How has Democratic vote share in US Presidential Elections changed across counties from 2000 to 2016, and do these trends point to widening urban–rural polarization?
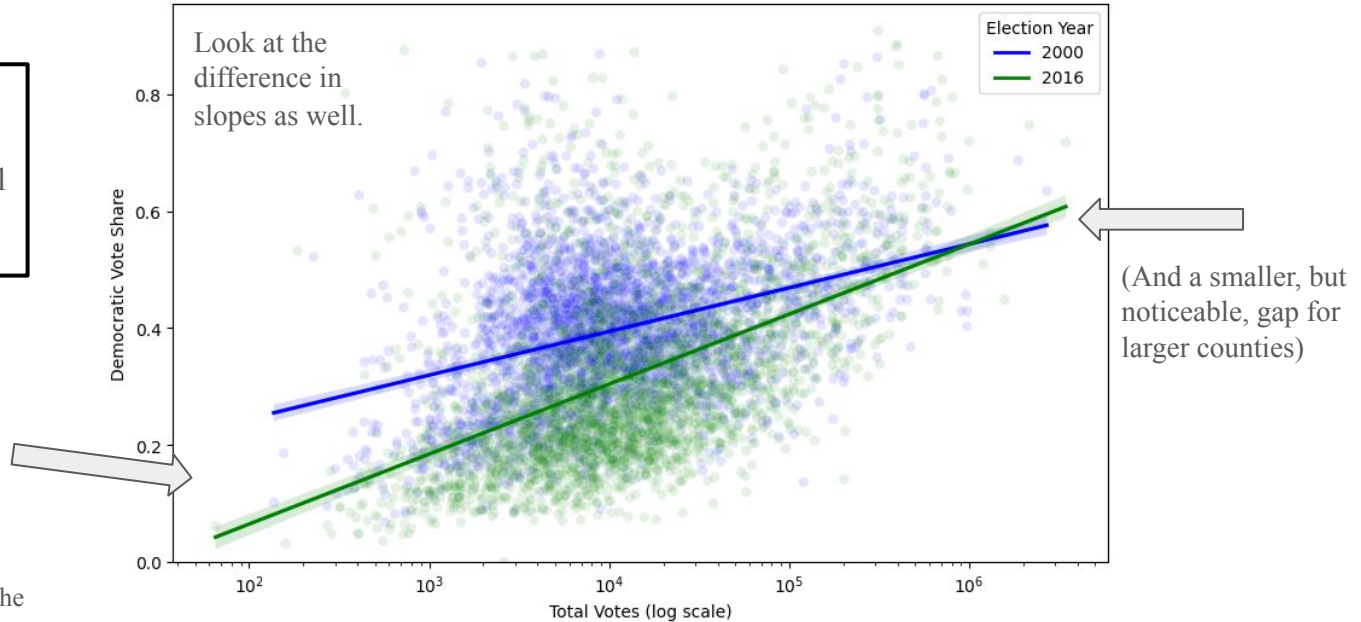
Nick Sobolewski, Rylie Teets

Results

Conclusion: Based on the dramatic difference in slopes and our near zero P-values, our evidence suggests that the 2016 election signaled an increase in urban-rural polarization.

Democratic Share = 0.0955 + 0.0325 (log total votes) - 0.2697 (year) + 0.0195 (log total votes * year)

Look at the difference in slopes as well.

(And a smaller, but noticeable, gap for larger counties)

Notice the huge difference in Democratic Vote Share for smaller counties

We define "urban-rural polarization" as the relationship between Democratic vote share and total votes per county, and how this relationship has changed over time.