

## Motivation & Overview

Sanctuary policy prevents the transfer of residents' information to federal immigration enforcement agencies (ICE) & discourages local police's cooperation with ICE on deportation matters

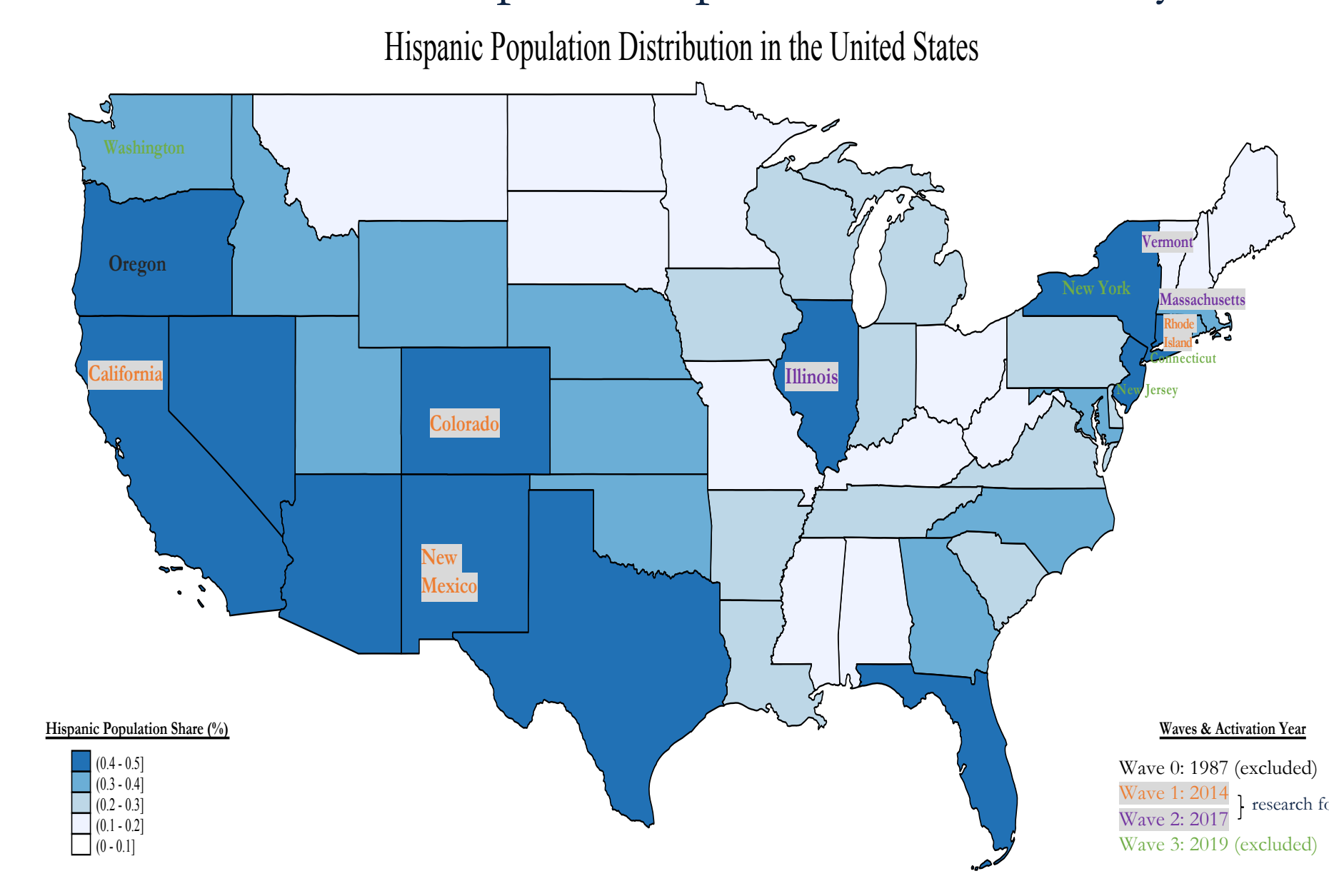
- Existing literature finds significant negative impacts of immigration enforcement policies on Hispanic K-12 school attendance & participation in welfare programs (Dee & Murphy, 2019; Alsan & Yang, 2018)
- Paucity of literature on sanctuary policy & its impacts on higher education: one county-level analysis where no significance is found (Corral, 2021)

Can state-level sanctuary policy increase Hispanic post-secondary attendance?

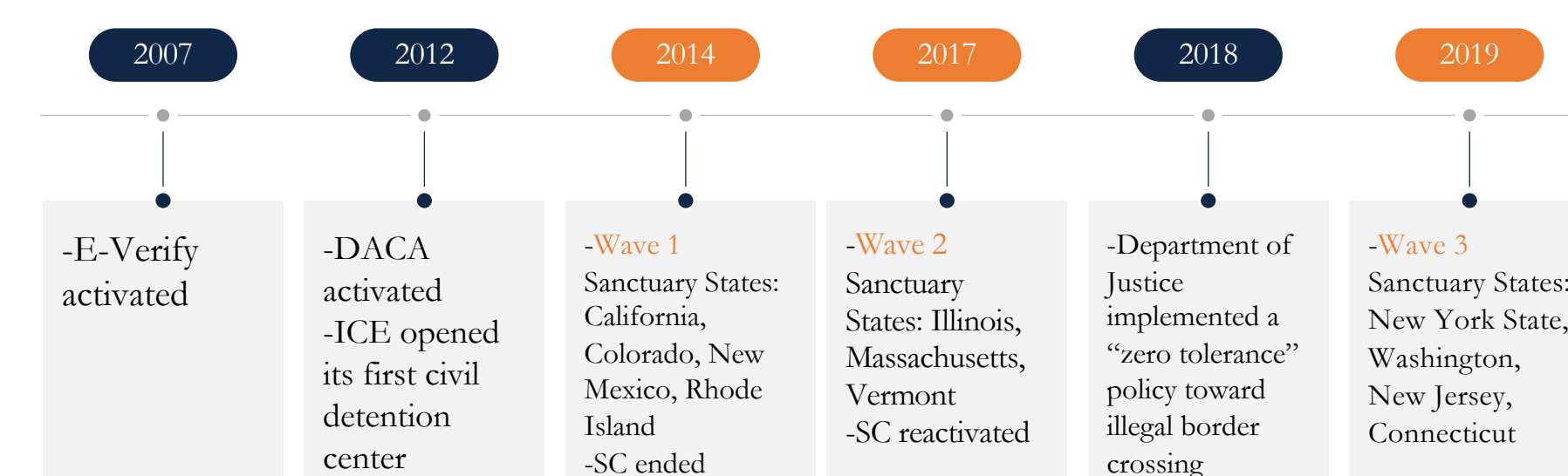
Treatment group: 19-22 years old Hispanics in active sanctuary states

Control group: 19-22 years old Hispanics in non-sanctuary states & inactive sanctuary states

## Distribution of Hispanic Population & Sanctuary States



## Timeline: Policy Implementation



## Data Source and Type

American Community Survey

- State-year individual data
- Unit of observation: individual
- Timeframe: 2007 to 2019
- Number of observations: 366,337 college-aged Hispanic individuals in total

Vaughan & Griffith, 2021

- List of sanctuary states
- Sources including ICE documents, state bills, Department of Justice reports

Individual demographics: sex, high school completion, English proficiency, Spanish speakers, Migration & citizenship: migration status, citizenship status, Income & social assistance: total family income, employment, food stamp, reciprocity

higher education attendance

## Economic Framework: Alsan & Yang, 2018

- Principle-agent problem: undocumented Hispanic parents discourage citizen children to attend college out of the fear of revealing themselves
- Externalities: Hispanic citizens forgo college enrollment out of concern for their non-citizen contacts

# Sanctuary Policy and Higher Education: Evidence from the United States

Author: Jin Wang

Advisors: Marit Rehavi and Nicole Fortin

## Research Questions:

- Can state-level sanctuary policy shield college-aged Hispanic residents from education interruptions?
- Are there spill-over effects between Hispanic citizens and Hispanic non-citizens?
- Does the policy have gender differential impacts?

## Rationale

Post-secondary Education Attendance as Research Interest:

Plyler v. Doe (1982) legalizes K-12 education for all, including undocumented residents

Hispanic Residents as Research Focus:

The Hispanic community has the highest share of undocumented residents in the U.S., who may be susceptible to immigration enforcement policies & deportation

U.S. born & Non-U.S. born Categorization to Study Spill-over Effects:

The categorization enables the research to study potential spill-over effects of sanctuary policy, given the existence of many mixed-status households

Puerto Ricans & Cubans as a Placebo:

Puerto Ricans have statutory citizenship since 1917 after Puerto Rico became part of the U.S. territories; Cuban Adjustment Act (1966 - 2017) granted lawful residency to all Cubans who reached U.S. soil

## Key Findings

- State-level sanctuary policy increased Hispanic non-citizen college-aged Individuals' school attendance by about 3 percentage points, which translates to about 7% increase on average
- Spill-over effects may exist among the Hispanic community: non-citizens are clearly affected; mixed evidence on citizens. Effects on Hispanic citizens may not be robust to state-specific time trend, possibly due to upward trends induced by other influences in the treatment states
- Sanctuary states strongly increased female Hispanic non-citizens to attend post-secondary education (15% on average); whereas there are no robust upward effects on their male counterparts

## Main Contributions

1st Paper to Conduct State-level Analysis on College Attendance

Previous literature conducts county-level analysis, with only one state sample as robustness check (Corral, 2021)

County-level sanctuary policy may not be perceived to be strong and secure enough to alter responses from the Hispanic community

Evidence on the Effectiveness of Sanctuary Policy

The positive impacts of sanctuary policy on non-citizen Hispanic higher education attendance are robust across specifications

State-level sanctuary status significantly increases higher education attendance of female Hispanic citizens & non-citizens

Policy Relevance in the U.S. & Canada:

- Canada's sanctuary cities to date: Toronto, Hamilton, London and Montreal; Vancouver and Ottawa still considering the designation
- CA sanctuary cities grant access to public service for non-status residents (failed refugee claimants, undocumented or sponsorship-breakdown immigrants, expired visa holders)
- Sanctuary State/City movement continues to grow in the U.S. & Canada

## OLS DD Results: Wave 1

Table 2a: Effects of Wave 1 Sanctuary Policy on School Attendance of College-aged (19-22) Hispanic Individuals

|                                                                                                                                                                             | Average School Attendance of Each Group |                      |                      | Puerto Ricans & Cubans only |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|----------------------|----------------------|-----------------------------|
|                                                                                                                                                                             | All Hispanics                           | U.S. born            | Non-U.S. born        |                             |
| mean (pre-treatment years)                                                                                                                                                  | 46.76%                                  | 51.79%               | 45.76%               | 53.15%                      |
| Estimated Change in School Attendance Rates in Treatment states relative to Control states (Wave 1 vs. Non-sanctuary States (excluding Wave 2, Wave 3 & Oregon), 2007-2019) |                                         |                      |                      |                             |
| OLS (Diffs-in-diffs)                                                                                                                                                        | 0.0223***<br>(0.008)                    | 0.0234***<br>(0.006) | 0.0247**<br>(0.012)  | -0.009<br>(0.044)           |
| add state fixed effects                                                                                                                                                     | 0.0225***<br>(0.007)                    | 0.0244***<br>(0.006) | 0.0282**<br>(0.011)  | 0.0053<br>(0.044)           |
| add individual controls                                                                                                                                                     | 0.0229***<br>(0.007)                    | 0.0197***<br>(0.005) | 0.0201**<br>(0.009)  | -0.0039<br>(0.052)          |
| add time trend controls                                                                                                                                                     | 0.0076<br>(0.005)                       | 0.0020<br>(0.006)    | 0.0250***<br>(0.009) | -0.0003<br>(0.043)          |

## Conclusion

Synthesize and build upon work of Alsan & Yang, 2018; Dee & Murphy, 2019; Corral 2021 by focusing on Hispanic post-secondary attendance

Use 12-year individual data from ACS & list of sanctuary states compiled by Vaughan & Griffith (2021)

DD & Staggered DD specifications

New evidence on the effectiveness of state-level sanctuary policy

State-level sanctuary policy enabled about 240,000 college-aged Hispanic non-citizens to pursue higher education; among which the majority are females

Policy Implication: positive long-term socioeconomic impacts, improved health literacy, valuable workforce, terminating the self-perpetuating cycle of marginalization, improved stability and integration of U.S. society

## Empirical Strategy

$$1 \quad OLS \text{ DD: } Y_{ist} = \alpha_s + \gamma After_t + \theta D_{st} + X'_{ist}\beta + \delta_s t \times \alpha_s + \epsilon_{ist}$$

$\alpha_s$ : state fixed effect

$After_t$ : post-treatment, year fixed effect

$D_{st}$ : equals 1 if it is a Hispanic individual residing in a state with active sanctuary status

$X'_{ist}$ : individual controls

$\alpha_s$ : state-specific time trend

$\epsilon_{ist}$ : error term

$$2 \quad OLS \text{ Staggered DD: } Y_{ist} = \alpha_s + \rho_t + \gamma D_{st} + X'_{ist}\beta + \epsilon_{ist}$$

$\alpha_s$ : state fixed effect

$\rho_t$ : year fixed effect

$D_{st}$ : equals 1 if it is a Hispanic individual residing in a state with active sanctuary status

$X'_{ist}$ : individual controls

$\epsilon_{ist}$ : error term

## Gender Differential Impacts

Table 4: Gender-based Analysis on the Effectiveness of State-level Sanctuary Policy (All Hispanics excluding Puerto Ricans & Cubans, 19 to 22 Years Old)

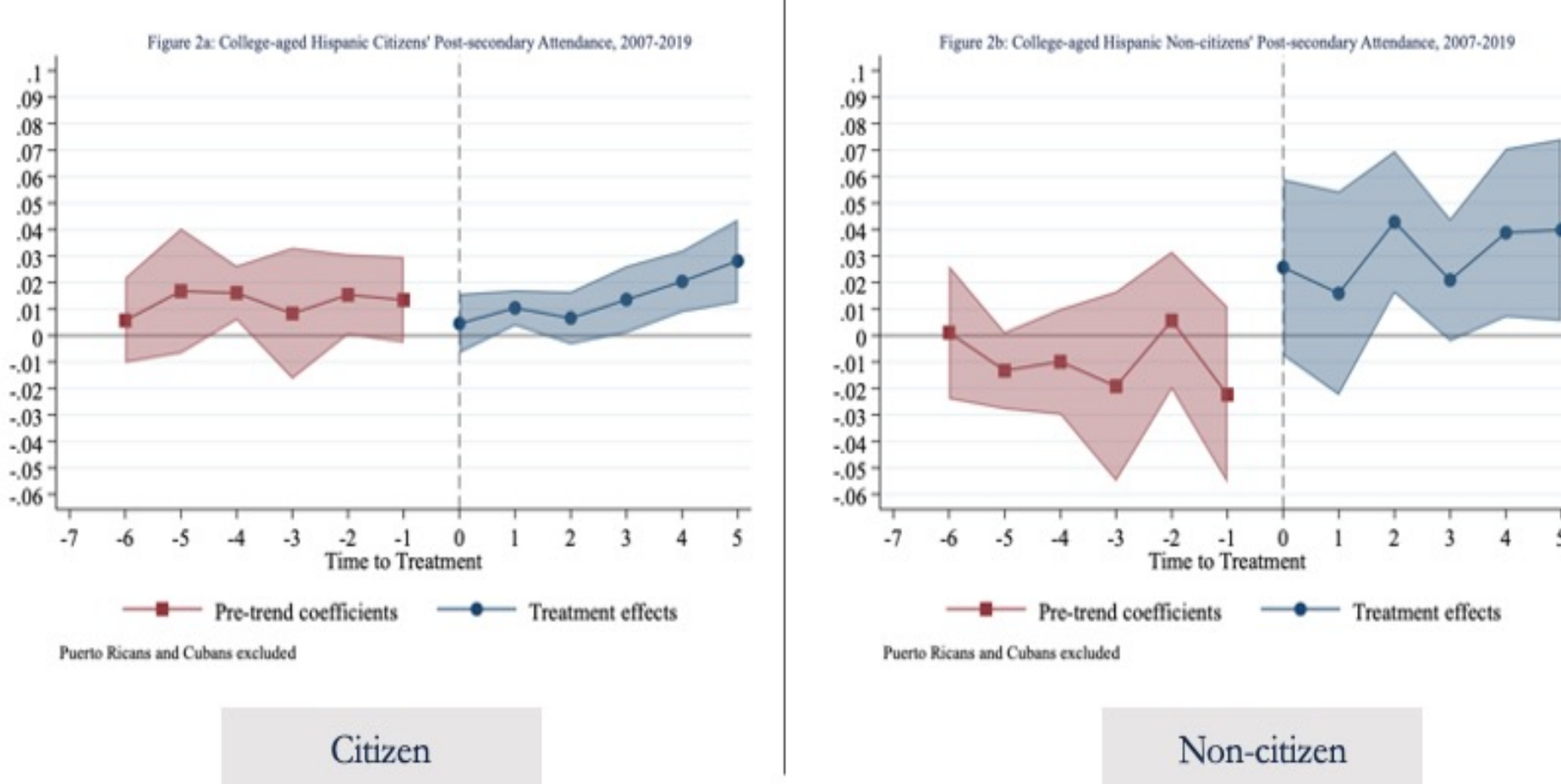
|                                                                                                     | U.S. born           |                      |                       |                      |  |
|-----------------------------------------------------------------------------------------------------|---------------------|----------------------|-----------------------|----------------------|--|
|                                                                                                     | Wave 1              |                      | Wave 2                |                      |  |
|                                                                                                     | Male (N=93,100)     | Female (N=93,241)    | Male (N=52,573)       | Female (N=52,655)    |  |
| mean (before policy activation)                                                                     | 46.88%              | 57.91%               | 51.69%                | 63.24%               |  |
| OLS (Diffs-in-diffs), with state fixed effects, individual controls, and state-specific time trends | -0.0124*<br>(0.007) | 0.0183*<br>(0.009)   | -0.0415***<br>(0.011) | 0.0426***<br>(0.013) |  |
|                                                                                                     | Non-U.S. born       |                      |                       |                      |  |
|                                                                                                     | Wave 1              |                      | Wave 2                |                      |  |
|                                                                                                     | Male (N=33,134)     | Female (N=27,098)    | Male (N=23,124)       | Female (N=18,546)    |  |
| mean (before policy activation)                                                                     | 29.46%              | 38.76%               | 33.77%                | 42.21%               |  |
| OLS (Diffs-in-diffs), with state fixed effects, individual controls, and state-specific time trends | 0.0011<br>(0.015)   | 0.0577***<br>(0.015) | 0.0125<br>(0.044)     | 0.0213<br>(0.035)    |  |

## Summary Statistics

Table 1 - Summary Statistics by Sanctuary State Status (19-22 years old)

|                                         | Wave 1   | Wave 2  | Non-sanctuary States (excl. Oregon & Wave 3) |
|-----------------------------------------|----------|---------|----------------------------------------------|
| Hispanic Population share (%)           | 47.61    | 47.83   | 41.86                                        |
| Individual demographics:                |          |         |                                              |
| female (%)                              | 21.19    | 8.31    | 7.36                                         |
| with high school diploma (%)            | 38.28    | 14.72   | 13.07                                        |
| high proficiency in English (%)         | 37.92    | 14.47   | 12.91                                        |
| Spanish speaker (%)                     | 30.58    | 12.71   | 10.49                                        |
| Migration & citizenship:                |          |         |                                              |
| U.S. Born (%)                           | 34.81    | 12.86   | 11.23                                        |
| born abroad of U.S. citizen parents (%) | 0.37     | 0.24    | 0.23                                         |
| naturalized citizens (%)                | 1.27     | 0.79    | 0.71                                         |
| immigrant (%)                           | 9.18     | 5.00    | 4.72                                         |
| abroad migration (%)                    | 0.37     | 0.22    | 0.25                                         |
| between-state migration (%)             | 0.62     | 0.52    | 0.65                                         |
| Income & social assistance:             |          |         |                                              |
| total family income (\$)                | 62139.37 | 61619.5 | 55294.8                                      |
| employed (%)                            | 25.41    | 10.65   | 9.59                                         |
| Food Stamp recipient (%)                | 7.26     | 3.45    | 2.90                                         |
| Puerto Ricans & Cubans                  |          |         |                                              |
| Population Share (%)                    | 0.96     | 3.30    | 2.14                                         |
| Population (N)                          | 305,997  | 137,938 | 1,303,925                                    |

## Borusyak et al. Imputation Method (2021): Wave 1



## OLS DD Results: Wave 2

Table 2b: Effects of Wave 2 Sanctuary Policy on School Attendance of College-aged (19-22) Hispanic Individuals

|                                                                                                                                                                     | Average School Attendance of Each Group |                       |                     | Puerto Ricans & Cubans only |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|-----------------------|---------------------|-----------------------------|
|                                                                                                                                                                     | All Hispanics                           | U.S. born             | Non-U.S. born       |                             |
| mean (pre-treatment years)                                                                                                                                          | 48.39%                                  | 56.75%                | 32.47%              | 47.32%                      |
| Estimated Change in School Attendance Rates in Treatment states relative to Control states (Wave 2 vs. Other States (excluding Wave 1, Wave 3 & Oregon), 2007-2019) |                                         |                       |                     |                             |
| OLS (Diffs-in-diffs)                                                                                                                                                | 0.0280***<br>(0.0038)                   | 0.0155***<br>(0.0054) | 0.0248<br>(0.0234)  | 0.0484<br>(0.0298)          |
| add state fixed effects                                                                                                                                             | 0.0256***<br>(0.0039)                   | 0.0142**<br>(0.0059)  | 0.0110<br>(0.0296)  | 0.0591**<br>(0.0267)        |
| add individual controls                                                                                                                                             | 0.0271***<br>(0.0038)                   | 0.0175***<br>(0.0066) | 0.0274*<br>(0.0158) | 0.0286<br>(0.0211)          |
| add time trend controls                                                                                                                                             | -0.0011<br>(0.0162)                     | -0.0018<br>(0.0105)   | 0.0235*<br>(0.0117) | -0.0060<br>(0.0255)         |

## OLS Staggered DD Results: Wave 1 & 2

Table 3: Staggered DD on College-aged Hispanic Individuals (Wave 1 & 2 vs. Other States, excluding Wave 3 & Oregon)

|                                                                    | All Hispanics excluding Puerto Ricans & Cubans (alternative specification) |                       |                       | Puerto Ricans & Cubans only |
|--------------------------------------------------------------------|----------------------------------------------------------------------------|-----------------------|-----------------------|-----------------------------|
|                                                                    | All Hispanics                                                              | U.S. born             | Non-U.S. born         |                             |
| mean (all years)                                                   | 50.76%                                                                     | 54.47%                | 35.56%                | 52.21%                      |
| Panel A: Sanctuary Policy Activation Year Excluded                 |                                                                            |                       |                       |                             |
| OLS (Diffs-in-diffs), with year & state fixed effects              | 0.0195***<br>(0.0068)                                                      | 0.0211***<br>(0.0054) | 0.0200*<br>(0.0101)   | 0.0192<br>(0.0154)          |
| add individual controls                                            | 0.0204***<br>(0.0066)                                                      | 0.0170***<br>(0.0057) | 0.0184*<br>(0.0094)   | 0.0185<br>(0.0238)          |
| Borusyak et al. Imputation Method, with year & state fixed effects | 0.0143*<br>(0.0081)                                                        | 0.0134***<br>(0.0079) | 0.0298**<br>(0.0138)  | 0.0191<br>(0.0208)          |
| add individual controls                                            | 0.0223***<br>(0.0059)                                                      | 0.0192***<br>(0.0042) | 0.0286***<br>(0.0095) | 0.0107<br>(0.0184)          |
| Observations                                                       | 324,070                                                                    | 222,767               | 69,326                | 31,977                      |

## References

- Alsan, Marcella, and Crystal Yang. "Fear and the Safety Net: Evidence from Secure Communities." National Bureau of Economic Research, 2018.
- Borusyak, Kirill, Xavier Jaravel, and Jann Spiess. "Revisiting Event Study Designs: Robust and Efficient Estimation." Working paper, 2021.
- Corral, Daniel. "The Relationship between Immigration Enforcement and Educational Attainment: The Role of Sanctuary Policies." AERA Open, vol. 7, 2021.
- Dee, Thomas, and Mark Murphy. "Vanished Classmates: The Effects of Local Immigration Enforcement on School Enrollment." American Educational Research Journal, vol. 57, no. 2, 2020.
- Vaughan, Jessica, and Griffith, Bryan. "Map: Sanctuary Cities, Counties, and States." Center for Immigration Studies, 2021.