

Economic and Social Predictors of Bernie Sanders Campaign Donors

Objective

To examine demographic and social factors that are associated with support for Bernie Sanders in the form of donations to his campaign.

Background

Bernie Sanders was a 2016 Democratic candidate. Known for his progressive left stance, Bernie Sanders had a passionate, dedicated support base. Although he lost the Democratic Party nomination, he secured more Independent votes than Hillary Clinton (Wall Street Journal, 2016).

Bernie Sanders' campaign was funded in large part by "small dollar" donations from citizen supporters and a rejection of corporation donations, as opposed to Hillary Clinton's Super PAC-backed campaign funds. Approximately two thirds of Bernie Sanders campaign funds came from nearly one million people who donated small amounts while only twenty percent of Clinton's funds came from small donations (LA Times, 2016). Approximately ten percent of all Sanders' donations were twenty-seven dollars or less though the average donor contributes numerous times, resulting in an average contribution of ninety-six dollars. Previous analyses of who his donors are have indicated interesting trends including that unemployed donors gave more than any other job category (LA Times, 2016). Additionally, his donors tend to live in the liberal areas and areas with a higher proportion of college graduates (LA Times, 2016). To gain further insight into who the Bernie Sanders donors really are, we conducted a spatial analyses of two states using a variety of demographic and social criteria in conjunction with spatial data on where donations occurred.

Study Area

The study area consisted of two states: California and Mississippi. California is the state that contributed the most money in total to the Bernie Sanders campaign fund. Mississippi is the state that contributed the least money per person, with an average contribution of only \$0.09 per person. It is important to note in initial analyses of these differences that the median income in Mississippi in 2014 was around \$36,000, making it the poorest state in the United States while California's median income is over \$60,000 (US Census Bureau, 2015). However, income discrepancies alone do not fully explain differences in contributions between the two states. Wealth is also likely to be a factor influencing political opinion rather than a confounding variable.

Criteria

Demographic

- Age
- Race (white base)

Wealth

- Median disposable income

Education

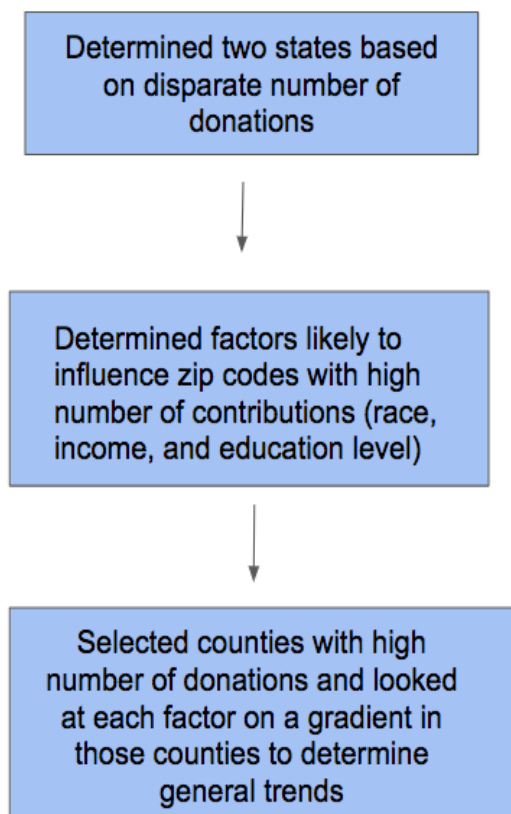
- College

Hypotheses

1. Areas that donate the highest amount will tend to have moderate/middle incomes (range according to US Census Bureau: \$25,000 - \$75,000)
2. Zip codes with high numbers of donations will tend to be in areas with relatively high percentages of people with at least some college education.
3. Zip codes with high numbers of donations will tend to have a high percentage of minorities compared to the state percentage.

Methodology

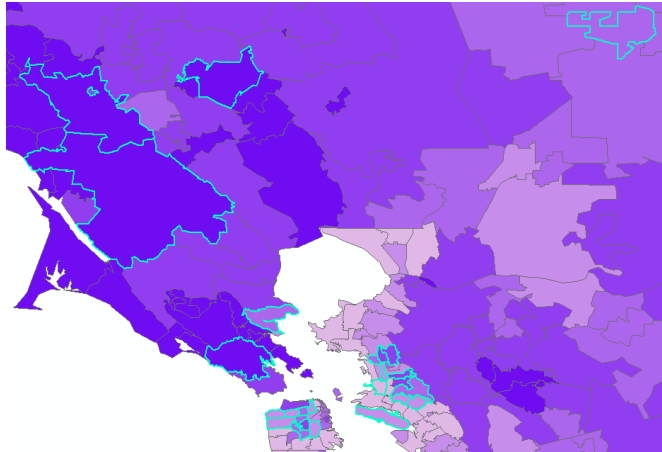
We selected zip codes with high numbers of Bernie Sanders donations (≥ 2592 , the highest two categories based on natural break for California, and ≥ 230 for Mississippi based on roughly the top 60%). We did this by selecting by attribute. We then looked at each indicator on a gradient separately, focusing on those highlighted Bernie zip codes.



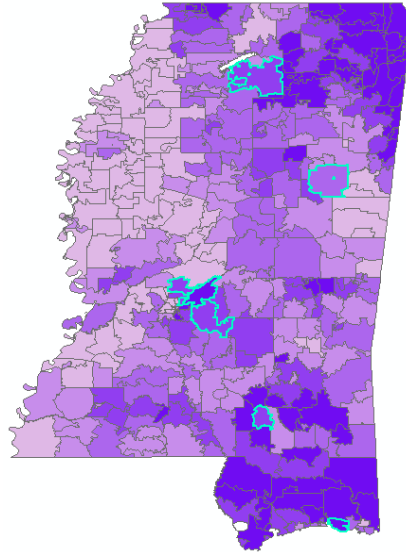
Results

Race

- CA_Race_White
WHITE / RACE_BASE
- 4.41% - 35.4%
 - 35.5% - 52.4%
 - 52.5% - 68.2%
 - 68.3% - 82%
 - 82.1% - 100%

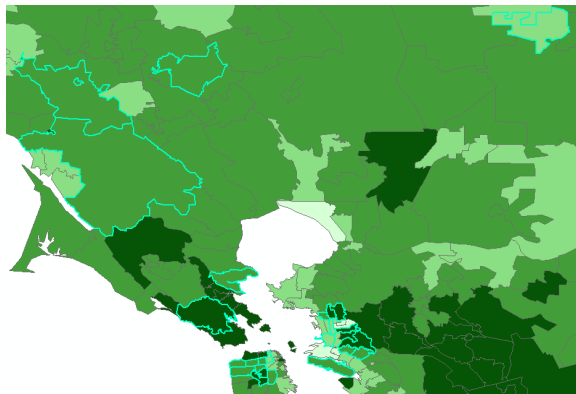


- White
WHITE / RACE_BASE
- 0% - 35.4%
 - 35.5% - 52.4%
 - 52.5% - 68.2%
 - 68.3% - 82%
 - 82.1% - 100%

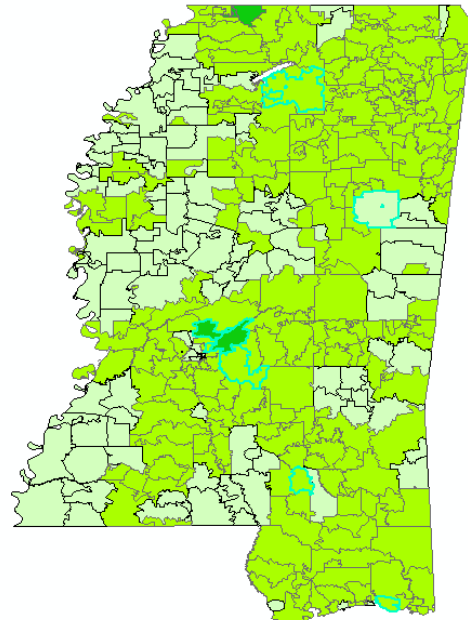


Income

- CA - Income (Median Disposable)
DI_MEDIAN
- \$0.00 - \$25,000.00
 - \$25,000.01 - \$50,000.00
 - \$50,000.01 - \$75,000.00
 - \$75,000.01 - \$200,001.00

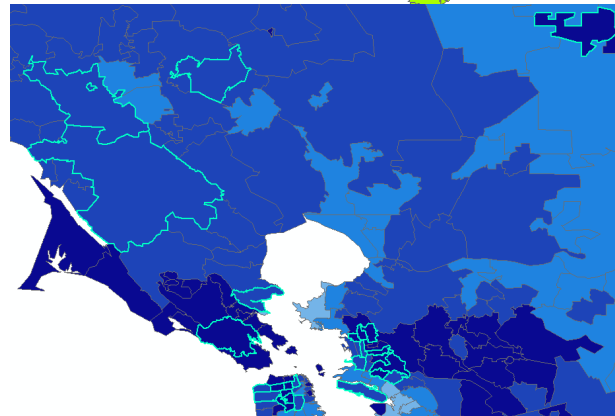


- Disposable Income
DI_MEDIAN
- \$0.00 - \$25,000.00
- \$25,000.01 - \$50,000.00
- \$50,000.01 - \$64,069.00

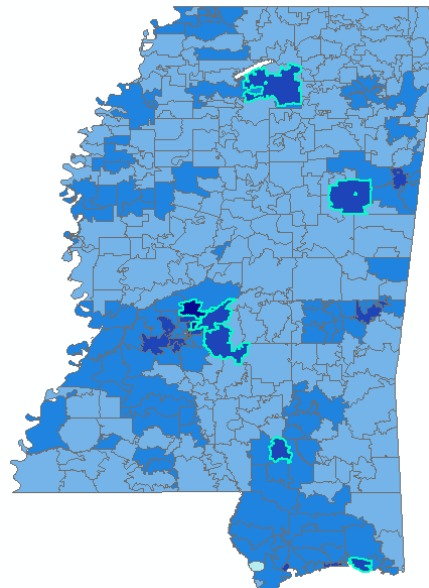


Education

- College
PCT_COLL
- 0% - 20%
- 20.01% - 40%
- 40.01% - 60%
- 60.01% - 80%
- 80.01% - 100%



- College
PCT_COLL
- 0% - 20%
- 20.1% - 40%
- 40.1% - 60%
- 60.1% - 80%
- 80.1% - 100%



Discussion

For all of our indicators we first selected the zip codes with a greater average number of donations (top 60%). We then looked at each indicator individually within those selected zip codes to examine trends in our indicators that may have contributed to this high number of donations. We chose to examine number of donations as opposed to the amount donated because we felt that the amount donated would be strongly correlated with income and would obscure other factors generating support. Given the importance of many small donations to the campaign, this is a better way to examine trends.

Demographic- Race

White Americans are the racial majority, while African Americans are the largest racial minority, followed by Hispanics. The percentage of white people in California is roughly 42%. The percentage of white people in Mississippi is roughly 58% (US Census Bureau, 2016).

California

To examine the demographic indicator of race, we looked at the zip codes with high numbers of donations overlaid with the percentage of white people per zip code. In this way, we grouped all non-white races together as a minority category to see the total percentage of minorities by looking at total percentage of white people. The zip codes with high numbers of donations in California tended to have more white people than the average percentage of California of 42%. So, Bernie zip codes in California were actually less racially diverse than average. This was contrary to our hypothesis that areas with many donations would also contain a greater than average percentage of minorities. This may be in part related to median disposable income, which tends to be higher among whites than other racial minorities (there are notably high percentages of minorities in the bottom income bracket).

Mississippi

The zip codes with high numbers of donations in Mississippi tended to have over 68% white people. Bernie counties in Mississippi were also less racially diverse than average for the state like California. This finding was also contrary to our hypothesis that areas with many donations would also contain a greater than average percentage of minorities.

Wealth- Median Disposable Income

The middle class, as defined by the U.S. Census Bureau, includes incomes ranging between \$25,000-\$75,000. Disposable (personal) income (DPI) is the amount of money that the earners have available for spending and saving after income taxes have been accounted for. The DPI is a gauge frequently used to monitor the economic state of the country (US Census Bureau).

California

Looking at the Bernie zip codes, they tended to range from lower middle class to upper middle class. This is in line with what we hypothesized. Donors must have a sufficient income that they feel they can afford to donate, yet compared to other campaigns, more people who are not very wealthy are donating.

Mississippi

Compared with California, Mississippi zip codes with high Bernie donations tended to be lower middle class. This makes sense, given that there are very few zip codes in Mississippi with high earnings to begin with.

Education-Highest Degree Obtained (% college)

We examined education by looking at the percent of people with college education. This includes people with associate's degrees, some college (including college dropouts and current students), bachelor's degrees, and graduate degrees.

California

Bernie zip codes tended to be in areas that had higher percentages of people with college education compared to most zip codes in the state. This is in line with our hypothesis. Many Bernie zip codes had over 60% of the population with some college education, which is well above the national average, even when those with some college are considered. The percentage of people who actually obtain bachelor's degrees in the United States is roughly 23% (US Census Bureau).

Mississippi

Mississippi Bernie zip codes also tended to contain more educated people compared to other zip codes in the state, which aligns with our hypothesis. There is a very apparent pattern on the map of education in Mississippi, where the highly educated zip codes are the ones with support for Bernie. All but two of the zip codes with 60% or more of the population having some level of college education were Bernie counties.

Age

Age would appear to be a strong indicator, but due to inconclusive data collected that comprised only of populations from age 0 - 26, we chose to omit this from our analysis. A pattern that was observed was that areas with the highest number of donations did not overlap with areas with the highest number of young eligible voters (age 17-26). A hypothesis for the younger demographic not donating, despite being a large support base for Bernie Sanders, is that the younger demographic does not have as much disposable income for donations. Their support is given in the form of social political support.

Conclusions

Hypotheses-Summary of Outcome

1. Areas that donate the highest amount will tend to have moderate/middle incomes (range according to US Census Bureau: \$25,000 - \$75,000).
 - Data agrees with our hypothesis
2. Zip codes with high numbers of donations will tend to be areas with relatively high percentages of people with college education.
 - Data agrees with our hypothesis
3. Zip codes with high numbers of donations will tend to have a high percentage of minorities compared to the state percentage.
 - Data disagrees with our hypothesis

This project explored the relations between social and economic factors and the effect that they had on the amount of monetary donations contributed to Bernie Sanders' election campaign. Data was taken from the U.S. Census Bureau. Donation amounts were grouped by zip codes, which was the smallest geographic unit available. Two states, California and Mississippi, were analyzed in-depth because these states contributed the highest and lowest amounts, respectively. Race, educational attainment, and disposable income were chosen as factors because we hypothesized that these factors significantly influenced voting choices.

Through our analysis, we found that Bernie zip codes tended to have high numbers of white, middle class, college educated people. The race indicator was the only one which was contrary to our hypothesis, and we think that income, which is tied to race, may be the primary explanatory variable for this finding.

These findings are useful for political campaign managers, both Democratic and Republican parties. Specifically, further analysis of this type would be useful for creating strategies to focus on areas that would likely provide the highest support to the presidential candidate's political platform, which is useful because certain states weigh heavier in the electoral votes. The general trends in demographic factors contributing to candidate support are insightful as well. For our current political system, understanding how to leverage the electoral college is the key to winning the presidential race.

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