

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

Replication Study 98

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 individuals born in Mexico. Using data from the American Community Survey (2006–2016) and a difference-in-differences research design, I compare full-time employment rates between individuals aged 26–30 at the time of DACA implementation (treatment group) and those aged 31–35 (control group), who would have been eligible except for the age cutoff. The preferred specification, which includes year fixed effects, state fixed effects, and demographic controls, yields a statistically significant effect of 4.6 percentage points (robust SE = 1.05 percentage points, 95% CI: [2.53, 6.66], $p < 0.001$). This suggests that DACA eligibility led to a meaningful increase in full-time employment among eligible individuals. Pre-trend tests and placebo analyses support the validity of the research design.

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1 Introduction

1.1 Background

The Deferred Action for Childhood Arrivals (DACA) program was implemented by the U.S. federal government on June 15, 2012. The program allowed certain undocumented immigrants who had arrived in the United States as children to apply for and obtain temporary relief from deportation and authorization to work legally for two-year periods. The program's eligibility criteria required applicants to have:

- (1) Arrived in the U.S. before their 16th birthday
- (2) Not yet reached their 31st birthday as of June 15, 2012
- (3) Lived continuously in the U.S. since June 15, 2007
- (4) Been present in the U.S. on June 15, 2012 without lawful status

Applications began being received on August 15, 2012, and in the first four years, nearly 900,000 initial applications were received, with approximately 90% approved. Due to the structure of undocumented immigration to the United States, the majority of eligible individuals were from Mexico.

Because DACA offers legal work authorization and allows recipients to apply for driver's licenses and other identification in many states, we might expect the program to increase employment rates among those eligible. The ability to work legally removes a significant barrier to formal employment and may allow DACA-eligible individuals to pursue better job opportunities with higher wages and more hours.

1.2 Research Question

This study addresses the following research question: Among ethnically Hispanic-Mexican, Mexican-born individuals living in the United States, what was the causal impact of DACA eligibility on the probability of being employed full-time (defined as usually working 35 hours per week or more)?

1.3 Identification Strategy

The research design exploits the age discontinuity in DACA eligibility. Specifically, individuals had to be under 31 years old as of June 15, 2012 to be eligible. This creates a natural experiment where individuals just below the age cutoff (the treatment group) became eligible

for DACA, while those just above (the control group) did not, despite otherwise meeting the eligibility criteria.

I define:

- **Treatment Group:** Individuals aged 26–30 on June 15, 2012 (born 1982–1986)
- **Control Group:** Individuals aged 31–35 on June 15, 2012 (born 1977–1981)

The difference-in-differences (DiD) approach compares the change in full-time employment from the pre-period (2006–2011) to the post-period (2013–2016) between these two groups. The identifying assumption is that, absent DACA, the treatment and control groups would have experienced parallel trends in full-time employment.

2 Data

2.1 Data Source

The data for this analysis come from the American Community Survey (ACS) as provided by IPUMS USA. I use the one-year ACS files from 2006 through 2016. The 2012 survey year is excluded from the analysis because DACA was implemented mid-year (June 15, 2012) and the ACS does not indicate the month of data collection, making it impossible to distinguish observations from before and after implementation.

2.2 Sample Selection

The analysis sample is constructed through the following selection criteria, aligned with DACA eligibility requirements:

1. **Hispanic-Mexican ethnicity:** Using the IPUMS variable `HISPAN`, I select individuals coded as Mexican (`HISPAN = 1`).
2. **Born in Mexico:** Using the variable `BPL`, I select individuals with birthplace coded as Mexico (`BPL = 200`).
3. **Non-citizen status:** Using the variable `CITIZEN`, I select non-citizens (`CITIZEN = 3`). Following the research instructions, I assume that anyone who is not a citizen and has not received immigration papers is undocumented for DACA purposes.
4. **Arrived before age 16:** Using variables `YRIMMIG` (year of immigration) and `BIRTHYR` (birth year), I calculate age at immigration and retain only those who arrived before their 16th birthday.

5. **Arrived by 2007:** To satisfy the continuous residence requirement (living in the U.S. since June 15, 2007), I retain only individuals who immigrated by 2007.
6. **Birth year cohorts:** I select individuals born between 1977 and 1986, corresponding to ages 26–35 on June 15, 2012.

2.3 Variable Definitions

Table 1: Key Variables Used in Analysis

Variable	IPUMS Code	Definition
Full-time employment	UHRSWORK	= 1 if usually works \geq 35 hours/week
Treatment indicator	BIRTHYR	= 1 if born 1982–1986
Post-period indicator	YEAR	= 1 if survey year \geq 2013
Survey weight	PERWT	Person-level survey weight
Female	SEX	= 1 if female
Married	MARST	= 1 if married, spouse present
Education	EDUC	Educational attainment (categorical)
State	STATEFIP	State FIPS code

2.4 Final Sample Size

The final analysis sample consists of 44,725 person-year observations:

- Treatment group (ages 26–30): 26,591 observations
- Control group (ages 31–35): 18,134 observations
- Pre-period (2006–2011): 29,326 observations
- Post-period (2013–2016): 15,399 observations

Using survey weights (PERWT), the weighted sample represents approximately:

- Treatment group: 3,674,965 individuals
- Control group: 2,530,790 individuals

3 Methodology

3.1 Difference-in-Differences Framework

The difference-in-differences estimator compares the change in outcomes over time between treatment and control groups. Let Y_{it} denote full-time employment status for individual i at time t . The basic DiD model is:

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

where:

- $\text{Treat}_i = 1$ if individual i is in the treatment group (born 1982–1986)
- $\text{Post}_t = 1$ if the observation is from the post-DACA period (2013–2016)
- δ is the DiD estimator, representing the causal effect of DACA eligibility

3.2 Model Specifications

I estimate four increasingly comprehensive model specifications:

Model 1: Basic DiD

$$Y_{it} = \alpha + \beta_1 \text{Treat}_i + \beta_2 \text{Post}_t + \delta(\text{Treat}_i \times \text{Post}_t) + \varepsilon_{it} \quad (2)$$

Model 2: DiD with Year Fixed Effects

$$Y_{it} = \alpha + \beta_1 \text{Treat}_i + \gamma_t + \delta(\text{Treat}_i \times \text{Post}_t) + \varepsilon_{it} \quad (3)$$

Model 3: DiD with Year Fixed Effects and Covariates

$$Y_{it} = \alpha + \beta_1 \text{Treat}_i + \gamma_t + \delta(\text{Treat}_i \times \text{Post}_t) + X'_{it}\beta + \varepsilon_{it} \quad (4)$$

Model 4: Full Model with Year and State Fixed Effects (Preferred)

$$Y_{it} = \alpha + \beta_1 \text{Treat}_i + \gamma_t + \lambda_s + \delta(\text{Treat}_i \times \text{Post}_t) + X'_{it}\beta + \varepsilon_{it} \quad (5)$$

where γ_t represents year fixed effects, λ_s represents state fixed effects, and X_{it} is a vector of individual covariates including sex, marital status, and education level.

3.3 Estimation

All models are estimated using weighted least squares (WLS) with the survey person weights (PERWT) to ensure nationally representative estimates. Heteroskedasticity-robust standard errors (HC1) are reported for inference.

3.4 Identifying Assumptions

The key identifying assumption for the DiD estimator is the **parallel trends assumption**: absent DACA, the treatment and control groups would have experienced parallel changes in full-time employment over time. While this assumption is fundamentally untestable, I provide supporting evidence through:

1. **Pre-trend analysis:** Testing whether there is a differential trend between treatment and control groups in the pre-period.
2. **Event study:** Estimating year-specific treatment effects to visualize the dynamics of the effect and check for pre-existing differences.
3. **Placebo test:** Estimating a “fake” treatment effect using only pre-period data to verify that no spurious effects appear before the actual intervention.

4 Results

4.1 Summary Statistics

Table 2 presents weighted full-time employment rates by treatment status and time period. Before DACA implementation, the treatment group had a lower full-time employment rate (62.53%) compared to the control group (67.05%). After implementation, this pattern reversed: the treatment group’s rate increased to 65.80% while the control group’s rate declined to 64.12%.

Table 2: Full-Time Employment Rates by Group and Period (Weighted)

Group	Full-Time Employment Rate		
	Pre-Period (2006–2011)	Post-Period (2013–2016)	Change
Control (Ages 31–35)	0.6705	0.6412	−0.0293
Treatment (Ages 26–30)	0.6253	0.6580	+0.0327
Difference (Treat – Control)	−0.0452	+0.0168	
Simple DiD			0.0620

Notes: Rates are weighted using survey person weights (PERWT). The simple DiD is calculated as: (Treatment Post – Treatment Pre) – (Control Post – Control Pre).

The simple difference-in-differences calculation yields an estimated effect of 6.20 percentage points. This large effect reflects both the improvement in the treatment group and the decline in the control group over this period.

Table 3 presents demographic characteristics by treatment status.

Table 3: Demographic Characteristics by Treatment Status

Characteristic	Control Group (Ages 31–35)	Treatment Group (Ages 26–30)
N (unweighted)	18,134	26,591
Mean age in 2012	32.9	27.8
% Female	42.5%	43.5%
% Married	47.8%	36.2%
Mean year of immigration	1989.0	1993.6

Notes: Statistics are weighted using PERWT except for sample sizes.

The treatment group is younger on average (by design), less likely to be married, and immigrated later than the control group. These differences motivate the inclusion of demographic controls in the regression analysis.

4.2 Main Regression Results

Table 4 presents the main difference-in-differences regression results across all four model specifications.

Table 4: Difference-in-Differences Regression Results

	(1) Basic DiD	(2) + Year FE	(3) + Covariates	(4) + State FE
DiD Estimate ($\hat{\delta}$)	0.0620*** (0.0097) [0.0116]	0.0610*** (0.0096)	0.0467*** (0.0089)	0.0459*** (0.0089) [0.0105]
95% CI	[0.043, 0.081]	[0.042, 0.080]	[0.029, 0.064]	[0.029, 0.063]
95% CI (Robust)	[0.039, 0.085]			[0.025, 0.067]
Treatment (β_1)	-0.0452*** (0.0057)	-0.0452*** (0.0057)	-0.0225*** (0.0053)	-0.0227*** (0.0053)
Post (β_2)	-0.0294*** (0.0075)			
Year Fixed Effects	No	Yes	Yes	Yes
Demographic Controls	No	No	Yes	Yes
State Fixed Effects	No	No	No	Yes
R-squared	0.0016	0.0051	0.1566	0.1603
N	44,725	44,725	44,725	44,725

Notes: Standard errors in parentheses; robust (HC1) standard errors in brackets where shown. Demographic controls include sex, marital status, and education level. All models estimated using weighted least squares with survey weights (PERWT). *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

The key findings from Table 4 are:

1. The basic DiD estimate (Model 1) indicates that DACA eligibility increased full-time employment by 6.20 percentage points ($p < 0.001$).
2. Adding year fixed effects (Model 2) yields a nearly identical estimate of 6.10 percentage points.
3. When demographic controls are added (Model 3), the estimate decreases to 4.67 percentage points, suggesting that some of the raw difference was due to compositional differences between groups.
4. The full model with state fixed effects (Model 4) produces an estimate of 4.59 percentage points with a robust standard error of 1.05 percentage points.

Preferred Estimate: Model 4 with robust standard errors is the preferred specification. The DiD estimate is **0.0459** (4.59 percentage points) with a robust standard error of 0.0105,

yielding a 95% confidence interval of [0.0253, 0.0666]. The effect is statistically significant at conventional levels ($p < 0.001$).

4.3 Interpretation

The preferred estimate suggests that DACA eligibility caused a 4.6 percentage point increase in full-time employment among eligible individuals aged 26–30, compared to what would have occurred absent the program. Given that the baseline full-time employment rate for the treatment group in the pre-period was 62.5%, this represents a relative increase of approximately 7.3%.

This effect is economically meaningful. DACA provided work authorization that allowed recipients to enter the formal labor market, pursue jobs that require legal documentation, and potentially negotiate for better working conditions including full-time hours.

4.4 Heterogeneity by Sex

Table 5 presents separate DiD estimates by sex.

Table 5: Heterogeneity Analysis by Sex

Subgroup	DiD Estimate	Robust SE	N
Male	0.0621***	(0.0124)	25,058
Female	0.0313*	(0.0182)	19,667

Notes: Estimates from basic DiD model (Model 1) with robust standard errors. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

The effect appears larger for men (6.21 percentage points) than for women (3.13 percentage points), though the difference is not statistically significant. The larger effect for men may reflect their higher baseline labor force participation or differences in the types of jobs available to each group.

4.5 Year-by-Year Employment Rates

Table 6 shows the year-by-year full-time employment rates for the treatment and control groups.

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

Year	Treatment (Ages 26–30)	Control (Ages 31–35)	Difference (Treat – Control)
<i>Pre-Period</i>			
2006	0.6377	0.6928	−0.0551
2007	0.6598	0.7230	−0.0632
2008	0.6603	0.6915	−0.0312
2009	0.6122	0.6451	−0.0330
2010	0.5986	0.6295	−0.0309
2011	0.5803	0.6301	−0.0498
<i>Post-Period</i>			
2013	0.6416	0.6319	+0.0097
2014	0.6372	0.6175	+0.0197
2015	0.6588	0.6660	−0.0072
2016	0.6990	0.6535	+0.0455

Notes: All rates are weighted using PERWT. Year 2012 excluded due to DACA implementation timing uncertainty.

Several patterns are evident:

- In the pre-period, the treatment group consistently had lower full-time employment rates than the control group.
- Both groups experienced declines during the Great Recession (2008–2010).
- After DACA implementation, the treatment group’s rate increased while the control group’s remained relatively stable.
- By 2016, the treatment group had a higher full-time employment rate than the control group.

5 Robustness Checks

5.1 Pre-Trend Analysis

A critical assumption of the DiD design is that treatment and control groups would have followed parallel trends absent the intervention. To test this, I estimate a linear pre-trend model using only pre-period data:

$$Y_{it} = \alpha + \beta_1 \text{Treat}_i + \beta_2 \text{Year}_t + \beta_3 (\text{Treat}_i \times \text{Year}_t) + \varepsilon_{it} \quad (6)$$

If the parallel trends assumption holds, β_3 should be zero (no differential trend).

Table 7: Pre-Trend Test Results

Pre-Trend Model	
Treatment \times Year	0.0034
Robust SE	(0.0040)
<i>p</i> -value	0.3945

Notes: Year is centered at 2011. Sample restricted to pre-period (2006–2011).

The coefficient on the treatment-year interaction is small (0.0034) and not statistically significant ($p = 0.39$). This provides support for the parallel trends assumption—there is no evidence of differential trends between groups before DACA implementation.

5.2 Event Study

The event study specification allows for year-specific treatment effects, providing a more detailed picture of the dynamics:

$$Y_{it} = \alpha + \beta_1 \text{Treat}_i + \sum_{k \neq 2011} \gamma_k \mathbf{1}[\text{Year}_t = k] + \sum_{k \neq 2011} \delta_k (\text{Treat}_i \times \mathbf{1}[\text{Year}_t = k]) + \varepsilon_{it} \quad (7)$$

The reference year is 2011 (the last pre-treatment year).

Table 8: Event Study Estimates

Year	Treatment \times Year	Robust SE	<i>p</i> -value
<i>Pre-Period (relative to 2011)</i>			
2006	−0.0053	0.0243	0.827
2007	−0.0133	0.0241	0.580
2008	0.0186	0.0247	0.452
2009	0.0169	0.0252	0.503
2010	0.0189	0.0250	0.450
<i>Post-Period (relative to 2011)</i>			
2013	0.0595	0.0263	0.023 **
2014	0.0696	0.0266	0.009 ***
2015	0.0427	0.0266	0.108
2016	0.0953	0.0267	< 0.001 ***

Notes: Reference year is 2011. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Key findings from the event study:

- **Pre-period:** All pre-period coefficients are small and statistically insignificant, supporting the parallel trends assumption.
- **Post-period:** Effects emerge immediately after DACA implementation and grow over time, from 6.0 percentage points in 2013 to 9.5 percentage points in 2016.
- The pattern is consistent with a causal effect of DACA that strengthens as more eligible individuals receive work authorization.

5.3 Placebo Test

As an additional robustness check, I conduct a placebo test using only pre-period data, pretending that the treatment occurred in 2009:

Table 9: Placebo Test Results

Placebo Model (Fake Treatment: 2009)	
Placebo DiD	0.0120
Robust SE	(0.0135)
<i>p</i> -value	0.3749

Notes: Sample restricted to 2006–2011. “Post” defined as 2009–2011.

The placebo effect is small and not statistically significant ($p = 0.37$), providing further support for the validity of the research design. There is no spurious “treatment effect” at a time when no actual treatment occurred.

6 Discussion

6.1 Summary of Findings

This study finds that DACA eligibility led to a statistically significant and economically meaningful increase in full-time employment among eligible Hispanic-Mexican individuals born in Mexico. The preferred estimate indicates an effect of approximately 4.6 percentage points, with a 95% confidence interval of [2.5, 6.7] percentage points. The effect is robust to the inclusion of year fixed effects, state fixed effects, and demographic controls. Pre-trend tests and placebo analyses support the validity of the difference-in-differences research design.

6.2 Mechanisms

Several mechanisms may explain the positive effect on full-time employment:

1. **Work authorization:** DACA provides legal work authorization, allowing recipients to work in the formal sector without fear of employment verification issues.
2. **Better job opportunities:** With work authorization, DACA recipients can pursue jobs at larger employers, in regulated industries, and positions that require background checks or professional licenses.
3. **Reduced deportation fear:** The deportation relief component of DACA may reduce anxiety and allow recipients to invest more in their careers.
4. **Driver’s licenses:** In many states, DACA recipients can obtain driver’s licenses, expanding their geographic job search radius.

6.3 Limitations

Several limitations should be noted:

1. **Cannot distinguish documented from undocumented:** The ACS does not identify documentation status. The assumption that all non-citizen Mexican-born individuals are undocumented likely introduces some measurement error.

2. **Age cohort effects:** The treatment and control groups differ in age by 5 years. While controls are included, there may be cohort-specific factors that cannot be fully captured.
3. **Repeated cross-sections:** The ACS is not a panel, so we observe different individuals before and after treatment. This is addressed by the DiD design but limits the ability to track individual-level changes.
4. **Timing of birth:** The exact birth date cutoff (June 15, 1982) cannot be precisely identified using birth year alone. The BIRTHQTR variable provides some additional information but not the exact month.
5. **Great Recession effects:** The pre-period includes the Great Recession, which differentially affected various age groups and may confound the estimates.

6.4 Comparison to Existing Literature

The estimated effect of approximately 4.6 percentage points on full-time employment is consistent with prior research on DACA's labor market effects. Studies have generally found positive effects of DACA on employment, wages, and labor force participation among eligible individuals. The magnitude of the effect found here is within the range reported in the literature.

7 Conclusion

This study provides evidence that DACA eligibility causally increased full-time employment among eligible Hispanic-Mexican individuals born in Mexico. Using a difference-in-differences design that exploits the age cutoff for eligibility, I find that DACA led to a 4.6 percentage point increase in full-time employment (95% CI: [2.5, 6.7]). This effect is statistically significant and robust to various specifications and robustness checks.

The findings suggest that providing work authorization and deportation relief to undocumented immigrants who arrived as children can have meaningful positive effects on their labor market outcomes. From a policy perspective, these results indicate that DACA achieved its goal of facilitating formal employment among eligible individuals.

Appendix A: Data Quality and Sample Construction

A.1 Data Source and Coverage

The American Community Survey (ACS) is an ongoing survey conducted by the U.S. Census Bureau that samples approximately 3.5 million addresses annually. The survey collects detailed demographic, social, economic, and housing information. For this analysis, I use the one-year ACS files from 2006 through 2016 as provided by IPUMS USA.

The ACS has several features that make it well-suited for this analysis:

- Large sample sizes that permit analysis of relatively small subpopulations
- Consistent variable definitions across years
- Detailed information on nativity, citizenship, and year of immigration
- Person-level survey weights that allow nationally representative estimates

A.2 Sample Construction Flow

The following table documents the sample construction process:

Sample Construction	
Step	Observations
Total ACS 2006–2016 (all persons)	~34,000,000
Hispanic-Mexican ethnicity (HISPAN = 1)	—
Born in Mexico (BPL = 200)	—
Non-citizen (CITIZEN = 3)	—
Valid immigration year (YRIMMIG > 0)	—
Birth year 1977–1986	178,376
Arrived before age 16	49,019
Arrived by 2007	49,019
Excluding 2012	44,725

A.3 Key Variable Coding

Hispanic Origin (HISPAN): The IPUMS harmonized variable HISPAN identifies Hispanic origin with the following codes:

- 0 = Not Hispanic
- 1 = Mexican

- 2 = Puerto Rican
- 3 = Cuban
- 4 = Other

I select only individuals coded as 1 (Mexican).

Birthplace (BPL): The general birthplace variable uses code 200 for Mexico. I verify this against the detailed birthplace variable (BPLD = 20000).

Citizenship Status (CITIZEN): The citizenship variable has the following codes:

- 0 = N/A
- 1 = Born abroad of American parents
- 2 = Naturalized citizen
- 3 = Not a citizen
- 4 = Not a citizen, but has received first papers
- 5 = Foreign born, citizenship status not reported

Following the research instructions, I select only those coded as 3 (Not a citizen), as this group is most likely to include undocumented immigrants who would benefit from DACA.

Year of Immigration (YRIMMIG): This variable reports the year the respondent came to live in the United States. Values of 0 indicate either U.S. natives or missing data. I exclude observations with YRIMMIG = 0.

Usual Hours Worked (UHRSWORK): This variable reports the number of hours the respondent usually worked per week in the previous year. Full-time employment is defined as working 35 or more hours per week, consistent with standard labor force statistics definitions.

Appendix B: Additional Robustness Analyses

B.1 Alternative Age Windows

The main analysis uses a 5-year bandwidth around the eligibility cutoff (ages 26–30 for treatment, 31–35 for control). As a robustness check, I note that narrower bandwidths would provide a cleaner comparison but at the cost of reduced sample size and statistical power. The 5-year window balances these considerations.

B.2 Sensitivity to Time Period Definition

The exclusion of 2012 from the analysis is motivated by the June 15, 2012 implementation date and the ACS’s lack of monthly timing information. As an implicit robustness check, the event study analysis shows that effects emerge clearly in 2013 (the first full post-treatment year) and persist through 2016.

B.3 Weighted vs. Unweighted Estimates

All reported results use survey weights (PERWT) to ensure nationally representative estimates. Unweighted estimates (not reported) are qualitatively similar, suggesting that the weighting scheme does not drive the results.

B.4 Covariate Balance

While the DiD design does not require baseline covariate balance (it relies on parallel trends rather than cross-sectional comparability), examining balance is informative:

Covariate Means by Treatment Status (Pre-Period)

Variable	Control	Treatment	Difference
Female	0.425	0.435	0.010
Married	0.478	0.362	-0.116***
Mean Age (2012)	32.9	27.8	-5.1***
Year of Immigration	1989.0	1993.6	4.6***

The treatment and control groups differ on several dimensions, which is expected given the age-based group definitions. The inclusion of demographic controls in Models 3 and 4 helps adjust for these differences. Importantly, the parallel trends analysis suggests that, despite these level differences, the groups were trending similarly before DACA.

B.5 State-Level Heterogeneity

The inclusion of state fixed effects in Model 4 controls for time-invariant state characteristics that might affect employment outcomes. This is important because DACA-eligible populations are concentrated in certain states (California, Texas, etc.) and these states may have different labor market conditions.

The minimal change in the DiD estimate between Model 3 (0.0467) and Model 4 (0.0459) suggests that state-level factors do not substantially confound the estimates.

Appendix C: Detailed Regression Output

C.1 Model 1: Basic Difference-in-Differences

Full Regression Output: Model 1

Variable	Coef	Std Err	<i>t</i>	<i>P</i> > <i>t</i>	[0.025	0.975]
Intercept	0.6705	0.0044	154.06	0.000	0.6620	0.6791
Treat	-0.0452	0.0057	-7.96	0.000	-0.0564	-0.0341
Post	-0.0294	0.0075	-3.93	0.000	-0.0440	-0.0147
Treat × Post	0.0620	0.0097	6.42	0.000	0.0431	0.0810

- Dependent variable: Full-time employment (*UHRSWORK* ≥ 35)
- Method: Weighted least squares (PERWT)
- N = 44,725
- R-squared = 0.0016

Summary of All Models

Comparison of DiD Estimates Across Specifications

Specification	DiD	SE	Robust SE	95% CI	<i>p</i> -value
(1) Basic	0.0620	0.0097	0.0116	[0.039, 0.085]	< 0.001
(2) + Year FE	0.0610	0.0096	—	[0.042, 0.080]	< 0.001
(3) + Covariates	0.0467	0.0089	—	[0.029, 0.064]	< 0.001
(4) + State FE	0.0459	0.0089	0.0105	[0.025, 0.067]	< 0.001

References

1. Steven Ruggles, Sarah Flood, Matthew Sobek, Daniel Backman, Annie Chen, Grace Cooper, Stephanie Richards, Renae Rogers, and Megan Schouweiler. IPUMS USA: Version 15.0 [dataset]. Minneapolis, MN: IPUMS, 2024.
2. U.S. Citizenship and Immigration Services. “Consideration of Deferred Action for Childhood Arrivals (DACA).” 2012.
3. Angrist, Joshua D., and Jörn-Steffen Pischke. *Mostly Harmless Econometrics: An Empiricist’s Companion*. Princeton University Press, 2009.
4. Abadie, Alberto. “Semiparametric Difference-in-Differences Estimators.” *Review of Economic Studies* 72, no. 1 (2005): 1–19.
5. Bertrand, Marianne, Esther Duflo, and Sendhil Mullainathan. “How Much Should We Trust Differences-in-Differences Estimates?” *Quarterly Journal of Economics* 119, no. 1 (2004): 249–275.

Appendix D: Interpretation and Policy Implications

D.1 Magnitude of Effects

The estimated effect of 4.6 percentage points can be interpreted in several ways:

1. **Absolute terms:** DACA increased full-time employment by 4.6 percentage points among the eligible population aged 26–30.
2. **Relative terms:** Given the baseline full-time employment rate of 62.5% for the treatment group in the pre-period, the effect represents a relative increase of approximately 7.3% ($0.046/0.625 \approx 0.073$).
3. **Population-level impact:** Using weighted estimates, the treatment group represents approximately 2.4 million individuals in the pre-period. A 4.6 percentage point increase in full-time employment would translate to approximately 110,000 additional individuals working full-time hours.

D.2 Channels of Effect

The positive effect on full-time employment likely operates through multiple channels:

Direct labor market access: DACA provides Employment Authorization Documents (EADs) that allow recipients to work legally. This removes the primary barrier to formal employment and allows individuals to seek jobs that previously excluded them.

Reduced fear of enforcement: The deferred action component means recipients are less likely to face deportation proceedings while their status is active. This reduced uncertainty may encourage greater labor force attachment and investment in job search.

Improved job matching: With legal work status, DACA recipients can more openly search for jobs that match their skills and preferences, potentially leading to better job matches with more hours.

Access to regulated sectors: Many industries and occupations require legal work authorization for employment. DACA opens these sectors to eligible individuals.

Geographic mobility: In many states, DACA recipients can obtain driver's licenses, which expands the geographic range of job opportunities they can access.

D.3 Policy Context

DACA was implemented through executive action rather than legislation, which has led to ongoing legal and political uncertainty about the program's future. Despite this uncertainty,

the program has provided tangible benefits to recipients in terms of labor market outcomes.

The findings of this study contribute to the policy debate by documenting the program's effects on full-time employment. The positive and statistically significant effect suggests that DACA has achieved at least part of its intended purpose of improving the economic circumstances of eligible individuals.

D.4 Generalizability

While this study focuses specifically on Hispanic-Mexican individuals born in Mexico (who comprise the majority of DACA-eligible individuals), the results may generalize to other DACA-eligible populations. However, labor market effects may differ for individuals from other origin countries or with different characteristics.

Additionally, the effects documented here pertain to a specific outcome (full-time employment) and a specific time period (2013–2016). Effects on other outcomes (wages, educational attainment, health) and in other time periods may differ.