Political Movements of the 21st Century

This project has been in the works for a while now, but it was originally inspired by this article from 538: <https://fivethirtyeight.com/features/purple-america-has-all-but-disappeared/>. The basic conclusion was that, at a county level, US elections are much more polarized than they used to be. Far more counties were landslide victories in 2012 and 2016 than in 1992 and 1996. An open question from the report was what is causing these changes. Are voters getting more polarized? Is turnout getting more polarized? Or are voters sorting themselves into polarized clusters? I wanted to investigate this third possibility by looking at county-level migration patterns aggregated by presidential vote shares. The basic idea is to compare the Democratic or Republican vote share of the county someone moves from to the vote share of the county they move to. I will first describe the data I have, then the methods I used to make this comparison, and conclude with a discussion of possible extensions to this analysis.

The election data is fairly straightforward. I use the presidential vote at the county level available here: XX. The presidential vote is a better comparison than a local election (of senators or representatives) because each county is choosing between the same two candidates and I don’t need to worry about incumbency status changing across counties. This choice is also consistent with the 538 article that inspired this analysis. I only use the two party vote, ignoring third parties who play a very minor role in presidential elections.

The migration data come from the American Community Survey here: https://www.census.gov/topics/population/migration/guidance/county-to-county-migration-flows.html. They are five-year snapshots of county-to-county migration flows starting in 2005. I use 2008-2012 migration because the election data I will use are for the 2008 and 2012 elections. The Census offers a few different cuts of the data. They have migration flows by occupation, work status (full-time vs part-time), employment status (employed vs unemployed), and by slightly larger geographic groupings. I primarily use the total data but will note potential uses of the more detailed data in a later section.[[1]](#footnote-1)

One obvious limitation is that I do not know if the people moving are the same as the people voting. It could be that the people who leave a heavily Republican count are Democrats. I think that people don’t consider politics very often or very significantly when they do move, but I would not be surprised if on average the people leaving a county had different political views than those who stay and vote in that county. One could try and address this problem by using the more detailed cuts of the migration data to try and identify people moving for reasons that could be reasonably considered exogenous to their political beliefs, but even that method wouldn’t be perfect. The ultimate question I had is why are counties getting more politically polarized, and the answer to that question should include people moving for political reasons.

The first comparison I did was to make some transition matrices (Tables 1 and 2).[[2]](#footnote-2) For those who are unfamiliar, a transition matrix shows the probability of transitioning to each of the columns conditional on starting in a given row. For example, the top row in Table 1 shows the probabilities that someone who is moving from a county with a democratic vote share between 0% and 12.5% moves to a county with the given column vote shares. So of the people moving from a county with a slight Republican lean (a democratic vote share of 37.5% to 50%, row 4), 32.7% of them moved to a county with the same slight Republican lean and 32.5% of them moved to a county with a slight democratic lean.

An interesting slice of Table 1 is the diagonal entries, the probability that a migrant stays in a county with similar partisan leanings. The diagonal entries are, in general, not large relative to the other entries, suggesting that people do move to counties with different political views than their own. However, it looks like people tend to move to counties with the same majority. Table 2 assesses this phenomenon by aggregating the columns into simply which party got a majority. It confirms that migration tends to happen between counties with the same political majority.

Figure 1 shows a scatter plot of each county’s democratic vote percentage on the x-axis and their average destination democratic vote share on the y-axis. The average destination vote share for a county is the average democratic share of all other counties weighted by how many people migrated there from the given county. The best-fit line from a regression is plotted along with the line y = x. If people were moving to counties with the same partisan lean, I would expect the slope of the regression line to also be 1 with an intercept of 0. However, the slope is significantly lower than one (significant well below the 1% level for those who care) and the intercept is greater than zero, again suggesting that people are moving towards more politically moderate counties.

The transition matrices and scatter plots are useful summaries, but they miss the geographic distribution of these movements. Figures 2 through 4 visualize the county-level results. Figure 2 shows the democratic vote share of each county, Figure 3 shows the average destination democratic vote share, and Figure 4 shows the average difference between destination and origination democratic vote share (essentially Figure 3 minus Figure 2). The coloring was done by splitting the counties above and below 50% for Figures 2 and 3 or 0% in Figure 4 into four quantiles each (the number of dark red and light red counties is the same, but the number of dark red and dark blue counties is not the same). Alaska and U.S. islands are not shown.

Figure 3 generally shows an expansion of blue counties, particularly in the upper Mid-West, from Figure 2. This is likely people moving to the more liberal Twin Cities and Chicago. The same phenomenon is observed on the coasts. In the South, the blue areas generally shrink from Figure 2 to Figure 3. In particular, it looks like counties along the Mississippi river and Appalachian Mountains show migration towards more Republican counties. These probably reflect movement from heavily African-American and democratic counties to the Southern cities that lean more republican. My guess is that the counties that change from red to blue or from blue to red all tend to represent movement towards local urban centers that differ in political lean from the more rural surrounding counties.

Comparing Figures 2 and 3 confirms that most counties have an average destination lean towards the same party that won a majority in the county (Figures 2 and 3 show most counties keeping their original color of red or blue). However, that average destination lean is in general more liberal than the county of origin’s lean (Figure 4 is nearly all blue). Interestingly, the redder areas of Figure 3 all seem to be the darkest blue areas from Figure 2 (particularly the West Coast in California). This is likely because those counties are so liberal that it is quite hard to even find a county that is more liberal to move to.

Overall, I think that this data indicates that migrations could explain the increasing number of polarized counties, but it does depend on the above concern about which people choose to move. People are generally moving to areas more centrist than where they are moving from, and if those people who move are slightly more centrist than the people who do not move, the counties people leave are becoming more homogenous and more polarized. The destination counties are fewer and more densely populated, so even if some of them become less partisan, the majority of counties will become more partisan. Certainly migration isn’t the only piece of this puzzle, but it is a potential cause and worth investigating.

Of course, there are other cuts of these data, and I may return to them later. One choice I made was that I focused on out-migration (comparing the places people are going to the places they are from), rather than in-migration (comparing the places people are coming from to where they are going). I think that analysis would likely require a more focused look at the higher population counties because they will be much more common among destination counties. To put it another way, nearly every county has out-migration, but not all counties have in-migration. I focused on out-migration because I haven’t thought of a good way to identify and/or visualize those counties, but I think that is an interesting topic to explore, too.

1. An interesting fact I learned was that Alaska does not have counties, so the vote data and migration data didn’t use the same geographic divisions. Consequently, Alaska is not included in any analysis. [↑](#footnote-ref-1)
2. Code and data to reproduce all figures is available on my GitHub page. [↑](#footnote-ref-2)