# A Response to Brams and Kilgour

The electoral college is often criticized because of the focus on competitive “swing states”.  A relative few states are pivotal, while a large majority of states have seemingly no power to determine the president.  This view was recently repudiated by Bram's and Kilgour (2017) who argue that non-competitive states shape the contest.  They focus on four elections (2000, 2004, 2008, and 2012).  We extend their analysis to include the 38 presidential elections in the modern two-party.  Additionally, we offer a simple alternative measure that is highly predictive of the final Electoral College percentage.  Presidential elections have long term trends, and electoral strategies of campaigns are, at least in part, determined by the results of the previous election.  We model non-competitive states in two ways; one, as Bram's and Kilgour do, using a *retrospective criterion*, and second, using an *ex ante criterion*, the results from previous elections.

In their article, Bram's and Kilgour (2017) offer a compelling argument that non-competitive states can help shape a presidential general election.  Voters in non-competitive states are not pivotal; that is, their vote is very unlikely to change the outcome of the election.  The traditional rational choice approaches to electoral behavior show that voters are less likely to cast ballots in non-competitive states (CITE), candidates less likely to spend campaign resources in those states and make personal appearances (CITE), and … Bram's and Kilgour argue that non-competitive states matter in ways previous literature overlooked, i.e., they structure the contest and either limit or extend the paths to victory for respective campaigns.

The paper will proceed in the following manner; first, we will

**Define new variable**

If indeed non-competitive states help to shape electoral contests, we expect that a simple measure would capture most of the variation in electoral outcomes.  We propose a measure of competition that is derived from Bram's and Kilgour (2017), but is more parsimonious.  First, we define the set of states that are competitive, Cj= (s\_1, s\_2, s\_3, ..., sn).  These states each have an electoral value, s1 = sec, such that the sum of states both in this set and in the set not included equal the total Electoral College, ECj =sum{Cec}+ sum{Nec}.  If the sum of set of competitive states’ electoral votes is more than half the total electoral votes, Cec > ½ sum{ECj}, we can say that there is is some structure to the Electoral Contest such that non-competitive states can influence the strategic nature of campaigns.  Each candidate then has a set of states that are not competitive in their favor, where the sum of the two sets’ electoral value is equal to N; N = DN+ RN.  We define our variable of interest as the difference between the two-candidate’s non-competitive electoral totals, divided by the total votes in the contest, *Safe Advantage* = DN - RN/EC.  This measure is standardized across elections, providing a comparable measure.  The intuition is simple, when one party has a big advantage in non-competitive electoral votes, they will be more likely to win the election.  Bram's and Kilgour show this intuition by examining the number of winning coalitions possible given the set of competitive states, and determining what percentage each party would be expected to win under the assumption of independence and equal probability that either party will win.  Our proposed a measure that requires neither assumption.  The most important feature of our variable is that when the percentage of non-competitive electors differs for each party, i.e. DN/EC +- RN/EC, the candidate that has a bigger advantage in non-competitive electors will have more strategies to win the electoral contest.  These additional strategies correspond to a higher likelihood of winning.  We first show this by running a logit model, where the dependent variable is defined as Victory = 1 when the Democratic candidate wins and Victory = 0 when the Republican candidate wins.

**COULD I USE THE RESULTS OF THE LOGIT REGRESSION TO GET PROBABILITY OF VICTORY IN FUTURE ELECTION, AND USE THAT TO DETERMINE COMPETITIVENESS? I’M THINKING MORE BROADLY THEN DESCRIBED ABOVE, IE USE T AS THE DEPENDENT VARIABLE AND T-1 AS INDEPENDENT VARIABLE, FOR EACH ELECTION EXCEPT 1868.** Additionally, we regression our Safe Advantage variable on a continuous dependent variable, where the margin of electoral victory is calculated as Electoral Margin =DEMEC/EC - 0.50, such that the most evenly split Electoral victory equals 0 (an example would be the election of 1876, where Hayes won by 1 electoral vote, or (185/369)-0.50=0.001, and a Democratic advantages being negative and Republican being positive, with electoral shutouts equal to -1 and 1, respectably.  We also control for the total proportion of electors that are competitive in each election.  This control is important because it indicates the magnitude of influence the Safe Advantage measure has.  For instance, if the Democratic candidate has a large electoral lead in non-competitive states, but those leads only represent a small percentage of the whole electors, the Republican candidate will have many more electoral paths to victory than if the Democratic candidate has the same advantage but no states are competitive, i.e. the Democratic candidate has already won. That gives us the equation *Electoral Margin* = \alpha + \beta\_1{Safe\ Advantage} + \beta\_2{Proportion\ Competitive} + \epsilon.

## Replication

**Remark about the errors found in Bram's and Kilgour, and the corrections made to generate my new data**

<https://www.dropbox.com/s/mrkpky7exgnuhbd/Non_Competitive_Electoral_Outcomes.pdf?dl=0>

## REGRESSION ELECTION RESULTS ON WINNINGNESS, FRAGILITY, AND VULNERABILITY, THEN COMPARE TO DIFFERENCE IN NC

## Sensitivity analysis where we expand the definition of competitive

In Brams and Kilgour, they discuss the necessity for their assumption of independence to limit the definition of competitiveness to +- 3\%.  For their analysis, the assumption of independence needs to hold so that setting the probability of victory for either party at 50% is realistic.  That is, a state where one party wins by 6% is outside the margin of error, and therefore the probability *is not* 50%.  For our purposes, this assumption need not hold, and our definition of competitive can, and we will argue, *should* be larger than +-3%.  We make no assumption about the probability that a competitive state will be won by either party, but instead are only interested in non-competitive states, which we will assume have a 0% probability of switching to the other candidate.  We treat competitive states as unknown and random with no probability distribution.  In fact, the only way they enter our analysis is through the independent variable that controls for the proportion of the electors that are not-competitive (or 1 -competitive).  Naturally, when a larger proportion of the total electors are competitive, the outcome of the election is less likely.  Because we only have *retrospective* evaluations of what states are competitive, we can expand the definition of competitive to include more states so that we are not selecting on the dependent variable.  In the extreme case where all states are competitive, we would be unable to make any predictions.  We can, however, make predictions if even one state is not competitive, though the estimates will have lots of uncertainty.  The most precise predictions will happen when all states are not-competitive, because we then will have the outcome predetermined.  While every election has featured at least two candidates, there are plenty of examples in US history where the outcome was certain, even if media chose to report otherwise.  Take 1984 for instance, where Ronald Reagan won 49 out of 51 states (including Washington D.C.)[[1]](#footnote-1)

# References

Election 1984. (1984). *Editorial research reports 1984* (Vol. II). Washington, DC: CQ Press. Retrieved from <http://library.cqpress.com/cqresearcher/cqresrre1984091400>

1. Norman Ornstein, writing before the election, said “Incumbent presidents don’t often lose, particularly presidents presiding over 6% real growth and low or non-existent inflation” quoted in CQPress, http://library.cqpress.com/cqresearcher/document.php?id=cqresrre1984091400}. [↑](#footnote-ref-1)