

Milestone #5: A Dive into My Replication Analysis

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Introduction

Research Paper: Local demographic changes and US presidential voting, 2012 to 2016

Authors: Seth J. Hilla, Daniel J. Hopkins, and Gregory A. Huberc

This PDF document presents an initial overview of the replication exercise through a high-level visual presentation and a textual overview of the authors' findings and methods (King, Tomz, and Wittenberg 2000).

Overview

The topics of immigration and the increase of racial and ethnic minorities have been fairly prevalent in media, social media, and political rhetoric over the last few years, but do these phenomena actually influence voting behavior? This study analyzes voting patterns in areas that received an influx of immigrants prior to the 2016 general election. Notably, using precinct-level data, it finds that these influxes did not influence voting behavior in favor of Trump, but rather (in a slight way) benefited his opponent in those particular areas. In other words, local demographic changes are not, on their own, increasing support for anti-immigration candidates. The authors argue that this means the cities in question are not engaging in the often suggested “threatened response” associated with voting behavior in light of immigration influxes. The authors acknowledge that “despite its disparate local impacts, immigration may be a symbolic, nationalized issue whose effects, do not depend on local experiences.” However, the actual connection has yet to be proven empirically and it is tough to do so given several factors influencing voting patterns. Some of these factors include, but are not limited to, greater exposure to international trade and declining economic prospects for the less educated. The authors explain that ‘positive intergroup contact’ could be responsible for the seemingly ‘supportive’ voting patterns at low levels of aggregation (locally).

The authors use 8 main regression models as well as loess lines in their analysis. They study change in proportion of Hispanics and proportion change of Hispanic proportions concluding that in places with demographic shifts, Trump did not benefit, but, in fact, Clinton did. These findings are further validated by a similar model utilizing foreign-born, noncitizens proportions to discard the possibility of increased Clinton support due to changing electoral composition (given that noncitizens cannot vote and would not influence the electoral outcome in such way) (Hilla, Hopkins, and Huberc 2019). I am interested in exploring this topic further by analyzing the variables used and figuring out whether this conclusion stands across demographic groups. In addition, this paper evokes an interest in understanding how Trump’s nationalist rhetoric and media’s portrayal of immigration influxes may have attracted different demographic groups in cities that did not experience such influx (fearing that they might) i.e. the Deep South.

Dan Hopkins offers a link to the data for this research paper on his website. The full paper can be found here. For more information about this project please visit my project’s Github repo¹.

Research on the United Kingdom has found that support for Brexit, the UK Independence Party, and reducing immigration are higher in localities that have low immigrant shares but recent demographic changes (21–23), with related research in continental Europe (24, 25).

¹All analysis for this paper is available here.

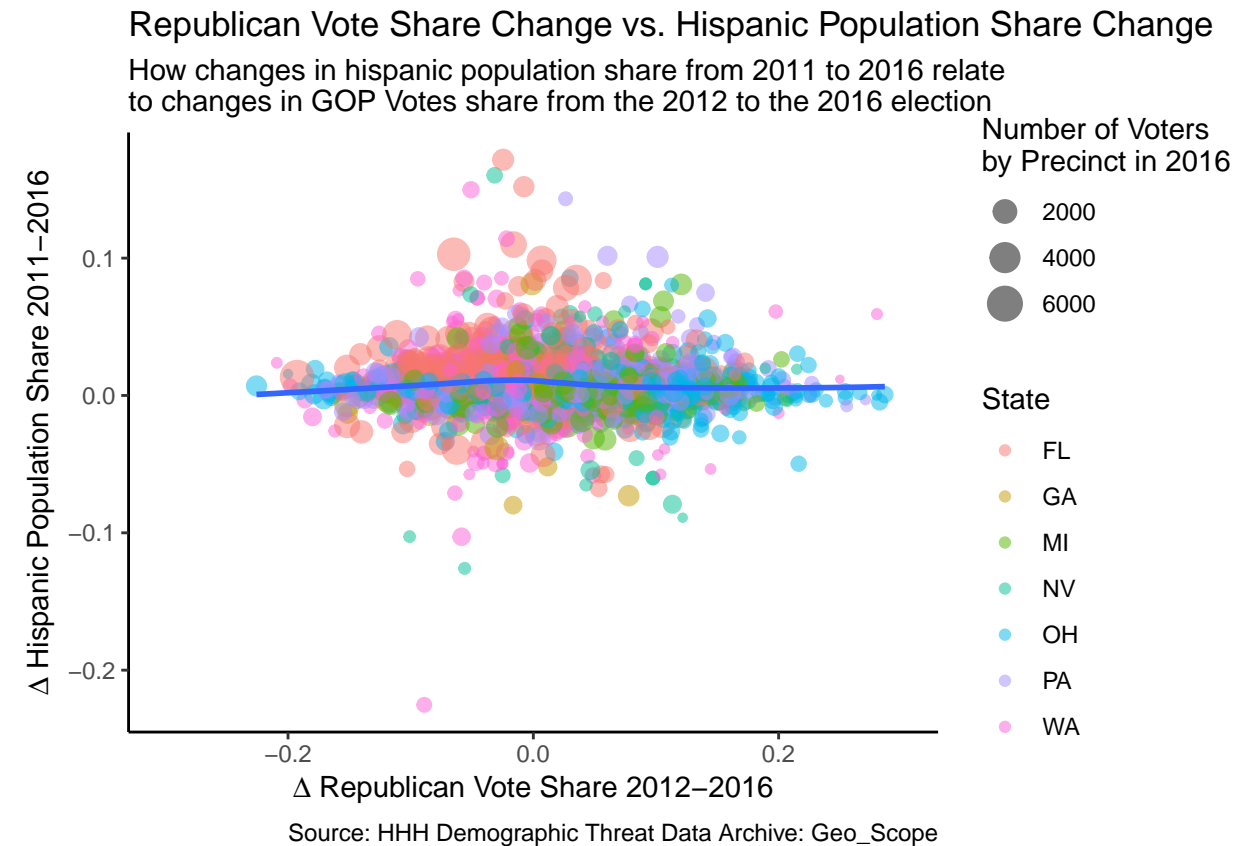
A GT Table of my Data

Average Changes in Proportion of Population Groups by State
Proportion of foreign born and GOP voters respectively between 2011-2016

State	Avg. Change in Foreign Pop.	Avg. Change in Republican Voters
FL	-0.780	-0.162
GA	NA	NA
MI	-0.012	NA
NV	NA	NA
OH	NA	3.963
PA	0.213	2.809
WA	NA	NA

Source: HHH Demographic Threat Data Archive: Precinct

A Beautiful Graphic



My graphic shows the association between changes of Republican vote share and Hispanic population proportion changes over the same period of time. I am using the sample function to get a random sample of 2000 observations from my geo_scope dataset. I used the geoscope dataset because I wanted to color the observations by state, which the authors do not do, but I thought would be interesting and prettier. I was able to create the loess line using geom_smooth and it does not appear dissimilar to the original paper's model(Consulting 2020). I also added the aesthetic enhancement of size as number of voters in 2016 in each precinct(Wickham et al. 2019).

To create this graphic I utilized several online guides cited in the References section of this paper(Xie, Allaire, and Grolemond 2019).

Appendix

Table Replication

Replication of Table 1:

% Table created by stargazer v.5.2.2 by Marek Hlavac, Harvard University. E-mail: hlavac at fas.harvard.edu

% Date and time: Sun, Apr 05, 2020 - 8:37:05 PM

Table 1. Change in Republican vote share 2012 to 2016 and change in Hispanic population, various time intervals

	<i>Dependent variable:</i>							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Change in Prop. Hispanic, 2011 to 2016	−0.031*** (0.010)	−0.045*** (0.007)	−0.065*** (0.006)					
Prop. Change in Prop. Hispanic, 2011 to 2016				−0.004*** (0.0005)				
Prop. Hispanic 2011		−0.110*** (0.002)	−0.132*** (0.002)	−0.133*** (0.002)				
Prop. Change in Prop. Hispanic, 2000 to 2016								−0.005*** (0.001)
Change in Prop. Hispanic, 2000 to 2016					−0.056*** (0.007)	−0.044*** (0.005)	−0.089*** (0.005)	
Prop. Hispanic 2000						−0.122*** (0.003)	−0.132*** (0.002)	−0.147*** (0.002)
Constant	−0.00002 (0.0004)	0.055*** (0.002)	0.156*** (0.003)	0.156*** (0.003)	0.002*** (0.0005)	0.065*** (0.001)	0.132*** (0.002)	0.129*** (0.002)
Observations	28,934	28,934	28,934	28,934	28,934	28,934	28,934	28,934
R ²	0.0003	0.587	0.636	0.635	0.002	0.571	0.614	0.612
Adjusted R ²	0.0003	0.586	0.636	0.635	0.002	0.571	0.614	0.611

Note:

*p<0.1; **p<0.05; ***p<0.01

I need to work on getting rid of the dependent variable row and adding the note. I also need to reorder the variable output and make sure that all of the numbers replicate well.

Original Table

Table 1. Change in Republican vote share 2012 to 2016 and change in Hispanic population, various time intervals

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Change in prop. Hispanic, 2011 to 2016	−0.040** (0.01)	−0.071** (0.01)	−0.077** (0.01)					
Prop. Hispanic 2011		−0.13** (0.00)	−0.15** (0.00)	−0.15** (0.00)				
Prop. change in prop. Hispanic, 2011 to 2016				−0.0041** (0.00)				
Change in prop. Hispanic, 2000 to 2016					−0.077** (0.01)	−0.047** (0.01)	−0.085** (0.01)	
Prop. Hispanic 2000						−0.13** (0.00)	−0.14** (0.00)	−0.15** (0.00)
Prop. change in prop. Hispanic, 2000 to 2016								−0.0055** (0.00)
Observations	31,949	31,352	31,352	31,352	31,949	31,949	31,949	31,949
R-squared	0.001	0.658	0.704	0.704	0.004	0.649	0.689	0.687
Control for levels	No	Yes	Yes	Yes	No	Yes	Yes	Yes
County fixed effects	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Additional Census controls	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Republican share 2012	No	No	Yes	Yes	No	No	Yes	Yes

Robust standard errors are in parentheses. * $P < 0.05$; ** $P < 0.01$. Precinct-level analysis; weighted to number of votes 2012; proportional changes top and bottom coded at 1 and −1. Note: Dependent variable is change in GOP vote share, 2012 to 2016. Prop., proportion.

Figure 1: This table offers a summary of the 8 main regression models for the original paper while omitting several control variables in the output.

References

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- King, Gary, Michael Tomz, and Jason Wittenberg. 2000. “Making the Most of Statistical Analyses: Improving Interpretation and Presentation (Pp. 347-361).” American Journal of Political Science Vol. 44, No. 2.
- Wickham, Hadley, Winston Chang, Lionel Henry, Thomas Lin Pedersen, Kohske Takahashi, Claus Wilke, Kara Woo, Hiroaki Yutani, and Dewey Dunnington. 2019. “Smoothed Conditional Means.” Available at https://ggplot2.tidyverse.org/reference/geom_smooth.html.
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