



Electoral Districts and Competitiveness

INTRO

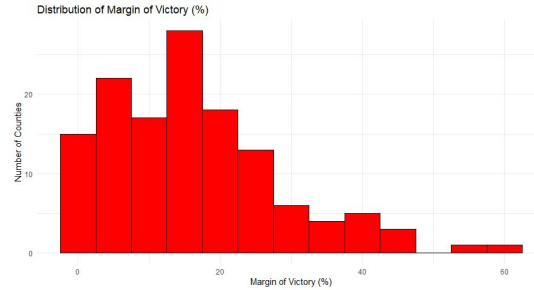
Elections are built around competition, but the nature of this competition can be easily manipulated by various factors. One such factor are electoral districts and their precincts. With the availability of election data, I aimed to see how electoral districting can impact the nature of electoral competitions. I hypothesize that voting districts with more precincts will experience more competitive elections. I will measure the competitiveness of elections by examining the margin of victory.

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THEORY & VARIABLES

My theory is that districts with more precincts experience more competitive elections. My dependent variable was the competitiveness of the election, measured in margin of victory (%). My independent variable was the number of precincts.



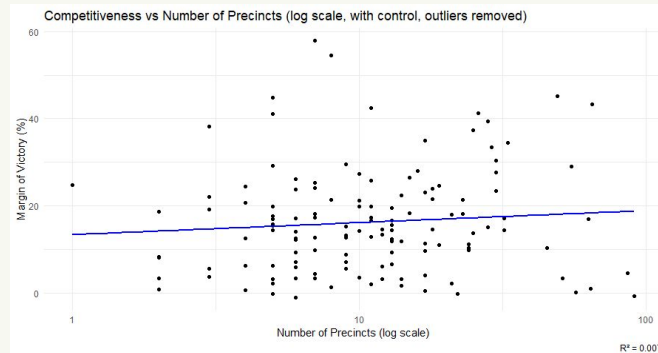
ANALYSIS

I decided to focus my research directly on the 2006 senate race in Virginia in order to narrow down my data, as gathering election and registration data on a broader area would have been a challenge. I used two datasets in my research process, both coming from the Virginia Department of Elections. My first dataset allowed me to view how votes were cast in the senate race per city/county in Virginia. My second dataset allowed me to see how many precincts, active, inactive, and total registered voters there were per county/city. Once I merged these two datasets using r I was able to examine whether cities/counties with more precincts experience more competitive elections.

As seen in the histogram on the left, counties/cities did not typically experience competitive elections. However, the bars on the histogram representing more competitive results could indicate that other factors are influencing election competitiveness.

CONCLUSION

Overall my research did not provide results to support my hypothesis that districts with more precincts experience more competitive elections. There is a clear variation in competitiveness, however, the number of precincts per county was not correlated to this variation. Other factors such as population size, average income, rural/urban population, or average education level could play a larger role in deciding electoral competitiveness. A limitation of my research includes my inability to include these other controls, as I was limited by my data and time. For future studies, exploring more recent and varied types of elections could provide different results and allow one to observe if there is change in electoral competitiveness over time.



ANALYSIS CONT

The figure on the left plots the relationship between the number of precincts per county/city and the margin of victory (%) in each county/cities 2006 senate race. The x-axis uses a log scale to account for the variation in precinct counts across the counties. The model controlled for the proportion of active voters per county to account for variation in both voter engagement and voter registration. The blue regression line shows the trend between the amount of precincts and competitiveness. The low r-squared value (0.007) and nearly horizontal regression line both indicate no strong relationship between the number of precincts and electoral competitiveness.