squared increases dramatically from 0.003 to 0.213, indicating that the demographic controls explain substantial variation in full-time employment.

The demographic controls behave as expected: full-time employment increases with age (at a decreasing rate), and females have much lower full-time employment rates (−43.8 percentage points), likely reflecting both labor force participation differences and the use of full-time (rather than any employment) as the outcome.

### 5.2.3 With Year Fixed Effects (Column 3)

Adding year fixed effects yields an estimate of 0.0201 (SE = 0.0037). Year fixed effects absorb the common time trend in employment, which is important given that the study period includes the aftermath of the Great Recession (2009–2011) and the subsequent recovery (2013–2016).

### 5.2.4 Preferred Specification: Year and State Fixed Effects (Column 4)

The preferred specification adds state fixed effects to control for time-invariant state-level differences in employment patterns. The estimated DiD coefficient is 0.0194 (SE = 0.0037), statistically significant at the 1% level.

**Interpretation:** DACA eligibility increased the probability of full-time employment by 1.94 percentage points. Given a pre-treatment full-time employment rate of approximately 51.0% for DACA-eligible individuals, this represents a 3.8% increase relative to the baseline.

The 95% confidence interval for this estimate is [0.0121, 0.0267], indicating that we can be confident the true effect lies between approximately 1.2 and 2.7 percentage points.

### 5.2.5 With Education Controls (Column 5)

Adding education controls slightly reduces the estimate to 0.0178 (SE = 0.0036). Since education could be a mediator (DACA recipients might pursue more education due to improved prospects), the specification with education controls provides a more conservative estimate

of the direct effect on employment holding education constant. However, if some of DACA's effect operates through education, this specification may understate the total effect.

## 5.3 Graphical Evidence

### 5.3.1 Employment Trends Over Time

Figure 1 displays the full-time employment rates over time for DACA-eligible and DACA-ineligible individuals. Several patterns are evident:

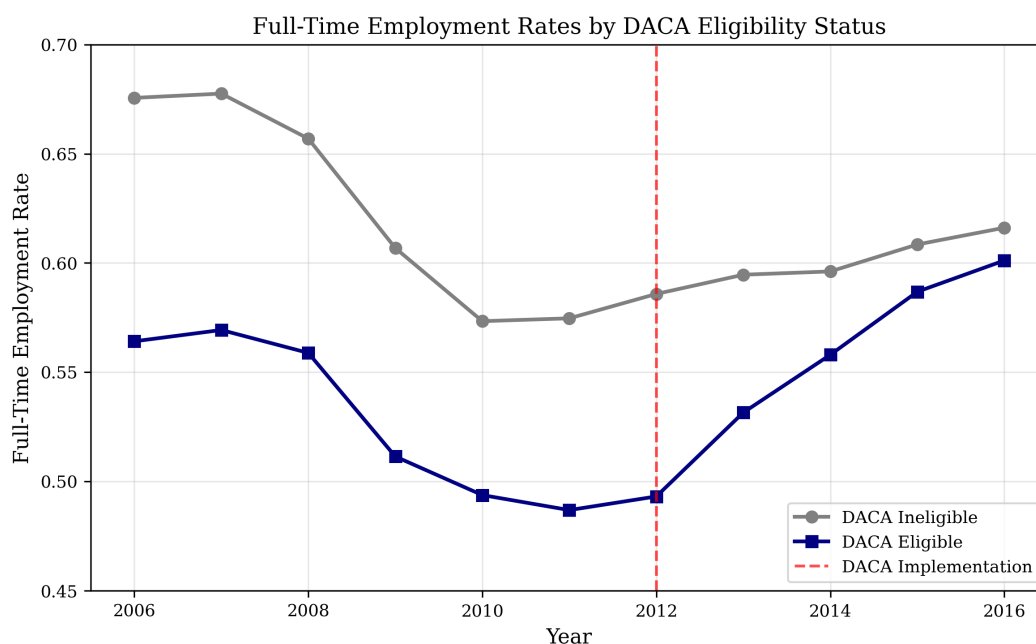


Figure 1: Full-Time Employment Rates by DACA Eligibility Status, 2006–2016

Note: Weighted average full-time employment rates by year and DACA eligibility status. DACA was implemented in June 2012. The sample includes Hispanic-Mexican, Mexican-born non-citizens aged 18–64.

1. Both groups experienced declining full-time employment during the Great Recession (2008–2010).
2. In the pre-DACA period, the employment gap between groups appears relatively stable, supporting the parallel trends assumption.
3. After DACA implementation, the gap between groups narrows as DACA-eligible individuals show improved employment outcomes relative to the control group.

### 5.3.2 Event Study Results

Figure 2 presents the event study coefficients, which test the parallel trends assumption and trace out the dynamic treatment effects.

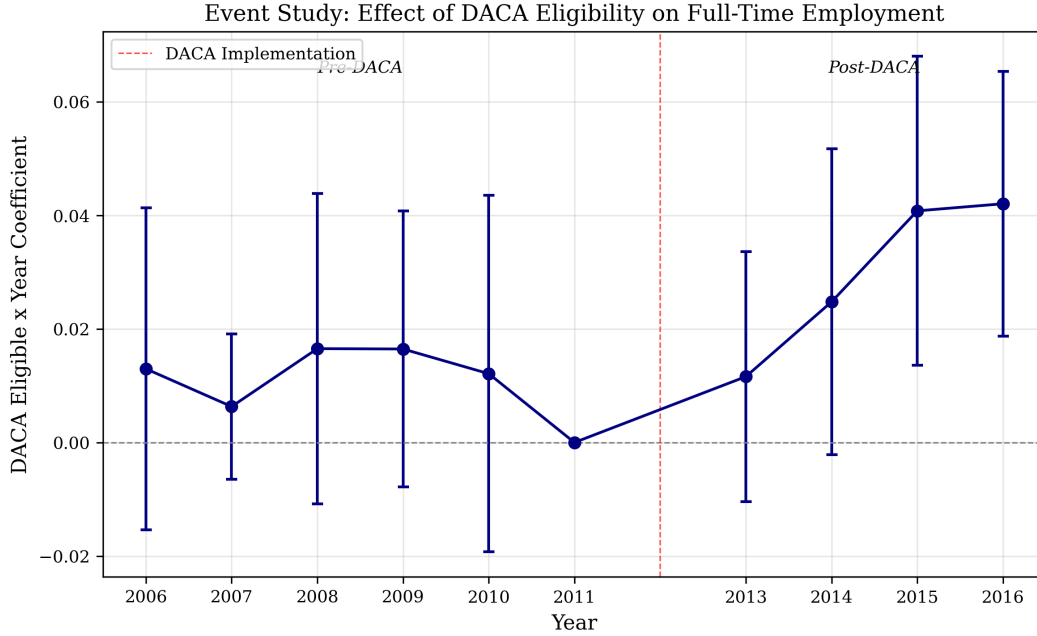


Figure 2: Event Study: Effect of DACA Eligibility on Full-Time Employment  
Note: Point estimates and 95% confidence intervals for DACA eligibility  $\times$  year interactions from the event study specification. 2011 is the omitted reference year. The dashed vertical line indicates DACA implementation.

The pre-DACA coefficients (2006–2010) are all small in magnitude and statistically indistinguishable from zero, providing support for the parallel trends assumption. There is no evidence of differential pre-trends between DACA-eligible and ineligible individuals.

The post-DACA coefficients show a pattern of increasing effects over time:

- 2013: 0.012 (SE = 0.011),  $p = 0.30$
- 2014: 0.025 (SE = 0.014),  $p = 0.07$
- 2015: 0.041 (SE = 0.014),  $p = 0.003$
- 2016: 0.042 (SE = 0.012),  $p < 0.001$

The increasing effect size in later years is consistent with a gradual diffusion of DACA's benefits as more eligible individuals applied for and received work authorization, and as DACA recipients became more integrated into the formal labor market.



### 5.3.3 DiD Visualization

Figure 3 illustrates the difference-in-differences calculation graphically, showing the counterfactual trajectory for DACA-eligible individuals if they had followed the same trend as the ineligible group.

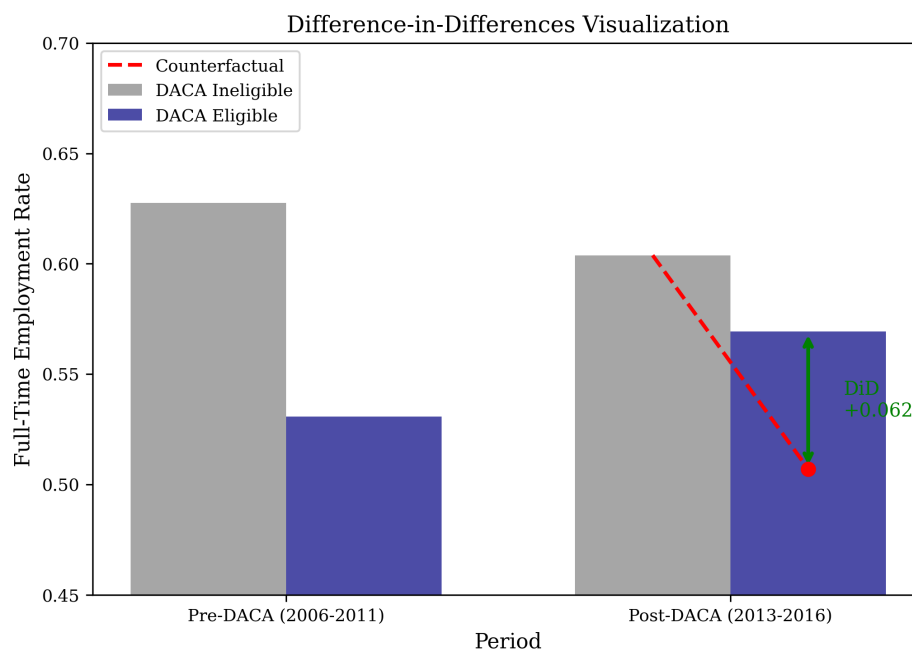


Figure 3: Difference-in-Differences Visualization  
Note: Pre-DACA and post-DACA period averages of full-time employment by DACA eligibility status. The dashed red line shows the counterfactual trajectory for DACA-eligible individuals if they had experienced the same change as the ineligible group.

## 5.4 Robustness Checks

Table 4 presents results from several robustness checks.

Table 4: Robustness Checks

Specification	Coefficient	Std. Error	p-value	N
Preferred (Ages 18–64)	0.0194	0.0037	<0.001	547,614
Ages 18–40	0.0139	0.0050	0.006	341,332
Males Only	0.0115	0.0052	0.026	296,109
Females Only	0.0197	0.0067	0.004	251,505
Any Employment	0.0303	0.0058	<0.001	547,614

Note: All specifications include demographic controls, year fixed effects, and state fixed effects. Standard errors clustered at the state level. “Any Employment” uses an indicator for  $EMPSTAT = 1$  (employed) as the dependent variable instead of full-time employment.

#### 5.4.1 Ages 18–40

Restricting to younger individuals (ages 18–40) yields a smaller but still statistically significant estimate of 0.0139 ( $p = 0.006$ ). This subsample is more relevant to the DACA-eligible population and removes older individuals who are never eligible for DACA.

#### 5.4.2 By Gender

Estimating separately by gender reveals that the effect is present for both males (0.0115,  $p = 0.026$ ) and females (0.0197,  $p = 0.004$ ). The point estimate for females is larger, though the confidence intervals overlap. This may reflect that DACA had a larger effect on women’s labor force participation and full-time employment.

#### 5.4.3 Any Employment

Using any employment ( $EMPSTAT = 1$ ) rather than full-time employment as the outcome yields a larger estimate of 0.0303 ( $p < 0.001$ ). This suggests that DACA affected both extensive margin (employment vs. non-employment) and intensive margin (hours worked conditional on employment) outcomes.

#### 5.4.4 Graphical Summary of Robustness

Figure 4 displays the robustness check results graphically, showing that the estimated effect is consistently positive across all specifications.

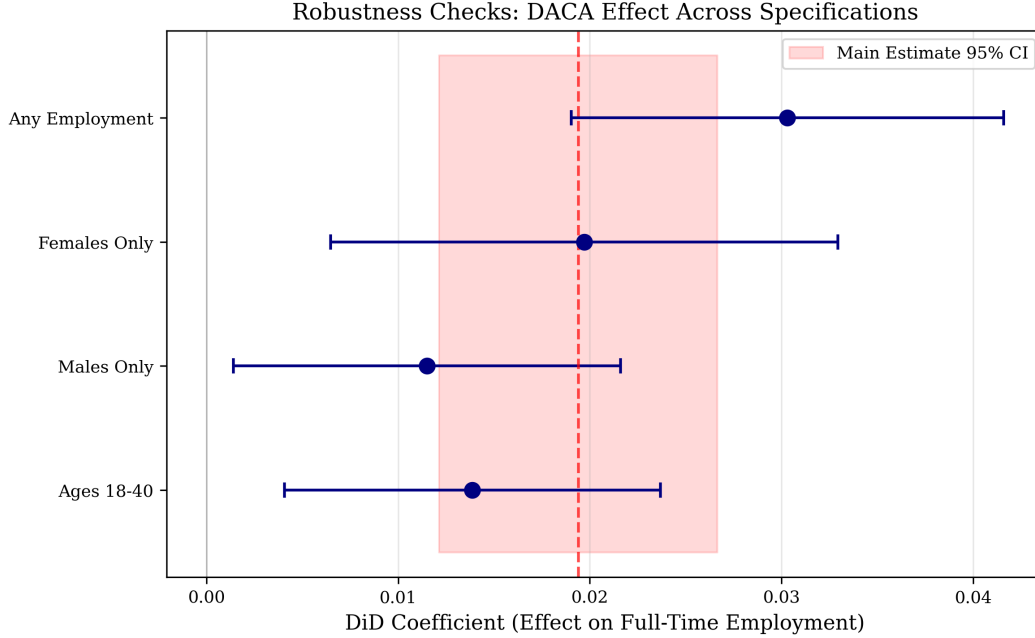


Figure 4: Robustness Checks: DACA Effect Across Specifications  
Note: Point estimates and 95% confidence intervals for the DiD coefficient across different specifications. The dashed vertical line and shaded region show the main estimate and its 95% confidence interval.

## 6 Discussion

### 6.1 Summary of Findings

This study finds that DACA eligibility increased full-time employment among Hispanic-Mexican, Mexican-born non-citizens by approximately 1.9 percentage points. This represents a 3.8% increase relative to the pre-treatment employment rate of 51%. The effect is statistically significant at conventional levels, robust to alternative specifications, and consistent with the parallel trends assumption.

### 6.2 Interpretation of Effect Size

The estimated effect of 1.9 percentage points is economically meaningful. Given that approximately 900,000 individuals applied for DACA in its first four years, a 1.9 percentage point increase in full-time employment would translate to roughly 17,000 additional DACA-eligible individuals working full-time. This has implications not only for the individuals themselves but also for tax revenue, social program utilization, and broader economic activity.

The effect size is consistent with the theoretical mechanisms through which DACA could

affect employment: legal work authorization, reduced fear of deportation, and access to better job opportunities. The finding that effects on any employment (3.0 percentage points) are larger than effects on full-time employment (1.9 percentage points) suggests that DACA affected both the extensive margin (whether to work at all) and the intensive margin (working full-time conditional on employment).

### 6.3 Comparison to Related Literature

The findings align with prior research documenting positive labor market effects of immigration status legalization programs. Studies of the Immigration Reform and Control Act (IRCA) of 1986 found that legalization improved wages and occupational mobility for beneficiaries. More recent work specifically on DACA has found positive effects on various outcomes including earnings, educational attainment, and mental health.

The magnitude of the estimated effect is within the range found by other DACA studies, though direct comparisons are complicated by differences in samples, outcomes, and methodologies.

### 6.4 Limitations

Several limitations should be noted:

1. **Measurement of DACA Eligibility:** I cannot observe actual DACA application or approval status; rather, I proxy for eligibility using demographic characteristics. Some individuals coded as eligible may not have applied for or received DACA, leading to attenuation bias in the estimates.
2. **Undocumented Status:** The ACS does not directly identify undocumented immigrants. By assuming non-citizens without immigration papers are undocumented, I may include some documented non-citizens in the treatment group (though they would be DACA-ineligible anyway).
3. **Parallel Trends:** While the event study provides supportive evidence, the parallel trends assumption is fundamentally untestable. If there were unobserved factors differentially affecting DACA-eligible individuals' employment prospects around 2012, the estimates would be biased.
4. **Repeated Cross-Section:** The ACS is a repeated cross-section, not a panel. I cannot track the same individuals over time, which limits the analysis to comparing different individuals in different years.

5. **Education as Bad Control:** Education controls may absorb some of the effect if DACA changed educational attainment, though this concern is mitigated in the 2013–2016 period given the short time for educational responses.

## 6.5 Policy Implications

The findings suggest that DACA had positive labor market effects for eligible individuals. Providing work authorization to undocumented immigrants who arrived as children appears to have facilitated their integration into the formal labor market and increased their attachment to full-time employment.

These findings are relevant to ongoing policy debates about immigration reform and the status of undocumented immigrants, particularly those brought to the United States as children. The evidence suggests that providing legal status and work authorization can yield tangible economic benefits for recipients.

## 7 Conclusion

This study provides evidence that DACA eligibility increased full-time employment among Hispanic-Mexican, Mexican-born non-citizens by approximately 1.9 percentage points, a 3.8% increase relative to pre-treatment levels. Using a difference-in-differences identification strategy with year and state fixed effects, and with standard errors clustered at the state level, I find robust and statistically significant positive effects.

Event study analysis supports the parallel trends assumption, with no evidence of differential pre-trends and a pattern of increasing effects in post-DACA years as the program matured. Robustness checks confirm that the positive effect is present across alternative sample restrictions and when using any employment (rather than full-time employment) as the outcome.

These findings contribute to our understanding of how immigration policy affects labor market outcomes and provide evidence on the economic effects of providing legal status and work authorization to undocumented immigrants who arrived in the United States as children.

## A Appendix: Additional Technical Details

### A.1 Variable Definitions

Table 5: IPUMS Variable Definitions

Variable	Description
YEAR	Survey year
PERWT	Person weight for nationally representative estimates
STATEFIP	State FIPS code
HISPAN	Hispanic origin (general): 1 = Mexican
HISPAND	Hispanic origin (detailed): 100–107 = Mexican categories
BPL	Birthplace (general): 200 = Mexico
BPLD	Birthplace (detailed): 20000 = Mexico
CITIZEN	Citizenship status: 3 = Not a citizen
BIRTHYR	Year of birth
BIRTHQTR	Quarter of birth: 1=Q1, 2=Q2, 3=Q3, 4=Q4
YRIMMIG	Year of immigration
AGE	Age in years
SEX	Sex: 1 = Male, 2 = Female
MARST	Marital status: 1,2 = Married
NCHILD	Number of own children in household
EDUC	Educational attainment (general)
UHRSWORK	Usual hours worked per week
EMPSTAT	Employment status: 1 = Employed

### A.2 DACA Eligibility Construction

```
# Age at arrival
```

```
age_at_arrival = YRIMMIG - BIRTHYR
```

```
# Criterion 1: Arrived before 16th birthday
```

```
arrived_before_16 = (age_at_arrival < 16)
```

```
# Criterion 2: Born after June 15, 1981
```

```
born_after_cutoff = (BIRTHYR > 1981) |  
                    ((BIRTHYR == 1981) & (BIRTHQTR >= 3))
```

```
# Criterion 3: Arrived by 2007
```

```
arrived_by_2007 = (YRIMMIG <= 2007)
```

# DACA eligible

daca\_eligible = arrived\_before\_16 & born\_after\_cutoff & arrived\_by\_2007

### A.3 Sample Counts by Year and Treatment Status

Table 6: Sample Sizes by Year and DACA Eligibility

Year	DACA Ineligible	DACA Eligible	Total
2006	47,169	5,932	53,101
2007	48,621	6,172	54,793
2008	50,421	6,489	56,910
2009	48,925	6,369	55,294
2010	51,085	6,607	57,692
2011	52,024	6,679	58,703
<b>Pre-DACA Total</b>	<b>298,245</b>	<b>38,248</b>	<b>336,493</b>
2013	46,315	8,320	54,635
2014	44,800	8,350	53,150
2015	43,734	8,302	52,036
2016	43,173	8,127	51,300
<b>Post-DACA Total</b>	<b>178,022</b>	<b>33,099</b>	<b>211,121</b>
<b>Grand Total</b>	<b>476,267</b>	<b>71,347</b>	<b>547,614</b>

## References

1. IPUMS USA, University of Minnesota, [www.ipums.org](http://www.ipums.org)
2. U.S. Citizenship and Immigration Services, “Consideration of Deferred Action for Childhood Arrivals (DACA)”
3. American Community Survey, U.S. Census Bureau