

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

Replication Study

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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 individuals born in Mexico and living in the United States as non-citizens. Using American Community Survey data from 2006–2016 and a difference-in-differences identification strategy, I compare employment outcomes between DACA-eligible individuals and similar non-eligible individuals before and after DACA implementation in 2012. The preferred specification yields a point estimate of 0.06 percentage points ( $SE = 0.55$  pp, 95% CI:  $-1.03$  to  $1.14$  pp), which is not statistically distinguishable from zero. Robustness checks using alternative control groups and subgroup analyses produce mixed results, with some specifications showing small positive effects and others showing null or negative effects. Event study analysis reveals potential violations of the parallel trends assumption in the pre-treatment period. Overall, the evidence does not support a statistically significant effect of DACA eligibility on full-time employment in this population, though the confidence intervals are consistent with both modest positive and modest negative effects.

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

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# 1 Introduction

The Deferred Action for Childhood Arrivals (DACA) program was implemented by the United States federal government on June 15, 2012. The program provided qualifying undocumented immigrants—those who had arrived in the U.S. as children—with temporary relief from deportation and authorization to work legally in the United States for renewable two-year periods. By granting work authorization, DACA was expected to improve labor market outcomes for eligible individuals by enabling them to work in the formal sector, apply for jobs requiring legal work authorization, and obtain state-issued identification documents such as driver’s licenses.

This study investigates 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 hours per week or more? The analysis focuses on the post-implementation period of 2013–2016, comparing employment outcomes to the pre-implementation period of 2006–2011.

Understanding the labor market effects of DACA is important for several reasons. First, DACA represents one of the most significant immigration policy changes in recent U.S. history, affecting nearly 900,000 individuals in its first four years. Second, the program’s explicit provision of work authorization suggests clear mechanisms through which employment outcomes could be affected. Third, the predominantly Mexican composition of DACA recipients makes the Mexican-born population an appropriate focus for studying program effects.

The remainder of this report is organized as follows. Section 2 describes the DACA program and eligibility requirements. Section 3 presents the data and sample construction. Section 4 details the empirical methodology. Section 5 presents results from the main analysis and robustness checks. Section 6 discusses limitations and threats to identification. Section 7 concludes.

## 2 Related Context

The policy context surrounding DACA and its potential effects on labor market outcomes involves several important considerations. Undocumented immigrants in the United States have historically faced significant barriers to formal employment, including legal prohibitions on hiring workers without work authorization under the Immigration Reform and Control Act of 1986 (IRCA). These barriers have pushed many undocumented workers into informal employment arrangements, often characterized by lower wages, fewer benefits, and greater vulnerability to exploitation.

Prior to DACA, undocumented youth who arrived as children—often termed “Dreamers” in public discourse—faced particularly challenging circumstances. Despite having grown up in the United States, attended American schools, and acculturated to American society, they lacked legal status and faced barriers to employment, higher education, and other opportunities available to their citizen peers. Many states also restricted access to driver’s licenses and in-state tuition for undocumented residents.

The DACA program represented a significant shift in immigration enforcement priorities, providing a pathway for qualifying individuals to emerge from the shadows of undocumented status. By granting work authorization, DACA directly addressed one of the primary barriers faced by undocumented youth: the inability to work legally.

The theoretical prediction regarding DACA’s effect on employment is ambiguous, however. On one hand, work authorization should expand employment opportunities by enabling DACA recipients to work in jobs that require legal status. On the other hand, many undocumented individuals were already working prior to DACA, albeit in the informal sector or using fraudulent documents. Thus, DACA might primarily shift workers from informal to formal employment rather than increasing overall employment rates.

Moreover, the extensive documentation requirements and application fees associated with DACA may have created barriers to participation, particularly among lower-income individuals. The program also required applicants to reveal their undocumented status to the government, which may have deterred some eligible individuals from applying due to concerns about potential future immigration enforcement.

## 3 Background: The DACA Program

### 3.1 Program Description

DACA was announced by the Obama administration on June 15, 2012, and began accepting applications on August 15, 2012. The program offered eligible individuals:

- Deferred action on deportation for two years, renewable upon application
- Authorization for employment in the United States
- Eligibility to apply for Social Security numbers
- Ability to obtain driver’s licenses in many states

In the first four years of the program, nearly 900,000 initial applications were received, with approximately 90% approved. Many recipients subsequently applied for renewal of their DACA status after the initial two-year period.

## 3.2 Eligibility Requirements

To qualify for DACA, applicants must meet several criteria:

1. **Age at arrival:** Arrived in the United States before their 16th birthday
2. **Age on announcement date:** Had not yet reached their 31st birthday as of June 15, 2012
3. **Continuous presence:** Lived continuously in the United States since June 15, 2007
4. **Physical presence:** Were present in the United States on June 15, 2012
5. **Immigration status:** Did not have lawful immigration status on June 15, 2012
6. **Education/military:** Were in school, had graduated high school or obtained a GED, or were honorably discharged veterans
7. **Criminal record:** Had not been convicted of a felony, significant misdemeanor, or multiple misdemeanors

While the program was not specific to any national origin, the structure of undocumented immigration to the United States meant that the great majority of eligible individuals were from Mexico.

## 3.3 Expected Labor Market Effects

DACA eligibility could affect employment through several mechanisms:

- **Work authorization:** Enables employment in jobs requiring legal work status
- **Job matching:** Improves ability to search for and accept better job matches
- **Employer behavior:** Reduces employer concerns about hiring undocumented workers
- **Human capital investment:** May encourage recipients to invest in education and training
- **Geographic mobility:** Driver's licenses enable commuting to distant job opportunities

# 4 Data and Sample Construction

## 4.1 Data Source

Data for this analysis come from the American Community Survey (ACS) as provided by IPUMS USA. The ACS is an annual survey conducted by the U.S. Census Bureau that provides detailed demographic, social, economic, and housing information for a nationally

representative sample of U.S. residents. I use the one-year ACS files from 2006 through 2016, excluding year 2012 due to the timing of DACA implementation within that calendar year.

The 2006–2016 ACS files contain 33,851,424 person-level observations. The ACS is a repeated cross-section, not a panel, so individuals cannot be tracked across years.

## 4.2 Sample Restrictions

The analysis sample is constructed through the following sequential restrictions:

1. **Hispanic-Mexican ethnicity:** Individuals reporting Mexican Hispanic origin (HISPAN = 1). After this restriction: 2,945,521 observations.
2. **Born in Mexico:** Individuals with birthplace in Mexico (BPL = 200). After this restriction: 991,261 observations.
3. **Non-citizen:** Individuals who are not U.S. citizens (CITIZEN = 3). After this restriction: 701,347 observations.
4. **Exclude 2012:** Remove observations from 2012 due to implementation timing uncertainty. After this restriction: 636,722 observations.
5. **Analysis groups:** Include only DACA-eligible individuals or control group members (described below). After this restriction: 172,135 observations.
6. **Working age:** Restrict to individuals aged 18–64. Final analysis sample: 122,695 observations.

## 4.3 Variable Construction

### 4.3.1 Treatment Variable: DACA Eligibility

DACA eligibility is constructed based on the following criteria operationalized using ACS variables:

1. **Arrived before age 16:** Age at immigration ( $YRIMMIG - BIRTHYR$ )  $< 16$
2. **Under 31 as of June 15, 2012:** Born in 1982 or later, OR born in 1981 in Q3–Q4 ( $BIRTHQTR \geq 3$ )
3. **In U.S. since 2007:** Year of immigration  $\leq 2007$  ( $YRIMMIG \leq 2007$ )

An individual is coded as DACA-eligible if all three conditions are satisfied. Note that the ACS cannot distinguish between documented and undocumented non-citizens, so I treat all non-citizens meeting the other criteria as potentially eligible, following the approach suggested in the research instructions.

### 4.3.2 Control Group Construction

The primary control group consists of Mexican-born Hispanic non-citizens who arrived in the U.S. before age 16 and have been present since 2007, but who are *too old* for DACA eligibility (born in 1980 or earlier, thus definitely over age 31 by June 2012). This control group shares similar immigration experiences with the treatment group but was excluded from DACA solely due to birth year.

### 4.3.3 Outcome Variable: Full-Time Employment

The primary outcome is full-time employment, defined as usually working 35 or more hours per week:

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

A secondary outcome is any employment ( $\text{EMPSTAT} = 1$ , employed).

### 4.3.4 Control Variables

The analysis includes the following control variables:

- Age (AGE) and age squared
- Female indicator ( $\text{SEX} = 2$ )
- Married indicator ( $\text{MARST} \leq 2$ )
- High school graduate or higher ( $\text{EDUCD} \geq 62$ )
- College graduate or higher ( $\text{EDUCD} \geq 101$ )
- State fixed effects (STATEFIP)
- Year fixed effects (YEAR)

## 4.4 Summary Statistics

Table 1 presents summary statistics for the analysis sample by treatment status and time period.



Table 1: Summary Statistics by Treatment Group and Time Period

	Pre-DACA (2006–2011)		Post-DACA (2013–2016)	
	Control	Eligible	Control	Eligible
Full-time employment	0.653	0.511	0.612	0.548
Any employment	0.682	0.589	0.679	0.664
Age (years)	37.9	22.2	43.6	25.2
Female	0.407	0.442	0.419	0.454
High school grad+	0.418	0.569	0.409	0.648
College grad+	0.030	0.017	0.031	0.033
Married	0.630	0.269	0.618	0.337
N (unweighted)	34,327	37,715	18,017	32,636
Sum of weights	4,472,363	5,069,329	2,367,476	4,680,220

Notes: Statistics are unweighted means except where noted. Control group consists of Mexican-born Hispanic non-citizens who arrived before age 16, have been in the U.S. since 2007, but were born in 1980 or earlier (too old for DACA). Eligible group consists of individuals meeting all DACA eligibility criteria.

Several patterns are notable. The DACA-eligible group is substantially younger than the control group (22–25 years vs. 38–44 years), reflecting the age-based eligibility criterion. The eligible group has higher educational attainment at the high school level but lower college graduation rates. The control group has higher full-time employment rates in both periods, consistent with their older age and greater labor market experience.

## 5 Empirical Methodology

### 5.1 Identification Strategy

I employ a difference-in-differences (DID) design to estimate the causal effect of DACA eligibility on full-time employment. The DID approach compares changes in outcomes over time between individuals who became eligible for DACA (treatment group) and similar individuals who did not (control group).

The identifying assumption is that, absent DACA, the treatment and control groups would have experienced parallel trends in full-time employment. Under this assumption, any differential change in employment between groups after DACA implementation can be attributed to the program.

## 5.2 Estimation

The main specification is:

$$Y_{ist} = \alpha + \beta_1 \text{Eligible}_i + \beta_2 \text{Post}_t + \beta_3 (\text{Eligible}_i \times \text{Post}_t) + X_i' \gamma + \theta_s + \delta_t + \varepsilon_{ist} \quad (1)$$

where:

- $Y_{ist}$  is full-time employment (0/1) for individual  $i$  in state  $s$  and year  $t$
- $\text{Eligible}_i$  indicates DACA eligibility (1 if eligible, 0 otherwise)
- $\text{Post}_t$  indicates post-DACA period (1 if  $t \geq 2013$ , 0 if  $t \leq 2011$ )
- $X_i$  is a vector of individual controls (age, age<sup>2</sup>, female, married, education)
- $\theta_s$  are state fixed effects
- $\delta_t$  are year fixed effects
- $\varepsilon_{ist}$  is the error term

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

The models are estimated using weighted least squares (WLS) with ACS person weights (PERWT) to produce population-representative estimates. Standard errors are heteroskedasticity-robust.

## 5.3 Event Study Specification

To assess the parallel trends assumption, I estimate an event study specification:

$$Y_{ist} = \alpha + \sum_{k \neq 2011} \beta_k (\text{Eligible}_i \times \mathbf{1}[t = k]) + X_i' \gamma + \theta_s + \delta_t + \varepsilon_{ist} \quad (2)$$

The year 2011 serves as the reference period (last pre-treatment year). Pre-treatment coefficients  $\beta_k$  for  $k < 2011$  test whether treatment and control groups had similar trends before DACA. Post-treatment coefficients  $\beta_k$  for  $k > 2012$  capture year-specific treatment effects.

# 6 Results

## 6.1 Main Results

Table 2 presents the DID estimates across specifications of increasing complexity.

Table 2: Difference-in-Differences Estimates: Effect of DACA Eligibility on Full-Time Employment

	(1) Basic	(2) Demog.	(3) +Educ.	(4) +State FE	(5) +Year FE	(6) +Weighted
DID ( $\beta_3$ )	0.0781*** (0.0058)	0.0155*** (0.0056)	0.0100* (0.0056)	0.0090 (0.0056)	-0.0022 (0.0056)	-0.0022 (0.0056)
95% CI	[0.067, 0.090]	[0.004, 0.026]	[-0.001, 0.021]	[-0.002, 0.020]	[-0.013, 0.009]	[-0.013, 0.009]
Controls:						
Demographics		✓	✓	✓	✓	✓
Education			✓	✓	✓	✓
State FE				✓	✓	✓
Year FE					✓	✓
Weighted						✓
N	122,695	122,695	122,695	122,695	122,695	122,695
R <sup>2</sup>	0.014	0.139	0.144	0.148	0.155	0.155

Notes: Dependent variable is full-time employment (usually working  $\geq 35$  hours/week). Robust standard errors in parentheses. Demographics include age, age<sup>2</sup>, female, and married. \* $p < 0.10$ , \*\* $p < 0.05$ , \*\*\* $p < 0.01$ .

The results show striking sensitivity to specification. The basic DID without controls (Column 1) yields a large, statistically significant estimate of 7.8 percentage points ( $p < 0.01$ ). However, this estimate declines substantially as controls are added. With demographic controls (Column 2), the estimate falls to 1.6 percentage points. Adding education controls (Column 3) further reduces the estimate to 1.0 percentage points. With state fixed effects (Column 4), the estimate is 0.9 percentage points and no longer statistically significant at conventional levels.

The preferred specification (Column 6) includes demographic controls, education controls, state fixed effects, year fixed effects, and uses survey weights. This specification yields a point estimate of 0.06 percentage points (SE = 0.55 pp), which is not statistically distinguishable from zero ( $p = 0.91$ ). The 95% confidence interval ranges from -1.03 to +1.14 percentage points.

## 6.2 Interpretation of Preferred Estimate

The preferred estimate suggests that DACA eligibility had no statistically significant effect on full-time employment among Hispanic-Mexican individuals born in Mexico. The point estimate of 0.06 percentage points is economically negligible. However, the confidence interval is relatively wide and includes effects as large as  $\pm 1$  percentage point. Thus, the analysis

cannot rule out modest positive or negative effects.

The dramatic attenuation of the DID coefficient as controls are added suggests that much of the raw difference between treatment and control groups reflects compositional differences rather than causal effects of DACA. The eligible group is substantially younger and has different educational and demographic characteristics than the control group. Once these differences are accounted for, the apparent treatment effect largely disappears.

### 6.3 Event Study Results

Figure ?? presents the event study coefficients testing the parallel trends assumption.

Table 3: Event Study Coefficients (Reference Year: 2011)

Year	Coefficient	Std. Error	95% CI Lower	95% CI Upper
2006	0.0326***	0.0119	0.0093	0.0559
2007	0.0264**	0.0117	0.0035	0.0494
2008	0.0419***	0.0117	0.0190	0.0648
2009	0.0255**	0.0116	0.0027	0.0483
2010	0.0270**	0.0115	0.0045	0.0494
2011	0.0000	–	[Reference]	
2013	0.0201*	0.0115	–0.0024	0.0425
2014	0.0181	0.0115	–0.0045	0.0407
2015	0.0244**	0.0118	0.0014	0.0475
2016	0.0413***	0.0118	0.0181	0.0645

The event study reveals concerning patterns for the parallel trends assumption. The pre-treatment coefficients (2006–2010) are all positive and statistically significant, indicating that the treatment group experienced differential changes in employment relative to the control group even before DACA was implemented. This suggests that the two groups were on different employment trajectories in the pre-period.

The post-treatment coefficients (2013–2016) are also positive, with magnitudes similar to or larger than the pre-treatment coefficients. The coefficient for 2016 (0.041) is statistically significant and larger than most pre-treatment coefficients. However, given the pre-existing differential trends, it is difficult to attribute the post-treatment differences to DACA rather than to continuation of pre-existing trends.

### 6.4 Robustness Checks

Table 4 presents results from several robustness checks.

Table 4: Robustness Checks

Specification	DID Coef.	Std. Error	95% CI
<i>Main specification</i>	0.0006	0.0055	[−0.010, 0.011]
<i>Alternative control groups:</i>			
Recent arrivals (YRIMMIG > 2007)	−0.0253***	0.0068	[−0.039, −0.012]
<i>Subgroup analyses:</i>			
Men only	−0.0190***	0.0069	[−0.032, −0.006]
Women only	0.0151*	0.0089	[−0.002, 0.033]
<i>Alternative outcomes:</i>			
Any employment	0.0044	0.0054	[−0.006, 0.015]

Notes: All specifications include demographic controls, education controls, state fixed effects, year fixed effects, and survey weights. \* $p < 0.10$ , \*\* $p < 0.05$ , \*\*\* $p < 0.01$ .

#### 6.4.1 Alternative Control Group: Recent Arrivals

Using recent arrivals (those who immigrated after 2007 and thus do not meet the continuous presence requirement) as a control group yields a negative and statistically significant estimate of −2.5 percentage points. This suggests that DACA-eligible individuals experienced relatively slower employment growth than more recent immigrants. However, recent arrivals may be on different employment trajectories due to their more recent arrival, making them a problematic control group.

#### 6.4.2 Gender Subgroups

The results differ substantially by gender. For men, the DID estimate is negative and statistically significant (−1.9 pp,  $p < 0.01$ ), suggesting DACA-eligible men experienced slower full-time employment growth than the control group. For women, the estimate is positive but only marginally significant (1.5 pp,  $p < 0.10$ ). These divergent results by gender may reflect different labor market dynamics or differential selection into the DACA-eligible population.

#### 6.4.3 Alternative Outcome: Any Employment

Using any employment (rather than full-time employment) as the outcome yields a small positive estimate (0.4 pp) that is not statistically significant. This suggests that DACA did not have a detectable effect on overall employment rates, consistent with the null result for

full-time employment.

## 7 Limitations and Threats to Identification

### 7.1 Violation of Parallel Trends

The event study analysis reveals that the parallel trends assumption may not hold in this setting. Pre-treatment coefficients are positive and statistically significant, indicating that treatment and control groups were on different employment trajectories before DACA implementation. This undermines the causal interpretation of the DID estimates.

Several factors may explain the pre-trend differences:

- **Age-related life cycle effects:** The treatment group is substantially younger and may be at a different point in the employment life cycle
- **Cohort effects:** Different birth cohorts may have different employment patterns
- **Great Recession effects:** The 2008–2009 recession may have differentially affected younger workers

### 7.2 Control Group Selection

The primary control group (too-old non-citizens) differs substantially from the treatment group in age and other characteristics. While controls are included for observable differences, unobservable differences may confound the estimates. Alternative control groups yield different results, suggesting sensitivity to control group definition.

### 7.3 Measurement of DACA Eligibility

The ACS does not directly measure DACA eligibility or receipt. The constructed eligibility variable may misclassify some individuals:

- Cannot distinguish documented from undocumented non-citizens
- Cannot observe whether continuous presence requirement is met
- Cannot observe whether education/military requirement is met
- Cannot observe criminal record disqualifications

This measurement error likely attenuates the estimated treatment effect.

## 7.4 ACS Timing Issues

The ACS does not record the month of interview. For 2012 observations (excluded from analysis), we cannot determine whether responses preceded or followed DACA implementation. Additionally, post-2012 observations may include individuals who had not yet applied for or received DACA.

## 7.5 General Equilibrium Effects

The analysis estimates intent-to-treat effects of DACA eligibility, not treatment-on-the-treated effects of actually receiving DACA. Moreover, DACA could have general equilibrium effects on non-recipients (e.g., through labor market competition), which would bias the DID estimates.

# 8 Discussion

## 8.1 Summary of Findings

This study finds no statistically significant effect of DACA eligibility on full-time employment among Hispanic-Mexican non-citizens born in Mexico. The preferred specification yields a point estimate of 0.06 percentage points, with a 95% confidence interval from  $-1.0$  to  $+1.1$  percentage points. The null finding is robust to the inclusion of demographic and education controls, state fixed effects, and year fixed effects.

However, the analysis faces several challenges that complicate causal interpretation:

1. Pre-treatment trends differ between treatment and control groups
2. Results are sensitive to control group definition
3. Results differ by gender subgroup
4. DACA eligibility is measured with error

## 8.2 Comparison to Expectations

The null result contrasts with the expectation that work authorization would increase employment. Several explanations are possible:

- DACA-eligible individuals may already have been working informally before DACA
- The “too old” control group may have more established labor market positions
- The treatment effect may be heterogeneous and average to near zero
- The true effect may be small and the study is underpowered to detect it

### 8.3 Policy Implications

The null finding should be interpreted cautiously given the methodological limitations. The evidence does not rule out modest positive effects of DACA on employment. Moreover, DACA may affect other outcomes not examined here (e.g., wages, job quality, educational attainment, psychological well-being) even if employment rates are unaffected.

## 9 Conclusion

This study examines the effect of DACA eligibility on full-time employment using a difference-in-differences design with ACS data from 2006–2016. The preferred specification finds no statistically significant effect, with a point estimate of 0.06 percentage points and a 95% confidence interval from  $-1.0$  to  $+1.1$  percentage points.

The analysis is subject to several important limitations, including potential violations of the parallel trends assumption, sensitivity to control group definition, and measurement error in DACA eligibility. The event study reveals that treatment and control groups were on different employment trajectories before DACA implementation, which complicates causal interpretation.

### 9.1 Implications for Policy Evaluation

The null finding has several implications for understanding DACA’s effects. First, the result suggests that work authorization alone may not be sufficient to significantly increase full-time employment rates among young undocumented immigrants. This could reflect the fact that many DACA-eligible individuals were already employed prior to the program, either through informal arrangements or by using fraudulent documents. In this case, DACA might shift workers from informal to formal employment without substantially changing overall employment rates.

Second, the null finding may reflect the particular population studied. The comparison with older ineligible immigrants may not capture the counterfactual outcomes for DACA-eligible youth, given the substantial age differences between groups. Younger workers typically have lower employment rates than prime-age workers due to schooling and labor market entry dynamics.

Third, the confidence intervals, while including zero, are consistent with economically meaningful effects in either direction. The upper bound of  $+1.1$  percentage points, if real, would represent a non-trivial improvement in full-time employment. Conversely, the lower



bound of  $-1.0$  percentage points would represent a modest decline. A larger sample or more powerful identification strategy would be needed to distinguish these possibilities.

## 9.2 Avenues for Future Research

Future research could address the limitations of this study in several ways:

- **Alternative control groups:** Using legal permanent residents or naturalized citizens from Mexico as a comparison group might provide a more similar counterfactual, though these groups differ in other important ways from undocumented immigrants.
- **Regression discontinuity designs:** The age-based eligibility cutoff (under 31 as of June 15, 2012) creates a potential regression discontinuity that could be exploited for causal identification, comparing individuals just below and just above the age threshold.
- **Administrative data:** Linking ACS data to administrative records on DACA applications would enable estimation of treatment-on-the-treated effects and reduce measurement error.
- **State-level policy variation:** Variation in state policies regarding driver's licenses for DACA recipients could be exploited to study mechanisms through which DACA affects labor market outcomes.
- **Intensive margin outcomes:** Examining effects on hours worked (conditional on employment), wages, job quality, or occupational upgrading might reveal effects not captured by the binary employment outcome.
- **Longer time horizons:** Extending the analysis beyond 2016 would capture later cohorts of DACA recipients and allow assessment of longer-term effects, though this would require careful attention to subsequent policy changes affecting the program.

## 9.3 Final Remarks

Despite the null findings for full-time employment, the evidence does not preclude beneficial effects of DACA on other dimensions of recipient well-being. Work authorization may improve job quality, wages, working conditions, and psychological well-being even if overall employment rates remain similar. The program may also have important effects on educational attainment, as young people who anticipate legal work authorization may be more likely to invest in human capital.

Moreover, the lack of statistical significance in the preferred specification does not constitute evidence of no effect. The null finding is equally consistent with the true effect being small but positive, small but negative, or truly zero. More precise estimation methods and better-identified research designs would be needed to definitively characterize DACA's labor market effects.

In conclusion, this replication study provides a rigorous examination of DACA's effects on full-time employment but ultimately yields inconclusive results. The challenges of constructing an appropriate control group for this unique policy intervention highlight the difficulties inherent in causal inference for immigration policy evaluation. Continued research attention to these questions remains warranted given the ongoing policy debates surrounding DACA and related immigration reforms.

## A Appendix: Variable Definitions

Table 5: IPUMS Variable Definitions

Variable	Definition
YEAR	Census/survey year
PERWT	Person weight (sampling weight)
STATEFIP	State FIPS code
AGE	Age in years
SEX	Sex (1=Male, 2=Female)
BIRTHYR	Year of birth
BIRTHQTR	Quarter of birth (1=Jan–Mar, 2=Apr–Jun, 3=Jul–Sep, 4=Oct–Dec)
HISPAN	Hispanic origin (1=Mexican)
BPL	Birthplace (200=Mexico)
CITIZEN	Citizenship status (3=Not a citizen)
YRIMMIG	Year of immigration to the U.S.
EDUCD	Educational attainment (detailed)
MARST	Marital status
EMPSTAT	Employment status (1=Employed)
UHRSWORK	Usual hours worked per week

## B Appendix: Additional Results

Table 6: Weighted Full-Time Employment Rates by Group and Period

	Pre-DACA	Post-DACA
Control (too old)	67.7%	63.5%
DACA-eligible	52.6%	57.0%
Difference	−15.1 pp	−6.5 pp

The raw difference-in-differences from weighted means is:

$$\text{DID} = (57.0 - 52.6) - (63.5 - 67.7) = 4.4 - (-4.2) = 8.6 \text{ pp}$$

This raw DID of 8.6 percentage points is attenuated to near zero (0.06 pp) in the regression specification with full controls, demonstrating the importance of accounting for compositional differences between treatment and control groups.

## C Appendix: Sensitivity to Age Restrictions

The analysis restricts to individuals aged 18–64. The large age difference between treatment and control groups (mean ages of approximately 24 vs. 40) raises concerns about comparability. The control group’s higher baseline employment rate is consistent with greater labor market experience among older workers.

An alternative approach would restrict both groups to overlapping age ranges, but this would eliminate most of the sample (DACA-eligible individuals must be under 31 by June 2012, while the control group must be over 31). The fundamental identification challenge in this setting is that DACA eligibility is determined partly by age, making it difficult to find a control group with similar characteristics.

# Replication Information

## Data

- Source: IPUMS USA, American Community Survey
- Years: 2006–2016 (excluding 2012)
- Sample: One-year ACS files

## Software

- Python 3.x with pandas, numpy, statsmodels, scipy
- L<sup>A</sup>T<sub>E</sub>X for report compilation

## Key Results Summary

- Preferred estimate: 0.0006 (0.06 percentage points)
- Standard error: 0.0055
- 95% CI:  $[-0.0103, 0.0114]$
- p-value: 0.91
- Sample size: 122,695