UC Davis
UC Davis Previously Published Works
Title
Constitutional Design and 2014 Senate Election Outcomes
Permalink
https://escholarship.org/uc/item/8kx5k8zk
Journal
The Forum, 12(4)
ISSN
1540-8884
Authors
Highton, Benjamin
McGhee, Eric
Sides, John
Publication Date
2014-12-01
DOI
10.1515/for-2014-5029
Peer reviewed

# Benjamin Highton*, Eric McGhee and John Sides Constitutional Design and 2014 Senate Election Outcomes 


#### Abstract

A common observation about the 2014 Senate elections is that one advantage the Republicans had was that the set of states holding elections tilted Republican in partisanship. In this article, we quantify that advantage and demonstrate that the constitutional requirements of equality for state representation in the Senate plus the division of seats into three classes were critical elements in the Republicans' pickup of nine seats and retaking partisan control. Markedly less important was the national Republican partisan tide.


## Introduction

The US Constitution requires that states receive equal representation in the Senate, irrespective of population size. The Constitution also specifies a Senate term length of 6 years and the division of Senate seats into 3 classes so that one third of the seats come up for election every 2 years. ${ }^{1}$ The electoral consequences of these constitutional provisions appear to have been substantially more important for explaining the Republicans’ pickup of nine seats and takeover of party control of the Senate than the national partisan tide in their favor.

1 To begin the process, "[a]t the start of the first session of Congress in 1789, the senators were divided into the three classes by lot with same-state senators assigned to separate groups. The first class' term expired in 2 years, the second in 4 years, and the third in 6 years. Subsequent elections to all classes were for the full 6-year Senate term" (https://www.senate.gov/artandhistory/history/common/briefing/Constitution_Senate.htm).

[^0]
## State (not Individual) Equality in Representation

As a measure of partisan composition, it is common to use the presidential vote to differentiate Democratic from Republican electoral constituencies (e.g., Ansolabehere, Snyder, and Stewart 2001; Canes-Wrone, Brady, and Cogan 2002; Levendusky, Pope, and Jackman 2008; Gailmard and Jenkins 2009; Bartels, Clinton, and Geer 2013). Relying on presidential vote shares has the advantage that "every voter in (almost) every district confronts the same choice in (almost) every presidential election; in that sense, at least, the measure is comparable across districts" (Bartels, Clinton, and Geer 2013, p. 9). In 2012, President Obama received $51.1 \%$ of the national vote and Mitt Romney received 47.2\% (Cook 2013). The Democratic share of the two-party vote was therefore $52 \% .^{2}$

The national vote, of course, gives equal weight to every individual's vote. Yet if equal weight is given to states instead of to individuals, a shift toward the Republicans becomes evident. Weighting the presidential vote in every state equally, the average state Democratic share of the two-party vote was $49.2 \%$, an almost three-point swing from the national outcome. If every state was a microcosm of the country, or if for every Texas there was a New York, and for every Wyoming there was a Vermont, then the average state presidential vote would reflect the national vote. But it does not. The typical state is less Democratic and more Republican than the country overall. Thus in contemporary American politics, an institution like the Senate that treats states - rather than individuals - equally will benefit the Republicans at the expense of the Democrats.

To make comparisons over time, we computed the "normalized" presidential vote for every state in each presidential election. This quantity is the difference between the Democratic share of the vote in each state and the national Democratic share of the vote. For example, the Democratic share of the two-party vote in Indiana in 1996 was $46.8 \%$, and the national Democratic vote was $54.7 \%$, producing a normalized presidential vote for Indiana of $-7.9 \%$ (46.8-54.7=-7.9). One way to show how equality for the states produces deviations from the national partisan balance is by graphing the average state normalized vote over time. A second way is by graphing the median state normalized vote over time. Both are shown in Figure 1.

When the average/median state vote is more Democratic than the nation overall, that is, the normalized presidential vote is positive, there is a Democratic

[^1]

Figure 1 Normalized Democratic Presidential Vote over Time.
"bias" due to equal state representation in the Senate. When the average/median state is less Democratic than the national overall - the normalized presidential vote is instead negative - there is a Republican "bias" due to equal state representation. Figure 1 makes clear that since the adoption of direct election of Senators in 1913 there has been a long-term trend away from Democratic bias and toward Republican bias.

Judging by state means, there was a significant Democratic bias of about five percentage points in the first decades of the twentieth century. Over time, this has given way to about a two percentage-point Republican bias in recent decades. The trend for state medians is less pronounced, principally due to a smaller apparent Democratic bias in the early decades. ${ }^{3}$ Since the 1980s, the Republicans have benefited from a bias of about two percentage-points in both measures. For this bias to have a partisan electoral effect, all that is required is that the partisan leanings of states (as measured by the state presidential vote) influence Senate outcomes, which we will demonstrate shortly.

3 The explanation for the difference between the two measures in the early-to-mid twentieth century lies in the fact that the former Confederate states were outliers with very high rates of Democratic presidential voting, thereby pulling the average state presidential vote in the Democratic direction. This phenomenon matters less for the median state presidential vote.

## Class Bias in Senate Seats

To fit Senate seats with 6-year terms onto the 2-year national election cycle, elections for one third - one "class" - of the seats are held every 2 years. Every state has two senate seats, and each seat is in one of three classes. For instance, California's seats are in classes 1 and 3. Alabama's seats are in classes 2 and 3. Mississippi's seats are in classes 1 and 2. And so on. Every national election year, one class of seats is up for election. In 2014, the 33 class 2 seats were up. (There were also three special elections to fill open seats from other classes, for a total of 36 Senate elections in 2014.)

It turns out that the class 2 seats are notably more Republican than the other two classes, providing another advantage to the Republicans. Table 1 reports the relevant figures. Based on the 2012 presidential election, the average normalized presidential vote for the 33 class 2 seats favors the Republicans by five percentage points, and the median favors them by 7.3 points. These are the largest figures for any of the classes. In addition, the partisan balance across the three states that held special elections in 2014 also favored the Republicans. One of the three was in Hawaii, a strongly Democratic state. But the other two were in states that are safely Republican: South Carolina and Oklahoma.

The Republican bias in class 2 Senate states has developed over time, as shown in Figures 2 and 3. The figures show the average (Figure 2) and median (Figure 3) normalized presidential vote for all three classes of states since early in the twentieth century. Clearly, what is true in contemporary times has not always been the case. Class 2 states were once biased in favor of the Democrats, and this advantage has steadily eroded with the passage of time and produced the current level of Republican bias. The primary explanation for the why class 2 seats were once the most biased in favor of the Democrats and are now the most biased in

Table 1 Normalized Democratic Presidential Vote by Senate Seat Class.

| Senate |  | Normalized Presidential Vote |
| :--- | ---: | ---: |
| Seat Class | Average | Median |
| 1 | -0.5 | +1.4 |
| 2 | -5.0 | -7.3 |
| 3 | -3.0 | -2.3 |

Cell entries are the average/median normalized 2012 presidential vote for the states with the designated seat classes. There are 33,33 , and 34 states, with class 1,2 , and 3 seats, respectively.


Figure 2 Mean Normalized Democratic Presidential Vote by Senate Seat Class over Time.


Figure 3 Median Normalized Democratic Presidential Vote by Senate Seat Class over Time.
favor of the Republicans lies in the association between seat classes and region. Ten of the 11 former Confederate states have class 2 seats, including all six that have changed the most over time (Alabama, Georgia, Louisiana, Mississippi, South Carolina, and Texas).

## Electoral Implications in 2014

To estimate the electoral effects of the Republican bias in state electorate partisanship, we begin with a simple OLS model of Senate electoral outcomes in 2014. The dependent variable is the Democratic share of the two-party Senate vote, and the independent variables are incumbency and state partisanship. ${ }^{4}$ Table 2 reports the results. The incumbent advantage is estimated at 4.2 percentage points. The estimated intercept (48.5) is the predicted vote for a hypothetical election where the value of incumbency is 0 (indicating an open seat) and the value of state partisanship is 0 (indicating a state whose partisan balance is equal to the nation overall).

The difference between this value and $50 \%$ is a reasonable estimate of the national partisan tide (Bartels 1998). In an election year with no tide, one would expect an intercept of 50 . In a year with a Democratic tide the intercept would be $>50$. And in a year with a Republican tide, the intercept would be $<50$, as it is for 2014. With an estimated intercept of 48.5, the estimated magnitude of the Republican tide is 1.5 percentage points of the vote.

The estimated effect of state partisanship on 2014 Senate election outcomes is 0.84 which means that 10 percentage-points of the normalized presidential

Table 2 Parameter Estimates of the 2014 Senate Election Outcomes.

| Variable | Estimate <br> (standard error) |
| :--- | ---: |
| Incumbency | 4.2 |
| State Partisanship | $(1.3)$ |
| Intercept | 0.84 |
|  | $(0.11)$ |
| SEE | 48.5 |
| Adjusted R | $(1.1)$ |
| N | 5.4 |
|  | 0.81 |

[^2]vote translated into an estimated 8.4 points of the Senate vote. With values of the normalized presidential vote ranging from a low for Wyoming ( -23 ) to a high for Hawaii (20), there would be a predicted difference of 36 percentage points of the vote between the two states on the basis of this variable alone.

If the states holding Senate elections in 2014 were evenly balanced in terms of state partisanship, then although state partisanship exerted a sizable effect on the cross-sectional variation in outcomes, it would not help explain the overall outcome, in which Republicans picked up nine seats and took control of the Senate. But as we have discussed, there was a sizable Republican advantage with respect to state partisanship in the 2014 elections. To estimate the contribution of this advantage to the overall outcome, we used the regression estimates in Table 1 to simulate 500 elections for each of the 36 seats up in 2014.

Before simulating the outcomes, we first adjusted the values of state partisanship. Across the 36 elections, the average normalized presidential vote was -4.8 and the median was $-7.3 .{ }^{5}$ To be conservative, we focus on the average presidential vote because it is smaller in magnitude than the median and add 4.8 percentage points to the value of the normalized presidential vote for each election. This has the effect of shifting the distribution of the state presidential vote in the Democratic direction and making the overall average for the normalized presidential vote equal to zero.

The results of the simulations are reported in Table 3. Overall, the Democrats won just 12 of the 36 elections. With their 34 seats not up in 2014, they are left with just 46 total seats and minority status in the Senate. However, when we remove the Republican advantage in state partisanship, the predicted number of Democratic seats increases to 50 , with $90 \%$ of the simulations giving them between

Table 3 Predicted Party Seats and Control of the Senate under Different Scenarios.

| Scenario | Democratic seats <br> [90\% confidence interval] | Percent chance of <br> Democratic control |
| :--- | ---: | ---: |
| Actual outcome | 46 | $0 \%$ |
| No net Republican advantage | 50 | $69 \%$ |
| in state partisanship | $[48-53]$ |  |
| No national Republican tide | 48 |  |
|  | $[45-50]$ | $18 \%$ |

5 The value of -4.8 differs slightly from the value of -5.0 in Table 1 due to the inclusion of the three non-class 2 seats that were also up for election in 2014.

48 and 53 seats. ${ }^{6}$ Moreover, in $69 \%$ of the simulations, the Democrats won enough elections to maintain control of the Senate. Clearly, in the absence of the Republican bias in state partisanship, the Democrats' electoral position would have been substantially better.

In contrast, the contribution of the national Republican tide in 2014 was notably more modest. To estimate its effect, we conducted another set of simulations. This time, rather than removing the effect of state partisanship, we removed the effect of the national tide by setting the intercept from the regression model to 50.0 instead of 48.5. This has the effect of adding 1.5 percentage points to the Democratic vote in each election. Eliminating the national Republican tide does improve things for the Democrats, raising their predicted number of seats to 48 from 46 and giving them an $18 \%$ chance of winning at least 50 to gain party control. But in comparison to the effects of bias in state partisanship, these effects are considerably smaller.

## Conclusion

The outcome of the 2014 midterm elections decisively brought the Republicans back to power in the Senate. Our analysis suggests that the constitutional requirements of equality in state representation in the Senate and the division of seats into three classes were critical elements in the Republican takeover. Markedly less important was the national Republican partisan tide. While we cannot say with certainty what would have happened in the absence of a Republican state partisanship advantage and a national partisan tide, our estimates indicate that the Democrats would have been a good bet to maintain control of the Senate had there been no Republican advantage in state partisanship. The same cannot be said for the absence of a national tide.

Looking forward, class 3 states will be holding senate elections in 2016. On the one hand, the Democrats can be pleased that the bias in state partisanship they faced in 2014 will not be as great. On the other hand, the Republicans can be pleased that overall, the class 3 states are still biased in their favor. The average normalized presidential vote in class 3 seats favors the Republicans by 3.0 percentage points (compared to 5.0 in class 2 seats), and the median favors them by 2.3 points (compared to 7.3 in class 2 seats). The Constitutional influences present in 2014 will thus be diminished, but not eliminated.

6 Because the Vice President is a Democrat and would cast tie breaking votes in the Senate, the Democrats would maintain control of the Senate if they controlled at least 50 seats after the elections. The Republicans needed to control at least 51.

## References

Ansolabehere, Stephen, James M. Snyder, Jr., and Charles Stewart III. 2001. "Candidate Positioning in U.S. House Elections." American Journal of Political Science 45 (1): 136-159.
Bartels, Larry M. 1998. "Electoral Continuity and Change, 1868-1996." Electoral Studies 17 (3): 301-326.
Bartels, Larry M., Joshua D. Clinton, and John G. Geer. 2013. "Representation." Center for the Study of Democratic Institutions, Vanderbilt University.
Canes-Wrone, Brandice, David W. Brady, and John F. Cogan. 2002. "Out of Step, Out of Office: Electoral Accountability and House Members' Voting." American Political Science Review 96 (1): 127-140.
Cook, Rhodes. 2013. America Votes 30. Thousand Oaks, CA: SAGE Publications, Inc.
Gailmard, Sean, and Jeffery A. Jenkins. 2009. "Agency Problems, the 17th Amendment, and Representation in the Senate." American Journal of Political Science 53 (2): 324-342.
Gelman, Andrew, and Gary King. 1994. "A Unified Method of Evaluating Electoral Systems and Redistricting Plans." American Journal of Political Science 38 (2): 514-544.
Levendusky, Matthew S., Jeremy C. Pope, and Simon D. Jackman. 2008. "Measuring DistrictLevel Partisanship with Implications for the Analysis of U.S. Elections." Journal of Politics 70 (3): 736-753.

Benjamin Highton is a political science professor at the University of California, Davis. Previously he was an APSA Congressional Fellow. His research and teaching interests include American national politics, political behavior, elections, public opinion, and research methods.

Eric McGhee is a research fellow at the Public Policy Institute of California (PPIC) with expertise in elections, legislative behavior, political participation, political parties and party polarization. His publications include Open Primaries and Voter Turnout in Primary Elections. He is a former APSA Congressional Fellow.

John Sides is a political science professor at George Washington University. His work focuses on political behavior in American and comparative politics. He is the author, with Lynn Vavreck, of The Gamble: Choice and Chance in the 2012 Election.


[^0]:    *Corresponding author: Benjamin Highton, Department of Political Science, University of California, Davis, CA 95616-8682, USA, e-mail: bhighton@ucdavis.edu
    Eric McGhee: Public Policy Institute of California, 500 Washington Street, Suite 600, San Francisco, CA 94111, USA
    John Sides: Department of Political Science, George Washington University, 2115 G Street NW, Suite 440, Washington, DC 20052, USA

[^1]:    2 Throughout, when we refer to the Democratic presidential vote we mean the Democratic share of the major party vote. Likewise for the Republican vote.

[^2]:    4 Incumbency is coded in the usual way: - 1 (Republican incumbent), 0 (open seat), 1 (Democratic incumbent). State partisanship is the normalized state Democratic share of the two-party presidential vote in 2012. The Democrats did not have a candidate in the Alabama Senate election. Following Gelman and King (1994) we set the Democratic vote share to $25 \%$ rather than either setting it to $100 \%$ or excluding it from the analysis. For the Kansas Senate election, we treat the independent candidate (Greg Orman) as the Democrat because the original Democratic candidate dropped out as Orman's standing rose in the polls.

