Evaluating the Impact of Redistricting on
District Homogeneity, Political Competition, and Political Extremism
in the U.S. House of Representatives, 1962-2002

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ABSTRACT

We investigate the link between the increased political homogeneity of U.S. House districts over the 1962-2002 period, and the well-known increase in political extremism that occurred over that same time period (the “emptying out of the center”). We examine the central mechanism through which this link is posited to act: increased district homogeneity leading to reduced district competitiveness leading, in turn, to fewer centrist candidates. We argue that this argument, now accepted as gospel in op-ed pages throughout the country, has been much overstated. While district homogeneity has risen (using the Koetzle, 1998 measure), and there is a clear link between increased district homogeneity and declining district competitiveness, the standard Downsian story in which political competitiveness can be expected to generate centrist politics is far too simplistic. In fact, for Republicans there is no relationship whatsoever between district competition and ideological extremism (using D-Nominate scores), and the relationship for Democrats has changed sign over the course of four decades and the magnitude of the effect has never been that large. Also, a reduction in mean district homogeneity is not the only reason for the observed decline in political competitiveness; realigning trends also have a lot to do with the decline in competitiveness. Both Democrats and Republicans are now more closely tethered to their national party images than was true in the past, thus making it harder for a candidate of the party misaligned with the district median to win an election. Moreover, polarizing trends are also clearly visible in the Senate, where there has been no change in the political homogeneity of states, although there has been a slight decrease in number of competitive Senate contests over this period. Thus, blaming redistricting for the bad things (reduced competitiveness, increased polarization and vitriol) recently happening in the U.S. House of Representatives is very much an overstatement.
The increasing partisan use of redistricting means that there are fewer swing districts in the House, thus fewer lawmakers in the middle.


Language much like the quote above could be found in op-ed columns throughout the U.S. since the 1990s. It is now part of the common wisdom that the steady decline in the number of competitive seats -- a decline commonly linked to changes in redistricting practices -- is one of the major reasons why U.S. politics has become more polarized.

While it is clear that Congress has become more polarized (see Rohde 1991; Jacobson 2000), the underlying causal factors for this polarization are much less clear. The causal path that is most often proposed to link polarization and redistricting is something like the following three step process:

(1) Increases in average district homogeneity can be linked to changes in redistricting practices that make it more likely that politically homogeneous districts will be drawn. In particular, in each decade from the 1960s through the 1990s, an increasing number of majority-minority districts\(^1\) have been drawn as a result of actions taken under Section 2 and Section 5 of the Voting Rights Act of 1965 (as amended in 1982).\(^2\) Such districts pack voters with similar characteristics and predilections into a single district, while bleaching neighboring districts of minority voters and loyal Democrats, still further increasing average levels of district homogeneity. More generally, the post-Reynolds v. Sims focus on “one person, one vote” as an overriding factor has meant that districts need no longer be drawn entirely within existing political subunit boundaries -- boundaries

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\(^1\) By a *majority-minority district* we mean one in which African-Americans or Hispanics are in the majority.

\(^2\) See e.g., Grofman (1993).
which often include somewhat heterogeneous populations. This process of “fine-tuned”
gerrymandering is greatly facilitated by the new computer GIS (geographic information
systems) technology. Thus, the potential for artful partisan gerrymandering, where the
party in control of the process packs its opponents voting strength into a limited number
of districts, while creating safe districts for its own candidates (Owen and Grofman,
1988) have been increased. On the other hand, the potential for carefully crafted
bipartisan gerrymanders, sweetheart deals with safe seats for incumbents of both parties -
- whereby, often, representatives select their voters rather than voters selecting their
representatives -- has also been increased.

(2) Reductions in the levels of district competition are caused (at least in large
part) by increases in average district homogeneity, because homogeneous districts tend be
highly uncompetitive (Carson et al 2004; Stonecash, Brewer, and Mariani 2003).
However, now that regional realignments have more or less sorted themselves out (the
Northeast has far fewer moderate Republicans and the South has far fewer moderate
Democrats), the distinctiveness of the two major parties is more clear now (to both
candidates and voters) than it has been in decades. This makes it quite difficult for one
party to win a district that leans towards the other party.

(3) Increases in political polarization are caused by declines in political
competition, because representatives from safe seats can more safely disregard the views
of minority party voters in their constituencies than can representatives from marginal
seats. Thus, representatives from these seats will look more like the median or modal
party member from their own party than like the overall median in their district (or in the
nation as a whole). Moreover, even if the standard Downsian story were right, and the
representative would resemble the overall median voter, in a homogeneous district that median voter will be much more of an ideological extremist than would be the case in a more closely politically divided constituency. Furthermore, the candidates who win in the primaries tend to be less moderate in these kinds of districts. There are far fewer “moderates” from either side of the aisle in part because even those that do win a party primary against a more ideological opponent will be having a tougher time winning now that the parties are more clearly sorted ideologically.

Examining these linkages one by one, however, we find that the overall linkage between the last several decades of changes in redistricting practices and the growing party polarization in the U.S. House has at least one weak link to the chain. While the initial link, between changes in districting practices and increases in district homogeneity is very strong, especially once we focus on the growth in majority-minority districts, and the intermediate link between homogeneity and competition is also very real, the link between levels of competition and political extremism is not at all what would be suggested by the standard Downsian story.

(1) Changes in district homogeneity

District level homogeneity is a concept that needs precise explication, since it can be operationalized in many different ways and is considerably broader than, say, white versus black comparisons. Moreover, if we are to make use of measures of homogeneity of House districts for purposes of longitudinal analyses, then we need to take into account how the underlying demography in the country has been changing. Here, following Koetzle (1998), we operationalize homogeneity as involving five variables measured at
the district or state level (percent African-American, proportion urban, percent White, percent High School Graduate, and median income), each of which tends to tilt a district in either a pro-Democratic or a pro-Republican direction. Scores are calculated in a fashion such that a value is low if the district is politically heterogeneous and high if it is homogeneous, regardless of which party is being favored. 3

We show in Table 1 mean homogeneity values (ranging from 0 to 5) for each of six redistricting periods over the years 1962-2002, for both the House and the Senate. We see that states do not change much in their mean homogeneity (as per the Koetzle measure) over the period in question, but House districts increase their homogeneity significantly, with the greatest changes coming in the 1980s and 2000 rounds of redistricting, and a monotonic trend since the 1970s. Thus, while, it the evidence is only indirect, these aggregate differences are consistent with redistricting driven increases over time in the homogeneity of House districts.

<Table 1 about here>

An important component of the diversity measure is the percent black in the district or the state. This percentage has changed very little at the state level, but has undergone important shifts at the constituency level. The number of districts with more than 40% black population has risen steadily in response to Section 5 preclearance decisions by the U.S. Department of Justice during the decades of the 1980s and 1990s (pre-1993) when DOJ incorporated both a purposive discrimination test and an effects-based vote dilution test in judging which plans in the deep South and other covered

3 More detail on how we operationalize this diversity measure is given in a methodological appendix.
jurisdictions would survive Section 5 preclearance scrutiny, and in response to litigation brought by minority plaintiffs under the 1982 revised language of Section 2 of the Voting Rights Act of 1965 (See reviews in Grofman, Handley and Niemi, 1992; Grofman, 1993; Handley and Grofman, 1998). We show in Table 2, the changes by redistricting period in the number of heavily black (40-45%, 45-50%, 50-55%, 55-60%, 60-65%, above 65%) districts; while in Table 3 we show the changes by redistricting period in the number of overwhelmingly white districts (70-80% white, 80-90% white, 90-100% white).

<Tables 2 and 3 about here>

(2) changes in political competitiveness

There has been a decline in political competition in the U.S. House, as judged by the proportion of districts which are won with less than 60% of the vote (See Figure 1). In 2004, only 23 of 435 seats were won with a margin of less than 10%, and only 10 House seats were won with a margin of 5% or under. In contrast, in the Senate there were 7 races decided by 10 percent or less, 6 of which were decided by less than 5 percent (these comprise roughly 20 percent of all Senate elections in 2004). Figure 2 represents the data for the U.S. Senate. Clearly the Senate experiences significantly more competitive elections in terms of the sheer proportion that are close, compared to the House. However, the linear time trend is downward, which matches the overall trend in the House.

<Figures 1 and 2 about here>

Majority-minority districts by definition have a high minority population and thus a high proportion of loyal Democrats. Given the characteristics of proximate populations,
ceteris paribus, most of the non-minority voters in majority-minority districts are likely to be white Democrats, so that such districts soak up Democratic strength. Because the loyal minority Democrats are purged from neighboring districts, these districts are reduced in their proportion of loyal Democrats, and if the reductions are severe enough, some of these districts cease to be competitive, too – a bit of a double whammy as far as competition is concerned.

More generally, districts which are homogeneous in other partisan-related characteristics, e.g., heavily urban, also may be expected to be less competitive than districts which are more heterogeneous in character. Thus, ceteris paribus, as mean district homogeneity rises, we would expect to see average levels of competition decline. Of course, the link between increased number of homogeneous seats, and a decline in overall homogeneity, need not be perfect: in principle, we could imagine that, in the same process during which heavily homogenous and non-competitive seats are being drawn, a large number of competitive seats are also being drawn – but the empirical reality appears otherwise.

Can we attribute the decline in marginal seats to the increase in the number of majority minority districts, or in an increase in other forms of homogeneity? Well, the two trends go together and, as seen above, there exists a clear posited mechanism that links the two trends in a causal fashion. But, in the Senate, homogeneity has not changes over time, since the lines of states remained unchanged, and competitiveness has declines in the Senate as well. While this may not be “beyond a reasonable doubt” proof, it certainly suggests that redistricting may not be the culprit when it comes to assigning blame for less competitiveness in House elections over this time period.
To more fully make sense of the impact of redistricting on electoral competitiveness we must understand that the “redistricting revolution” has been occurring at the same time as pockets of secular realignment around the country, as areas of the country previously under one-party rule (the South for Democrats, New England for the Republicans) open up for genuine two-party competition, at least for some levels of government. At the same time as we see a decrease in the number of truly competitive seats, we also see an increase in the number of truly lop-sided seats (including the number of those so expectedly lopsided that no member of the opposite party even bothers to run).

In terms of uncontested seats, the story is really quite interesting and serves as another reminder that in many cases the aggregate trends over time hide important differences between the parties. As Figures 3 and 4 show, while the Republican party has enjoyed a marked increase in the number of their candidates for the House that have no Democrat running against them at all, over the same time period the number of Democrats who do not have to worry about a Republican opponent in the general election has decreased significantly. Overall the number of elections won in a truly lopsided fashion (with the winner garnering at least 80 percent of the two-major-party vote) has increased (see Table 4).

<< Table 4 and Figures 3 and 4 about here >>

We might reasonably expect that redistricting should decrease competition, and that this would show up in a decrease in the number of competitive seats just after a redistricting. First and foremost, as Owen and Grofman (1988) show, in a world of
electoral uncertainty, optimal partisan gerrymanders do not involve drawing districts with “thin” margins, rather they involve drawing a minority of seats that are overwhelmingly packed for the other side, while still drawing a majority of seats quite safe for your own incumbents. Thus optimal partisan gerrymanders are not that distinct from bipartisan incumbency protection gerrymanders in that both have lots of really safe seats. Second, if there is considerable uncertainty, and/or if parties are risk averse, we may find a bipartisan agreement to create an incumbency protection gerrymander. The more such bipartisan gerrymanders the more we will see a reduction rather than an increase in the number of competitive districts found after a redistricting.

When we look at House data from 1960 through 2002, and compare the number of seats in years ending with 0 with the number of competitive seats in years ending with 2, we find that the mean number of competitive seats at the end of each redistricting decade is 128.2 (n = 5); and the mean number of competitive seats at the beginning of the next redistricting decade is 137.4 (n =5). While this difference is in the expected direction, it is not that large and we find no statistically significant difference (p = .47). It is only from 1990 to 1992, that we find a substantial increase in the number of competitive seats, from 109 to 162. Thus, another reason why we might think that the link between homogeneity and competition is not so strong is that we do not really see a decrease in the number of competitive seats after redistricting as compared to the number of marginal seats found at the end of the previous redistricting decade

Why might we not observe the expected redistricting effects in lowering levels of competition?
First, we would note that redistricting “shakes up the lines,” and thus might reallocate voters familiar with a given incumbent’s record, thus harming that incumbent’s reelection chances.

Second, to the extent that partisan gerrymandering efforts replace some seats previously won by the minority party with seats that lean slightly toward the majority party but are more competitive than those they replaced, redistricting would actually increase the number of competitive seats.

Third, and perhaps even more importantly, looking at redistricting effects only in the year of redistricting can be very misleading. The effects of redistricting do not necessarily manifest themselves immediately. In particular, because of the incumbent advantage (which can often be worth as much as 8-10 percentage votes of vote share) an incumbent may “hang on” for the immediate post-redistricting election even though his seat has been redrawn to favor the other party if the electoral tides that year (those years) favor members of his party, but then go on to lose later in the decade. If the short-run consequences of redistricting include some incumbents who are hanging on barely, this increase in competition may compensate for increased safety in other seats, giving rise to little immediate evidence of redistricting effects. But, as those now marginal incumbents are replaced by candidates of the opposite party, we should actually see a decline in the number of competitive seats over the course of a decade.

Indeed, when we look at the mean number of competitive seats across the four decades from the 1960s through the 1990s, we see values of 148.5, 154.2, 129.5, 110.5, and 119, as we move from years beginning with 2 at the start of a redistricting decade, to years ending with 0 at the end of a redistricting decade. Note that the highest mean
number of competitive seats is found in years ending with 4, just after the initial redistricting. When we again omit the 1960, 2000 and 2002 data and do a difference of means test comparing the number of seats in years ending with 2 with the number of competitive seats in that same decade in years ending with 0, we find that difference between 148.5 (n=4), the number of competitive seats at the beginning of the redistricting and the mean number of competitive seats at the end of the redistricting decade 113 (n = 4), while in the expected direction and relatively large, is not quite statistically significant (p = .06, using a one-tailed test) -- probably because of the small sample size. We would, however, also note that, from 1972 to 1980, we actually find a slight increase in the number of competitive seats, from 121 to 130.

(3) changes in party polarization

The single most striking phenomenon about the contemporary House of Representatives is the level of polarization between the parties, with the almost complete elimination of a political “center.” Present levels of between-party polarization have not been seen for almost a century (Eric Schickler; quoted in Toner, 2004: 41). In Figure 5, for the House, and in Figure 6, for the Senate, we show polarization for the 1962-2000 period in terms of a set of histograms of Poole-Rosenthal D-NOMINATE scores by redistricting era.

<< Figures 5 and 6 about here>>

In Figures 7 and 8 we show median D-NOMINATE scores for each chamber over the 1960-2000 period for each party and for the chamber as a whole.
A critical question is the extent to which this pattern of increased polarization can be linked to redistricting. To our eyes, one of the most striking features of the House-Senate comparisons shown by looking at the data reported in these tables is the fact that changes in between-party polarization in the House and the Senate tended to move in tandem. However, the magnitude of the changes over time is far greater in the House than in the Senate. Such a finding casts doubt on any purely redistricting-based story to account for over-time changes in polarization, but it also suggests that changes in the House may be indirectly driving those in the Senate, e.g., by spillover when former House members enter the Senate, or when the tone of state politics is set by the polarization within the state’s House delegation.

As we saw from Figure 2, while there was a decline in competitiveness of Senate seats, although the proportion of seats that are competitive in the Senate still far outweighs those that are competitive in the House. Furthermore, we find a pattern of increased polarization in the Senate that closely tracks what happened in the House (compare Figure 5 with Figure 6, and Figure 7 with Figure 8), even though the amount of movement is far less in the Senate. Lastly, and most importantly, the direct connection positive between lack of competition and extremist ideology is, when we look at the data, considerably more complex than is often supposed. In particular, we discover quite different patterns of relationships between ideological extremism and victory margin among House members of the two parties, and we find patterns that have changed dramatically over the past five decades. See Figures 9 and 10.
In Figure 9 we have plotted member ideology DW-NOMINATE scores by vote percentage for data pooled for the years 1952-2000 – for grouping of members into vingtile categories (i.e. 0-.05, .06-.10, … , .90-.95, .96-1). The x-axis is the Democratic proportion of the vote, so very small values indicate Republican victories by very large margins. In Figure 9, where the Democratic percentage is near .5, we have the competitive districts. Areas of the figure to the left represent Republican victories, while the areas to the right represent Democratic victories. The two solid lines, one for each party, are the predicted values from a quadratic regression for that party, and the shaded regions represent the 95 percent confidence region. If so-called “safe seats” elected more ideologically extreme members we would expect the line for the Democrats to slope downward as we move along the x-axis toward 1, and the line for the Republicans to slope upward as we move along the x-axis toward the 0. Yet, for the pooled data, the Democratic line is more or less straight with only a slight downward slope, while the estimated Republican line here is completely flat. Thus, as the margin of victory increases for members to the U.S. House, we seen no real change in the ideology of the members that are elected, at least when we look at data pooled over the entire time period. When, however, we disaggregate the data by redistricting epoch, then we do discover a pattern for Democrats, but once again, no relationship for Republicans.

In Figure 10 we show correlations between DW-NOMINATE scores and victory margin by year, for each party separately in the House of Representatives.

4 For pooled data, this same lack of a relationship between competition and extremism holds using a wide variety of ideological scores from many different interest groups (see Lee, Moretti, and Butler 2004).
The question is whether or not members who win by large margins are more extreme than their colleagues that win by relatively small margins. For Republicans we find from these two figures that there is essentially no relationship between district competitiveness and ideological extremism, either for the pooled data or for particular redistricting epochs. For Democrats, things are rather different. While there is also little or no relationship between homogeneity and competition for the pooled data, for Democrats, the nature of the relationship varies dramatically over the decade, changing in both sign and magnitude. In the 1950s and 1960s, the seats won overwhelmingly by Democrats were not held by ideologically extreme members, rather they were held mostly by relatively moderate white Southern Democrats. In the 1970s and 1980s, among Democrats, there was little or no relationship between Democratic victory margin and ideological extremism at the aggregate level since the seats being won by large margins now included both the seats of white conservatives/moderates and quite liberal black representatives. By the 1990s, the seats being won by large margins were disproportionately those held by African-Americans who are by and large quite liberal, and thus, we get a positive correlation between ideological extremism and homogeneity among the Democrats. But, even with the most recent data, the magnitude of this correlation is not that great.

Figure 11 presents the same type of data as above for the US Senate. The patterns are roughly the same as in the House but much less pronounced. Democrats in the early time period that win by large margins tend to be more conservative, and those that win in more recent elections with huge margins tend to be more liberal. The Republicans do not
exhibit any strong relationship between ideological extremism and competitiveness for
the entire period.

<<Table 5a and 5b and Figure 11 about here >>

Summary and Conclusion

Carson et al (2004) track changes in House districts over time and try to establish
a link between districts change and more extreme ideology in the House. While they do
find statistically significant effects, when we look more closely at their findings, the over
time differences in ideological change in an extremist direction between members
representing newly configured districts and those that represent districts that have not
changed in composition is fairly modest. Yes, changes in district composition may
matter, but such changes simply cannot account for the dramatic changes in mean and
median ideological location of the two parties in Congress over the past several decades.

Fleisher and Bond (2004) also document the polarization in both the House and
the Senate and by and large dismiss redistricting as the primary culprit. They show that
moderate, cross-pressured members of both chambers were by and large replaced over
time with more extreme members, while a small proportion of moderates in Congress
were converted (i.e. they became more liberal or conservative on their own). Fleisher
and Bond speculate that these changes occurred because more extreme candidates began
running for office; the parties began recruiting more extreme candidates to run for office;
and voters have become more polarized themselves and in turn, elect more polarized
Redistricting does not play a central role in Fleisher and Bond’s argument and they try to develop an argument that fits for both chambers of Congress. Our findings suggest that redistricting is not really to blame for the current levels of polarization in the House of Representatives (and, of course, it cannot be blamed for the concomitant polarization in the Senate either). While homogeneity in House districts has increased over time, and the number of competitive election in the House has decreased, the link between those changes and polarization is less than clear. For example, the Senate has undergone an increase in polarization and a decrease in competition in the last decade or two, without the benefit of redistricting or an increase in district homogeneity. And to the extent that redistricting effects are real, we believe that they are more likely to be indirect, tied to realignment. In particular, as party images become more distinct (with the absence of conservative Southern Democrats or liberal Northern Republicans) it becomes harder for a candidate of one party to compete successfully to win votes among the partisans of the other party regardless of the position s/he adopts. This means that we can get party polarization even in relatively competitive seats.

Similarly, redistricting is only partly at fault in the decline in political competition. There are other effects that can only be attributed to realignment. The number of uncontested seats, for instance, has increased over time since the 1960’s. We

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5 There is a significant amount of disagreement with respect to the polarization of the electorate among political scientists. Fiorina (2003) shows that voters are not polarized but divided, Ansolabehere, Rodden, and Snyder also show that “the difference between a typical strongly Republican state and a typical strongly Democratic state is just 8 percentage points 54 percent for the dominant party; 46 percent for the weaker. This is hardly a great divide.” On the other side Abramowitz and Saunders (2005) demonstrate that there are deep divides among Americans and these differences involve a substantial proportion of the voting electorate.

6 Of course, redistricting causes the election of more extremists to the House, which leads to polarization in the lower chamber; and then, the Senate follows suit, perhaps because many members of the House run successfully for a seat in the Senate.
could blame this change on redistricting, as it is a very likely suspect given the number of bipartisan redistricting plans that get implemented across the country. However, by looking at this trend by party, we see that the Republicans had virtually no uncontested seats in the early 1960’s and that number has increased significantly since that time. Yet the Democrats have witnessed a large decrease in the number of these kinds of seats. Why? The answer has less to do with redistricting, per se, than it does with regional realignments. The Northeast, and to a larger extent, the South have both undergone partisan realignments. In the South, seats that were overwhelmingly Democratic have often been replaced with seats that are overwhelmingly Republican.

In sum, if we want to understand the link between redistricting, political competition and polarization we must do so in a nuanced way that takes into account realignment trends that affect the changing and party-specific relationships between safe seats and ideological extremism.
* Bars indicate the proportion of House elections every two years that were won with 60 percent of the vote or less. The horizontal line is the linear trend line.
Figure 2
Senate Competitive Elections

* Bars indicate the proportion of Senate elections every two years that were won with 60 percent of the vote or less. The horizontal line is the linear trend line.
Figure 3. Number of Uncontested Elections with a Democratic Victor in the House

*The graph shows how many Democrats won in each election with 100 percent of the vote.*
Figure 4. Number of Uncontested Elections with a Republican Victor in the House

*The graph shows how many Republicans won in each election with 100 percent of the vote.
Figure 5. Histogram of Poole-Rosenthal D-Nominate Scores for U.S. House, 1962-2000

House Common Space Scores
1962-64
House DNOMINATE Scores 1962-1964

House Common Space Scores
1968-70
House DNOMINATE Scores 1968-1970

House Common Space Scores
1972-80
House DNOMINATE Scores 1972-1980

House Common Space Scores
1982-90
House DNOMINATE Scores 1982-1990

House Common Space Scores
1992-2000
Figure 6. Histogram of Poole-Rosenthal D-Nominate Scores for U.S. Senate, 1962-2000
Figure 7
Median Nominate Common Space Scores in the House, Overall and by Party: 1960-2000

The diagram illustrates the median Nominate Common Space Scores for the House of Representatives over the years 1960 to 2000, differentiated by party - House Republican Median and House Democratic Median. The scores are presented on a common scale, with the y-axis representing the common space scores ranging from -4 to 4. The x-axis represents the years from 1960 to 2000, marked at intervals of 10 years.

The House Overall Median line shows a relatively stable trend with a slight decline. The House Republican Median line begins at a similar level but exhibits a more pronounced upward trend towards the end of the period. Conversely, the House Democratic Median line starts at a higher score and shows a decline towards 1990, followed by a slight increase by 2000.

Legend:
- Blue line: House Overall Median
- Red line: House Republican Median
- Green line: House Democratic Median

The data points for each year are connected by smooth lines, providing a visual representation of the median common space scores over the specified period.
Figure 8
Median Nominate Common Space Scores in the Senate,
Overall and by Party, 1960-2000
Figure 9. The Relationship Between Victory Margin and Ideology for House Members

The graph depicts the quadratic regression line for DW-NOMINATE scores regressed on margin of victory (done separately for Democrats and Republicans). The vertical line at .5 separates Republicans (to the left of the line) from Democrats (to the right of the line). The sample size for the regression models are 4,627 for Republicans and 6,318 for Democrats.
Figure 10. Biannual Correlation Between DW-NOMINATE Score and Victory Margin, U.S. House of Representatives, 1952-2000
Figure 11. Biannual Correlation Between DW-NOMINATE Score and Victory Margin in the U.S. Senate Over Time, 1952-2000
Table 1. Homogeneity Scores for the House and Senate for Each of Six Redistricting Periods, 1962-2002

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Table 2. Number of Districts with Different Proportions of African Americans by Redistricting Period

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<td>6</td>
<td>9</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>2002</td>
<td>383</td>
<td>18</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>10</td>
<td>10</td>
<td>2</td>
</tr>
</tbody>
</table>

* Entries indicate the number of House districts that fall into each category of percent Black by redistricting period.
Table 3. Number of Districts with Different Proportions of Whites by Redistricting Period

<table>
<thead>
<tr>
<th>Year</th>
<th>70-80%</th>
<th>80-90%</th>
<th>90-100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1962</td>
<td>41</td>
<td>56</td>
<td>281</td>
</tr>
<tr>
<td>1966</td>
<td>46</td>
<td>57</td>
<td>284</td>
</tr>
<tr>
<td>1972</td>
<td>34</td>
<td>79</td>
<td>269</td>
</tr>
<tr>
<td>1982</td>
<td>67</td>
<td>107</td>
<td>195</td>
</tr>
<tr>
<td>1992</td>
<td>70</td>
<td>110</td>
<td>176</td>
</tr>
<tr>
<td>2002</td>
<td>85</td>
<td>101</td>
<td>74</td>
</tr>
</tbody>
</table>

* Entries indicate the number of House districts that fall into each category of percent White by redistricting period.
Table 4. Number of House Elections Won by 80 Percent or More

<table>
<thead>
<tr>
<th>Year</th>
<th>Non-competitive races</th>
</tr>
</thead>
<tbody>
<tr>
<td>1962</td>
<td>69</td>
</tr>
<tr>
<td>1964</td>
<td>66</td>
</tr>
<tr>
<td>1966</td>
<td>69</td>
</tr>
<tr>
<td>1968</td>
<td>70</td>
</tr>
<tr>
<td>1970</td>
<td>83</td>
</tr>
<tr>
<td>1972</td>
<td>73</td>
</tr>
<tr>
<td>1974</td>
<td>90</td>
</tr>
<tr>
<td>1976</td>
<td>79</td>
</tr>
<tr>
<td>1978</td>
<td>97</td>
</tr>
<tr>
<td>1980</td>
<td>82</td>
</tr>
<tr>
<td>1982</td>
<td>81</td>
</tr>
<tr>
<td>1984</td>
<td>91</td>
</tr>
<tr>
<td>1986</td>
<td>100</td>
</tr>
<tr>
<td>1988</td>
<td>103</td>
</tr>
<tr>
<td>1990</td>
<td>102</td>
</tr>
<tr>
<td>1992</td>
<td>51</td>
</tr>
<tr>
<td>1994</td>
<td>63</td>
</tr>
<tr>
<td>1996</td>
<td>53</td>
</tr>
<tr>
<td>1998</td>
<td>128</td>
</tr>
<tr>
<td>2000</td>
<td>95</td>
</tr>
<tr>
<td>2002</td>
<td>100</td>
</tr>
<tr>
<td>2004</td>
<td>81</td>
</tr>
</tbody>
</table>

*The table indicates the number of House elections in which the winner received at least 80 percent of the two-party vote. The correlation between the number of truly lopsided elections and year is .32.*
### Table 5a
Number of Lopsided House Elections By Region and Race of Candidate

<table>
<thead>
<tr>
<th>Years</th>
<th>Southern Whites</th>
<th>Southern Blacks</th>
<th>Non-Southern Whites</th>
<th>Non-Southern Blacks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1962-70</td>
<td>207</td>
<td>0</td>
<td>81</td>
<td>2</td>
</tr>
<tr>
<td>1972-80</td>
<td>176</td>
<td>1</td>
<td>120</td>
<td>7</td>
</tr>
<tr>
<td>1982-90</td>
<td>195</td>
<td>3</td>
<td>171</td>
<td>13</td>
</tr>
</tbody>
</table>

*Table entries indicate the number of House elections won with 80 percent or more of the two-party vote. The South includes Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Texas, and Virginia. White and Black refer to the race of the elected member of Congress.*

### Table 5b
Percent of Republican Victories Won by 80% or More by Region

<table>
<thead>
<tr>
<th>Region</th>
<th>Percent Lopsided Republican Victories</th>
</tr>
</thead>
<tbody>
<tr>
<td>West</td>
<td>9.23</td>
</tr>
<tr>
<td>Midwest</td>
<td>9.78</td>
</tr>
<tr>
<td>South</td>
<td>33.88</td>
</tr>
<tr>
<td>Border States</td>
<td>20.66</td>
</tr>
<tr>
<td>Northeast</td>
<td>13.88</td>
</tr>
</tbody>
</table>

Bibliography


Grofman, Bernard. 1993. Would Vince Lombardi have been right if he had said, `When it comes to redistricting, race isn't everything, it's the only thing?’ Cardozo Law Review, 14(5):1237-1276.


Appendix A: Creating the Diversity Measure

For our purposes here we pooled House and Senate observations in order to get diversity measures. We should note that doing this exact same procedure for the House and Senate separately yields significant results for the House but not for the Senate.

There are five components to our measure of diversity all measured at the district or state level: percent Black, percent White, percent High School Graduate, percent urban population, and the median income.

Step one is to standardize the variables. This is necessary because they are on very different scales - median income is in the thousands and censored on one side, while percent White ranges from 0 to 100 and is censored on both sides. Standardization is carried out in typical fashion - subtract the mean from each observation and divide by the standard deviation. This is done for each variable for each election year over the period 1962-1996.

Step two is to calculate the median and then deviations from the median. This is done for each variable by year and separately for the Southern and Non-Southern states. This last step is necessary because the South is very different on many of these variables. Therefore, the median for the southern states is calculated separately and then deviations from the median are calculated across all observations. We define the South as the following states: Alabama, Arkansas, Georgia, Florida, Louisiana, Mississippi, North Carolina, South Carolina, Texas, and Virginia.

Next, we multiply all values for the variables on percent Black and percent urban by -1. This is to make the values "match" with the other three. For instance, percent White takes on high values in districts that typically support the Republicans. Percent Black will be just the opposite - high positive values will be in traditional Democratic districts.

To create the single diversity variable then one simple adds the absolute value of each of these variables together. This first transforms each variable to positive values (this takes away the partisan component of the variable) so that values close to zero are diverse and the higher the value of the variable the less diverse it is (remember these are deviations from the median so high positive values on percent white mean there is either a very high percentage of whites or an extremely low percentage of whites). Adding them up simply gives a single value that captures our notion of diversity.

We take one precautionary step before running our analyses: we remove 1970, 1980, and 1990 from the dataset, because Senate data are updated those years and House data are not updated until two years later. This artificially overstates the differences between the House and the Senate.