

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

Independent Replication Study

January 2026

Abstract

This study examines the causal impact of eligibility for the Deferred Action for Childhood Arrivals (DACA) program on full-time employment among Hispanic-Mexican Mexican-born individuals in the United States. Using data from the American Community Survey (2008–2016, excluding 2012) and a difference-in-differences research design, I compare employment outcomes for individuals aged 26–30 (treatment group) versus 31–35 (control group) at the time DACA was implemented. The preferred specification estimates that DACA eligibility increased the probability of full-time employment by 7.5 percentage points (95% CI: 4.5–10.5 pp), a statistically significant effect. This finding is robust across multiple specifications including models with demographic controls, year fixed effects, and state fixed effects. Heterogeneity analysis reveals larger effects for males and for individuals with higher educational attainment. These results suggest that DACA’s work authorization provision had meaningful positive effects on labor market outcomes for eligible individuals.

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1 Introduction

The Deferred Action for Childhood Arrivals (DACA) program, implemented on June 15, 2012, represented one of the most significant immigration policy changes in the United States in recent decades. The program provided temporary relief from deportation and work authorization to approximately 1.8 million undocumented immigrants who had arrived in the United States as children. By offering legal work authorization, DACA potentially removed a major barrier to formal employment for eligible individuals, who had previously been constrained to informal labor markets or employment in sectors with limited documentation requirements.

This replication study investigates whether DACA eligibility causally increased the probability of full-time employment among eligible individuals. The research design exploits the age-based eligibility cutoff for DACA: individuals must not have reached their 31st birthday as of June 15, 2012. This creates a natural comparison between those just young enough to qualify (the treatment group, ages 26–30) and those just too old to qualify (the control group, ages 31–35), who share similar characteristics but differ in their DACA eligibility status.

The study employs a difference-in-differences (DiD) methodology, comparing changes in full-time employment rates between treatment and control groups from the pre-DACA period (2008–2011) to the post-DACA period (2013–2016). This approach controls for time-invariant differences between groups and common temporal trends, isolating the causal effect of DACA eligibility on employment outcomes.

Understanding the employment effects of DACA has important policy implications. If DACA increased formal employment among eligible individuals, this would support arguments that legal work authorization improves labor market outcomes for undocumented immigrants, potentially benefiting both workers and the broader economy through increased tax revenue and reduced reliance on informal employment arrangements.

The remainder of this report is organized as follows: Section 2 describes the institutional background of DACA. Section 3 details the data and sample construction. Section 4 presents the empirical methodology. Section 5 reports the main results. Section 6 presents robustness checks and additional analyses. Section 7 concludes with a discussion of findings and limitations.

2 Institutional Background

2.1 DACA Program Overview

DACA was announced by the Obama administration on June 15, 2012, and applications began to be accepted on August 15, 2012. The program was designed to provide tempo-

rary relief for undocumented immigrants who had arrived in the United States as children and met specific criteria. Unlike comprehensive immigration reform, DACA did not provide a path to citizenship or legal permanent residency but offered renewable two-year periods of deferred action and work authorization.

2.2 Eligibility Requirements

To qualify for DACA, individuals must have met the following criteria:

- Arrived in the United States before their 16th birthday
- Had not reached their 31st birthday as of June 15, 2012
- Lived continuously in the United States since June 15, 2007
- Were present in the United States on June 15, 2012
- Did not have lawful status (citizenship or legal residency) at that time
- Had no felony convictions and limited misdemeanor convictions
- Were in school, had graduated high school, had a GED, or were honorably discharged veterans

2.3 Program Take-Up and Demographics

In the first four years following DACA's implementation, approximately 900,000 initial applications were received, with an approval rate of approximately 90%. The great majority of DACA recipients were from Mexico, reflecting the composition of the undocumented immigrant population in the United States. Recipients could reapply for additional two-year terms of protection, which many did.

2.4 Potential Labor Market Effects

DACA could affect employment outcomes through several mechanisms:

1. **Work authorization:** DACA recipients could legally work and obtain Social Security numbers, enabling access to formal employment.
2. **Driver's licenses:** In many states, DACA status enabled recipients to obtain driver's licenses, expanding job access and commuting options.
3. **Reduced fear of deportation:** Deferred action status reduced employment disruption concerns related to immigration enforcement.
4. **Human capital investment:** Work authorization may have encouraged investments in education and job training.

3 Data

3.1 Data Source

The analysis uses data 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 collects demographic, social, economic, and housing information from approximately 3.5 million households each year. The ACS provides detailed information on employment status, hours worked, and demographic characteristics necessary for this analysis.

3.2 Sample Construction

The analysis sample consists of Hispanic-Mexican Mexican-born individuals who would have been eligible for DACA based on age (either in the treatment or control age range). The provided dataset includes observations from 2008 through 2016, with 2012 excluded since it cannot be determined whether observations in 2012 are from before or after DACA's implementation.

3.2.1 Treatment and Control Groups

The sample is divided into two groups based on age at the time DACA was implemented (June 15, 2012):

- **Treatment group (ELIGIBLE=1):** Individuals who were ages 26–30 on June 15, 2012. These individuals met the age requirement for DACA eligibility.
- **Control group (ELIGIBLE=0):** Individuals who were ages 31–35 on June 15, 2012. These individuals would have been eligible for DACA but for exceeding the age limit.

3.2.2 Time Periods

The sample is divided into pre- and post-DACA periods:

- **Pre-period (AFTER=0):** Years 2008–2011
- **Post-period (AFTER=1):** Years 2013–2016

3.3 Key Variables

3.3.1 Outcome Variable

The primary outcome is full-time employment status (FT), defined as usually working 35 or more hours per week. This binary variable equals 1 for full-time workers and 0 otherwise. Individuals not in the labor force are included in the analysis with FT=0,

following the instructions that all individuals should be retained regardless of labor force participation.

3.3.2 Treatment Indicators

- **ELIGIBLE**: Binary indicator equal to 1 for treatment group (ages 26–30 on June 15, 2012), 0 for control group (ages 31–35)
- **AFTER**: Binary indicator equal to 1 for post-DACA years (2013–2016), 0 for pre-DACA years (2008–2011)
- **ELIGIBLE × AFTER**: Interaction term capturing the DiD effect

3.3.3 Control Variables

The following demographic and policy variables are available for robustness analyses:

- **Demographics**: Sex (SEX), age (AGE), marital status (MARST), education (EDUC_RECODE)
- **Survey weights**: Person weight (PERWT) for population-representative estimates
- **Geographic indicators**: State (STATEFIP) for state fixed effects
- **State policies**: Driver’s license access (DRIVERSLICENSES), in-state tuition (INSTATETUITION), E-Verify requirements (EVERIFY), and other state-level immigration policies

3.4 Sample Description

Table 1 presents the sample composition by group and time period.

Table 1: Sample Composition

| Period | Treatment (ELIGIBLE=1) | | Control (ELIGIBLE=0) | |
|-----------------------|------------------------|------------|----------------------|------------|
| | N | % of Total | N | % of Total |
| Pre-DACA (2008–2011) | 6,233 | 35.9% | 3,294 | 19.0% |
| Post-DACA (2013–2016) | 5,149 | 29.6% | 2,706 | 15.6% |
| Total | 11,382 | 65.5% | 6,000 | 34.5% |

Total sample: 17,382 observations

The treatment group is larger than the control group because the treatment group spans ages 26–30 (a five-year age window) while the control group includes ages 31–35. The decline in observations from pre- to post-period reflects the shorter post-period time span and potential changes in survey response patterns.

4 Empirical Methodology

4.1 Difference-in-Differences Framework

The primary empirical strategy employs a difference-in-differences (DiD) design. The DiD approach compares the change in outcomes between treatment and control groups from before to after the policy intervention. The key identifying assumption is that, in the absence of DACA, the treatment and control groups would have followed parallel trends in full-time employment.

4.2 Main Specification

The basic DiD model is specified as:

$$FT_{it} = \beta_0 + \beta_1 \cdot ELIGIBLE_i + \beta_2 \cdot AFTER_t + \beta_3 \cdot (ELIGIBLE_i \times AFTER_t) + \varepsilon_{it} \quad (1)$$

where:

- FT_{it} is the full-time employment indicator for individual i in year t
- $ELIGIBLE_i$ is an indicator for DACA eligibility (ages 26–30)
- $AFTER_t$ is an indicator for post-DACA years (2013–2016)
- β_3 is the DiD estimator, representing the causal effect of DACA eligibility

The interpretation of β_3 is the differential change in full-time employment probability for DACA-eligible individuals relative to ineligible individuals, comparing the post-DACA period to the pre-DACA period.

4.3 Extended Specifications

To assess robustness, I estimate several extended specifications:

4.3.1 Model with Demographic Controls

$$FT_{it} = \beta_0 + \beta_1 ELIGIBLE_i + \beta_2 AFTER_t + \beta_3 (ELIGIBLE_i \times AFTER_t) + \mathbf{X}'_i \boldsymbol{\gamma} + \varepsilon_{it} \quad (2)$$

where \mathbf{X}_i includes sex, marital status, and education level.

4.3.2 Model with Year Fixed Effects

$$FT_{it} = \beta_0 + \beta_1 ELIGIBLE_i + \beta_3 (ELIGIBLE_i \times AFTER_t) + \sum_t \delta_t \cdot \mathbf{1}[Year = t] + \varepsilon_{it} \quad (3)$$

4.3.3 Model with State Fixed Effects

$$FT_{it} = \beta_0 + \beta_1 ELIGIBLE_i + \beta_2 AFTER_t + \beta_3 (ELIGIBLE_i \times AFTER_t) + \sum_s \mu_s \cdot \mathbf{1}[State = s] + \varepsilon_{it} \quad (4)$$

4.3.4 Full Model

$$FT_{it} = \beta_0 + \beta_1 ELIGIBLE_i + \beta_3 (ELIGIBLE_i \times AFTER_t) + \mathbf{X}'_i \gamma + \sum_t \delta_t \cdot \mathbf{1}[Year = t] + \sum_s \mu_s \cdot \mathbf{1}[State = s] + \varepsilon_{it} \quad (5)$$

4.4 Estimation Methods

4.4.1 Weighted Least Squares

The preferred specification uses weighted least squares (WLS) with ACS person weights (PERWT) to produce population-representative estimates. The ACS uses a complex survey design, and the weights account for differential sampling probabilities and non-response adjustments.

4.4.2 Standard Error Estimation

I estimate standard errors using several approaches:

- Conventional standard errors (assuming homoskedasticity)
- Heteroskedasticity-robust standard errors (HC3)
- Cluster-robust standard errors at the state level

State-level clustering accounts for within-state correlation in employment outcomes and potential state-level policy effects.

4.5 Identifying Assumptions

The validity of the DiD estimator rests on several key assumptions:

1. **Parallel trends:** In the absence of DACA, employment trends would have been parallel between treatment and control groups. I assess this assumption by examining pre-treatment trends and conducting an event study analysis.
2. **No spillover effects:** DACA eligibility for treatment group members did not affect employment outcomes for control group members. This assumption would be violated if, for example, DACA-eligible workers competed with slightly older ineligible workers for the same jobs.

3. **Common support:** Treatment and control groups are comparable in observable characteristics. I examine this by presenting summary statistics by group.
4. **Stable Unit Treatment Value Assumption (SUTVA):** Each individual's potential outcome depends only on their own treatment status, not on the treatment status of others.

5 Results

5.1 Descriptive Statistics

Table 2 presents summary statistics for the treatment and control groups.

Table 2: Summary Statistics by Treatment Group

| Variable | Treatment (ELIGIBLE=1) | | Control (ELIGIBLE=0) | |
|-------------------------|------------------------|-------|----------------------|-------|
| | Mean | SD | Mean | SD |
| Full-time employed (FT) | 0.643 | 0.479 | 0.660 | 0.474 |
| Age | 27.97 | 3.08 | 32.75 | 2.98 |
| Female | 0.482 | — | 0.471 | — |
| Married | 0.418 | — | 0.516 | — |
| Observations | 11,382 | | 6,000 | |

The treatment group has a lower average age by design (approximately 28 years vs. 33 years for the control group). The two groups have similar gender composition. The control group has a higher marriage rate (51.6% vs. 41.8%), consistent with the age difference. The overall full-time employment rate is slightly lower for the treatment group (64.3% vs. 66.0%), though this aggregate comparison masks important within-period variation.

5.2 Difference-in-Differences: Descriptive Evidence

Table 3 presents the 2×2 table of full-time employment rates by group and period, using survey weights.

Table 3: Full-Time Employment Rates by Group and Period (Weighted)

| | Pre-DACA (2008–2011) | Post-DACA (2013–2016) | Change |
|------------------------|-------------------------|--------------------------|---------------|
| Treatment (ELIGIBLE=1) | 0.637 | 0.686 | +0.049 |
| Control (ELIGIBLE=0) | 0.689 | 0.663 | -0.026 |
| Difference | -0.052 | +0.023 | |
| DiD Estimate | | | +0.075 |

The descriptive DiD calculation shows that full-time employment increased by 4.9 percentage points for the treatment group while it decreased by 2.6 percentage points for the control group. The difference-in-differences of 7.5 percentage points represents the raw estimate of DACA's effect on full-time employment.

Several patterns are noteworthy:

- In the pre-period, the control group had higher full-time employment (68.9% vs. 63.7%), consistent with the older age of the control group
- Both groups experienced the effects of the Great Recession recovery during this period
- Only the treatment group showed improvement in full-time employment rates, while the control group declined slightly

5.3 Main Regression Results

Table 4 presents the main regression results across multiple specifications.

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

| | (1) OLS | (2) WLS | (3) Robust SE | (4) +Demo | (5) +Year FE |
|------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| ELIGIBLE | -0.043*** (0.010) | -0.052*** (0.010) | -0.043*** (0.010) | -0.045*** (0.010) | -0.050*** (0.010) |
| AFTER | -0.025** (0.012) | -0.026** (0.012) | -0.025** (0.012) | -0.013 (0.012) | — |
| ELIGIBLE × AFTER | 0.064*** (0.015) | 0.075*** (0.015) | 0.064*** (0.015) | 0.062*** (0.014) | 0.072*** (0.015) |
| Constant | 0.670*** (0.008) | 0.689*** (0.008) | 0.670*** (0.008) | 0.921*** (0.016) | 0.736*** (0.012) |
| Demographics | No | No | No | Yes | No |
| Year FE | No | No | No | No | Yes |
| Weights | No | Yes | No | Yes | Yes |
| Observations | 17,382 | 17,382 | 17,382 | 17,379 | 17,382 |
| R-squared | 0.002 | 0.002 | 0.002 | 0.130 | 0.006 |

Standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Demographics include sex, marital status, and education category.

Table 5: Additional Specifications

| | (6) +State FE | (7) Full Model | (8) Clustered SE |
|------------------|----------------------------|----------------------------|----------------------------|
| ELIGIBLE | -0.054*** (0.010) | -0.045*** (0.010) | -0.043*** (0.009) |
| AFTER | -0.026** (0.012) | — | -0.025* (0.014) |
| ELIGIBLE × AFTER | 0.074*** (0.015) | 0.059*** (0.014) | 0.064*** (0.014) |
| Demographics | No | Yes | No |
| Year FE | No | Yes | No |
| State FE | Yes | Yes | No |
| Weights | Yes | Yes | No |
| Clustered SE | No | No | Yes |
| Observations | 17,382 | 17,379 | 17,382 |
| R-squared | 0.008 | 0.138 | 0.002 |

Standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

5.3.1 Interpretation of Main Results

The key finding across all specifications is a positive and statistically significant DiD coefficient (ELIGIBLE × AFTER). The preferred specification—weighted OLS (Column 2)—estimates that DACA eligibility increased full-time employment probability by **7.5 percentage points** (SE = 0.015, p < 0.001).

This estimate is highly robust across specifications:

- Unweighted OLS: 6.4 pp
- With demographic controls: 6.2 pp
- With year fixed effects: 7.2 pp
- With state fixed effects: 7.4 pp
- Full model (all controls): 5.9 pp
- State-clustered standard errors: 6.4 pp (SE = 0.014)

All estimates range from 5.9 to 7.5 percentage points and are statistically significant at the 1% level. The consistency across specifications provides strong evidence that the effect is not driven by any particular modeling choice.

5.3.2 Preferred Estimate

Preferred Estimate (Weighted OLS):

- Effect size: **0.0748** (7.48 percentage points)
- Standard error: 0.0152
- 95% Confidence interval: [0.045, 0.105]
- p-value: < 0.001
- Sample size: 17,382

The weighted OLS specification is preferred because:

1. It accounts for the complex survey design of the ACS
2. It produces population-representative estimates
3. It maintains model simplicity while addressing the key identification concern

6 Robustness and Additional Analyses

6.1 Pre-Trends Analysis

A key assumption of the DiD design is that treatment and control groups would have followed parallel trends in the absence of treatment. I assess this assumption in two ways.

6.1.1 Visual Inspection of Pre-Treatment Trends

Table 6 presents full-time employment rates by year and eligibility status.

Table 6: Full-Time Employment Rates by Year and Group (Weighted)

| Year | Treatment | Control | Difference | N (Total) |
|-------------------------|-----------|---------|------------|-----------|
| <i>Pre-DACA Period</i> | | | | |
| 2008 | 0.680 | 0.747 | -0.067 | 2,354 |
| 2009 | 0.637 | 0.685 | -0.049 | 2,379 |
| 2010 | 0.609 | 0.690 | -0.081 | 2,444 |
| 2011 | 0.625 | 0.624 | +0.001 | 2,350 |
| <i>Post-DACA Period</i> | | | | |
| 2013 | 0.674 | 0.657 | +0.017 | 2,124 |
| 2014 | 0.643 | 0.642 | +0.001 | 2,056 |
| 2015 | 0.693 | 0.690 | +0.003 | 1,850 |
| 2016 | 0.741 | 0.666 | +0.075 | 1,825 |

The pre-treatment period (2008–2011) shows some variation in the gap between groups, which could reflect differential impacts of the Great Recession or compositional

changes. The gap narrows substantially by 2011. In the post-treatment period, the treatment group consistently performs as well as or better than the control group, with the largest difference appearing in 2016.

6.1.2 Formal Pre-Trend Test

I formally test for differential pre-trends by regressing full-time employment on the interaction between eligibility and a linear time trend in the pre-period only:

$$FT_{it} = \alpha_0 + \alpha_1 ELIGIBLE_i + \alpha_2 YEAR_TREND_t + \alpha_3 (ELIGIBLE_i \times YEAR_TREND_t) + \varepsilon_{it} \quad (6)$$

where $YEAR_TREND_t = Year - 2008$.

Result: The coefficient on $ELIGIBLE \times YEAR_TREND$ is 0.017 (SE = 0.009, p = 0.058). This is marginally non-significant at conventional levels, providing some support for the parallel trends assumption, though the positive coefficient suggests a potential slight convergence in the pre-period.

6.2 Event Study Analysis

To further examine the dynamics of the treatment effect, I estimate an event study specification with year-by-eligibility interactions, using 2011 (the last pre-treatment year) as the reference:

$$FT_{it} = \beta_0 + \beta_1 ELIGIBLE_i + \sum_{t \neq 2011} \gamma_t \cdot \mathbf{1}[Year = t] + \sum_{t \neq 2011} \delta_t \cdot (ELIGIBLE_i \times \mathbf{1}[Year = t]) + \varepsilon_{it} \quad (7)$$

Table 7 presents the event study coefficients.

Table 7: Event Study Coefficients (Reference Year: 2011)

| Year | Coefficient | SE | 95% CI | |
|-------------------------|-------------|-------|------------------|---|
| <i>Pre-DACA Period</i> | | | | |
| 2008 | -0.068 | 0.029 | [-0.125, -0.011] | * |
| 2009 | -0.050 | 0.029 | [-0.107, 0.007] | |
| 2010 | -0.082 | 0.029 | [-0.139, -0.025] | * |
| <i>Reference</i> | | | | |
| 2011 | 0.000 | — | — | |
| <i>Post-DACA Period</i> | | | | |
| 2013 | 0.016 | 0.030 | [-0.043, 0.074] | |
| 2014 | 0.000 | 0.030 | [-0.059, 0.059] | |
| 2015 | 0.001 | 0.031 | [-0.059, 0.062] | |
| 2016 | 0.074 | 0.031 | [0.013, 0.136] | * |

* indicates statistical significance at 5% level

Interpretation: The event study reveals several important patterns:

1. **Pre-treatment coefficients:** The 2008 and 2010 coefficients are negative and significant relative to 2011, indicating that the treatment group had relatively lower employment in earlier years. This pattern suggests some convergence leading up to DACA rather than a violation of parallel trends (which would require a consistent divergence).
2. **Post-treatment coefficients:** The coefficients gradually increase after DACA, with the largest and only statistically significant effect appearing in 2016 (7.4 pp). This pattern is consistent with a delayed or cumulative treatment effect, possibly reflecting gradual program take-up and job market adjustments.

6.3 Heterogeneity Analysis

I examine whether the effect of DACA eligibility varies across subgroups.

6.3.1 By Sex

Table 8: Heterogeneity by Sex

| Subgroup | DiD Estimate | SE | 95% CI |
|----------|--------------|-------|----------------|
| Males | 0.072*** | 0.017 | [0.038, 0.105] |
| Females | 0.053** | 0.023 | [0.007, 0.098] |

*** p<0.01, ** p<0.05

The effect is positive and significant for both males and females, but somewhat larger for males (7.2 pp vs. 5.3 pp). This may reflect gender differences in labor market participation or the types of jobs affected by DACA's work authorization.

6.3.2 By Education Level

Table 9: Heterogeneity by Education Level

| Education Level | DiD Estimate | SE | N |
|--------------------|--------------|-------|--------|
| High School Degree | 0.061*** | 0.018 | 12,444 |
| Some College | 0.067* | 0.038 | 2,877 |
| Two-Year Degree | 0.182*** | 0.064 | 991 |
| BA+ | 0.162*** | 0.060 | 1,058 |

*** p<0.01, * p<0.1

The effect is larger for individuals with higher educational attainment. Those with two-year degrees or bachelor's degrees and above show effects of approximately 16–18 percentage points, compared to 6–7 percentage points for those with high school degrees or some college. This pattern suggests that DACA may have been particularly beneficial for individuals who could access jobs requiring formal credentials but were previously barred from such employment due to documentation status.

6.4 State Policy Interactions

Several states adopted policies that complemented DACA by allowing recipients to obtain driver's licenses or access other benefits. I examine whether the effect of DACA varies by state driver's license policy.

Model:

$$FT_{it} = \dots + \beta_3(ELIGIBLE \times AFTER) + \beta_4 DRIVERSLICENSES + \beta_5(ELIGIBLE \times AFTER \times DRIVERSLICENSES) \quad (8)$$

Results:

- ELIGIBLE × AFTER: 0.092 (SE = 0.019)
- ELIGIBLE × AFTER × DRIVERSLICENSES: -0.032 (SE = 0.020)

The interaction with driver's license policy is negative but not statistically significant, suggesting that the employment effect of DACA was not significantly larger in states that allowed DACA recipients to obtain driver's licenses. This could indicate that the primary mechanism was work authorization rather than mobility improvements.

7 Discussion and Conclusion

7.1 Summary of Findings

This replication study provides evidence that DACA eligibility had a positive and statistically significant effect on full-time employment among Hispanic-Mexican Mexican-born individuals in the United States. The preferred estimate indicates that DACA eligibility increased the probability of full-time employment by approximately 7.5 percentage points (95% CI: 4.5–10.5 pp).

Key findings include:

1. **Robust main effect:** The positive effect of DACA eligibility on full-time employment is consistent across all specifications, ranging from 5.9 to 7.5 percentage points.
2. **Parallel trends:** The pre-trend test is marginally non-significant ($p = 0.058$), providing reasonable support for the identifying assumption. The event study shows some pre-treatment variation but no clear pattern of divergent trends.
3. **Heterogeneous effects:** The effect is larger for males than females, and substantially larger for individuals with higher educational attainment (bachelor's degree or above).
4. **Delayed effect pattern:** The event study suggests that the full effect of DACA emerged gradually, with the largest effects appearing by 2016, consistent with gradual program take-up and labor market adjustment.

7.2 Interpretation

The finding of a 7.5 percentage point increase in full-time employment is economically meaningful. Given a baseline full-time employment rate of approximately 64% for the treatment group in the pre-period, this represents an approximately 12% increase in the likelihood of full-time employment.

The results are consistent with the hypothesis that legal work authorization removes barriers to formal employment. Prior to DACA, eligible individuals could only work in informal sectors or jobs with limited documentation requirements. DACA enabled access to formal employment, potentially improving job quality, hours, and compensation.

The larger effects for more educated individuals suggest that DACA was particularly valuable for those who possessed credentials but were unable to use them in the formal labor market due to documentation barriers. This interpretation aligns with theories about credential-based labor market segmentation.

7.3 Limitations

Several limitations should be considered when interpreting these results:

1. **Parallel trends assumption:** While the pre-trend test is marginally non-significant, the pre-period shows some variation that could reflect differential Great Recession impacts or other confounding factors.
2. **Selection into the control group:** The control group (ages 31–35) is slightly older by design, which could introduce age-related differences in employment patterns beyond those captured by the DiD framework.
3. **Measurement of eligibility:** The ELIGIBLE variable identifies individuals who meet the age criteria, but not all such individuals would actually apply for or receive DACA. The estimated effect represents an intent-to-treat (ITT) effect rather than a treatment-on-the-treated (TOT) effect.
4. **Potential spillovers:** If DACA-eligible workers competed with slightly older ineligible workers, the control group’s employment could be negatively affected, potentially inflating the DiD estimate.
5. **External validity:** The sample is limited to Hispanic-Mexican Mexican-born individuals, so findings may not generalize to DACA-eligible individuals from other countries of origin.

7.4 Conclusion

This study finds that DACA eligibility increased full-time employment by approximately 7.5 percentage points among Hispanic-Mexican Mexican-born individuals. This effect is statistically significant, economically meaningful, and robust across a range of specifications. The findings suggest that providing work authorization to undocumented immigrants can improve their labor market outcomes, with particularly large benefits for those with higher educational attainment.

These results contribute to ongoing policy debates about immigration reform and the economic effects of pathways to legal status for undocumented immigrants. While DACA provided only temporary and limited protection, the positive employment effects documented here suggest that more comprehensive reforms providing work authorization could generate similar or larger benefits.

A Appendix: Additional Tables and Figures

A.1 Variable Definitions

Table 10: Variable Definitions

| Variable | Definition |
|-------------|---|
| FT | Full-time employment indicator (1 if usually works ≥ 35 hours/week, 0 otherwise) |
| ELIGIBLE | DACA eligibility indicator (1 if age 26–30 on June 15, 2012, 0 if age 31–35) |
| AFTER | Post-DACA period indicator (1 if year 2013–2016, 0 if year 2008–2011) |
| PERWT | ACS person weight for population-representative estimates |
| SEX | Sex (1 = Male, 2 = Female in IPUMS coding) |
| AGE | Age in years |
| MARST | Marital status (1 = Married spouse present, 6 = Never married) |
| EDUC_RECODE | Simplified education categories (Less than HS, HS Degree, Some College, Two-Year Degree, BA+) |
| STATEFIP | State FIPS code |
| YEAR | Survey year |

A.2 Sample Sizes by Year

Table 11: Sample Sizes by Year and Group

| Year | Treatment | Control | Total |
|-------|-----------|---------|--------|
| 2008 | 1,506 | 848 | 2,354 |
| 2009 | 1,563 | 816 | 2,379 |
| 2010 | 1,593 | 851 | 2,444 |
| 2011 | 1,571 | 779 | 2,350 |
| 2013 | 1,377 | 747 | 2,124 |
| 2014 | 1,349 | 707 | 2,056 |
| 2015 | 1,227 | 623 | 1,850 |
| 2016 | 1,196 | 629 | 1,825 |
| Total | 11,382 | 6,000 | 17,382 |

A.3 Complete Regression Output: Preferred Specification

Table 12: Complete Regression Output: Weighted OLS (Preferred Specification)

| | Coefficient | Std. Error | t-statistic | p-value |
|------------------|-------------|------------|-------------|---------|
| Intercept | 0.689 | 0.008 | 83.05 | <0.001 |
| ELIGIBLE | -0.052 | 0.010 | -5.06 | <0.001 |
| AFTER | -0.026 | 0.012 | -2.08 | 0.038 |
| ELIGIBLE × AFTER | 0.075 | 0.015 | 4.93 | <0.001 |

Observations: 17,382
R-squared: 0.002
F-statistic: 13.57 (p < 0.001)

References

IPUMS USA. University of Minnesota. *American Community Survey Data*. <https://usa.ipums.org/usa/>

U.S. Citizenship and Immigration Services. (2012). *Consideration of Deferred Action for Childhood Arrivals (DACA)*.