

The Effect of DACA Eligibility on Full-Time Employment

Among Hispanic-Mexican Mexican-Born Immigrants

A Difference-in-Differences Analysis Using American Community Survey Data

Independent Replication Study

January 2026

Abstract

This study examines the causal effect of eligibility for the Deferred Action for Childhood Arrivals (DACA) program on full-time employment among Hispanic-Mexican Mexican-born immigrants in the United States. Using a difference-in-differences design with American Community Survey data from 2006-2016, I compare employment outcomes for DACA-eligible individuals before and after the program's implementation in June 2012, relative to ineligible immigrants from the same demographic group. The analysis finds that DACA eligibility is associated with a statistically significant 1.03 percentage point increase in the probability of full-time employment (defined as working 35 or more hours per week), controlling for demographic characteristics, year fixed effects, and state fixed effects (95% CI: 0.16 to 1.90 percentage points, $p = 0.020$). Alternative specifications examining the extensive margin of employment suggest a larger effect of approximately 2.34 percentage points on any employment. These findings suggest that DACA had a modest positive effect on labor market outcomes for eligible individuals, consistent with theoretical predictions about the effects of work authorization on employment.

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

Contents

1	Introduction	4
2	Background	4
2.1	The DACA Program	4
2.2	Theoretical Framework	5
3	Data	5
3.1	Data Source	5
3.2	Sample Construction	6
3.3	Variable Definitions	6
3.3.1	Outcome Variable: Full-Time Employment	6
3.3.2	Treatment: DACA Eligibility	6
3.3.3	Control Variables	7
3.3.4	Survey Weights	7
4	Empirical Strategy	7
4.1	Identification Strategy	7
4.2	Estimation	8
5	Results	8
5.1	Sample Description	8
5.2	Raw Difference-in-Differences	9
5.3	Regression Results	10
5.4	Alternative Outcome Measures	11
5.5	Time Trends	12
6	Robustness and Limitations	13
6.1	Identification Concerns	13
6.2	Alternative Explanations	13
7	Discussion and Conclusion	14
7.1	Summary of Findings	14
7.2	Interpretation	14
7.3	Limitations	14
7.4	Conclusion	14
	Appendix A: Variable Definitions	16

Appendix B: Detailed Sample Construction	17
Appendix C: Sample Sizes by Group and Period	18
Appendix D: Full Regression Output	19
Appendix E: Replication Code	20
Appendix F: Preferred Estimate Summary	21

1 Introduction

The Deferred Action for Childhood Arrivals (DACA) program, announced by President Obama on June 15, 2012, represented one of the most significant immigration policy changes in recent U.S. history. The program provided temporary relief from deportation and work authorization to undocumented immigrants who arrived in the United States as children. Given that DACA granted recipients legal authorization to work, a natural question is whether the program improved labor market outcomes for eligible individuals.

This study examines the effect of DACA eligibility on full-time employment among Hispanic-Mexican Mexican-born immigrants residing in the United States. The research question focuses on whether DACA eligibility increased the probability that an eligible person works full-time, defined as usually working 35 or more hours per week. I employ a difference-in-differences (DiD) identification strategy, comparing changes in employment outcomes for DACA-eligible individuals before and after the program's implementation to changes experienced by similar but ineligible immigrants from the same origin group.

The primary contribution of this study is to provide an independent estimate of DACA's effect on full-time employment using a clearly defined treatment group based on the program's actual eligibility criteria. By focusing on Hispanic-Mexican Mexican-born immigrants, I examine the population that comprised the vast majority of DACA recipients, providing estimates with direct policy relevance.

2 Background

2.1 The DACA Program

DACA was announced on June 15, 2012, and applications began to be accepted on August 15, 2012. The program provided qualifying individuals with deferred action status for two years, renewable for additional two-year periods, along with work authorization. To qualify for DACA, individuals had to meet the following criteria:

1. Arrived in the United States before their 16th birthday
2. Had not yet reached their 31st birthday as of June 15, 2012
3. Lived continuously in the United States since June 15, 2007
4. Were physically present in the United States on June 15, 2012
5. Did not have lawful immigration status on June 15, 2012

6. Met educational requirements (enrolled in school, graduated high school, obtained GED, or honorably discharged from military)
7. Had not been convicted of a felony, significant misdemeanor, or three or more misdemeanors

In the first four years of the program, nearly 900,000 initial applications were received, with approximately 90% approved. While the program was not limited to any particular nationality, the structure of undocumented immigration to the United States meant that the majority of eligible individuals were from Mexico.

2.2 Theoretical Framework

DACA could affect employment through several channels. First and most directly, DACA provided legal work authorization, potentially allowing recipients to seek formal employment rather than working in the informal economy. Second, the ability to obtain driver's licenses and other identification documents in many states could reduce barriers to employment. Third, reduced fear of deportation might increase labor supply by encouraging recipients to seek employment and invest in job-specific human capital.

However, the effect on *full-time* employment specifically is theoretically ambiguous. While work authorization might increase overall employment, it could also shift workers from informal full-time arrangements to formal part-time employment. Alternatively, formal employment with work authorization might come with more standard hours, potentially increasing full-time work.

3 Data

3.1 Data Source

The analysis uses data from the American Community Survey (ACS) as provided by IPUMS USA. The ACS is a nationally representative household survey conducted by the U.S. Census Bureau that collects detailed information on demographic characteristics, employment, and other socioeconomic outcomes.

I use the one-year ACS samples from 2006 through 2016. The pre-DACA period includes 2006-2011, and the post-DACA period includes 2013-2016. I exclude 2012 from the analysis because DACA was announced in June 2012, making observations from that year potentially from either the pre- or post-treatment period (the ACS does not identify the month of data collection).

3.2 Sample Construction

The analytic sample is constructed as follows:

1. **Ethnic and nativity restriction:** I restrict to individuals who identify as Hispanic-Mexican ($HISPAN = 1$) and were born in Mexico ($BPL = 200$). This captures the population most affected by DACA.
2. **Age restriction:** I limit the sample to working-age adults (ages 18-64) who could plausibly be in the labor force.
3. **Year exclusion:** I exclude observations from 2012 due to the mid-year implementation of DACA.

The resulting analytic sample contains 755,660 person-year observations representing the Hispanic-Mexican Mexican-born population ages 18-64 in the United States from 2006-2011 and 2013-2016.

3.3 Variable Definitions

3.3.1 Outcome Variable: Full-Time Employment

The outcome variable is a binary indicator for full-time employment. Following the research question, full-time employment is defined as usually working 35 or more hours per week. This is constructed from the UHRSWORK variable, which records usual hours worked per week. The variable equals 1 if $UHRSWORK \geq 35$ and 0 otherwise (including for those not employed).

3.3.2 Treatment: DACA Eligibility

DACA eligibility is constructed using the following criteria, operationalized with available ACS variables:

1. **Arrived before age 16:** Calculated as year of immigration ($YRIMMIG$) minus birth year ($BIRTHYR$) being less than 16, conditional on having a valid immigration year.
2. **Under 31 as of June 15, 2012:** Individuals must have been born after June 15, 1981. To account for birth quarter ($BIRTHQTR$), I code individuals born in 1982 or later as satisfying this criterion, as well as those born in July-December 1981 (quarters 3 or 4).

3. **In U.S. since June 15, 2007:** Measured as YRIMMIG \leq 2007 with a valid immigration year.
4. **Not a citizen:** CITIZEN = 3 (not a citizen). Note that I cannot distinguish between undocumented non-citizens and documented non-citizens (e.g., visa holders) in the data, which may introduce measurement error.

An individual is coded as DACA-eligible if all four criteria are satisfied. I do not observe the educational requirements or criminal history exclusions in the ACS, which will lead to some measurement error in the treatment variable.

3.3.3 Control Variables

I include the following control variables in the regression models:

- **Age:** Continuous, and age squared to capture nonlinear age effects
- **Female:** Binary indicator for female sex
- **Married:** Binary indicator for married with spouse present (MARST = 1)
- **Year fixed effects:** Dummy variables for each survey year
- **State fixed effects:** Dummy variables for each state of residence (STATEFIP)

3.3.4 Survey Weights

All analyses use person weights (PERWT) to produce nationally representative estimates. Standard errors are heteroskedasticity-robust (HC1).

4 Empirical Strategy

4.1 Identification Strategy

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

The treatment group consists of individuals who satisfy all DACA eligibility criteria. The control group consists of Hispanic Mexican Mexican-born immigrants who do not satisfy one or more criteria (e.g., arrived after age 16, older than 31 in 2012, arrived after 2007, or are naturalized citizens).

4.2 Estimation

The baseline DiD specification is:

$$Y_{ist} = \alpha + \beta_1 \text{Eligible}_i + \beta_2 \text{Post}_t + \beta_3 (\text{Eligible}_i \times \text{Post}_t) + \mathbf{X}'_{it} \gamma + \epsilon_{ist} \quad (1)$$

where:

- Y_{ist} is full-time employment for individual i in state s at time t
- Eligible_i is an indicator for DACA eligibility
- Post_t is an indicator for the post-DACA period (2013-2016)
- \mathbf{X}_{it} is a vector of control variables
- β_3 is the DiD estimator of the DACA effect

In my preferred specification, I replace Post_t with year fixed effects and add state fixed effects:

$$Y_{ist} = \alpha + \beta_1 \text{Eligible}_i + \beta_3 (\text{Eligible}_i \times \text{Post}_t) + \mathbf{X}'_{it} \gamma + \mu_s + \tau_t + \epsilon_{ist} \quad (2)$$

where μ_s are state fixed effects and τ_t are year fixed effects.

All regressions are estimated using weighted least squares with person weights (PERWT) and heteroskedasticity-robust standard errors.

5 Results

5.1 Sample Description

Table 1 presents summary statistics for the analytic sample by DACA eligibility status.

Table 1: Summary Statistics by DACA Eligibility Status

	DACA Ineligible	DACA Eligible
Sample size	684,313	71,347
Mean age	41.1	23.6
% Female	47.3%	44.8%
% Married	62.3%	25.8%
% Employed	67.8%	62.3%
% Full-time (unconditional)	61.4%	52.7%

Notes: Sample is Hispanic-Mexican Mexican-born individuals ages 18-64 in ACS years 2006-2011 and 2013-2016. Full-time is defined as usually working 35+ hours per week.

DACA-eligible individuals are substantially younger on average (23.6 vs. 41.1 years), which follows directly from the under-31 eligibility criterion. They are also less likely to be married (25.8% vs. 62.3%), reflecting their younger age. Employment rates are somewhat lower among DACA-eligible individuals (62.3% vs. 67.8%), as are full-time employment rates (52.7% vs. 61.4%).

5.2 Raw Difference-in-Differences

Table 2 presents the raw (unadjusted) difference-in-differences calculation.

Table 2: Raw Difference-in-Differences Estimates

	Pre (2006-2011)	Post (2013-2016)	Difference
DACA Eligible	0.510	0.547	0.037
DACA Ineligible	0.622	0.603	-0.019
Difference	-0.112	-0.056	0.056

Notes: Cells show mean full-time employment rates. The difference-in-differences estimate is 0.056, suggesting DACA eligibility increased full-time employment by 5.6 percentage points.

The raw DiD estimate suggests that DACA eligibility increased full-time employment by approximately 5.6 percentage points. Before DACA, eligible individuals had a full-time employment rate of 51.0%, compared to 62.2% for ineligible individuals. After DACA,

eligible individuals saw their rate increase to 54.7%, while ineligible individuals experienced a decline to 60.3%.

5.3 Regression Results

Table 3 presents regression estimates from increasingly saturated specifications.

Table 3: Difference-in-Differences Regression Results

	(1) Basic DiD	(2) + Controls	(3) + Year FE	(4) + State FE
DACA Eligible	-0.116*** (0.003)	-0.022*** (0.003)	-0.011*** (0.003)	-0.008** (0.003)
Post	-0.020*** (0.001)	-0.009*** (0.001)	-	-
DACA × Post	0.064*** (0.005)	0.018*** (0.004)	0.011** (0.004)	0.010** (0.004)
Age		0.038*** (0.000)	0.039*** (0.000)	0.040*** (0.000)
Age ²		-0.0005*** (0.000)	-0.0005*** (0.000)	-0.0005*** (0.000)
Female		-0.399*** (0.001)	-0.398*** (0.001)	-0.393*** (0.001)
Married		-0.031*** (0.001)	-0.032*** (0.001)	-0.033*** (0.001)
Year Fixed Effects	No	No	Yes	Yes
State Fixed Effects	No	No	No	Yes
N	755,660	755,660	755,660	755,660
R ²	0.003	0.187	0.191	0.206

Notes: Dependent variable is full-time employment (35+ hours/week). All regressions weighted by PERWT with heteroskedasticity-robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.10.

Column (1) shows the basic DiD specification without controls. The raw DiD coefficient of 0.064 is consistent with the 5.6 percentage point estimate from Table 2 (slight differences due to weighting). This estimate is highly statistically significant ($t = 13.4$).

Column (2) adds demographic controls (age, age squared, female, married). The DiD coefficient falls substantially to 0.018, suggesting that much of the raw effect was due to compositional differences between eligible and ineligible groups (particularly age). The coefficient remains statistically significant at conventional levels.

Column (3) replaces the Post indicator with year fixed effects to more flexibly control for time trends. The DiD coefficient is 0.011 and remains statistically significant.

Column (4), the preferred specification, adds state fixed effects to control for time-invariant differences across states. The estimated effect of DACA eligibility on full-time employment is **1.03 percentage points** (SE = 0.44 pp, 95% CI: 0.16 to 1.90 pp, $p = 0.020$).

5.4 Alternative Outcome Measures

Table 4 presents results for alternative outcome specifications.

Table 4: Alternative Specifications

	DACA \times Post	95% CI
Main specification: Full-time (unconditional)	0.010** (0.004)	[0.002, 0.019]
Alternative 1: Full-time (conditional on employed)	-0.008 (0.005)	[-0.017, 0.002]
Alternative 2: Any employment	0.023*** (0.004)	[0.015, 0.032]

Notes: All specifications include demographic controls and year fixed effects. Full specification with state fixed effects for main outcome. Standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

The main specification shows a significant positive effect on unconditional full-time employment. When conditioning on being employed (Alternative 1), the effect on full-time status becomes slightly negative and is not statistically significant, suggesting DACA did not significantly change the intensity of work among those already employed.

Alternative 2 examines the extensive margin: whether the person is employed at all. The effect is larger and more precisely estimated: DACA eligibility increased the probability of any employment by 2.3 percentage points (95% CI: 1.5 to 3.2 pp). This suggests the main channel through which DACA affected full-time employment was by increasing overall employment, rather than by shifting part-time workers to full-time status.

5.5 Time Trends

Table 5 shows full-time employment rates by year and eligibility status.

Table 5: Full-Time Employment Rates by Year

Year	DACA Ineligible	DACA Eligible
2006	0.663	0.550
2007	0.662	0.554
2008	0.646	0.538
2009	0.604	0.496
2010	0.583	0.479
2011	0.576	0.469
2013	0.591	0.499
2014	0.599	0.538
2015	0.606	0.566
2016	0.615	0.584

Notes: Year 2012 excluded. Both groups experienced declining employment during the Great Recession (2008-2011) and recovery thereafter.

The year-by-year data reveal several patterns. Both groups experienced declining full-time employment during the Great Recession years (2008-2011). After 2012, both groups recovered, but the DACA-eligible group recovered more quickly, with their full-time employment rate increasing from 46.9% in 2011 to 58.4% in 2016—a 11.5 percentage point increase. By comparison, the ineligible group increased from 57.6% to 61.5%—only a 3.9 percentage point increase.

This pattern is consistent with a positive DACA effect: while both groups improved during the economic recovery, eligible individuals improved by approximately 7-8 percentage points more, which is close to the raw DiD estimate. The regression-adjusted estimates are smaller because they account for the fact that DACA-eligible individuals were aging into their prime working years during this period.

6 Robustness and Limitations

6.1 Identification Concerns

Several threats to identification should be considered:

Parallel trends assumption: The DiD design requires that, absent DACA, employment trends would have been parallel for eligible and ineligible groups. The pre-treatment data (2006-2011) shows both groups declining during the recession, though possibly at different rates. Without DACA, it is difficult to know whether the eligible group would have recovered at the same rate as the ineligible group.

Measurement error in treatment: DACA eligibility is constructed based on observable proxies in the ACS. Several limitations exist:

- I cannot distinguish between documented and undocumented non-citizens. Some individuals coded as “eligible” may have had legal status and thus not needed DACA.
- I cannot observe the educational requirements or criminal history exclusions for DACA.
- Year of immigration is self-reported and may contain recall error.

These measurement errors likely attenuate the estimated treatment effect toward zero.

Composition changes: The sample composition may change over time if DACA affected migration patterns. However, DACA only provided benefits to those already in the U.S., so direct selection effects should be limited.

6.2 Alternative Explanations

Age and lifecycle effects: DACA-eligible individuals are younger and may have different employment trajectories for reasons unrelated to DACA. While I control for age and age-squared, these parametric controls may not fully capture lifecycle patterns.

Economic recovery: The post-DACA period coincided with the recovery from the Great Recession. If younger workers benefited disproportionately from the recovery, this could confound the DACA effect.

Other policy changes: Other policies affecting immigrant employment may have changed during this period, potentially confounding the estimates.

7 Discussion and Conclusion

7.1 Summary of Findings

This study estimates the effect of DACA eligibility on full-time employment among Hispanic-Mexican Mexican-born immigrants. The preferred difference-in-differences specification, which includes demographic controls, year fixed effects, and state fixed effects, finds that DACA eligibility increased full-time employment by approximately 1.03 percentage points (95% CI: 0.16 to 1.90 pp). This effect is statistically significant at the 5% level.

The effect appears to operate primarily through the extensive margin of employment (whether one works at all) rather than the intensive margin (full-time vs. part-time among workers). DACA eligibility is associated with a 2.3 percentage point increase in any employment, but has no significant effect on full-time status conditional on being employed.

7.2 Interpretation

The finding of a positive but modest effect of DACA on full-time employment is consistent with theoretical expectations. DACA provided work authorization, which should facilitate formal employment. However, the effect is smaller than the raw differences might suggest, largely because DACA-eligible individuals are younger and would have experienced employment growth even absent the program as they aged into their prime working years.

The magnitude of the effect—about 1 percentage point on full-time employment and 2.3 percentage points on any employment—is economically meaningful but not dramatic. Given a base rate of roughly 50% full-time employment among eligible individuals, a 1 percentage point increase represents approximately a 2% relative increase.

7.3 Limitations

Key limitations include measurement error in DACA eligibility status, the inability to distinguish documented from undocumented non-citizens, and potential violations of the parallel trends assumption. The estimates should be interpreted as intent-to-treat effects for an imperfectly measured treatment.

7.4 Conclusion

This independent replication finds evidence that DACA eligibility had a modest positive effect on full-time employment among Hispanic-Mexican Mexican-born immigrants. The preferred estimate suggests an increase of approximately 1 percentage point in full-time

employment, primarily driven by increases in any employment rather than shifts from part-time to full-time work among those already employed.

Appendix A: Variable Definitions

Table 6: Variable Definitions and IPUMS Codes

Variable	IPUMS Name	Definition
Year	YEAR	Census/ACS survey year
Person weight	PERWT	Person-level sample weight
Age	AGE	Age in years
Sex	SEX	1=Male, 2=Female
Birth quarter	BIRTHQTR	1=Q1, 2=Q2, 3=Q3, 4=Q4
Birth year	BIRTHYR	Year of birth
Marital status	MARST	1=Married spouse present
Hispanic origin	HISPAN	1=Mexican
Birthplace	BPL	200=Mexico
Citizenship	CITIZEN	3=Not a citizen
Year of immigration	YRIMMIG	Year arrived in US
Employment status	EMPSTAT	1=Employed
Hours worked	UHRSWORK	Usual hours worked per week
State	STATEFIP	State FIPS code

Appendix B: Detailed Sample Construction

Sample Sizes at Each Stage

Table 7: Sample Construction

Step	Sample Size
All ACS observations 2006-2016	33,851,424
Hispanic-Mexican (HISPAN=1) born in Mexico (BPL=200)	991,261
Ages 18-64	833,282
Excluding 2012	755,660
Final analytic sample	755,660

DACA Eligibility Construction

Table 8: DACA Eligibility Criteria (Full Sample Before Age/Year Restrictions)

Criterion	N Meeting Criterion
Arrived before age 16 ($YRIMMIG - BIRTHYR < 16$)	322,246
Under 31 on June 15, 2012	274,149
In US since 2007 ($YRIMMIG \leq 2007$)	937,519
Not a citizen ($CITIZEN = 3$)	701,347
All criteria (DACA eligible)	133,120

Appendix C: Sample Sizes by Group and Period

Table 9: Sample Sizes by DACA Eligibility and Period

	Pre-DACA (2006-2011)	Post-DACA (2013-2016)	Total
DACA Ineligible	415,802	268,511	684,313
DACA Eligible	38,248	33,099	71,347
Total	454,050	301,610	755,660

Table 10: Weighted Population (Person-Years) by Group and Period

	Pre-DACA	Post-DACA	Total
DACA Ineligible	53,878,986	34,959,370	88,838,356
DACA Eligible	5,136,296	4,740,852	9,877,148
Total	59,015,282	39,700,222	98,715,504

Appendix D: Full Regression Output

Model 1: Basic Difference-in-Differences

Dependent Variable: Full-time Employment (UHRSWORK >= 35)

Weighted Least Squares with PERWT

Heteroskedasticity-robust standard errors (HC1)

	Coefficient	Std. Error	z	P> z

Intercept	0.6414	0.001	718.254	0.000
DACA Eligible	-0.1160	0.003	-36.150	0.000
Post	-0.0197	0.001	-13.546	0.000
DACA x Post	0.0639	0.005	13.404	0.000

N = 755,660

R-squared = 0.003

Model 4: Preferred Specification (with State and Year FE)

Key Coefficients:

	Coefficient	Std. Error	z	P> z

DACA Eligible	-0.0083	0.003	-2.456	0.014
DACA x Post	0.0103	0.004	2.332	0.020

95% CI for DACA x Post: [0.0016, 0.0190]

Controls: Age, Age^2, Female, Married

Fixed Effects: Year, State

N = 755,660

R-squared = 0.206

Appendix E: Replication Code

The analysis was conducted using Python 3.x with the following packages:

- pandas: Data manipulation
- numpy: Numerical operations
- statsmodels: Regression analysis

The complete analysis code is available in `analysis.py`. Key steps include:

1. Load ACS data, filtering to Hispanic-Mexican (HISPAN=1) Mexican-born (BPL=200) individuals
2. Construct DACA eligibility indicator based on age at arrival, age in 2012, time in US, and citizenship status
3. Create full-time employment indicator ($\text{UHRSWORK} \geq 35$)
4. Restrict to ages 18-64 and exclude year 2012
5. Estimate difference-in-differences regressions with WLS and robust standard errors

Appendix F: Preferred Estimate Summary

Table 11: Preferred Estimate: Effect of DACA Eligibility on Full-Time Employment

	Value
Effect Size (DACA \times Post coefficient)	0.0103
Standard Error	0.0044
95% Confidence Interval	[0.0016, 0.0190]
t-statistic	2.33
p-value	0.020
Sample Size	755,660
Interpretation	1.03 percentage point increase in full-time employment

Notes: Preferred specification includes demographic controls (age, age squared, female, married), year fixed effects, and state fixed effects. Estimation by weighted least squares with person weights (PERWT). Heteroskedasticity-robust standard errors.